NORTH-WEST UNIVERSITY

AN ASSESSMENT OF URBAN SUSTAINABILITY IN SOUTH AFRICA



THE CLAIRWOOD PRECINCT

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AN ASSESSMENT OF URBAN SUSTAINABILITY IN SOUTH AFRICA: THE CLAIRWOOD PRECINCT PLAN

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ABSTRACT/VOORWOORD

The study displays an analytical framework of urban sustainability in South Africa and applies the principles to Clairwood, a suburb in the South Durban Basin in KwaZulu Natal. It is important that urban areas are productive, inclusive, sustainable and well-governed. In addition, the demographic status and trends are of major concern to urban areas.

An important strategic issue facing the South African city is city growth. South African cities have grown much faster than the national population since the 1970s, but this has slowed in the 1996 to 2001 period. The growth of the urban population and migration trends pose specific challenges that may impact on the sustainability of the city. The analytical framework for urban sustainability investigates whether residents have the opportunities and capacities to share equitably in the social benefits of city life, how the city is impacting on the store of natural resources that sustains the settlement and makes it viable, how the local economy provides a majority of residents with a means to earn a reasonable living and if the political and institutional context is stable, open and dynamic enough to give a sense of security to accommodate a variety of interests.

The core features of the South African city is inequality. Large numbers of residents are separated geographically, materially and psychologically from the opportunities and advantages of city life. The study investigates progress in providing residents with access to key infrastructure based service, divides in wealth, ability to build assets and secure against risk; spatial exclusion; human development and quality of life and what is being done to address this in Clairwood.

Apartheid spatial planning left the South African cities with built environments that were dysfunctional and in turn resource inefficient. Reversing the impacts has unfortunately meant reinforcing and exacerbating these inefficiencies, as an increasing number of residents claim highly resource-intensive livelihoods from which they were previously excluded. The study investigates the urban-environmental challenge that apartheid built environment planning created; the trends in urban form resulting from post-apartheid settlement policies, measurable impacts on natural resources and suggestions for constructing a sustainability agenda in Clairwood.





The sustainability challenge facing the local economy in South African cities is negligible public and private sector investment in bases for industry efficiency other than cheap surplus labour. An artificially small middle- class and weak domestic demand; and the fact that the productive capacity of a large section of the population is under-valued and unharnessed, is also a major challenge.

The study investigates employment and remuneration trends and especially the relative attractiveness of cities in terms of their ability to provide residents with a means to earn a living, factors illustrating and explaining the strength of the urban economy and how South African cities are responding to urban economy weaknesses in a globalising economy.

The transformation in South Africa has left municipalities facing challenges of bad relations between communities and municipalities, poor public participation and increasing levels of crime. Administrative and financial challenges also play a role. The study investigates how well South African cities are governed, including evidence of social discord and disintegration and institutional stability assessing the institutional arrangements within Clairwood.





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CHAPTER ONE

INTRODUCTION









CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1. INTRODUCTION AND ORIENTATION TOWARDS THE STUDY

The world currently has a population of six billion. Two billion people live in urban areas, which is a third of the world population. It is estimated that the number of urban dwellers will triple in the next fifty years and that six billion people will then inhabit cities. The world population will have escalated to approximately nine billion in 2050. The world's urban population will grow from 2.86 billion in 2000 to 4.98 billion by 2030. High-income countries will account for only twenty-eight million out of the expected increase of 2.12 billion. The world's annual urban growth rate is projected at 1.8 per cent in contrast to the rural growth rate of 0.1 per cent. Sixty per cent of the world's population will live in cities.

An increase of two billion of the world population can be ascribed to an increase in the populations of less developed countries.This phenomenon is indicative of a weekly urban growth rate of close to one million persons. Much of this growth will be concentrated in cities consisting of a population of one million persons or more. The State of World Cities (2004) report notes that by 2003, there were thirty-nine cities over five million in population, and sixteen cities over ten million. The majority of people will be concentrated in "*developing*" countries (UN Habitat, 2004:1; Bos *et al.,* 1994; United Nations, 1993:1). This dramatic increase in the world's population and number of urban dwellers poses daunting challenges of social and economic destitution and severe environmental degradation. A pro-active approach in counteracting degradation has led to many policy debates and workshops which led to the creation of global terminology like "*urban sustainability*" which refers to the objective of "*improving the social and economic conditions of an increasingly urbanized population while preserving life systems and maintaining environmental quality*" (Department. of Environmental Affairs, 1998:2).

Sustainability is a poorly defined concept and runs the risk of becoming a catch phrase for political demagoguery. Various definitions of sustainability concede that sustainability is aimed at meeting today's needs without compromising future generations (Barker, 1995:36; Pezzey, 1992:55; Halley & Shaw, 1994:433; Kok & Gelderbloem, 1994: 31; WCED, 1987:43). This definition has been used by many people (ranging from political leaders to civil society) to justify many policies and practices ranging from communal agrarian utopianism as described by Lele (1991:6), to large-scale, capital-intensive market development (Carley & Christie, 1992:77-78).

Due to the various meanings given to the word "*sustainability*", the ideal of sustainability has generated a growing counter-reaction across the different schools of thought. There are various interpretations namely:

- Sustainability is seen as expanded government interference with market processes (Carley & Christie, 1992:77).
- Sustainability is defined as a rhetorical trope legitimating the reproduction of exploitative class relations under the guise of ecological necessity (Swanepoel & De Beer, 2000:64; Harrison *et al.*, 2003:245).
- The widespread use of the term "*sustainability*" has caused a move to replace the term because the term has suspect connotations (Norgaard, 1994).

In spite of the ambiguity faced when defining sustainability in political and conceptual terms, it is conceded that both the ideal and the necessity of long-term sustainability is imperative in facing the increasing scale of urbanisation (South African Cities Network, 2004:4).

Mumford stated in 1961 that a human life swings between two poles namely "*movement and settlement*". A human life is influenced by many social, economic and environmental factors. The State of South African Cities (2004) report summarises that it is important to conceptualise the interrelationships among social, economic, political, and environmental processes, a challenge simultaneously posed by the scale of predicted urbanisation, as well as the idea of sustainability.

Swanepoel & De Beer (2000:62) state that the current reality displays limited knowledge in terms of comprehension of these interrelationships. This is exacerbated by existing structures of knowledge and compartmentalisation. There is very little interaction between scholars of urban processes affecting first world cities and scholars of third world cities. Theories with regard to third world urban processes have little contact with first-world cities. Environmental and ecological concerns have in many theories been left out of the equation. Global-local linkages are often studied with the focus primarily within the economic sphere with negligence of environmental impacts and questions of ecological sustainability.

Many scholars focusing on environmental processes have almost completely disregarded the urban processes and problems. The barriers separating the "*First*" and the "*Third*" world urban processes and environmental processes, have grown to be sturdy and quite impermeable.

Many articles written on urban sustainability have not focused on theories of society and space and have not been well grounded in current empirical knowledge of urban processes. The result is that much work done on sustainable cities has had little impact in creating a sound theoretical framework for the popular idea of "*urban sustainability*" (Campbell, 1996; Drakakis-Smith, 1997; Healey and Shaw 1993; Munton, 1997).

1.2. AIMS AND OBJECTIVES

The dissertation will aim to:

- Study the concept of urban sustainability and define all its interrelationships.
- Research spatial aspects of urban sustainability.
- Salvage the concept of urban sustainability by articulating a strong conceptual framework to advance understanding of the concept and its implementation.
- Assess the current state of knowledge about urban sustainability in South Africa and apply it to Clairwood.
- Develop an agenda for research on urban sustainability in South Africa, productively integrating diverse perspectives and applying it to Clairwood.
- Build a knowledge base of urban sustainability in South Africa, as the urban population will increase over the next fifty years and apply lessons learnt to Clairwood.
- Develop recommendations for Clairwood through analysis of urban management, economic issues, housing issues, transportation, traffic patterns, land use management and stakeholder participation.
- Formulation of a management and implementation strategy, to provide guidelines for future development, to attract investment and build confidence in the area.

1.3. APPROACH TO THE STUDY

Urban sustainability is often defined in competing and contradictory terms. Various definitions operate or function at different spatial scales and the definitions often reflect the perspectives of individuals or groups occupying different social, economic, political and spatial positions. The various definitions differ primarily in terms of their assumptions of what should be sustained, variously invoking biological systems, development trajectories, investment profitability, power relationships, levels of material consumption, and cultural "*lifestyles*" (Mitlin & Satterthwaite, 1996; Lele, 1991:6.)

Extreme views on urban sustainability include:

- A global-scale definition of sustainability where it is defined as being synonymous with sustainable development and its management, embracing the agenda of the market, top-down planning, and scientific, technological, and design-based solutions (Mawhinney, 2002:2-24).

- Sustainability is defined in local terms where it is synonymous with *sustainable livelihoods* and where local context can lead to different and locally contingent perspectives on the meaning of, conditions for sustainability and the means to achieve it (Sachs, 1993; Douglass & Zoghlin, 1994; Drakakis-Smith 1995).
- The contradictory definitions of sustainability bound a continuum that embraces many perspectives. The absence of conceptual consensus regarding the terminology explains the clarity within literature and the susceptibility of the concept to political or ideological misinterpretation (Hope, 1984:91; Douglass & Friedmann, 1998:34).

These alternative definitions create many different perspectives with regard to the meaning and implications of sustainability as well as the means to achieve it. Many perceive that places where development dynamics have undermined livelihoods, development counteracts sustainability and the term "*sustainable development*" is an oxymoron. Sustainable development is seen as a top-down approach, a target of opposition and a source of struggle to overturn power relations (Martinussen, 1997:56-72; Rapley, 1996:17).

In materially privileged places development is synonymous with material well-being based on high levels of consumption (Durning, 1990:151-16; Korten, 1991:24-25). Sustainability in this context refers to conservation, preservation, and protection of material privileges and the power relations through which they are produced and reproduced, in other words, sustained.

Sustainability is finally also defined by institutions, whose interests are advanced through processes operating at increasingly global scales, as the weakening or elimination of local barriers to accelerating globalisation (Douglas & Friedmann, 1998: 34; Preston, 1996:93).

When taking these definitions based on conflicting economic and political agendas into consideration, it is proposed that a definition of sustainability should focus on sustaining lives and livelihoods rather than sustaining development as shown in Pezzey (1992:55). "*Sustainable livelihoods*" in this context refers to processes of social and ecological reproduction situated within diverse spatial contexts. It is clear that processes of social and ecological reproduction are non-linear, indeterminate, contextually specific, and attainable by different means (Harrison *et al.*, 2003:19).

Sustainability consists of flexible and ongoing processes instead of a fixed and certain outcome. It also transcends the conventional dualism of urban versus rural, local versus global, and economy versus environment. Finally, it supports the possibility of diversity, difference, and local contingency rather than the imposition of global homogeneity (Barker, 1995:69).

The sustainability of local livelihood practices articulates with global-scale socio-economic and other systems in complex, indeterminate, and poorly understood ways. Ecological and social theory proposes that socio-ecological processes comprise non-linear dynamic systems that do not tend to equilibrium.

Local- and global challenges to sustainable livelihoods have far-reaching consequences at both a larger and a smaller scale as well as in distant locations. The fact that complex interactions across multiple scales have indeterminate outcomes argues convincingly that sustainability cannot be comprehended as a function of managed solutions, definitive scenarios, or predicted outcomes.

The following conclusions with regard to urban sustainability can be made:

- Sustainability is a process and does not have a fixed or predetermined outcome (Rondinelli, 1983; Esman, 1988:131).
- Sustainability is defined as being consistent with robustness and flexible in problem solving within localities instead of management toward certain, preconceived outcomes (Swanepoel & De Beer, 2000:38).
- Sustainability does not entail achieving set standards and single "solutions" to empowerment but on finding solutions for local problems based on diverse knowledge (Norgaard, 1994; Capra, 1982).
- Local knowledge and practice is imperative, as alternative ways are needed to address sustainability in different contexts (Swanepoel & De Beer, 2000:67).
- Urban sustainability is an integrated part of sustainability, which implies that the process of urbanisation is defined within the context of dynamic and complex social, economic, political, and ecological processes producing sustainable or unsustainable urban landscapes (Castells, 1994).
- Urban places are not containers of sustainable or unsustainable processes, but are produced by means of processes that may or may not be sustainable (Hanson & Lake, 2000:2; Voisey: 2002:1).
- Urban sustainability promotes the development of local–global relationships conducive to sustainability and does not refer to urban self-containment, isolation, or insulation from global processes (UN- Habitat, 2004:1; Graham, 1999).
- Sustainability is fundamentally more a political than a technological or design problem, as the greatest barrier to sustainability lies in the absence of institutional designs for defining and implementing sustainable practices in local contexts (Freire & Polése, 2003:77; Voisey, 2002:1).

Urban sustainability therefore entails focusing on the following:

- Process instead of the outcome (Lake & Hanson, 2002:1; Pirages, 1994:1).
- Geographic context (the place-specific aspect of indigenous knowledge) instead of on universal recommendations; on contingency and specificity (both across places and within places over time) rather than on homogeneous solutions (World Conference on Science, 1999).
- Flows and linkages across space (Karn, 2003:11).
- Flexibility instead of predetermined outcomes.
- Building local capacity for managing unintended consequences, deflecting external shocks and responding to global pressures (Miller; 2001:7).

Building social capital and expanding the capacity of communities (at various scales) to support sustainable livelihoods is therefore seen as more important, and more consistent with principles of long-term sustainability than the of finding top-down solutions for meeting externally defined basic needs through market-led consumption processes (Halley & Shaw, 1994:433, Kotze & Swanepoel, 1983:2; De Beer & Swanepoel, 1998:23).

Concepts of Scale: Local and Global

The conceptual centrality of geographic scale is highlighted when sustainability is approached in terms of sustainable livelihoods. Livelihoods are constituted in local places where sustainable and unsustainable practices are experienced and where agency is rooted. Sustainability is embedded in localities but this understanding necessitates clarification of the concept of locality and of local–global relations (Wilbanks, 2004:3).

Defining locality requires transcending the dualism of local and global. Locality can be defined both in terms of a node in networks of flows and interactions as well as a place where people live, a site of everyday life. The state, the economy, civil society, mediated by and filtered through processes of regulation imposed by political practices, constellations of power, particular histories, and cultural norms and practices, all operating at a variety of geographic scales, comprises the definition of a locality. The interaction between these elements come together "*in*" a particular place, which is in part a product of how that locality, viewed as a system of practices, articulates with intersecting practices and processes, operating at larger and smaller scales or at the same scale somewhere else (Wilbanks, 2004:3).

Each locality is seen as a node in a global network, which means that every locality is an open system with a reach that is potentially global (Massey, 1991; Wallerstein, 1974). Networks of flows in and out of a place include people, labour, goods, money, information, and ideas or innovations, which include culture and ideas. It is therefore impossible to separate the local from the global as can be explained by Hagerstrand's theory in the dissemination of information in 1965.

Locality is seen as an integrated part of networks of flows, which emphasises process, the repetition and replication of local practices, and endowment of localities with stabilised forms. In this sense, each locality is seen as a place with a particular history, geography, culture, and set of power relations, all of which intersect with the ideas of sustainability (Friedmann, 1997; Castells, 1994).

If locality is viewed as a place it entails a conceptual shift to a set of processes and networks operating at the smallest geographic scales namely the household, the neighbourhood, and the district. Seeing locality as a node within multiple networks and as a place is important when defining urban sustainability.

Traditional Concepts of Locality

All the mainstream development paradigms including the neo-liberal and structural views, tend to approach locality in a reductionist fashion, exhibiting the following characteristics:

- Description of locality in homogenic terms as an abstract concept, through a characteristic set of assumptions embedded in each approach, rather than conceiving of localities as complex and variegated as described in Philbrick's theory on localization (Philbrick, 1957:305). An example is the neo-liberal perspective, which assumes that markets operate similarly and increase efficiency, growth (output), and profitability across places. Markets are also assumed to be the central mechanism for achieving development goals such as increasing and distributing wealth (Kleynhans & Naudé; 2001:67).

- No agency or unlimited agency is prescribed. The above mentioned view debates the fact that non-local institutions should promote local development, due to the fact that local places are unable to facilitate development or to sustain environments. Unlimited agency is usually ascribed in models of local self-sufficiency and in cases where "*failures*" of development or of environmental or social sustainability agendas are attributed. Examples of this include local inadequacies such as corruption, insufficient governance capacity, or lack of local innovation (National Science Foundation, 2000:14).

Southern countries are seen as "flawed" and are judged on northern terms (Swanepoel & De Beer, 2000:64). This has been proved by the pervasive tendency among neo-Malthusian and demographic transition theorists e.g. Fox (1994) tried to attribute global problems of poverty and degradation to problems stemming from overpopulation rather than from northern consumption levels and patterns or from complex combinations of processes that exhibit enormous spatial variation.

Reconceptualising Locality

A different approach to scale has to be applied to conceptualise sustainable lives and livelihoods. The approach has to be different to the traditional approaches discussed above. Redefining locality as a concept will contribute the following:

- Recognition of the differentiation among and within localities.
- Construction of a definition for sustainable lives and livelihoods in terms of localities increases sensitivity to diverse contexts. Existing prevailing paradigms often tend to flatten diversity across localities. Redefining locality means breaking down stereotypes, avoiding an unrealistic concept of locality, and rejecting the idea of universal solutions to local problems and challenges. Localities should also be seen as sources of diverse knowledge and practices that must be recorded to address questions of sustainability (Swanepoel & De Beer, 2000:67; Cline-Cole, 1998).

Locality can be analysed at a variety of levels and is therefore an inclusive construct. Redefining the concept of locality attends to the various amounts of spatial scales, at which the pursuit of local livelihoods is simultaneously shaped from households (Rohe & Gates, 1985:17), to transnational financial networks as described in Castells in 1994. "*Green*" practices can have unexpected negative consequences in distant locations. For example, many levels of analysis need to be considered in evaluating the relative merits of recycling wastes in situ versus exporting wastes (Hardoy & Satterthwaite, 1992:183).

A relational concept of locality acknowledges the fact that intersecting power relations over a variety of geographic scales could lead to local "failures", and that it is not merely the failure of local capacity and will or shortage of social capital (National Science Foundation, 2000:14).

The emphasis on flows, linkages, and networks highlights the tensions introduced by jurisdictional boundaries. These boundaries usually articulate poorly with networks. Resistance to neighbourhood destruction or displacement that is addressed to local authorities or decision-makers ignores the fact that

localities are situated within national, regional, and global hierarchies. Forces contributing to neighbourhood displacement range across geographic scales through complex networks of processes and power relations.

Localities are defined as sites where struggles take place as well as cooperation and cooptation. The concept of locality considers regulations and governance not only as national functions but also as processes that include a bottom-up approach where grassroots groups, NGOs, community- based organisations and other members of civil society are involved (CSIR, 1998:2).

Particular localities have certain societal (cultural and political) contexts, which could influence the possibilities for sustainable livelihoods, apart from economic and ecological conditions. Sustainability includes social sustainability, for example the changing ethnic diversity in cities is likely to be of particular importance in shaping social sustainability. Sustainability must also address the following, namely questions of meaning, sense of place, social capital, and civic culture (Douglass & Friedmann, 1998:165).

A broader definition of sustainability and scale recognises the main role of households in the pursuit of sustainable livelihoods in localities (Douglass & Friedmann, 1998:16). Households are at the centre of sustainable livelihoods in localities. Every household member is incorporated into circuits of production and consumption in specific ways as described in Philbrick's theory of occupance (Philbrick, 1957:303). Households display complex strategies for investing in members in a way that enables households to sustain economies under structural adjustment, for example, economies sustaining households (Gilbert & Gugler, 1984). The role of the household and individual household members with regard to larger structures differs enormously across localities in North and South America, Africa, Europe, and Asia (Schroeder, 1993; Schroeder, 1997).

Urbanisation and Urban Form

Urban sustainability entails engaging with the particular kind of locality associated with urbanisation and the urban. Focusing on urban sustainability implies that urban localities pose particular challenges and opportunities for achieving sustainable livelihoods (Klaassen *et al.*, 1981).

Urban sustainability is one of the integrated components of global sustainability and entails studying urbanisation within the context of constantly changing and complex social, economic, political, and ecological processes producing urban growth ways that are either sustainable or unsustainable (Geyer, 1998).

Movement of population from rural to urban areas, outcomes of changing processes of production, consumption, and social reproduction are all components of urbanisation (Heikkila & Jarvinen; 2001:6-7). Service activities have increased in many of the developed countries thereby exporting the long-established industrial activities to the periphery of the urban region and in other cases to locations in the developing world. This spatial shift in secondary sector activities has had an effect on both urban and rural locations as well as developed and developing locations. Changing consumption levels throughout the world also significantly shape urbanisation in complex and geographically uneven ways. New urban forms as well as changing landscapes are created as a result of increased consumption levels, which is a byproduct of sustainability.

Rural areas throughout the world are mimicking occupations, income, consumption and lifestyles characteristic of urban areas and are therefore becoming increasingly " *urban*" (Kelly, 1999; McGee, 1994). It is at household level where new modes of consumption are played out. New urban forms are an expression of new urbanisation processes. New urban forms include the mega-city, the extended urban region, the post-industrial city, and other forms that are increasing in both first and third world countries (National Science Foundation, 2000:18).

Cities consisting of twenty million people are fundamentally different from the smaller urban agglomerations of the past. They differ in terms of population size but also in generative processes, the scale of ecological impacts, the administrative and organisational challenges they pose, the possibilities for internal isolation and both the opportunities for and barriers to interaction across vast urban regions (Fuchs *et al.*, 1994; Lo & Yeung, 1998; McGee and Robinson, 1995; Rakodi; 1997).

Urbanisation is usually associated with overwhelmingly negative environmental impacts. Scale economies in the provision of bulk services for example water, sanitation, electricity, and transportation, can be achieved by means of large, dense urban agglomerations. Not much research has been done on the comparative opportunities and barriers to establishing sustainable livelihoods in diverse urban forms and settlement densities (Hardoy & Satterthwaite, 1992).

The cause and effect factors of urbanisation are embedded within the multi-scale processes that define and produce localities. Urban sustainability, seen in conventional terms, for example the "*eco-city*" approach, views the city as a self-contained, bounded territorial unit and the sustainable city as one that is self-sufficient and self-reliant. This concept of sustainable urbanisation is contradictory, as a city cannot exist without its hinterland. The hinterland can encompass the globe. If interdependencies among different localities and their hinterlands are ignored, questions about whether one locality is becoming "*more*

sustainable" by making other places less sustainable, are overlooked. An example of this is where the export of waste or maintenance of levels of material consumption in a certain locality necessitates degenerative production in other locations (Lake, 2000:2).

Economy and Environment

Economy and environment are seen as antagonistic elements or components with mutually exclusive values and objectives (Carley & Christie, 1992:77-78). Urban sustainability, in contradiction to this view, necessitates both a broader knowledge and integrated understanding of the economy and the environment. It is necessary to view the broader definitions of economy and environment and to research the interactions between the environmental and economical processes (Trainer, 1990:201).

A broader definition of economic processes than is encompassed in traditional definitions is a prerequisite for long-term sustainability of economic systems. This involves integration of economic dimensions with societal dimensions (Heeney, 2004:1). High and increasing economic growth rates are primary economic objectives, but other objectives include maintaining social capital, achieving distributive and procedural justice and expanding democratic participation and accountability. If these elements are not present, it could undermine attainment of economic sustainability (Carley & Christie, 1992:77-78).

Ecological sustainability, if seen in conventional terms, aims to maintain biodiversity and life support systems and reduce reliance on non-renewable resources. Public health and safety seen in societal terms of reduction of hazardous wastes and pesticides, for example, and also at the level of the household and the workplace, are also included in the list of elements ensuring ecological sustainability (Hardoy & Satterthwaite, 1992; Wackernagel & Rees, 1999.)

The goals of economic and ecological sustainability are summarised as follows:

Table 1-1: Goals of Economic and Ecological Sustainability

Economic sustainability	**Ecological sustainability**
Full employment	Maintaining biodiversity
Economic stability	Maintaining life-support systems
Reasonable economic growth	Conserving the resource base
Labour force replenishment and skills development	Conserving renewables

Economic sustainability	Ecological sustainability
Attainment of labour standards	Creating secondary materials economy
Expanding social capital	Eliminating health risks
Distributive and procedural justice	Avoiding creation of new risks
Democratic participation and accountability	Protecting household and workplace safety

Source: National Science Foundation (2000: 19)

Many actors are involved in the policy-making process affecting economic and ecological sustainability at different spatial scales as seen in the table below due to the various levels of knowledge shown below:

Table 1-2: Actors in policy making

	Economic	Ecological
➢ **Global**	International financial institutions Supranational organisations Multinational corporations International trade secretariats	Climate change researchers Global environmental NGOs
➢ **National**	National Government Trade agreement National corporations Trade unions	Regional agencies Environmental organisations Regional planning agencies
➢ **Local**	Local government CBO's NGOs Households	Environmental justice advocate Land trust preservationists Sustainable agricultural organizations Households

Source: National Science Foundation; 2000

This results in a wide variety of knowledge held by different groups and organisations with regards to processes related to economic and ecological sustainability. This diversity implies a fragmentation of knowledge at all scales. The fragmentation of knowledge is only partial as many groups work across scales to achieve their ends (De Beer & Swanpoel, 1998:28).

Dualism related to economic and ecological sustainability is artificial. Temporal scale is a key issue in the relationship between economic and ecological sustainability. "*Economic*" objectives may appear to conflict with "*ecological*" goals in the short term, but they are in most cases co-dependent when viewed over the long term. A dialectical relationship exists between processes of urbanisation and the environment–economy nexus when researching urban sustainability. Characteristics of urban places such as high population density, energy consumption, agglomeration and scale economies have direct implications for the economy–environment relationship, and vice versa (Heeney, 2004:2).

The close interrelationships linking economy and environmental challenge the following long-held assumptions:

- *Livelihoods can be sustained through market processes.* A more narrowly construed version of this assumption is that markets (either independently or through regulation) can encourage sustainable practices of natural resource exploitation by internalising externalities. Neoclassical assumptions characterise negative externalities as examples of market failure and, therefore, redeemable within the scope of market processes. In this view, it is economically rational for producers to maximise negative externalities (since socialised costs need not be compensated by the producer). A fundamental structural challenge to sustainable livelihoods arises, however, if externalising costs is not only rational but also necessary for current markets to operate, as appears to be the case given the increasingly rigorous competition of capital under conditions of globalisation. The conclusion to draw from this examination of neoclassical assumptions is that market processes are incompatible with the goal of sustainable livelihoods (Deveraux, 1993:185).
- E*nvironmentally sustainable innovations result from scarcity and the search for marginal advantage.* This is a variation on the conventional assumption that markets drive technological innovations conducive to sustainability. It has been proven (Maharani & Salsa, 1999; Shiva, 1992; Tenner, 1997) that many technological innovations resulting from problems with existing production processes (and related problems of overcapacity) are actually or potentially more harmful to the environment than the technologies they replace. An example of this is the field of biotechnology, a field that can be positive but also pose serious ecological, social and ethical challenges (Krimsky & Wrubel, 1996; Rissler & Mellon, 1996). The problem is exacerbated to the extent that the spatial and temporal effects of new technologies are quite diffuse and improperly understood.
- *It is assumed that capital mobility requires environmental deregulation.* The dependence of localities on inward investment, and ongoing fears of capital flight, often underlie arguments for reduction or elimination of environmental regulations and explain the apparent willingness of poor localities to accept environmental risks and burdens as they seek to sustain local livelihoods. The dependence of localities

on mobile capital, and the inequality inherent in that dependence, however, can be fundamentally reduced through development of alternative frameworks of ownership and control that replace profitability with sustainability as the motivating principle (Kleynhans & Naudé, 2001:139).

- *The assumption that international trade agreements are conducive to international environmental standards.* International trade agreements are often established to counteract barriers to the global circulation of capital. These agreements are justified on the grounds that they will support establishment and enforcement of uniform environmental standards. Apart from difficulties encountered in implementation and enforcement of trade agreements, these agreements in themselves do not fundamentally alter the structure of production or consumption and tend to address symptoms of environmental degradation rather than underlying causes. Expansion of the spatial scale of production and consumption causes environmental damage to the geographic area.
- *The assumption that individuals are fungible within economic and ecological systems.* Traditional analysis of economic and environmental effects often ignores issues of household composition and the gender division of labour. The household is seen as a place where economic and ecological processes are intimately related when analysed in the context of sustainable livelihoods. Household members can either contribute to sustainability or ignore the concept as they participate in circuits of production and consumption. The household viewed as a site of mutual dependence can also fracture sustainable practices under particular conditions. An example of this is where transformations in global systems caused by either colonialism or globalisation of capital can, inter alia, bring about changes in gender divisions of labour within households, which in turn can disrupt sustainable agriculture and livelihoods. The household is an important instrument of both historical and contextual analyses, in order to understand how prior sustainable systems have been maintained or damaged by external circumstances or elements (Carney, 1996; Gibson-Graham, 1996; Rocheleau *et al..,* 1996).

Politics is one of the greatest barriers to defining and achieving urban sustainability. Attaining sustainable livelihoods necessitates a realignment of entrenched interests, outcomes, and power relationships. Hope (1984:92) describes the political character of sustainability as

- a problem and a desired objective;
- an identification of the origins or causes of problems that undermine sustainability (i.e., in the reproduction of existing, unsustainable, structures and practices); and
- delineating solutions conducive to sustainability.

Defining the problems, causes and possible outcomes are inherently and inescapably political projects. The many different definitions show that the various constellations of power define the term of sustainability in

ways that serve their own interests. David Harvey (1966:361-374) suggests that nobody is "*against*" sustainability. The structure and the organisation of power relationships, and their institutional expression in forms of governance, where governance is defined in the broadest institutional terms, have to be investigated. Changes in the structure of governance are a prerequisite for obtaining sustainability.

The traditional discourse is dominated by biophysical and technological approaches that assume for example, that sustainability primarily refers to ecological systems that can be sustained via engineering solutions. Implicit and sometimes explicit assumptions are often made that lead directly to severely constrained problem definitions and agendas that presuppose outcomes and entail commitments to narrowly construed forms of resolution.

Global articulations of such scenarios include a phenomenon like modernisation and development, encompassing a forever expanding proportion of the earth's population and land area within the sphere of commodification and market processes. If sustainability is defined only in technical terms, the social, economic, and political components underlying existing unsustainable practices is excluded and it is assumed that sustainability can be achieved through a status quo situation where underlying relationships are left untouched (Lake 1996). The interest therefore shifts from identifying "*best practices*" for replication in other locations, to understanding the conditions that foster the adoption of sustainable practices. If the barriers to sustainability consist primarily of political factors instead of technical problems, it has to be ascertained why cities are unable to implement sustainable practices.

The following issues have to be considered, namely the focus on the social and political conditions under which individuals in urban places can democratically participate in decisions about sustaining their livelihoods; as well as the social and political consequences of recognising the condition of urban sustainability (Douglass & Friedmann, 1998).

The National Science Foundation (2000:22) states that sustainability is achieved by considering the social, political, economic, and cultural relationships fundamental to the organisation of society. These structures, in turn, delineate power relationships that emerge as, and are articulated through, institutions of governance. Institutions of governance are socially constructed and, therefore, subject to transformation. Governance is perceived as a set of institutions that may comprise varying configurations of actors situated, for example, in the state, the market, and civil society. Institutions consist of sets of rules, which may be formal or informal, codified or implicit. Institutions are defined by these sets of rules which consist of the constituent actors, the conditions for their inclusion, their reach or authority, the states of the world they can affect (i.e., their

jurisdiction), the flow of information, the mechanisms through which decisions are produced and/or overturned, and the distribution of end results.

Governance institutions are dynamic, instrumental, context-dependent, hierarchical and overlapping (Commons, 1957; Ostrom, 1990; Wantrup, 1970; Waterstone, 1996). Various configurations of the multiple, interacting institutions produce the conditions of everyday life. Examples of institutional actors operating at different spatial scales include, inter alia, the following:

- International political organisations, e.g. United Nations, World Trade Organisation
- Global financial institutions, e.g. World Bank, International Monetary Fund
- Global-, national- and local corporations and markets
- Global non-governmental organisations
- National-, state- or provincial- and local governments
- Inter-city networks which, for example, include associations of governments, national chambers of commerce
- Local-, community-, and grassroots organisations
- Households.

All institutions are governed by sets of rules defining the actors, boundaries, scope, authority, jurisdiction, decision process and outcomes. Politics is the process of contestation over delineation of the rules and is summarised as the one who governs, how, where, for whom, and with what outcomes. The nature of these rules determines the extent to which outcomes are conducive to sustainable livelihoods.

Any change in the direction to sustainability could involve the introduction of new institutional actors or changes in the boundaries, scope and jurisdiction of existing institutions (Freire & Polése, 2003:77).

1.4. METHODOLOGY

Research was designed around the Clairwood Precinct, situated in the Durban South Basin of South Africa focusing on long-term analysis of the environment. The study encompassed a variety of geographic scales. The case study was intended to strive to build a knowledge base that would contribute to theoretical and practical understanding of challenges to and opportunities for urban sustainability. Clairwood is an area where sustainability was undermined, due to previous government practices and external pressures, and where sustainability is to be reinforced. The research site provided utility for exploring and challenging

different theoretical propositions about possibilities for, and barriers to, livelihood sustainability. Working from analysis of events and processes occurring at Clairwood, research was focused on pursuing the consequences of local events and processes for the sustainability of livelihoods at the local scale as well as at different scales affected by local practices. The research objective was less of an attempt to identify a "*model*" practice of sustainability to be transported to other sites than of an attempt to rather identify processes and conditions through which sustainability could prove to be more or less likely to be attained.

Clairwood was chosen as a study area as the livelihood is under siege. Clairwood's economic structure is dualistic in nature and consists of manufacturing or service economies and forms a residential enclave surrounded by industrial land uses. There are different social and cultural practices, exposure to environmental risks and hazards, and political and institutional structures.

In both conception and execution, research has been conducted in collaboration with specialists, with different fields of expertise. Research was also inclusive and participatory, incorporating local practitioners (and their local knowledge) as full partners. Consistent with the normative goal of seeking to promote sustainable livelihoods, research should contribute to capacity building and empowerment in Clairwood. Additional points of leverage, from which change will be implemented, were also researched.

Research was conducted around four main categories whereby certain issues could be identified, namely:

Geographic Scale, the Local, and the Global

The following issues with regard to Clairwood were researched:

- The relationship between sustainability and the flows of population, capital, resources, information, etc. linking Clairwood to other localities and other geographic scales as well as the relationship between the duration and intensity of flows and sustainability.
- The relationship between local perceptions of scale interdependencies to determine whether they support or undermine sustainability.
- The flows connecting localities to other scales mediated by technology and regulation and their effect on sustainability.
- How territorially-bounded localities address broader economic and environmental systems, operating at larger spatial scales.
- The social, political, economic, and cultural history of a locality's effect on sustainability.

- How sense of place, stocks of social capital, and civic culture relate to both geographic mobility and sustainability.
- The relationship between the social and cultural resources and the willingness to invest in a place, as well as how to change local institutions and modes of behaviour.

Urbanisation, Urban Form and the Physical Environment

The following issues were investigated:

- The effect of form and density of settlement patterns in Clairwood on the process of sustainability and how this relationship varies in the different contexts.
- The economic and environmental causes and impacts of increased levels of production and consumption
- The material environmental impacts of urbanisation in Clairwood, mediated by social relations. (An example of this is as follows: although it is possible to measure the extent of pollution generated by the Clairwood population on its surrounding air shed, it is still necessary to understand the particular socio-cultural practices that produce such pollution. The environmental impacts of urbanisation are embedded within a set of local practices shaped by the economy, culture, history, and geography of Clairwood and the surrounding areas.)
- Sustainability at household and community level, as well as how sustainability is influenced by gender relations within households, by livelihood strategies of households, and by changes in household composition due to urbanisation, selective migration and commuting patterns.
- The changing position of poor or other marginalised segments of households and community members in Clairwood as they are exposed to rapid urbanisation and the related effect on sustainability.

Economy and Environment

The following issues were investigated:

- A shift in attention from sustainable development in Clairwood to sustainable livelihoods and its effect on how livelihoods are conceptualised, measured, analysed and assessed.
- The extent to which livelihoods are differentially constructed at the level of the household, the locality, and larger spatial scales and the extent to which these differences affect sustainability in Clairwood.
- The forms and conditions of livelihood that are more or less conducive to sustainability.
- The structural impediments and opportunities for markets to foster sustainable livelihoods in Clairwood.

- The effect of the increasing scope of market institutions (for example, through privatisation in Clairwood) on sustainability as well as its effect on the economical and ecological systems operating in Clairwood.
- The possibilities and limits of the "*greening of industry*" as a route to sustainability and the extent to which this strategy becomes a substitute for more far-reaching structural change.
- The extent to which consumer-led campaigns can alter patterns of consumption and production to determine the impact on sustainable livelihoods.

Politics and Institutions

The following were investigated:

- Consequences for sustainability of currently existing institutional rules and relationships, operating across and within a broad range of context- and issue-specific matters in Clairwood.
- The systemic changes in the form of economic restructuring, global environmental change and scale shifts in governance structures, including issues such as devolution, deregulation and privatisation, for example, where changes in institutional rules and relationships are introduced, and the consequences for sustainability of these systemic changes are observed within Clairwood.
- Changes in institutional rules and relationships needed in Clairwood to facilitate a transition toward greater sustainability.
- New categories of actors, scope, authority and decisions needed to facilitate attainment of sustainable livelihoods in Clairwood.
- Such institutional rules and arrangements as would promote greater local control over local processes and conditions.
- Changes in local practices through enhancement of circumstances of local actors and institutions.

Research consisted of the following:

- Desktop research and literature studies encompassing all the components of urban sustainability and current trends and impacts.
- Fieldwork was focused on the Clairwood Precinct and included an analysis of any previous documentation on the Clairwood area, interviews and questionnaires and stakeholder participation workshops with relevant stakeholders. Fieldwork was conducted in conjunction with the development of

the Clairwood Precinct Plan for the South Durban Basin Area Based Management of the eThekwini Municipality.

1.5. SCOPE

The scope of the study was to refine research so as to contribute to the conceptual understanding of urban sustainability, improve tools of analysis, and uncover the selective uses of sustainability by actors in varying contexts and on how change can most effectively be brought about.

1.6. OUTLINE OF THE REPORT

The report consists of the following chapters:

- **Chapter One** provides an introduction to the study.
- **Chapter Two** describes the sustainable development framework by describing approaches to development, spatial dynamics and characteristics of integrated development.
- **Chapter Three** provides a description of the development framework of urban sustainability in South Africa.
- **Chapter Four** is focused on integrating the city.
- **Chapter Five** is focused on the urban economic development and economic trends to determine sustainability.
- **Chapter Six** provides a sustainability of the built (man-made) and natural environment.
- **Chapter Seven** describes the importance of good governance and citizenship as prerequisites for sustainability.
- **Chapter Eight** provides a synopsis of the knowledge base on urban sustainability by conducting a study of the Clairwood Precinct.

CHAPTER TWO

THE SUSTAINABLE DEVELOPMENT FRAMEWORK





CHAPTER TWO: THE SUSTAINABLE DEVELOPMENT FRAMEWORK

2.1 INTRODUCTION TO APPROACHES TO DEVELOPMENT

Since the end of World War II, there has been a worldwide struggle for the improvement of living conditions, especially in the so-called "*developing*" countries (Swanepoel & De Beer, 2000:31). There was little query initially as to the causes of underdevelopment. The newly independent countries, the United Nations bodies and industrialised countries tried to promote development by applying measures like the introduction of knowledge systems through the assignment of experts, the expansion of education and the development of infrastructure. The example of the industrialised countries was followed. In the course of time it became obvious that this was more or less a treatment of symptoms instead of causes, and the gap gradually widened between the developed and less developed countries of the world.

During the early period of development efforts, there was little discussion on the historical causes and the real nature of underdevelopment. Theoretical considerations at the time of the "Cold War" explained the situation of underdevelopment and the path for development from the viewpoint of Western or socialist metropoles (Norgaard, 1994). Only in more recent times has the viewpoint of Developing Countries gained momentum in development theory (Souza, 2000). This has great practical implications namely that development theory offers the justification for policies. The answer to the question of the nature of development determines which strategies, policies, projects, type of industry, or what organisation of agriculture should be considered to be in line with development goals or detrimental to these.

Different positions in development policy are based on differences in underlying development theories. There are a great number of explanations for underdevelopment and concepts of development. The most important theoretical explanations and theories of underdevelopment and approaches to development are researched. The main schools of thought and how they have developed are discussed and a brief and critical appraisal is given. The hegemony of these schools of thought has changed over time as new or revised theoretical discourses have risen to prominence. The emphasis is on development theory, which has international currency, but there

can be variations in the theoretical frameworks applied to different countries and regions. Developing societies are also not homogeneous. The recent and growing emphasis on globalisation of economic and social life, and the collapse of many state socialist societies especially in Eastern Europe, the notion of what constitutes a developing society has in effect been widened and has also exercised an impact on development theory (Swanepoel & De Beer, 2001:31; Soja, 2000:190). Soja (2000:190) also refers to globalisation as being the "*millennium metaphor for practically everything that has been happening almost everywhere.*" Low and Barnett (2000:54) refer to globalisation as "*a talismanic term, a seemingly unavoidable reference point for discussion of our contemporary situation*". They also state that globalisation is a highly politicised discourse of prediction and projection which works to drastically foreclose the realm of choice, decision, responsibility and strategy. The definition of development theory has been affected by the growing definitions of globalisation in terms of social and economic systems.

Some authors organise development theories along the scientific disciplines, which are basic for the analysis and differentiation between economic theories, sociological theories, demographic theories and climate theories. Others differentiate between socialistic and market-economy oriented theories because these two groups have a different way of analysing and diagnosing the causes of underdevelopment, and they are distinct as to their opinion on the possibilities of reform or revolution with a view to influencing the development process. The chapter defines development in economic terms and in terms of sustainable development.

Definitions of Development

Development was originally seen in economic terms with two main schools of thought namely balanced growth versus unbalanced growth. Martinussen (1997:56-72) states that economics provided the initial thrust for development.

Balanced growth involves the simultaneous expansion of a large number of industries in all sectors and regions of the economy. Balanced growth, or the "*Big Push*" theory argues that as a large number of industries develop simultaneously, each generates a market for the other. This

"*Big Push*" theory was developed by Rosenstein-Rodan during and after the Second World War after he had studied a number of relatively poor East and South-eastern countries. This theory is an investment theory, which stresses the conditions of "*take-off*". The emphasis is based on the need for a "*big push*". The investments should be of a relatively high minimum in order to reap the benefits of external economies. Only investments in big complexes will result in social benefits exceeding social costs. High priority is given to infrastructure development and industry, and this emphasis will lead to governmental development planning and influence (Meier, 1970:393-398). Ragna Nurkse (1967) elaborated on the theory developed by Rosenstein-Rodan.

If a large number of different manufacturing industries are created simultaneously then markets are created for additional output. For example, firms producing final goods can find domestic industries that can supply them with their inputs. The benefits of growth are spread, over all sectors and, ideally, regions (Nurkse, 1967:1). Nurkse states that people are poor as they are caught up in a cycle of little savings, investment and low productivity.

This is similar to the definition of the United Nations Development Programme (1998:1)that refers to a cycle of poverty namely that poverty entails a lack of access, lack of power, lack of income and resources to make choices and take advantage of opportunities. People living in poverty lack the financial and physical resources to make choices and take advantage of opportunities.

Nurkse (1967:2) was of the opinion that incremental increase in capital formation would be unsuccessful in breaking this cycle of poverty. The reason for this was, that as every industry endeavoured to increase its output through greater capital investment, there would not be a great enough market or demand for the specific product or service based on a shortage of supply in the economy.

Nurkse made the statement that development should take place over a number of sectors, inter alia balanced investment that would balance increases in demand with increases in supply. Nurkse emphasised inward industrialisation by means of import-substitution, based on a pessimistic outlook with regard to export of primary products in comparison with growth in

developing countries. Nurkse's pessimism was based on the following (Kleynhans & Naudé, 2001:74):

- Nurkse saw the export markets of tropical products and primary products as being severely limited over the long-term, based on the fact that supply would only increase marginally. In such circumstances, a greater supply in export would lead to decreases in the international prices of export goods of Less Developed Countries.
- Kleynhans and Naudé (2001:74) also state that Less Developed Countries have a greater tendency to import, based on the international demonstration effect whereby less developed countries imitate the consumer patterns of the developed countries. This would lead to many balance-related problems, as well as a decrease in available savings for investment.

Balanced growth theory is an extension of Say's Law, which states that the demand for one product is generated by the production of others. It is argued that free markets are unable to deliver balanced growth because entrepreneurs (Samuelson, 1980:325-326)

- do not expect a market for additional output and ask why they should risk resources when sales are uncertain;
- require skilled workers but are not willing to hire and train unskilled staff that may then leave to work for rival firms, in other words, employers cannot internalise their positive externalities; and
- do not anticipate the positive externalities generated by the investment of other firms engaged in expansion and are unable to raise finance for projects.

One firm provides a market for another if the government coordinates simultaneous investment in many industries. This requires state planning and intervention to

- enhance trained labour;
- plan and organise large-scale investment programmes;
- mobilise the necessary finance;
- nationalise strategic industries and undertake infrastructure investments, e.g. build roads; and

- protect infant industries through tariff (tax on imports) and quota (limit on quantity of imports) policies (Kleynhans & Naudé, 2001: 75; Nurkse, 1967:5).

The strategy of balanced growth is beyond the resources of most poor countries. Balanced growth within a closed economy rather than specialisation and trade, contradicts comparative advantage.

Unbalanced growth theorists argue that government planning results in government failure, which implicates that government intervention in the market fails to bring about an efficient allocation of resources, e.g. the planning process creates a bureaucracy. Development policies of Less Developed Countries focus on import-substitution, agricultural self-sufficiency and state control of production, yielding poor growth (Kleynhans & Naudé, 2001:75).

Hirschman (1984) argues that sufficient resources cannot be mobilised by government to promote widespread, coordinated investments in all industries (Meier & Seers, 1984:87-111). Hirschman shows that the theory of balanced growth is impractical in most Developing Countries that do not have access to a so-called "*Marshall Plan*", like Europe after the Second World War.

The unbalanced growth theorists concede that free markets, alone, cannot generate development, but differ in that government planning or market intervention is required in strategic industries. Those with the greatest number of backward and forward linkages are prioritised (Meier & Seers, 1984:88; Nurkse, 1967:70; Kleynhans & Naudé, 2001:75). According to Hirschman, Nurkse and Rosenstein-Rodan, industrialisation is seen as a prerequisite for economic development.

Industrialisation will provide optimal growth if it is accompanied by large-scale investment in a number of sectors simultaneously. Hirschman differed in the sense that he was in favour of the "*Big Push*" theory in a few industries. The goal of this would be to increase inequality in the economic structure. The rationale for this was that over-concentration in one sector would lead to sectors becoming over-capacitated in terms of demand which would lead to bottlenecks in other sectors.

Hirschman was under the impression that reaction in other sectors would stimulate development, as it would provide an opportunity for entrepreneurs to make a profit. An example illustrating Hirschman's theory is the overprovision of electricity, which leads to a decrease in the price of

provision. Large sectors of the economy can increase their output as a result of this. In this case the electricity sector is the forward linkage and large industries like mines, for example, the backward linkage. The question as to which industry must be over-invested in depends on the number of forward and backward linkages existing between the industry and the rest of the economy. It is the responsibility of government to create unbalanced investment in certain sectors that will create the most spin-offs (Meier & Seers, 1984:88-112). There is much hidden potential for development in less developed countries if large positive projects with positive externalities are developed (Meier & Seers, 1984:88-112).

It is concluded that theorists argue that a country lacks resources to finance balanced growth. Resources are therefore concentrated on strategic industries with:

- Significant forward linkages, e.g. firms creating essential inputs for other key firms in the economy.
- Significant backward linkages, e.g. key firms buying industrial inputs from a large number of domestic firms.
- Import substitution. Developing domestic industries replace imports and so improve the balance of payments.
- Significant backward and forward linkages identified by governments as strategically important sectors, to nationalise (planned economy) or subsidise (market-economy), e.g. state owned development banks finance priority investment projects chosen for their contribution to growth and development.

Neoclassical economic theory concludes that, when wage differentials exist between regions, migration will accelerate the convergence of the two regions. In other words, migration is one of many ways to speed up development and equalise economic disparities (Lewis, 1954:139-192; Ranis & Fei, 1961:533-565).

The notion that exporting labour can reduce economic differences between areas, is termed balanced growth, because the transfer of labour helps the emigration area to catch up economically with the immigration area. Economic theory promises a narrowing of income differentials between emigration and immigration areas on several grounds. An example of this is

the export of unemployed workers and the import of their remittance savings that would give the labour-emigration area an extra economic boost to accelerate its development. According to the balanced growth theory, emigration should be self-stopping because wages rise as migrants leave and jobs are created with migrants' remittances (Lewis, 1954:139-192; Ranis & Fei, 1961:533-565).

Several assumptions are required to ensure that a neoclassical theory holds true namely full employment, perfect competition, identical production technologies and no scale effects or externalities. According to some authors there is a relation between migration combined with immobile production factors, such as factories (Lewis, 1954:139-192; Ranis & Fei, 1961:533-565).

Lewis (1954:139-192) explains that most bilateral labour streams have drawn their inspiration from the balanced growth theory. Beginning optimistically, both sending and receiving countries anticipated benefits from the migration process. For receiving countries, the principal benefit was access to low-wage labour in times of need, always flexible and able to rotate in and out as need dictated. For sending countries, the cited benefits have been recruitment, remittances and returns. That is, recruiters would provide jobs, migrants would remit income while abroad and migrants with new skills would return to the sending country.

Nations are divided into three strata according to Wallerstein's (1974) world-systems theory, based upon their power namely the core, the semi-periphery and the periphery. The core maintains its power by exploiting the semi-periphery and periphery, and likewise the semi-periphery maintains its power by exploiting the periphery. Based upon these exploitative relationships, a world-systems theory suggests that inequality between the core and the periphery is generally growing. The theory makes few empirical predictions about migration, except that the core uses migration to exploit the periphery.

Most empirical studies of the effects of migration on individual villages or towns, support the hypothesis that development tends to be asymmetrical, helping the rich receiving region while hurting the poor sending region. These studies highlight the shortcomings of recruitment, remittances and returns. First, labour recruitment tends to attract motivated, risk-taking

individuals, who may be missed in the sending economy. Second, remittances tend to be used non-productively for land purchases, debt repayment, gold or dowries. Third, many migrants do not return, choosing to settle in the receiving country instead, eliminating the sending country's chance to profit from the skilled returning migrant as described by Myrdal in 1967. Migration increased inequality in some areas (Iberia, 1983:17).

Development theory defined in economic terms is focused on the improvement of living conditions. Neoclassical views argued in economic terms that developing countries simply required inputs that were in short supply, such as large-scale factories, money, trained workers and modern technology. Ngu (1982:157) summarised it briefly: *"It was merely a matter of providing capital and training in specialised skills to enable these late developers to explore their own natural resources and thus to eliminate poverty, regardless of its causes."*

Development theory and practice has throughout the years evoked many different development debates but essentially there has been consistency with the main issues and preoccupations over the last few decades. The main concerns of these theories are how to deal with poverty and growth, policy setting and participation, and how to achieve justice and equality albeit with different emphasis on the actors and means with different political backdrops and a diminishing sense of hope over the years (Harcourt, 1997:6).

Verhelst (1987) notes that toward the 1980s it became clear that development theory and practice had reached a turning point. It promoted westernisation in many ways and not development in poor areas. This process threatened the delicate balance between social and ecological systems in non-western societies. Many non-western knowledge systems were seen as being inferior and many developed countries argued that it should be replaced with western systems.

Westernisation in this sense has often been associated with an increasing process of intellectual poverty, as other knowledge systems were ignored and undermined by western scientists, who argued that their knowledge systems were superior to other knowledge systems. This has been proven wrong as no knowledge system that is ever complete.

Western knowledge systems have provided the basis for modern science, as all the assumptions that form the basis of modern scientific concepts are based on western schools of thought. Many scientists have only in recent times discovered the limitations of western science and the need for indigenous knowledge systems. Norgaard (1994) and Capra (1982) emphasise the fact that all knowledge systems should be mobilised to address existing and future challenges in society. Development is very dependent on culture and knowledge systems emanating from culture.

The intellectual crisis is also exacerbated by an environmental crisis affecting all regions on the planet in some way. The way in which we interact with our natural environment threatens different forms of life and the quality of life, including that of our own species. Increasing industrialisation, increased urbanisation and other problems lead to the loss of habitat of various species. Other examples include the loss of the ozone layer that causes cancer or the increased use of high entropic resources such as fossil fuels that promote global warming, which may alter the productive capacity of planet earth.

The environment is also threatened in that population growth threatens ecosystems, e.g. the Sub-Saharan countries where the population growth doubles every 20 years (Hancock 1995; Read, 1995). The environmental and intellectual crisis has to be addressed simultaneously in a holistic fashion. The crisis affects developed and Third World countries and has to be addressed by means of **sustainable development**, an approach that encompasses environmental issues as well as economic issues. Pezzey (1992:55) states that: "*The concept of sustainable economic development as applied to the Third World is therefore directly concerned with increasing material standard of living of the poor at "grassroots" level, which can be measured in terms of increased food, real income, educational services, health care, sanitation and water supply, emergency stocks of food and catch.* "

Sustainable development addresses issues of people's daily lives and aims to be sensitive towards the environment and to fulfil the needs of future generations. The WCED (1987: 43) states that development should "*meet the needs of the present without compromising the ability of future generations to meet their own needs*". Sustainable development does not replace all previous ideas on development but provides an umbrella for development with new and different questions

and answers. Different types of information are needed to fit a particular context, as there is no all-encompassing knowledge system. The way in which the development process is managed at local level will have a definite impact on the rate of success and the future of sustainable development. Kleynhans and Naudé (2001:14) explain that the Brundtland report stressed six critical aspects of interaction between the environment and economic development, namely population growth and development, food security, species and ecosystems, energy usage and resources, industrialisation and migration and urbanisation. Six prerequisites are given in the Brundtland report for sustainable development namely a political system that encourages public participation in decision-making, an economic system that finds solutions for inequality, a production system protecting natural resources, a technological system supporting trade and finance,a global framework supporting sustainable patterns of trade and finance, and an effective administrative system.

Sustainable development can be seen as a convergence of two paradigms that initially evolved in an antagonistic manner, as far back as the industrial revolution (Harrison *et al.*, 2003:245). The first being the growth and development paradigm based on the fact that economic growth is based on the economic output of an economy as measured by the Gross Domestic Product (GDP). It was believed that improved standards of living could be achieved through an increase of the respective GDPs. The second being environmental preservation, as environmental and resource impacts were not taken into consideration (Harrison *et al.,* 2003:245).

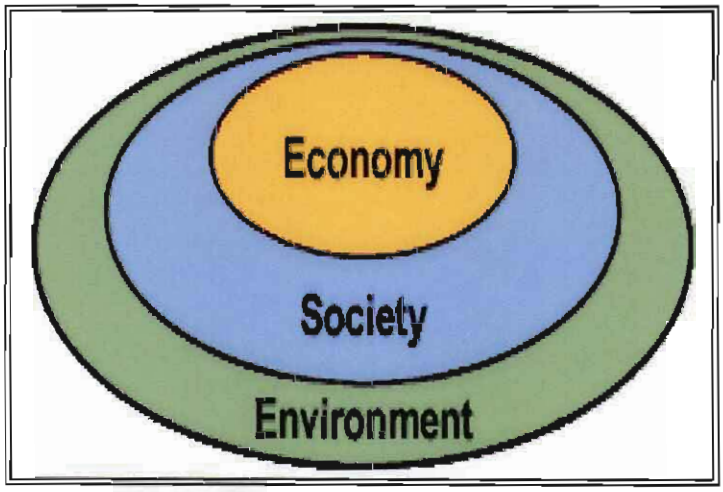
Between 1950 and 1970 the environmental movement emerged after a century where limited resources and environmental degradation had been discussed as a by-product of exponential population growth accompanied by high levels of production and consumption. The Club of Rome report of 1972 states that unless population growth and economic growth are controlled, and limits placed on environmental degradation, humans would not be able survive. Reconciliation between the two movements became imperative in the 1970s and the United Nations therefore introduced the Conference on the Environment and Development.

The first conference was held in 1972 in Stockholm. This formed the foundation of combining the two movements, thereby introducing a global framework for development. The United Nations

launched the World Commission on Environment and Development, which defined sustainable development as mentioned earlier in the section. The WCED definition is important as it retains the vision of development but states that it should not be pursued at the expense of future generations (Mawhinney, 2002:2).

Mawhinney (2002:2) described the term "*sustainable*" as the ability to continue. A society is sustainable if it can continue for a long time. A sustainable society does not borrow resources unfairly from other parts of the planet or from future generations. A sustainable society recognises that people, the economy and the environment are all connected.

Figure 2-1: Components of Sustainability



Source: Sustainablemeasures.com

Sustainable development is seen as consisting of the following components (Mawhinney, 2002:2-28):

- *Environmental Responsibility* where the natural environment is protected and enhanced and resources utilised fairly and efficiently.
- *Social Equity* where research is improved to ensure a better quality of life for everyone in the community, not only for some.

- *Economic Opportunity* where a healthy, growing economy is promoted and it is ensured that every individual has access to jobs and opportunity.
- *Community involvement* where safe, healthy communities are promoted, where all types of people and families have a sense of belonging and want to promote their community's sustainability.

2.2 UNBALANCED GROWTH/DEVELOPMENT

Traditionally economists monitored economic growth based on economic theory. Economic development theories and models seek to explain and predict how

- economies develop (or not) over time;
- barriers to growth can be identified and overcome; and
- Government can induce (start), sustain and accelerate growth with appropriate development polices.

Theories are generalisations. While Less Developed countries share similarities, every country's unique economic, social, cultural, and historical experience means the implications of a given theory vary widely from country to country. There is no single agreed upon "*model of development*". Each theory gives an insight into one or two dimensions of the complex process of development, e.g. Rostow explores the stages of development Less Developed Countries might take (Rostow, 1960). The Harrod-Domar model explains the importance of adequate savings in that process. Earlier theories investigated economic growth. Unbalanced growth theorists argue that sufficient resources cannot be mobilised by government to promote widespread, coordinated investments in all industries.

Neo Classical Theorists

In the eighteen and nineteenth centuries, a group of economists did work which is today seen as "classical" theories. Many modern economists have updated the classical theories and are referred to as neoclassical economists.

Classical theories were preoccupied with the role of markets in the economy as a means of increasing national income (Samuelson, 1980:786). Classical theory was also focused on the needs of the colonial powers, for example Shrestha (1987) explains Cecil John Rhodes's plea according to Lenin, that the United Kingdom should acquire additional colonial land for their surplus labour (Geyer, 2001:1). If markets worked freely and nothing prevented their rapid clearing then the economy would prosper. Government intervention was required if there was interference with the process.

Neoclassical thinking shifted to ways in which capital-labour ratios could be improved within Developed and Developing Countries. Industrialisation was an imperative ingredient in the process of economic development in both Developed and Developing Countries (North, 1955, 244; Rostow, 1960; Leven, 1966:79-84; Tiebout, 1963:105-109).

The main role of government according to the neoclassical theory was to ensure free workings of markets using supply-side policies and to ensure a balanced budget. The main theories justifying the neoclassical theory include the following:

- Free market theory
- Say's Law
- Quantity Theory of Money

Free market theory

This classical theory argues that if the economy is left to itself, it would lead to full employment equilibrium. This would be possible if the labour market worked properly.

Unemployment, caused by a surplus of labour, would lead to a fall in wages. This would lead to an increased demand for labour and equilibrium would be restored at full employment (Samuelson, 1980:651). Wages are initially too high, resulting in unemployment. This causes wage rates to fall and employment increases. Any unemployment left in the economy would be purely voluntary unemployment people who have made the choice not to work at the going wage rate.

The same would also be applicable in the market for loanable funds. Equilibrium would change in the market if any discrepancy between savings and loanable funds was noted. A free market and flexible prices would also be needed to achieve this. In this market the price is the rate of interest. If investment is increased the following process would occur, namely that there would be an increased demand for money; an increased rate of interest, which would lead to increased savings as borrowers are attracted by higher rates of interest, whereby equilibrium would be restored (Samuelson, 1980:652).

Say's law

Jean Baptiste Say was an economist of the early nineteenth century. He developed a law, which stated that supply created its own demand (Samuelson, 1980:325). This justifies the classical theory, which states that the economy will lean towards full employment. According to this law, any increase in output of goods and services (supply) will lead to an increase in expenditure to buy those goods and services (demand). There will be full employment as there will not be any shortage of demand and there will always be work and job opportunities for labourers. If there were any unemployment, it would simply be temporary as the pattern of demand shifted. The same processes mentioned for the classical theory, would restore equilibrium in this instance (Samuelson, 1980:325).

Quantity theory of money

Samuelson (1980:327) states that prices must always be proportional to the amount of money. The classical economists explained inflation according to the Quantity Theory of Money, which in turn was derived from an equation, namely the Fisher Equation of Change.

This equation is known as $MV = PT$ where:

M is the amount of money available for circulation and V is the velocity of circulation of that money. P is the average price level and T is the number of transactions taking place.

According to classical economists V is relatively stable and T would always tend to full employment. Therefore the conclusion was drawn that increases in the money supply would lead to inflation. The money supply was to be controlled to control inflation.

Long- and short- term effects

Classical economists based all theories on faith in markets (Kleynhans & Naudé, 2001:67-86). Classical economists assumed that the economy would always end at full employment and conceded that there might be a slightly different reaction in the short-term as the economy adjusted to its new long-run equilibrium.

Any increase in aggregate demand in the short-term will lead to an increase in output but will also lead to an increase in price. This will happen as firms suffer from diminishing returns and are forced to increase the prices of their product to cover the higher level of costs. Increases in aggregate demand may be caused by increases in the money supply, lower levels of taxation or increased government expenditure.

The situation will be different over the long-term. The economy will have tended towards full employment on its own, and any further increases in demand will simply be inflationary. The long-run aggregate supply curve will therefore be vertical.

The long-run aggregate supply curve is vertical at the full employment level of output and any increase in aggregate demand leads to prices increasing with no increase in output.

The basis of classical policy is minimal intervention over the short-term, while controlling inflation. Long-term supply-side policies will be needed to improve the workings of markets and reduce unemployment. Samuelson (1980:784-786) suggests that classical theories be applied in the following ways:

- Interest rates are used as the main mechanism for controlling inflation.
- Taxes are cut but also accompanied by a decrease in government expenditure. This should have no effect on demand but help improve incentives.

Famous neoclassical theorists and their impact on development policies

Three famous neoclassical authors are Rosenstein-Rodan, Lewis and Hirschman. Paul Rosenstein-Rodan studied economics in Vienna and received his doctoral degree in 1925. This is an important fact for understanding his subsequent work in economic development. Austrian economics is much more concerned with the process of establishing an economic rupture to attain an equilibrium situation, than with the conditions of an equilibrium situation per se. It is in this process that the market system has to fulfil its role of coordinating the decisions of economic agents. In Rosenstein-Rodan's words: *"What matters is'the pursuit curve."*(Rosenstein-Rodan, 1984:208.*)* The pursuit curve shows the dynamic path toward equilibrium and not only the conditions at the point of equilibrium.

Neoclassical theory therefore is concerned not only with the question of existence of equilibrium, but the possibilities of *"non-existence of equilibrium"* (Rosenstein-Rodan, 1984:208). Rosenstein-Rodan moved to London in 1936. During the Second World War, he formed a group to study the economic conditions of poor areas of Europe. This group, organised at the Royal Institute for International Affairs, worked on the proposed study from 1942 to 1945. From the study, Rosenstein-Rodan wrote a paper called *"Problems of Industrialization of Eastern and*

South-Eastern Europe", which was published in the "*Economic Journal*" in 1943. This paper was recognised later on as the seminal work for the emergence of economic development.

The article begins with a question that defines clearly what economic development is all about. The article discusses regional development and its potential to transform a stagnant region into a viable, dynamic region. Rosenstein-Rodan summarised the characteristics of a stagnant economy as being a surplus labour, lack of capital and often rural in nature. The idea that underdeveloped countries have a surplus labour permeated any research done on economic development. Rosenstein-Rodan (1943:208) points out that simultaneously, the rich areas and neighbourhoods are characterised by an abundance of capital and a shortage of labour. Hence, the only possible solution mentioned is the displacement of excess capital from a rich area to a poorer area.

The industrialisation of the poorer area should be compatible with the international trading needs. Rosenstein-Rodan mentions that it would not be beneficial for a country to produce goods already available in the international market. Based on these assumptions, Rosenstein-Rodan formulates his basic economic argument namely that the process of industrialisation cannot be left to market forces. More specifically, the theoretical apparatus of the theory of general equilibrium is inadequate for analysing this process.

This is true because the process of industrialisation is at stake. The process of industrialisation involves the presence of externalities, especially on the side of capital instead of on the side of labour. An example of this is when it is unprofitable for a single firm to invest in training its workers, because the employees can move to another firm at any time, causing a loss in investment. If all the firms form an institutional arrangement to train the labour force, then the externalities resulting from a specialisation of workers will be internalised in the industrial sector.

Rosenstein-Rodan (1984:202) uses the example of the initiation of a shoe-producing firm. This is an example of horizontal complementarity. There is also vertical complementary, that is, externalities which could be internalised by promoting investment for an entire productive chain, from producers to their suppliers, up until the last sector of the chain.

The theory of general equilibrium cannot handle the above-mentioned, as it usually deals with a given economic situation. This theory's point of departure states that a given amount of productive resources will be allocated for production of a certain amount of goods, depending on the technology, in order to satisfy the preferences of the economic agents. A process of industrialisation is, by its very nature, a process of transformation of the economic situation. This process involves what Rosenstein–Rodan (1984: 249) called *"external economies"*, undividable elements particularly in the case of social overhead capital and technological externalities, like the example of training the work force.

The requirement of a minimum amount of resource as a prerequisite for economic activity is an established principle in economics. Only with a minimum amount of resources and agriculture, can an economic surplus be developed. Smith (1979), in Book II of his *Wealth of Nations*, also draws attention to the fact that only with a certain minimum amount, can an individual act as a capitalist. The theory of general equilibrium is a case of imperfection, for the process of industrialisation is the normal situation. Rosenstein-Rodan states: *"The market mechanism does not realise the 'optimum', either in one nation or between nations, because it relies on such unrealistic assumptions as linear homogeneous production functions, no increasing returns or economies of scale or of agglomeration, and no phenomenon of minimum quantum of threshold. This obscures the nature of the development process and the risk involved. Nothing in theology or technology ordains that God created the world convex downwards."*

General equilibrium theory states that market forces cannot handle a process of industrialisation and that the only solution is to organise an institution or an enterprise, to coordinate this process. Its main role is to look for sources of capital outside the country and to direct and supervise its application. Rosenstein-Rodan suggests a name for such an institution, namely, the Eastern European Industrial Trust (EEIT). The projects chosen by this enterprise should be coordinated in order to explore the externalities referred to above. The projects should be implemented simultaneously to prevent a loss of externalities. Rosenstein-Rodan (1958:252) states: *"Industrialisation of international depressed areas, once it is accomplished, may create an equilibrium, from which onwards normal private incentives may operate successfully. But it seems hopeless to rely on them before that point is reached."*

The work of Lewis presents an entire analytical model for illustrating how an underdeveloped country could transform its economy from a static state, to a dynamic state. His model was published in 1954, approximately two years before Solow published his own model with the novelty of the concept of steady state equilibrium. Both models have some analytical similarities, but their conceptual content is very distinct. Solow's model is still widely accepted as "the" model of economic growth, while that of Lewis is reserved to explain economic development (Kleynhans & Naudé, 2001:70).

At the beginning of the fifties, much emphasis was placed on the causes of underdevelopment and how it could be overcome. An important point of discussion was how to finance the process of industrialisation. The main problem, described by Lewis, was how to increase the private domestic saving. He reflected on how this had happened in the nineteenth century in Europe. For him, the answer was *"from a rising share of profits in the national income"* (Lewis, 1984:132).

This answer led to another question, namely, how the profit share could be increased. Lewis was not satisfied with the Keynes model or the answer given in neoclassical economics. The main reason for his rejection of both models was that they could not provide any answer for explaining "*...a long-term rise in the savings propensity*" (Lewis, 1984: 132). In August 1952 Lewis proposed a possible solution: "*It suddenly occurred to me that all one needed to do was to drop the assumption – then usually (but not necessarily) made by neoclassical macroeconomists – that the supply of labour was fixed. Assume instead that it was infinitely elastic, add that productivity was increasing in the capitalist sector, and one got a rising profit share.*" (Lewis, 1984:132.)

The source of this infinite supply of labour is disguised unemployment in agriculture, technological unemployment and underemployment in urban areas or the informal sector, the movement of women from the household into the labour market; and the most important of all, the increase of population (Lewis, 1984:132).

Surplus labour, first mentioned as a characteristic of an underdeveloped country by Rosenstein-Rodan, was transformed into a crucial assumption in the Lewis-model. An important point is the

rejection of Keynesian and neoclassical economics by Lewis, in the presence of this assumption. Indeed, this rejection was spelled out in the very first pages of his seminal paper of 1954. In the case of Keynes, Lewis pointed out that, at the beginning, his theory seemed to be appropriate to deal with this assumption since after all, Keynes's work was concerned with the level of unemployment. It is precisely because Keynes is concerned with unemployment that his theory could not couple with a general underemployment of labour. Even if an underdeveloped country has full employment, there will still be a mass of unemployment significant enough for characterising its supply of labour as infinitely elastic.

Lewis argues that Keynes assumes an infinite supply of labour and capital in the short term. Lewis argues that once the Keynesian policies are put into action, the limit to increase production is predisposed resulting from a limited supply of labour.

It is interesting to note that this idea was carried forth by Harrod in his model of growth, defining the natural rate of growth. Solow also adopted the theory. Lewis (1984:133) further mentioned that once at the full employment, the neoclassical model "*comes into its own again*", since it was possible to maintain the assumption of a limited supply of labour and, for that matter, of capital. The theory of general equilibrium begins by assuming that there is a fixed supply of factors of production (the quantity of their services). These supplies will be allocated, given the technological constrain, for producing quantities of goods for satisfying the given preferences of economic agents.

The essence of this approach lies in the concept of scarcity. As a general feature of human life, scarcity gives the "*economic*" aspect of social life (Lewis, 1984:133). If the supply of labour is not fixed, in fact, if it is infinitely elastic, then labour will not be a scarce factor, and hence, the entire neoclassical approach is useless for analysing underdeveloped economies and the process of their development. The way out of this impasse is given by the very assumption that makes inappropriate Keynesian and Neoclassical economies namely to revert to the classical analysis of the process of capital accumulation. In Lewis's words: "*This essay is written in the classical tradition ,making the classical assumption, and asking the classical question. The classics, from Smith to Marx, all assumed, or agued, that an unlimited supply of labour was available at*

subsistence wages. They then enquired how production grows through time. They found the answer in capital accumulation, which they explained in terms of their analysis of the distribution of income. Classical systems thus determined simultaneously income distribution and income growth, with the relative prices of commodities as a minor by-product." (Lewis, 1958:400.)

This is a neat exposition of the theoretical structure of political economy. In fact, political economists assume that the wage rate is given and determined at the level that could maintain a worker and his family. Ricardo states that this level could change with changes in the social condition of a society. Since the wage rate is determined by historical and social conditions, a surplus product depends entirely on the productivity of labour (Ricardo, 1980:527). The concept of economic surplus is fundamental in the work of Lewis.

This surplus (profits) is the main source for capital accumulation. Moreover, Lewis does not separate capital accumulation from technical progress, which is an assumption taken for granted in every model of growth. In so far as capital is being accumulated the productivity of labour increases. This process goes on until the surplus labour is eliminated. At this point, the process of economic development is complete. The unproductive labour, in the sense of classical economists, is all absorbed into the capitalist sector, and, hence, it becomes productive, that is, it produces an economic surplus. A comparison of the Lewis model of capital accumulation with that of Solow, gives an example of what is being argued.

Solow's model of capital accumulation is built up from Keynesian and neoclassical theoretical principles. The work of Lewis rejects such principles and posits as its foundations the classical approach; utilising concepts completely alien to the mainstream economics, in particular, that of economic surplus. Maybe, for this reason, Solow's model is still taken as the starting point of growth economics, while that of Lewis is taken as a historical curiosity or limited to discuss the role of agriculture in the process of economic development (Kleynhans & Naudé, 2001:70-71).

The work of Albert Hirschman is the most drastic example of famous theories of neoclassical economic development theories. This is due to his combination of knowledge of different realms of social science that he utilises for building up his theory of economic development. His thought

on this question took shape in the late fourties as a member of the Federal Reserve Board, working as an economist on the project of post-war reconstruction of Western Europe, and then, from 1952 to 1956, at Bogotá, Colombia (Meier & Seers, 1984:88).

Hirschman detected a negative attitude with respect to the problems of society among fellow Latin American economists. He denominated this state of mind as the "*failure complex*". Hirschman saw the solution to the problems of his peers.

The work of Hirschman is most remembered due to his concept of "*linkage*". Focusing on this concept necessitates neglecting his entire approach to economic development. The base of his approach, and what gives the real content of his concept of "*linkages*", is in the first chapter of his "*The Strategy of Economic Development*", published in 1958. The ideas developed in this initial chapter are barely mentioned in the literature. Therefore, it is from here that Hirschman's ideas on development are taken (Meier & Seers, 1984:90).

Hirschman inverts the terms of the equation utilised by economists concerned with economic development. Usually, those economists point out the absence of some conditions for starting the process of development. Rosenstein-Rodan and Lewis mention the shortage of capital and described how capital accumulation could be launched. Hirschman, in turn, states that underdeveloped countries have the conditions for promoting development and that they do not have a shortage (Meier & Seers, 1984:92). Hirschman argues that the real problem is how to agglutinate these conditions for attaining development as a social objective. Hirschman remarks that a process of development involves the idea of change. Two images of change in underdeveloped countries are described by Hirschman.

Bianchi (2004) states that the first is the "*group-focused*" or "*co-operative*" image. This is typically found in static societies, in which "*individual members of such society usually have a definitive place and role assigned to them*". The increases in productivity by any individual should only happen "*at the expenses of other members and of the cohesiveness of the group*" (Hirschman, 1958:14).

Individual attempts to change a situation are ruled out by this condition. Development should be for everyone, for maintaining a relative position in the social structure, and not for some group in particular. Hirschman also notes that a process of development involves, by its very nature, "*that priorities are established and that certain activities and communities receive temporarily preferred treatment*" (Hirschman, 1958:16). This is almost unacceptable in societies that have this kind of image of economic development. It is difficult to assert what the priorities are. An example is "*the reluctance of many governments in underdeveloped countries to pick priorities and to maintain them in a consistent manner.*" (Hirschman, 1958:14).

The second image of change is the "*ego-focused*" or "the "*individualistic*". Here, "*change may be conceived as possible for individuals while it is not visualized at all for the group*" (Hirschman, 1958:14).

Hirschman explains: "*The individual member of such societies who is brought face to face with the evidence of economic progress will reinterpret it to mean that he can improve his own lot. On the other hand, he will dismiss such possibility for society as a whole simply because,[cit] not identifying himself with society.*" (Hirschman, 1958:14.) Initially it seems that such behaviour is more adequate to promote economic progress. Hirschman (1958:14) states on closer analysis, that this is not the case. First, because "*success is conceived not as a result of the systematic application of effort and creative energy, combined perhaps with a 'little bit of luck', but as due either to sheer luck or to outwitting of others through careful scheming*" (Hirschman, 1958:14).

From here, states Hirschman, the popularity of lotteries in Latin American countries. The most important obstacle in this type of society is that "*it tends to obstruct a series of processes that are part of the entrepreneurial function.*" An "*ego-focused*" society seems to create a conducive environment for implementation of the activities of a Schumpeterian innovating entrepreneur. However, even in this case some kind of cooperation is required for establishing a dynamic economy. Hirschman states: "*In the United States, of course, the need for this 'cooperative' component of entrepreneurship has long been recognized and indeed cultivated, and 'human engineering' has come to occupy an increasingly prominent place in the training and thinking of corporation executives.*" (Hirschman, 1958:17.)

The final result of analysis of these two types of images of change is that their decision-making process is not efficient and therefore, they do not take into account the amount of decisions and in a velocity required for making the necessary changes in the direction of economic progress. Everybody knows that some change has to occur and often nothing happens, or it is a timely process. It is possible to think that the problem lies in the scarcity of the decision-making process. It would then be possible to economise on this "*scarce*" factor.

This would not do because any project of change requires some amount of this decision factor. Bringing this analysis to the realm of economics, it is known that an economic agent only changes its decisions if it is out of its state of equilibrium. Therefore, if the problem of development is caused by a lack of decision-making, then the solution lies in the promotion of disequilibria. This will work as a pressure mechanism for individuals in society to make the necessary changes and to start a process of economic development.

From Hirschman's point of view, the idea of a balanced growth is unattainable because if a society has the capacity of conceiving and executing an entire plan, which coordinates the projects of investment, then this society is developed. Now, considering the process of investment, Hirschman calls attention for the insufficiency of the theory of economic growth, despite "*the attempt to make our underdeveloped economics of development, benefit from the recent vigorous advances of the economics of growth*" (Hirschman, 1958:19).

Hirschman (1958:29) states that any model of economic growth uses the equality of savings and investment as a condition of equilibrium and such equality is taken for granted. Hirschman argues that this can be so in an advanced society, where there is an entire set of institutions to make the savings disposable at one point, to be applied in another. There are several individuals who constantly seek economic opportunities and who search for possible resources to exploit. In other words, a developed society has already developed its decision-making processes and implementation mechanisms.

Economists in developed countries can take the equality of savings and investments for granted. This is not the case in an underdeveloped society as the process of decision-making is not as efficient as in Developed Countries. Hirschman (1958:19) states that this kind of "*short-cut*", namely, to utilise some theoretical piece derived in one society into another one can be a misleading act: "*The reason is that theories which, because of their high level of abstraction, look perfectly 'neutral' as between one kind of economic system and another, often are primarily relevant to the conditions under which they were conceived. If they are useful theories, they will have focused on variables that in a particular setting are both strategic and subject to change by policy-makers.*" The more useful theories are in one setting, the less they are likely to be so in a completely different set-up. The attempt to apply the economics of growth to the economics of development may be a case in point (Hirschman, 1958: 29).

New concepts, useful for understanding the reality of underdeveloped countries, need to be investigated. In the case of investment, this involves recognition of a third role of investment, besides the role of increasing income through multiplier effects and increasing productive capacity, due to the accelerator.

This third role entails directly inducing investments of others. From this point of view, a different approach is followed to determine the choice between projects of investment. In the traditional macro-theory, the choice between two projects is guided by their rates of return. Only one project is chosen. Hirschman's theory indicates the criteria applied, should entail determining which of them can cause more disequilibria. If the choice is correct, the implementation of one will lead to the other:

Hirschman (1958:78) states: "*In other words, our choice depends entirely on the pressure that the existence of project A exerts toward the coming into existence of project B as compared to the corresponding pressure that would emanate from B to A. Once the problem is formulated in this way it becomes quite clear that the comparative productivity of A and B which will both have to be undertaken is likely to be a rather minor factor in the decision assigning the priority.*" (Hirschman, 1958:78.)

It is in order to analyse what sequence is more apt to create the necessary pressure or disequilibria, that Hirschman introduces his concept of "*linkages*". This occurs after a long theoretical journey in which he dismisses the rationality of economic agent, the macro-theory of economic growth and finally, the strategy of balanced growth. It is all based on the perspective that economists should be cautious in the application of theories derived from one social environment to the next (Hirschman, 1958:78). In that, Hirschman is hand in hand with Rosenstein-Rodan and Lewis.

Swanepoel and De Beer (2000:47) explained that in the last century, the golden age of capitalism came to an end around the late sixties. The central economies began to suffer from a series of economic problems. One of the problems was a completely new one, namely a high rate of inflation, accompanied by a high rate of unemployment. In this context, the economic science, neoclassical theory, and also economic development, went into a crisis. The effectiveness of this criticism is derived from referring to an internal logical inconsistency of those theories.

The final conclusion was that the mainstream went back to its theoretical fundamentals derived from the general equilibrium theory, based on the concept of the "*representative agent*". This kind of representation of an economic system fitted in very well with the new the wave of neo-liberalism that began to take form in the eighties and nineties (Swanepoel & De Beer, 2000:47).

In turn, economic development faced, on the one hand, the failure of the process of industrialisation in underdeveloped countries to change their conditions of social life, and, on the other, under the neo-liberal agenda, ideas such as planning were completely ruled out, as it was perceived that the market forces would ensure mobilisation of economic resources in these societies, into a real process of development.

A document called the Consensus of Washington, containing ten points of economic policies for developing economies, was transformed into a new strategy for global development. The points were based on the reforms that some Latin American countries had been making since the seventies, to ensure the adjustment of their economies to the new international order. The essence of this strategy was to change the roles of the public and private sectors. The public sector should

take care of the stabilisation of the economic system and devote its resources to social goals. The private sector should invest resources in accordance with the market opportunities. An interesting aspect of this agenda, articulated by John Williamson, is that it dismissed the theories of economic development: A striking fact about the list of policies on which Washington does have a collective view is that they all stem from classical mainstream economic theory, namely Keynes. None of the ideas spawned by the development literature namely the "Big Push, "balanced" or "unbalanced growth", "surplus" labour plays any essential role in motivating the Washington consensus. "*This raises the question as to whether Washington is correct in its implicit dismissal of the development literature as a diversion from the harsh realities of the dismal science.*" (Williamson, 1990:19-20.)

(Neo-) classical policies

Classical economists state that the economy is self-adjusting. It is therefore true to say that because the economy tends to full-employment, there is no need to actively intervene in the economy. In fact intervention may simply be destabilising (Kleynhans & Naudé, 2001:67, 86). The key to long-term stable growth is to

- ensure free markets with no imperfections by means of supply-side policies; and
- control the growth of the money supply to ensure low inflation;

Classical and neoclassical theories therefore deal with increasing national income to promote economic growth.

Contributions of Adam Smith in the investigation of the wealth of the nations

Adam Smith stated in 1771 in his book "Wealth of the Nations" that :" *every individual neither intends to promote the public interest... he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which has part of his intention".*

The title suggests that Smith researches the factors that determine economic development and wealth. The invisible hand refers to the impersonal forces of supply and demand driven by own interest giving rise to shared wealth within a framework of perfect competition (Cupher & Dietz, 1997:108).Smith also stresses the importance of the division of labour and the "*Law of Accumulation*".

Adam Smith first formulated the view that the value of goods was determined not by their use value but by their exchange value. According to this concept, the market price adjusts to the cost price. Adam Smith opposed state intervention (tariffs, import or export barriers, etc.) and his views on economic liberation and the reduction of government control led to the blossoming of the free market system (Waters, 1928). His theory of free trade represented the rising workingclass, against the backwards feudalist mentality heralded by the old aristocracy. He exercised a major influence on economic policy in the late 18th and early 19th centuries. Smith was major role-player of the *"Scottish Enlightenment*" of the eighteenth century and was acquainted with Voltaire and others of the French Enlightenment. Smith explained that he came to the theory of political economy expressed in "*The Wealth of Nations*" from a study of "*human nature*" and consideration of how the innate passions of human beings became transformed into socially productive cooperation in "*laissez faire*" capitalism (Samuelson; 1980:784). He developed a *"four-stage*" theory of history tracing how social institutions respond to development of the productive forces and culminate in pre-Industrial Revolution capitalism (Cupher& Dietz, 1997:108).

Consistent with the theory of knowledge of David Hume, Smith regards value to be exclusively the product of human labour, which in turn has its source in human nature. The institutions of society and the division of labour arise historically independently of the will and understanding of

human beings, but as the natural outcome of the clash of their individualism. Smith wrote in the very earliest days of the industrial revolution, but it was not the large, industrial enterprises which formed the context of his thinking, but rather, Smith was a representative of the small-scale manufacturer of the early eighteenth century. Smith is regarded as founder of classical economics. Smith was the first to complete a comprehensive theory of political economy (Samuelson, 1980:784).

Smith saw labour as the sole source and measure of value: Labour is the real measure of the exchangeable value of all commodities. The real price of everything, what everything costs to the man who wants to acquire it, is the toil and trouble of acquiring it. What everything is really worth to the man who has acquired it, and who wants to dispose of it or exchange it for something else, is the toil and trouble which it can save to himself, and which it can impose upon other people. Labour alone, therefore, never varying its own value, is the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared. It is their real price; money is their nominal price only (Cupher& Dietz, 1997:109).

Many state that Smith was concerned primarily with economic growth. In this way, Smith moved away from the Cantillon-Physiocratic system which concentrated on "*natural equilibrium*" of circular flows, and brought back into economics what had been the Mercantilists' pet concern (Samuelson, 1980:817).

Smith posited a supply-side driven model of growth, which can be explained via the simplest of production functions:

$Y = (L, K, T)$

where Y is output, L is labour, K is capital and T is land, so output is related to labour and capital and land inputs. Consequently output growth (g_Y) was driven by population growth (g_L), investment (g_K) and land growth (g_T) and increases in overall productivity ($g_{\square}$). Succinctly:

$g_Y = (g_{\square}, g_K, g_L, g_T)$

Smith proposed in the traditional manner of the time that population growth was endogenous: it depended on the sustenance available to accommodate the increasing workforce. Investment was also endogenous and determined by the rate of savings (mostly by capitalists). Land growth was dependent on conquest of new lands (e.g. colonisation), technological improvements or fertility. Technological progress could also increase overall growth. Smith's famous thesis that the division of labour (specialisation) improves growth was a fundamental argument. Smith also saw improvements in machinery and international trade as engines of growth, as they facilitated further specialisation (Samuelson, 1980:682-683).

Kleynhans and Naudé (2001:67) point out that Smith also believed that "*division of labour is limited by the extent of the market*", thus supporting an economies of scale argument. As division of labour increases output and increases the extent of the market. It then induces the possibility of further division and labour and thus further growth. Smith argued that growth was self-reinforcing as it exhibited increasing returns to scale.

Smith (1979) believed that because savings of capitalists were what created investment and hence growth, income distribution was one of the most important determinants of how fast (or slow) a nation would grow. However, savings are partially determined by the profits of stock. Smith stated that profit declines as the capital stock of a country increases. This is not caused by a decreasing marginal productivity, but rather because the competition of capitalists for workers will bid wages up.

Lowering the living standards of workers was another way to maintain or improve growth, although the counter-effect would be to reduce labour-supply growth. Despite increasing returns, Smith did not see growth as eternally rising, but stated that a ceiling would be reached in the form of the "*stationary state,*" where population growth and capital accumulation would be zero.

It can be concluded that development economics is assigned the task of finding a way to bridge the gap between the Less Developed Countries and the Developed World. The neoclassical economists suggest that the market will right itself. Kleynhans and Naudé (2001:16) state that "*Wealth of the Nations*" (1776) mentions the structural changes in a country's economy, the

determinants of economic growth and technical innovation, social implication of market mechanisms like unemployment, the role of the state in the allocation, stabilisation and production, the role of money and financial means in the distribution of trade and production and the contribution of international trade to the wealth of a country. A range of theories causing growth starting with Smith's initial assertion that the market limits the division of labour, will be discussed below.

Growth in the size of the market and the effect on the division of labour and productivity

Adam Smith first noted that the division of labour and productivity are limited by the size of the market. Smith uses the example of a carpenter to illustrate that a tradesman must diversify his abilities in a small rural town where he will also be a joiner and cabinet-maker, whereas in a large market town he can specialise in simply carpentry and become more skilled and productive. He could even reduce his costs by bringing in an apprentice (Smith, 1979).

The size of the town is not the only factor involved in the size of the market. Better communications and infrastructure open up markets for firms. These advantages can mean that whole towns may specialise in an industry, for example London as a centre of finance, or Detroit as a centre for cars. The economies of scale in these examples are such that it has been difficult for firms not in these cities to compete without being part of a similar cluster zone.

Smith notes that in the 19th century the use of ships as a means of transportation enabled markets to open up for British producers. Trading with countries like India, which is located far away, would have been very unprofitable using land-based means of transport (Smith, 1979).

In modern times there are few limits in terms of distance. The world has become a "global village" with the worldwide use of aeroplanes and ships (Soja, 2000:191).

In the 18th Century European countries had begun the process of colonisation around the world, which opened up world trade. The European empires in the eighteenth and nineteenth centuries recognised the benefits of specialisation and thus entire colonies were assigned a single industry.

This was done to the benefit of the European consumer rather than the colony supplier. It was in effect a process of modernisation described by Eisenstadt (1966:1) as follows: *"Historically, modernisation is the process of change towards those types of social, economic and political systems that have developed in Western Europe from the seventeenth century to the nineteenth and have then spread to other European countries and in the nineteenth and twentieth centuries to the South America, Asian and African continents."*

These days' countries expand their markets by creating free trade areas rather than invading nations. In recent years efforts have been made in Europe and in the Americas to free up trade, with for example the European Single Market. There are also proposals to create a free trade area in East Asia.

The division of labour and productivity is affected in the following ways:

- In today's world firms spend vast amounts investing in new technologies and systems to make their workforce more productive. It is the growth in the size of the market for many firms that make these investments viable. Growth therefore helps continue the process of innovation and research. Furthermore, creating new products through innovation helps to create new markets. It is not just up to the government to expand the size of the economy.
- At the same time new technologies in the work place improve our productivity and spur growth, thus as long as we keep innovating growth is self-sustaining.

The division of labour plays a key role in theories of "cumulative causation" and self-sustaining growth.

The process of cumulative causation

Gunnar Myrdal explained the backwardness of developing nations with the theory of cumulative causation. Myrdal (1984:152) states the following: *"In the absence of counteracting policies inequalities would tend to increase, both internationally and within a country."* It is basically dualism applied to nations and regions of those nations, with regard to differences in income,

employment, growth and industrialisation. His theory is in contrast to the equilibrium theory, which suggests that market forces will restore equilibrium.

Myrdal (1984:152) states that economic and social forces encourage disequilibria. This can be seen in the way that international differences in welfare have increased over the last 200 years. It can also be seen in almost every country where there are regions that are wealthier than others for example north versus south Italy. Circular and cumulative causation helps to explain why inequality has increased rather than decreased as the classicalists predicted (Myrdal, 1984:152).

To illustrate his point Myrdal uses the example of a country where all regions have attained the same level of development in terms of income and productivity. Assume that an exogenous shock creates disequilibria and one region performs better than another.

Neoclassical theory suggests that where labour is scarce and capital is abundant, labour will flow in and capital will flow out, thus reducing wages and increasing profits. Whilst in the less well-off areas where wages are low, labour will flow out and capital will flow in. Equilibrium will be restored.

Cumulative causation suggests that the growth in the well-off region is self-sustaining. Instead of leading to equality the forces of supply and demand interact with each other to produce cumulative movements away from spatial equilibrium. An increase in supply prompts an increase in demand *vis a vis* extra expenditure on wages and inputs. In effect, this is termed the "*multiplier effect*", or virtuous circles.

On the other hand, the region that is experiencing low growth will continue to lose skilled labour and capital as businesses relocate towards the centre. This is called a vicious circle (Myrdal, 1984:152).

The division of labour plays a key role in cumulative causation

One of the key influences of cumulative causation is the effect of specialisation or the division of labour. One of Adam Smith's key points in the chapter on the division of labour was that large towns or clusters are able to sustain more specialised tradesmen as a result of higher demand for their niche (Smith, 1979). This results in an increasingly skilled and productive workforce. These advantages add to the comparative advantage that clusters have over the poorer regions, which is termed economies of scale.

This helps a firm in the following ways:

- When a business centre is created, the infrastructure that serves it tends to improve, which in turn creates cost savings for firms. In this way the market for firms in these areas becomes larger and cheaper to access. The result is more profits for the firm and the industry cluster.
- As the industry expands it increases the incentive for other firms to create complementary products on the demand side, which will aid the sale of the firm's product.
- On the supply side ancillary services will locate in the cluster zone, which will reduce the costs of the production process, increasing profits.

Division of labour and the rise to innovation

According to Smith it is the division of labour that brings to our attention the potential for technology to improve productivity. When labour is divided the tasks that people perform become simpler and more uniform. When this happens it is easier to identify tasks that can be performed by machines. Improving capital to make labour more efficient increases profits, which can in turn be reinvested into the economy.

It is important for Less Developed Countries (LDC's) to master technology in order to catch up with the Developed World. With the help of investment in research and development and training from the government, these firms and industries can compete better on a world stage. In this way progress helps growth become self-sustaining.

The following conclusions can be made:

- Adam Smith views the powers of need and delivery as driven by individuals or organizations' own needs. Individuals are seen in terms of maximisation of their own value and businesses are seen in terms of maximising their profit. Cupher & Dietz (1997: 108) were attentive to the fact that capitalists will have a natural tendency to be influenced by market forces to form monopolies in which case behaviour will not be to everyone's advantage. Smith identifies a role for the authorities by stating that the authority will be responsible for maintaining a competitive market environment. Smith also stresses the importance of specialisation. The Industrial Revolution that took place in Britain in the eighteenth and nineteenth century illustrated that specialisation could lead to excessive growth in productivity. Specialisation in the Industrial Revolution was characterised by organisation of workers in specific factories and workshops and a shift of work from the house to a separate worksite. It was also characterised by increased capital-intensity of production, by providing labourers with machines.
- Specialisation resulted in decreasing production costs per unit, greater effectiveness and productivity, greater competition of businesses that specialise, and an increase in output and greater per capita income.
- The so-called law of accumulation of Adam Smith was the incentive that motivated the competing market mechanism and the specialisation of the capitalist to be innovative with regard to the technical aspects of production. Capitalists endeavoured to improve technology to increase productivity of labourers. If capital can be accumulated and technology can be developed, economic growth will take place. Smith acknowledges the importance of institutional factors and the role of the authorities in powering the dynamic forces of the capitalist system and also an authority that does not interfere and promotes a free market system. The less the authorities interfere in the economy and the more free the market, the more the prosperity of all (Cupher & Dietz, 1997:108).

David Ricardo on Diminishing Returns of Land and Comparative Advantage

Smith's model of growth remained the predominant model of Classical Growth. David Ricardo (1817) modified it by including diminishing returns to land. Output growth requires growth of factor inputs, but, unlike labour, land is "*variable in quality and fixed in supply*". This means that as growth proceeds, more land must be taken into cultivation, but land cannot be "*created*". This has two effects on growth. Firstly, increasing landowner's rents (profits) over time, due to the limited supply of land, cuts into the profits of capitalists from above. Secondly, wage goods from agriculture, will be rising in price over time and this then cuts into profits from below, as workers require higher wages. This, then, introduces a quicker limit to growth than Smith allowed. Ricardo also claimed at first that this decline can be happily checked by technological improvements in machinery, albeit, also with diminishing productivity, and the specialisation brought by trade, although he also had stationary states (Kleynhans & Naudé, 2001:69; Ricardo, 1980:527).

However, in the third edition of his "*Principles*", Ricardo modified his position on machinery. He claimed that, in fact, machinery displaces labour and that the labour "*set free*" might not be absorbed again elsewhere, because capital is not simultaneously "*set free*". This will merely create downward pressure on wages and thus lower labour income. In order to reabsorb this extra labour without this effect, the rate of capital accumulation must be increased. There is no obvious mechanism for this to happen, particularly given the tendency described above for profits and thus savings, to decline over time.

In the evaluation of Ricardo's contribution, it is the theory of comparative advantage that is still the cornerstone of international trade theory. Later contributions show that Ricardo's theory had shortcomings in the sense that it saw the country's comparative advantage as static. Specialisation itself is not the most important factor, but rather the choice of product. Ricardo, for example, refers to wine production in Portugal and textile production in England as forms of international specialisation. The problem described by Joan Robinson (1978:103) is that "*the imposition of free trade on Portugal killed off a promising textile industry and left her with a slow-growing export market for wine, while for England, exports of cotton cloth led to accumulation, mechanisation and the whole spiralling growth of the industrial revolution.*"

If seen in this light, countries should create a comparative advantage for a type of product that will be in demand in the future.

Ricardo's portrait is somewhat more pessimistic than Smith's. The ultimately dismal portrait, however, was painted by T.R. Malthus (1796) with his famous claim that population growth was not so easily checked and would quickly outstrip growth and cause increasing misery all around. John Stuart Mill improved little upon Ricardo, perhaps only to emphasize the need for control of population growth to put a brake on declining growth and his view of stationary states as wonderful things to achieve (Samuelson, 1980:786).

Malthusian Theory on Population Growth

Thomas Malthus (1798: 38) in his essay titled "*An essay on the Principle of Population*", written during the Industrial Revolution, investigated the limited capacity of the land and the danger of overpopulation. These effects and consequences of population growth were termed as the "*dismal science*". The essay was written in a time where capitalism led to circumstances of exploitation of the majority of people (Kleynhans & Naude, 2001:68).

The property owners and factory owners were the minority who were advantaged by the Industrial Revolution at the expense of the poor. Malthus explains this phenomenon in terms of an increase in population growth. Malthus (1798:39) explains that population increases would always occur at times when higher salaries are required for subsistence. This will lead to survival of more children and an increase in population. The population grows geometrically at a faster rate than food production. He explained famine in terms of population figures and emphasises that the demand for food resulting from population increases will eventually outweigh any potential food production and cause famine (Woube, 1987: 28; Tarrant, 1990:467; Geier, 1995: 8). This study of population growth concluded that population growth would naturally precipitate itself in the form of famine, wars and disease.

Malthus based this view on the idea that populations tended to grow geometrically, assuming couples had two or more children, while the capacity of land to produce food tended to increase arithmetically as the ability to cultivate more land was less rapid (Malthus, 1798:40).

The inevitable conclusion for him was that the population growth rate outstripped the capacity of land to provide food for the people, ergo starvation and famine. The theory was based upon what has become known as the law of diminishing returns, also described by Ricardo (Kleynhans & Naudé, 2001:68). Cupher and Dietz (1997:113) state that Malthus blamed the poor and was not in favour of any form of welfare or donations to the poor as this could diminish the fear of starvation, hence reducing total national production and income, thus accelerating the pace of decline in society towards subsistence.

The law states that as increasing amounts of a factor input such as labour or fertiliser are added to a fixed factor such as land then the marginal product of the input would eventually diminish in other words, the increase in the output of land, the crop yields, would progressively decrease.

Swanepoel and De Beer (2000:234) are of the opinion that all factors of production have a capacity determined by their physical and technological capability. Simply adding more inputs of labour to an area of land will not continually increase the output of land proportionately. There comes a time when the capacity of the land is reached and diminishing returns set in. No extra fertiliser or extra labourers can change the physical composition of the soil to increase its fertility. Indeed the diminishing returns suggest additional factor inputs would reduce productivity of the land.

As with all theories and models, their strength can be tested according to the extent to which they enable predictions to be made about the real world. On a global scale, no cataclysmic famine has been noted. The weaknesses of Malthus's analysis were that he assumed a given state of technology.

The technological changes that have enabled the development of improved fertiliser and pesticides and more sophisticated machinery and horticultural techniques generally have ensured that agricultural yields have increased dramatically (Swanepoel & De Beer, 2000:234).

The law of diminishing returns is a short run concept. It assumes that there is a fixed factor and that the state of technology is constant. In reality, the productivity of the factor of production land and the state of technology has increased.

Nevertheless, perhaps, in the case of rural Zambia, for example, where the population is growing at a rate of between 2 and 3% per annum and with a doubling rate every 20-30 years and limited access to the technologies that enable the productivity of land to be expanded, the worsening levels of poverty are omens to some of Malthus's gloomy predictions being realised and the people are facing severe famine. Famine is seen as a crisis of mass starvation which has three elements namely food shortage, severe hunger and excess mortality. The theory implicates that food shortages are the causes of severe hunger and starvation.

There have been famines where no shortages were experienced, namely the Bangladesh famine of 1974 (Swanepoel & De Beer, 2000: 234) and mortality was caused by disease, not starvation. Shortage of food is neither a necessary nor a sufficient condition for famine to occur. The main determinant according to Deveraux (1993: 182) is the vulnerability of people that determines and disrupts access to adequate food supplied. He states: "*Droughts, floods, wars, grain hoarding – these and other disruptions to food suppliers "trigger" subsistence crises by threatening a population's access to food. They are the immediate causes of, which the Western media and public see as the main causes of famine. Those precipitating factors or triggers lead to famine only where particular groups of people are vulnerable to famine. Vulnerability is more complex, and usually implies processes rather than events. Underlying processes "set people up" for natural disasters or economic crises. This causes vulnerability, which is the real problem in the eradication of famine.*"

Malthusian theory is a supply side theory, which explains reasons for supply shortages that lead to famine, for example. This nineteenth-century theory did not foresee either the agricultural revolution resulting in higher food production or transport revolution, which has improved food distribution. History has shown that a continuous increase in food production is possible. There are no global shortages of food and in spite of the high population growth rate the world still produces food surpluses (Swanepoel & De Beer, 2000:234).

Kleynhans and Naudé (2001:68) evaluate the theory of Malthus, and state that he was very pessimistic with regard to sustainable human development. The end of economic growth was totally catastrophic. Malthus showed that there was no automatic way that all classes of the community could benefit from economic growth, his theory shows clear shortages namely:

- He underestimates the technological innovation brought about by higher productivity levels and the increase in output over the long-term, especially the agricultural revolution described by Swanepoel and De Beer (2000:234) in terms of better seeds, implements, knowledge systems and pesticides. Kleynhans and Naudé (2001:97) state that the effect of technology is increasing, causing it to grow faster than population growth.
- The effect of birth control on population growth, e.g. as people's opportunity to earn an income increase, the opportunity costs of children increase. This leads to a decrease in population growth as seen in many Developed Countries (Birg, 1995). Malthus also believes that the higher the national income, the higher the population growth. Kleynhans and Naudé (2001:97) state that in Developing Countries there is no clear relationship between population growth and per capita income. Modern medication and public health programmes lead to mortality rates seen as separate of national income. The distribution of income is more important in such instances than the per capita income level.

The Harrod-Domar Model and the Role 0f Investment in Development

The Harrod-Domar model developed in the 1930s, suggests that savings provide the funds borrowed for investment purposes. It is a neoclassical theory, but has a macro-focus. According to the Harrod-Domar Model, the equilibrium of an economic growth rate in an economy is unstable.

This condition occurs where growth in output is directly proportional to the rate of growth in the labour and output markets, and it does not lead to unemployment or inflation. This entails that there is a tendency in economies for economic growth that leads to hyperinflation, or

unemployment. This phenomenon can be prevented through state intervention (Kleynhans & Naudé, 2001:72). The model makes the following assumptions:

- The labour market grows against a steady rate
- Savings and investments are a fixed ratio of total output
- A fixed ratio of production function is specified which means that capital and labour are used in fixed ratio (Ghatak, 1995)

The economy's rate of growth depends on

- the level of saving and the savings ratio;and
- the productivity of investment, in other words economy's capital-output ratio;

For example, if eight rands' worth of capital equipment each produces one rand of annual output, a capital-output ratio of eight to one exists. A three to one ratio indicates that only three rands of capital is required to produce each one rand of output annually (Grabowski & Shields, 2000:1).

The Harrod-Domar model developed in the 1930s to analyse business cycles. It was later adapted to explain economic growth. The main findings include the following:

- Economic growth depends on the amount of labour and capital.
- Developing countries have an abundant supply of labour. It is a lack of physical capital that holds back economic growth and also economic development.
- More physical capital generates economic growth.
- Net investment, in other words, investment over and above that needed to replace worn out capital (deprecation), leads to more producer goods (capital appreciation), which generates higher output and income. Higher income allows higher levels of saving.

Implications of the Harrod-Domar model are that economic growth requires policies that encourage saving and generate technological advances, with lower capital-output ratio (Kleynhans & Naudé, 2001:72). The model was criticised by Domar who stated: "*My purpose was to comment on business cycles, not to derive an empirically meaningful rate of growth.*"

Other criticism summarised in Samuelson (1980:68-702) includes the following:

- It is difficult to stimulate the desired level of domestic savings.
- Meeting a savings gap by borrowing from overseas causes debt repayment problems later.
- Diminishing marginal returns to capital equipment exist so each successive unit of investment is less productive and the capital to output ratio rises.
- The amount of investment is just one factor affecting development, e.g. supply-side approach (free up markets) and human resource development (education and training).
- Economic growth is a necessary, but not sufficient condition for development.
- Sector structure of the economy is important, for example agriculture versus industry versus services.

Keynesian Theory and the Role of Investment in Development

Heilbroner (1984: 681 – 695) states that John Maynard Keynes, an economist, did plenty of work at the time of the Great Depression in the 1930s. His best-known work was the *"General Theory of Employment, Interest & Money"*, published in 1936. His work has been advocated and expanded upon by many economists. Keynes was a student of Alfred Marshall at Cambridge University and later served as a Cambridge don himself. He was intimately involved in public policy in Britain, serving in various capacities within the Civil Service, including a position in the Treasury from 1915 to 1919.

Even when Keynes returned to academia as a professor, he continued to combine the "*life of the mind*" with an active role in public policy debates, consulting for the British government, and writing popular pieces for the British press. Indeed, Keynes was one of the key figures involved in the Bretton Woods Conference which took place in 1944 in New Hampshire, where influential political and intellectual figures from both sides of the Atlantic came together to rethink international monetary and, more generally, economic policies.

The International Monetary Fund and the Bank for Reconstruction and Development were among the institutions to arise out of the rethinking that took place at Bretton Woods. Keynes's concern about proper public policy resulted in his developing new theoretical insights about the macro-

economy. These insights made up a logical framework of thought that has come to be called Keynesian economics or Keynesian macro-economic theory.

Keynesian macro-economic theory grew out of the so-called "*Great Depression*" of the 1930s when orthodox (neoclassical) economic theory was unable to either explain the causes of the severe economic collapse or to provide an adequate public policy solution. In particular, orthodox economic theory argued against the need for government intervention and in favour of a policy of "laissez-faire". Keynes feared that a "*do-nothing*" approach to the economic downturn and rising unemployment would only make conditions worse (Heilbroner, 1984:681-695).

Keynes believed that the very mechanisms by which the economy was supposed to return to full employment namely price adjustments, would only worsen the crisis. In a series of lectures in 1933, Keynes explained why he rejected the idea that price adjustments would provide the means of restoring "*full employment equilibrium*", as well as other aspects of the mainstream approach and provided a well-constructed alternative theoretical framework. These lectures were the basis for his "*General Theory of Employment, Interest, and Money*", published in 1936. This work is now considered one of the most significant texts in the history of economic thought (Samuelson: 1980:2).

In the *General Theory*, Keynes identified the catalyst of economic downturns, recessions and depressions in changes in the investment policies of the boards of directors of capitalist firms. Keynes argued that it was precisely the volatility of investment spending, or the demand for investment goods (capital goods and inventory), that created the so-called business cycle (Keynes, 1936:129). This volatility resulted from the uncertainties faced by these boards of directors when they attempted to maximise corporate profits: The members of the board are necessarily operating in an environment of uncertainty about future revenues and future costs and form expectations about these variables based on a wide range of factors out of their immediate control, including but not limited to interest rates, as well as variables within their control. If members of boards expect relatively low profit rates from investment spending, then they would be less likely to approve such spending. However, when enough firms cut back on investment spending plans, the overall economy can be hurt.

Keynes (1936:129) argues that jobs can disappear, consumers can find their income constrained and be forced to cut back on consumer spending, government revenues as tax revenues are linked to income in a positive relationship-fall and more and more firms find the demand for their goods and services declining. As demand falls, expected future revenues are adjusted downward and corporate boards may further cut back on investment spending. The result is an economy that can move into a sustained period of decline in gross domestic product. This demand-side analysis of the consequences of changes in profit expectations is at the core of the theoretical rethinking of macro-economics embodied in Keynes's *"General Theory"*.

Keynes (1936:129) states:*" If the Treasury were to fill old bottles with banknotes, bury them at suitable depths in disused coalmines which are then filled up to the surface with town rubbish, and leave it to private enterprise on well-tried principles of laissez faire to dig the notes up again ... there need be no more unemployment. . . . It would indeed be more sensible to build houses and the like; but if there are political and practical difficulties in the way of this, the above would be better than nothing."*

Keynesian concepts

Keynes did not agree with Classical theories and provided criticism as to why the Classical theories were incorrect. In essence, Keynes argued that markets would not automatically lead to full employment equilibrium, but that the economy could settle in equilibrium at any level of unemployment. This implied that policies of non-intervention were impractical. The economy would need active intervention by the government to manage the level of demand (Samuelson, 1980:788).

Keynesian concepts can be illustrated in terms of the circular terms of income. If there were disequilibria between leakages and injections, then classical economists believed that prices would adjust to restore the equilibrium. In contrast to this Keynes argued that the level of output, for example the National income, would adjust. An increase in injections caused by an increase in government expenditure, for example, would mean an imbalance between leakages and

injections. As a result of the extra aggregate demand firms would employ more people. This would mean increased income, some of which would be spent and some saved, or paid in tax. The increased expenditure would prompt the firms in the economy to produce even more, which leads to even more employment and therefore even more income. This process would carry on until it came to an end. The process would eventually come to an end as every time income increased, the level of leakages (savings, tax and imports) also increased. Once leakages and injections were equal again, equilibrium would be restored. This process is called the multiplier effect (Samuelson, 1980:225).

Keynesian theory

Keynes was of the opinion that it was not advisable to rely on markets to get to full employment (Samuelson, 1980:227). He argued that the economy could settle at any equilibrium and that markets would not change automatically, to correct the situation. The main Keynesian theories justifying this view includes:

- The labour market
- The market for loanable funds (money market)
- The Multiplier effect
- Keynesian inflation theory

The labour market

Keynes did not share the sentiments of the Classical economists who placed all their faith in markets. He argued that workers would not be happy about taking wage cuts and would resist this. This would imply that wages would not necessarily fall enough to clear the market and unemployment would linger.

When the demand for labour falls, for example perhaps from the onset of a recession, the wage rate should fall, so that the market clears. However, Keynes argued that because wages were

"*sticky downwards*", this would not happen and unemployment would persist. This unemployment was called demand deficient unemployment (Samuelson, 1980:697).

The money market (market for loanable funds)

Classical economists argued that funds for investment could only be increased if savings were increased. Keynes disputed this assumption based on the little faith he had in markets as a miracle cure. He stated that an increase in savings meant that people spent less. This would imply a decrease in aggregate demand that would lead to an inclination among firms to invest less due to the fact that they would find the demand for their products decreasing. Keynes stated that investment depended much more on business expectations (Samuelson, 1980:196).

The multiplier effect

Samuelson (1980:215-218) points out that an increase in aggregate demand would lead to an increase in National Income according to Keynes. This process would come about because any increase in demand would lead to more people being employed. If more people were employed, they would spend their extra earnings. This in turn would lead to even more spending, which would lead to even more employment, which would lead to even more income, which then would lead to even more spending. This is termed the "*multiplier effect*". The period of time this process would carry on for, would depend on how much of the extra income was spent each time. If the initial recipients of the extra income saved it all, then the process would come to an end very quickly as nobody else would have access to the extra income. However, if they spent it all the spin-off effects of the extra spending would carry on for long periods of time. The higher the level of leakages, the lower the Multiplier would be. The precise formula for calculating the multiplier is:

Multiplier = 1 - Marginal propensity to consume

Keynesian view of inflation

The key to the classical theory was based on the Quality Theory of Money and the Fisher Equation of Change, which was as follows:

$MV = PT$

M is the amount of money in circulation, V is the velocity of circulation of that money, P is the average price level and T is the number of transactions taking place.

Keynes rejected this theory stating that increases in the money supply would not inevitably lead to increases in inflation (Samuelson, 1980:230). Increasing M may instead lead to a decrease in V, which meant that the average speed of circulation of money would decrease due to the fact that there was more of it in circulation.

The increase in M may lead to an increase in the number of transactions (T) as disputes the assumption that the economy will find its own equilibrium. It may be in a position where there is insufficient demand for full employment equilibrium and in that case increasing the money supply will fund extra demand and move the economy closer to full employment.

Keynesians tend to argue that inflation is more likely to be cost-push inflation resulting from excess levels of demand. This is known as demand-pull inflation (Samuelson, 1980:230).

Keynesians and short- and long-term effects

Keynesian theory allows no discrepancy between short- and long-term. The economy could settle at any equilibrium level of income at any time, and it was up to the government to apply appropriate policies to ensure that this equilibrium was a good one for the economy.

The economy could settle at any equilibrium. The lowest equilibrium is not a very desirable equilibrium as the level of output is very low and there would be high levels of unemployment. Nevertheless this situation could, as argued by the Keynesian school of thought, persist in the long-term unless some form of government intervention stimulated the economy, for example

reflationary policy, which boosted the level of aggregate demand. An increase in aggregate demand growths leads to an increase in the level of output, but as the economy nears full employment inflation sets in, which in turn leads to the start of an increase in price levels. An excess level of demand that is referred to as demand-pull inflation, causes inflation. Simultaneously, there will be increased pressure on the labour market as nearly everyone will have a job. Wages will begin to rise, as firms will have to offer more to get the people they want. This in turn will cause costs to increase and result in cost-push inflation (Samuelson, 1980:771; Harris, 1947:73-101).

Keynesians believe that the economy can settle at any equilibrium and it is therefore recommended that the government become actively involved in the economy to manage the level of demand. These policies are known as demand-management policies. Demand management refers to adjustment of the level of demand to try to ensure that the economy arrives at full employment equilibrium. A shortfall in demand, such as in a recession (reflationary gap), will imply that government intervention is necessary to reflate the economy. Excess of demand, such as in a boom, necessitates steps by government to deflate the economy (Samuelson, 1980:771; Harris, 1947:73-101).

Reflationary policies

Reflationary policies to boost the level of economic activity might include (Samuelson, 1980:236-241):

- Increasing the level of government expenditure.
- Cutting taxation (either direct or indirect) to encourage spending.
- Cutting interest rates to discourage saving and encourage spending.
- Allowing some money supply growth.

The first two policies are expansionary fiscal policies and the last two are expansionary money policies. These policies are aimed at reducing aggregate demand and therefore the level of output.

Deflationary policies

Samuelson (1980: 257-258) explains that deflationary policies are implemented to slow down the level of economic activity. These policies might include:

- Reducing the level of government expenditure, which indicates a fiscal policy.
- Increasing taxation (either direct or indirect) to discourage spending. This also indicates fiscal policy.
- Increasing interest rates to encourage saving and discourage spending indicates monetary policy.
- Reducing money supply growth indicates monetary policy.

The impact of these possible measures should be to reduce aggregate demand and therefore the level of output. Keynesian policy can be summarised as an attempt to try and control the level of demand to get to full employment. If unemployment exists, it indicates that reflationary policies should be applied. If there is inflation, deflationary policies are needed (Samuelson, 1980:258).

Keynesian theory can be put into practice by activities such as the following:

- Analysing unemployment and inflation as main indicators.
- Boosting demand if there is unemployment by cutting taxes or boosting government expenditure.
- Dampening down demand if inflation increases too much by increasing taxes or cutting government expenditure. Once this has been managed a higher interest rate can reduce demand and a lower interest rate can increase demand.

Schumpeter and the Role of Technology in Development

In the 1920s and 1930s, three new sets of theories emerged which substantially improved upon the Classical. All the theories, to a large extent, drew from Karl Marx's theoretical scheme. Two themes ran through the new theories namely that the economy should be considered explicitly in its disaggregated, multi-sectoral structure and secondly, that the concept of a steady-state growth path be introduced as a reference point for such an economy (Samuelson, 1980:696-697; Hansen, 1951:79-82).

The first of these "*structural*" theories was developed by Joseph A. Schumpeter in his 1911 classic, "*Theory of Economic Development*" and then further explored later on in his "*Business Cycles*" (1939) and his "*Capitalism, Socialism and Democracy*" published in 1942. His system was supply-driven, which meant that the main secular engine of growth was seen to be the increase in factory supplies. The difference, however, was Schumpeter's resurrection of Smith's concern with the entrepreneur as an innovator, who improved growth by efficiently combining resources, adopting new technical improvements in machinery and conducting the division of labour (Schumpeter, 1936:87).

Schumpeter's starting point is the steady state, or rather, a smoothly expanding economy. Unlike Smith, his population growth was exogenous and his savings rate rather constant or, at best, a residual and not a driver of growth (Hartman, 1959:429). He was not very much concerned with distribution. In Schumpeter's view, the driver of "*development*" (as opposed to "*growth*") was discontinuous punctuated changes in the economic environment. These, he claimed, were brought about by a variety of things, e.g. sudden discoveries of new factory supplies, but entrepreneurial innovation was the central one (Samuelson, 1980:696).

The entrepreneurs' innovations drive development but their motive, like Marx had argued, was "*raw instinct*", profit-derived wealth being merely an "*index*" of that instinct (Hartman, 1959:430). Innovation, again like Marx, was not wholly exogenous, quite the contrary. Competition for small profits "*induced*" entrepreneurs to innovate, whereas uncompetitive periods with high profits slowed down the rate of innovation.

From a steady economy, a technical innovation by a single entrepreneur opens up new profitable avenues and more entrepreneurs are induced to innovate, thereby increasing the profits in the economy as a whole, thereby driving growth. As the "*supply of entrepreneurs*" in any generation is numerically exhausted, capitalists turn upon each other and compete away the existing profits. Profits begin to decline and the economy slows down. However, the decline in profits will eventually, again, induce those with entrepreneurial inclinations to once again innovate (Samuelson, 1980:726-727; Harwood, 1979:27-31).

One may think of this as more of a cycle theory than a growth theory, but Schumpeter claimed that there were ratchet effects in innovation so that entrepreneurial-driven spurts of economic activity led to progressively higher levels of income. There is no long run need to slow down, as unlike Ricardo, Schumpeter claimed that there were no diminishing returns to innovation. The only reason one may be driven towards a slower, steady-state, is that all the entrepreneurs in a generation might be already "*used up*" (Schumpeter, 1936:87).

There are also institutional preconditions for innovation: a capitalist system (private ownership of property) was one, existence and availability of plentiful credit another. Like Wicksell, Schumpeter abandoned Say's Law and claimed that credit made present activity independent of past activity and thus enabled entrepreneurship. Hence, since entrepreneurial innovation could be arrested by lack of credit, then financial innovation was also an important factor for increasing growth (Schumpeter, 1936:87).

Schumpeter (1936:87) did not have diminishing returns to innovation but he did have long-run elements in his theory, which induced a breakdown in growth. These are rooted in social-cultural changes: Enterprise may grow to the point where bureaucratic managers may replace entrepreneurial function, as they are less apt to innovate. Growth uncovers economies of scale and may lead to permanently high industrial concentration and high profits. Entrepreneurial activity will be progressively viewed as "*bad*" because capitalism leads to the breakdown of social and family relations and alienates the working class and, in particular, is despicable to intellectuals, who are highly influential upon public attitudes. This negative view of entrepreneurship will then conspire, culturally speaking, to diminish the supply of entrepreneurs.

That same breakdown in the family may also take away from the "*dynastic*" aspirations, which often lie behind the "*raw instincts*" of entrepreneurs.

The concept of "*steady-state*" was still primitive in Schumpeter. It was given more precision in the "steady-state" multi-sectoral growth theories of Gustav Cassel (1918) and John von Neumann (1937). Both Cassel and Von Neumann presented growth models, which are akin to Marx's reproduction scheme in many respects but differed essentially in the absence of "*crisis*". One can argue that it was probably more inspired by the general equilibrium theory of Léon Walras (1874), who also referred to the concept of steady-state growth in his theory of capital.

John von Neumann, in particular, followed the Classical idea that surplus is the determinant of growth but, contrary to the Classicals, did not concern himself with any falling rates of profit. John von Neumann's concern was in the formalisation of steady-state growth, but without reference to any Classical constraints that might bring the surplus down and bring the economy to a stationary state without growth. To some extent, this was due to the fact that, as a mathematician, Von Neumann abstracted much from the "social considerations" that often went into the Classical theories.

Schumpeter did not concern himself with possible resource constraints presented by land, or changes in fertility, or "*entrepreneurial*" behaviour or any other such concepts.

The dynamic models of Gustav Cassel and John von Neumann have a perpetual multi-sectoral growth rate, which they saw as perpetual and constant. They identified the rate of growth to be identical to the rate of profit and termed it the "*Golden Rule*" already implicit in the Classicals, Schumpeter and Walras (Samuelson, 1980).

Schumpeter also recognised the intrinsic differences in the nature of the accumulation of knowledge processes across sectors. This implicates that policy makers promoting development have to pay much greater attention to the efficiency of their policy tools with a focus on policy

and institutional learning, rather than following a set of simple normative guidelines about market failures (Leontif; 1950:103-110).

Joseph Schumpeter held two different approaches of the innovative process. In his first contributions, the emphasis was mainly on the role of new entrepreneurs entering niches of markets. Through the introduction of new ideas and innovations, these entrepreneurs challenged existing firms through a process of "*creative destruction*", which was regarded as the engine behind economic progress (Schumpeter, 1912).

In later contributions, Schumpeter (1942) paid attention mainly to the key role of large firms as engines for economic growth by accumulating non-transferable knowledge in specific technological areas and markets. This view is sometimes referred to as "creative accumulation" which refers to the *"... the incorporation of endogenous scientific and technical activities conducted by large firms. There is a strong positive feedback loop from successful innovation to increased research and development activities setting up a virtuous self-reinforcing circle leading to renewed impulses to increased market concentration"* (Freeman & Soete, 1987).

Nelson and Winter (1982) attempted to model Schumpeterian technological regimes, which were primarily concerned with the basic mechanics of Schumpeterian competition, particularly innovative and imitative strategies and their influence on the evolution of industrial structures. Winter (1984) extended this model with endogenous entry and adaptive research and designed strategies of firms, which emphasised characteristics of two different technological regimes. The first regime is characterised by the key role played by new firms in innovative activities, in other words, "*creative destruction*", whereas in the second one, the large and established firms, perform the main function termed "*creative accumulation*".

Malerba and Orsenigo (1993) describe the regime differences. The differences are described in terms of a combination of four factors namely the opportunity and appropriateness conditions, the cumulativeness of innovative activities and the nature of knowledge. Given such differences, industries are likely to differ with respect to their dynamic and structural properties, in what would be termed "*technological regimes*" (Freeman & Soete, 2000:14).

In this regard opportunity conditions refer to the likelihood of innovating, given a certain research effort. This may depend on factors such as the extent to which a sector can draw from the knowledge base, the technological advances of its suppliers and customers, and major scientific advances in universities or research laboratories. Appropriateness conditions reflect the possibilities of protecting innovations from imitation and of appropriating the profits from an innovation. Possible appropriateness devices are patents, secrecy, lead times, costs and time required for duplication, learning curve effects, superior sales efforts, and differential technical efficiency due to scale economies. Cumulativeness conditions refer to the extent to which the innovative successes of individual firms are serially correlated. They are related to the cognitive nature of the learning process, e.g. learning and doing, and they depend on the extent to which technological progress or major advances depend on the current technology stock.

Finally, with regard to the properties of the knowledge base, Dosi *et al.* (1988) distinguish between three aspects of knowledge namely the level of specificity, reflecting that knowledge can be applied universally, the extent to which knowledge is well-articulated or whether it is more tacit, and the extent to which the knowledge is publicly available, e.g. scientific and technical publications.

In the literature on technological regimes, opportunity conditions do not necessarily differ between the two regimes. The differences are mainly related to differences in appropriateness, cumulativeness conditions and patterns of access to knowledge. A "*creative destruction*" regime is often characterised by low appropriateness and cumulativeness conditions, and the knowledge is mainly (firm) specific, codified and simple. In the second regime these conditions are the opposite namely appropriateness and cumulativeness conditions are high, while knowledge is mainly generic, tacit and complex.

Distinction can be made between the two metaphorical archetypes of technological regimes for some broader macro-economic growth insights. The first regime is characterised by low appropriateness and cumulativeness conditions, and the knowledge is mainly (firm) specific, codified and simple. Appropriateness is represented in terms of the flow of innovations to

intermediate goods. If appropriateness is low it means that it is difficult for entrepreneurs to patent their inventions and to reap the fruits from their innovative activities by means of monopoly rents earned on their intermediate goods. Hence, innovations will flow via technology innovations into the public knowledge basin present in the economy at a specific date.

This observation brings forth the argument that diffusion of knowledge will be central to growth. Once the contribution of the innovation is leading-edge technology, every other entrepreneur will be able to use this leading-edge technology. The process described leads then to what is called "*creative destruction*". Every time a new entrepreneur enters the market with a new leading-edge technology, the incumbent firm whose technology is no longer on the leading edge will be displaced. The fact that the incumbent is displaced is reinforced by the fact that the cumulativeness of innovations is low, for it is hard in this regime to remain on the leading edge and therefore to build further on experience and past innovative activities. Basically, what cumulativeness enhances is the creation of technological environments characterised by continuity in innovative activities and it is hence practically impossible to observe cumulativeness in the described regime.

Freeman and Soete (2000:14) state that the second regime is characterised by high levels of patenting, creating monopoly rents in the intermediate goods sector. This high level of appropriateness leads to fewer leakages in a "*creative accumulation*" set-up, than in a "*creative destruction*" regime, reinforcing the tacitness of knowledge.

Cumulativeness of innovations entails increases in productivity, which itself leads to higher profits. As a consequence, an innovative firm benefits from a higher capacity to invest in research and development, which increases its absorptive capacity and its probability to innovate and imitate in the future.

An innovative firm is more likely to get an innovative draw in the future. According to the extent of this effect, the innovative process is more or less cumulative. In a creative accumulation regime, cumulativeness is higher due to experience and past innovative activities - as a consequence of creative accumulation - firms in this regime are large and entrance is unlikely due

to both the high level of concentration in the particular market orto a knowledge gap present among possible entrants. Finally, with respect to public knowledge it can be noted that leakages are used by firms in a creative accumulation regime to innovate, but that technology leakages between firms are marginal because of the high degree of appropriateness of innovative activities. Strategic alliances are likely to reinforce the closed accumulation process, rather than involve real "*creative destruction*" leakages. It is more profitable for firms in a cumulative accumulation regime to perform research and development than it is for firms in a setting of creative destruction where leakages are widely applied and profit levels are tending towards zero. The two archetypes discussed here should be viewed as two extreme theoretical cases of technology accumulation.

They are nevertheless helpful in giving some broad hindsight as to the fundamental difference in the need for and the type of public support. In the case of "*creative destruction*" one may think of a need for access to finance for research and development, particularly for small- and medium-sized firms and new technology-based firms. Of particular importance would be the "*distribution*" of science and technology. The dissemination of technology to promote innovation is a prerequisite for economic growth and development (Freeman & Soete, 2000:15).

Key statements that summarise Schumpeter's analysis is described by Tchalakov (2003) as follows:

The distinction between circular flow and development is fundamental for the capitalist economy. Schumpeter's "*circular flow*" indicates that economics functions in a "*static*" state, routinely following the beaten track of past cycles. The regime of "*development*" signifies a specific class of economic changes namely the radical, abrupt changes in production.

The source of development functioning in a different way is in other words, the introduction of innovations or what Schumpeter called "*new combinations*". The fundamental impulse, which puts the capitalist machine in motion, is printed onto the level of consumer goods, the new methods of production and transport, new markets, new forms of industrial organisation - in other words, all components born by capitalist initiative. The new combinations are always more profitable indicating that a key aspect of "*economic development*" is the competitive elimination

of old forms of production. This process of "*creative destruction*" is a fundamental trait of capitalism.

The introduction of innovations is impossible without the function of an entrepreneur. The only contribution of entrepreneurs is their will and action in channelling the existing production resources along new tracks. The entrepreneurs themselves cannot implement new combinations without resources - in other words, having no access to capital and already existing or created ad hoc, explain the essentially different roles of credits when the economy functions in a regime of development.

Creating an "*ex nihilo*" means of disbursement (through a plethora of credit tools) and thus ensuring credit to entrepreneurs, the banker seems to "*suck value from the future*", introduce it into the economic cycle and channel cycle, and channel it into a new direction.

The entrepreneurs' specific combination of "*will and action*" is a type of leadership that demands qualities possessed as a rule by a limited circle of individuals. This leadership is needed not only to break routine, but also to overcome the adverse reactions of the social environment in which the new combination is carried out. The leadership is also needed to overcome resistance of endangered producers ousted from the market by the new combination; winning over consumers; and finding allies, for example.

The "*rare qualities*" Schumpeter refers to, provide the next condition of providing the possibility for every potential entrepreneur to possess the resources necessary for the implementation of new combinations, for example access to credit as a key condition for economic development. Another condition indicated is the possibility to receive the anticipated entrepreneurial profit as compensation for his efforts.

In the "*Theory of Economic Development*" Schumpeter quotes two cases of non-market economy namely the isolated kingdom where all belongs to he "*signor*" and the isolated communist society, in which the central authority possesses all commodities and labour resources and determines all commodity values (Mirkowich, 1940:580).

What is similar between two cases, according to Schumpeter, is that some individuals enjoy absolute control over the means of production. They expect no production cooperation, nor do they provide possibilities for making profit to other economic agents. The problem of access to resources necessary for carrying out the new combinations *"does not exist in a non-exchange economy even if new combinations are carried out in it; for the directing organ, for example a socialist economic ministry, is in a position to direct the productive resources of the society to uses exactly as it can direct them to their previous employments."*

This distinction allows Schumpeter to define the difference between two types of economies. From the point of view of innovations, capitalist economy is the one in which resources necessary for new production are drawn from the circular flow by an ad hoc established purchasing power (bank loan) while communist economy is an economic form where the resources necessary for new production are drawn through some kind of power or command. This leads to the conclusion that "*leaders*" in a communist economy can play the role of entrepreneurs directly, without using bankers as middlemen. In the cases where the banking system is formally preserved, but is controlled by the leaders, the latter combine both functions of a motive power for the introduction of new combinations (entrepreneurs) and of creators of an ad hoc purchasing power by a decree for financing the new combinations (bankers).

The development as a specific form of functioning of the economy, in the sense of channelling the economic process along new tracks, introducing product, technological, organisational, market and innovations, is by no means related only solely to market economy. Moreover, according to Schumpeter, in the developing non-market economy *"the entrepreneurial activity of the leaders, which is indeed a necessary condition of the realisation of the combination, may be conceived as means of production."*

A third production factor, alongside labour and natural resources, is land. Part of the value of the new product should be ascribed to it. The amount of this part, as well as the part ascribed to labour and resources, is determined by competition. In a non-market economy there is no

competition, and profit is much less significant than in market economy indicating that the value of the leader's entrepreneurial activity is not clearly articulated (Mirkowich, 1940:580).

Economic Growth

Growth theory places emphasis on savings investment and growth rates. This is shown in the famous growth theory of Solow, a Nobel prize winner. It is a neoclassical model as it has a macro-economic focus based on maximising functions within households and profit-making ventures. Solow's main contributions are focused around the following (Kleynhans & Naudé, 2001:71):

- The necessity of technological innovation for long-term growth.
- The reaching of a long-term equilibrium situation if there is no technical innovation.
- The Solow-model implicates that poor countries will experience faster economic growth than rich countries if both have the same level of growth, rates in savings, investment and population. If countries' population growth rates are the same, the Solow-model forecasts convergence of per capita income between countries. Convergence implies that all countries' per capita income will be similar to one another. Convergence implies that countries with a low per capita income will grow faster than countries with a high per capita income, as capital stock will be less, which implies larger output from investments. Unconditional convergence ensures free mobility of capital that is attracted by maximum opportunities for investment in capital-scarce countries.
- The inability to increase economic growth over the long-term through investment. The importance of savings and investments for a country's per capita-income level of per capita income.

The emphasis is on industrial development, production of goods that create the best income and on comparative advantage. Big cities in South Africa, for example, tend to support wealth-creating ventures as they facilitate interactions between an even larger number of people. Market demand is deepened and new productive activity is stimulated. City economies affect population size.

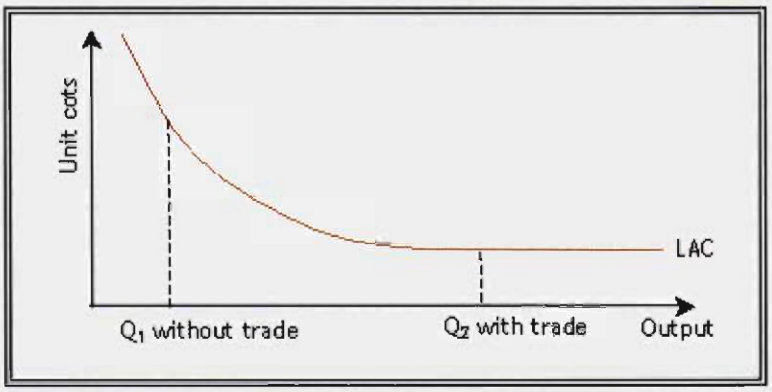
Cities performing well have population increases higher than the natural growth rate, as migrants are attracted by what they perceive as economic opportunities or "*lottery syndrome*". This is seen in a positive light by a country, as it creates conditions of higher economic growth, and as the cost to benefit of having more children increases in urban areas, it drives down fertility rates. This positive relationship assumes that the city can provide viable opportunities for those wanting to make a living. If a city cannot provide viable opportunities, populations will "float", disinvesting from the city psychologically, materially and physically with the young, mobile and wealthy and highly skilled leaving first (McCarthy 2004:7).

Comparative Advantage

It is mentioned above that growth theory emphasises savings, investment and growth rates and the emphasis is on industrial development, development of goods that produce the highest income or comparative advantage. Economic theory predicts all countries gain if they specialise and trade the goods in which they have a comparative advantage. This is true even if one nation has an absolute advantage over another country. Comparative advantage is created by international trade, which entails the exchange of goods and services between countries. Trade improves consumer choice and total welfare. Different countries have different factor endowments, e.g. climate, skilled labour force, and natural resources vary between nations (McCarthy, 2004:7). Therefore, some countries are better placed in the production of certain goods than others. International trade allows increased specialisation so that higher output allows economies of scale (Samuelson, 1980: 626-649). This is shown in figure 2-2 which is explained as follows:

- A larger market allows domestic producers greater scope for economies of scale. Without trade the domestic market only allows Q1 output. Access to overseas markets means Q2 output at lowest unit cost.
- International competition stimulates competition. Domestic firms strive to become "*world class*", adapting modern technology, and product and process innovations that reduce unit costs.

Figure 2-2: Comparative advantage



Source: Samuelson (1980)

Absolute advantage occurs when a country or region can create more of a product with the same factor inputs and comparative advantage, when a country has lower opportunity cost in the production of goods or services (Samuelson, 1980:629).

Comparative advantage is used to justify free trade and oppose protectionism. Comparative advantage is based on differing opportunity costs reflecting the different factor endowments of the countries involved. The theory assumes free trade, willingness to specialise and factor mobility. Specialisation and trade benefits exist in countries providing an exchange rate between the respective opportunity cost ratios (Samuelson, 1980:629).

Countries benefit if they specialise in the production of goods or services in which they have a comparative advantage, e.g. a lower internal opportunity cost. Less Developed Countries (LDC) are more prone to specialise in products based on intensive labour and land. The law of comparative advantage demonstrates that the standards of living rise and factor rewards increase, given appropriate exchange rates. However, many Less Developed Countries remain poor despite extensive specialisation and trade is not operating to even out disparities (Samuelson, 1980:629).

Overspecialisation in the primary sector has made Less Developed Countries susceptible to the problems of those industries. Barriers to trade, for example unequal bargaining strength, high

transport costs, and an inability or unwillingness to specialise, have reduced the potential gains from specialisation and trade.

Comparative advantage is a dynamic concept. A country can lose or acquire comparative advantage over time if there is a change in relative efficiency as measured by opportunity cost ratios. For example in the immediate aftermath of World War Two economists advised Japan to specialise in the production of rice. Japan ignored the expert advice. Extensive investment, technical expertise and a skilled labour force saw Japan acquire a comparative advantage in the production of cars and electronics (Kleynhans & Naudé, 2001).Samuelson (1980:629) explains that comparative advantage can be gained or improved through the following ways:

- Investment in education and training
- Investment in infrastructure
- Research and development to improve competitiveness, e.g. lower unit costs, better product design and reliability
- Lower inflation rates than competitors

Comparative advantage in the production of lower valued added textiles has shifted away from Developed Countries to Less Developed Countries' economies where unit labour costs are lower.

International trade requires extensive specialisation. This can have drawbacks including (Samuelson, 1980) the following:

- Strategic issues, e.g. countries become dependent on imports of essentials from other countries. A dispute in one country can halt production in another.
- Foreign producers may engage in dumping, e.g. selling output below average cost as part of a predatory pricing or contribution pricing strategy. Such practices are against World Trade Organisation rules.
- The argument that infant industries may not be able to become established if faced with competitors from foreign companies with lower costs due to greater economies of scale.
- A country may experience the disadvantage of overspecialisation, including diseconomies of scale.

- Vulnerability to sudden changes in demand. All products have a life cycle. Where a country has specialised in a product consumers no longer want, structural unemployment follows.

Comparative advantage has been heavily influenced by global changes in business trends (McCarthy, 2004:7). The world is characterised by increasing globalisation affecting traditional economic patterns. Inventories are kept to a minimum and "just-in-time" production has replaced "just-in-case" storage. Knowledge and skill is often the key to corporate success instead of monopoly control over hard assets, or scale efficiencies on long productions lines. New markets in distant locations are being established.

Knowledge economies and global trade are key features of the globalisation trends. Global systems have their origin in the industrial mass production. Large urban agglomerations in Developed Countries were focused on industrialising for comparative advantage and this led to urbanisation as people moved to cities to look for employment. There was an over-accumulation of capital and functional inefficiency that resulted from efficiency due to locational advantages, agglomeration economies and industrial integration at all levels.

Emphasis was placed on downsizing, capital mobility, and networking. Three new types of geographical arrangements of industries emerged, namely the branch plant colonisation where large multinational companies located in rural areas with sufficient infrastructure, the growth of small-firms with some linked to multinational companies and the location of high-tech firms and professional services in areas of high environmental quality.

Innovations in the information technology sector have facilitated efficient decentralised management and production. The technological impact of the computer communication and information technology (ICT) sector has grown exponentially with each new development challenging the development of new products. These information economies, defined as the networks that support linkages between firms, their markets and their suppliers would become important in competition, causing tension between economies of scale and economies of scope.

These changes exercise a significant impact on world cities based on the fact that the ICT brings about new combinations of concentration of central, financial, institutional, social, information and infrastructure industries. The trans-national companies dominate the economy and the engineers and financial experts are advantaged, at the expense of the workers. A new global division of labour is occurring and a widening of urban dualism globally affects every person's everyday life economically and socially, but the intellectual capacity of only those with access to ICT is increased dramatically.

ICT compresses time and space and leads to the societies becoming fragmented and localised. ICT is the main element in providing structural transformation in the economies of the West because it serves as a vehicle of new functionally interrelated global economic systems. The growth of ICT has led to the growth of innovation and new and exciting production and distributional options. In the midst of all technological innovation and concentration of multinational companies and supra-governmental institutions in the world cities, the need for face-to-face contact still remains.

The effect of ICT on the urban system is dependent on its availability based on the dissemination of information. The assimilation of an innovation is dependent on its availability threshold limitations and time of exposure. ICT is an explosion of information in all fields and it affects all sectors of the economy and also leads to the propagation of cultural and religious consciousness through the telecommunication media, which indicates a new economic sector. Economic growth in South Africa, for example, is summarised by Bundy (1992:26):

"*In South Africa, pre-capitalist societies were drawn slowly into an expanding world economy, with commodities produced under slavery, and commercial agriculture. The mining-industrial revolution of the last quarter of the nineteenth century transformed the pace and direction of economic development. The social and economic structures of modern South Africa are largely derived from the mineral discoveries and the particular kind of industrialisation that these*

stimulated. The twentieth century capitalist economy grew with, and was partly premised upon, particular forms of inequality that permitted rapid accumulation and afforded protection to a minority against competition from the black majority."

The primary and secondary industries in South Africa have declined over time. The tertiary sector has grown in importance. There are several other trends emerging. The South African economy has been shaped significantly by a few economic sectors namely government, social and community services, manufacturing, wholesale and retail trade, transport and communications. These sectors have continued to add significant value to the South African economy over the last 30 years.

There has not been enough job growth in the various sectors. Manufacturing has seen a significant decline in employment as production processes became increasingly capital-intensive and high-tech. The general exception to this picture of jobless growth may seem to be in the financial and business sector. Since the latest census data there is evidence that the financial service sector is also losing jobs.

According to a long-term trend from primary and secondary industry into services, there has been a marked decline in employment against machine operators and trade workers. This is to be expected. Less expected is a decline in employment amongst professionals by 8.3 % between 1996 and 2001. This may be driven by trends in some occupational sub-groups for example teachers. It may also be that cities are losing some of those residents that they consider being their primary economic asset, e.g. people working in high value-adding knowledge industries. An exodus of professional skills from the country may be driving this trend. At the other end of the spectrum there was a total loss of 91 145 jobs in private households between 1996 and 2001 (South African Cities Network, 2004).

A particular concern is the amount of employment opportunities in the city and those available in other parts of the country and non-urban areas. Some cities have higher unemployment rates than others. Some of the cities have unemployment rates far higher than even most rural areas. The

implications for residents in those particular cities is that it might make more sense to seek employment in rural areas. A similar picture emerges when levels of monthly income are compared. On average, city workers earn R 5 297 a month according to the 2004 State of the Cities report. This is R 2 508 better than that earned across the country outside the nine cities. To a varying extent the pattern holds for most of the major South African cities. When the average monthly income earned is compared to the national average, including the nine cities, it emerges that three cities are unable to offer their employed people remuneration better than they might find in another.

The lack of skills is a major concern as only 26, 9% of major city residents had a matric certificate in 2001 and only 11.9% had any form of post school higher education (South African Cities Network, 2004:11). Crimes affecting businesses, e.g. burglaries and fraud have declined significantly since the mid-to-late 1990s and the levels remain relatively static.

McCarthy (2004:7) states that urban economic challenges are being coped with in similar ways by all South African cities. Domestic economic demands are not seen to be the solution to economic recovery. South African cities are going global. The cities are "*lifting out of social relations from local contexts of interaction and restructuring across indefinite spans of time-space*". It is possible for an individual in New York or Johannesburg to be well linked within social and economic networks that extend globally, but have no real connection within the immediate vicinity. Foreign consumer goods and services allow them to capture sufficient foreign-earned income to slowly drive up local income and demand. This growth path is viable but the global export economy remains structurally unbalanced and very fragile, as it is dependent on the United States consumer.

The recent shift towards an export-economy has not had a significant impact on economic performance. Some indicators suggest that labour markets have suffered at the same time as economic returns from export industries have improved. There have been capricious results in

some sectors. Some sectors are shedding labour. The need for more diverse approaches, which includes support for domestic demand and latent local productive capacity, should be considered.

It is suggested that industries, e.g. enhancement of the construction industry, be accessed to promote employment, promote competitive advantage and access global markets in South African products (Robbins, 2004:1). This sector has potential to create leverage, as spending of one million Rand yields twenty jobs. Government is building infrastructure to alleviate poverty and increase competitiveness of private industry. Diversification is needed to create a success. This can be seen in changes in global trade patterns, e.g. China is becoming one of the world-leaders in low-labour-cost manufacturing for export. It is predicted that some countries will overtake the United States in terms of Gross Domestic Product, e.g. Brazil, India, Russia and China. Trading relations will differ from past logistical assumption that informed the port of Durban or the airport in years gone by (Robbins, 2004:2).

Provincial trends are inspected through an investigation of the major features of KwaZulu-Natal. KwaZulu-Natal has based most of its current fortunes on established global trade relationships. The province can no longer depend on a nineteenth century foundation and must adapt rapidly and competitively to prevent its economy from falling behind (The Monitor Group, 2000:1, Robbins, 2004:1).

McCarthy (2004:7) states that most people take it for granted that Durban is the country's second or third largest city. Durban Port is the artery in a subcontinent's trade relationship with the world during the twentieth century linking southern Africa through trade to the rest of the world. The agglomeration economy created by the associated logistics industries, trade and manufacturing are centred due to the activity of the Port. The Port has to compete with other forms of transport, resulting from increase in air travel and air cargo in comparison with sea transport, the shift towards knowledge and time-sensitive patterns. No longer relying on low wage labour and proximity to the sea-port requires changing traditional organisational bases for manufacturing and other economic shifts. Logistics infrastructure is to be modernised and twenty-first century organisational requirements in manufacturing are to be implemented.

Comparative and competitive advantages, described by McCarthy (2004:6), within the Southern African and global context entails:

- The fact that KwaZulu-Natal is seen as the primary artery of the South African economy based on the fact that both Durban Harbour and Richards Bay Harbour are located in this province, thereby linking it to the rest of the world. These are the two busiest ports handling cargo by value and bulk respectively. These ports ensure economic leadership in the provincial economy. The KwaZulu-Natal ports are the two leading ports in the country as both carry more container cargo by value and by mass respectively.
- Manufacturing is a logistic industry located in close proximity to the port resulting from locational advantages. KwaZulu-Natal is heavily industrialised and 30% of the GGP is derived from manufacturing; this is very high when compared to the national percentage of twenty per cent. Most manufacturing is concentrated in eThekwini, but it is not only limited to Durban. The Richards Bay economy is also characterised by a large manufacturing sector and it has been the fastest growing city in South Africa over the past few years. Richards Bay's GGP growth was 7,4 % between 1995 and 2001.
- KwaZulu-Natal is also the best-watered province with much potential for agricultural activity. It is the national leader in several agricultural products. In GGP terms agriculture is smaller than manufacturing. Agriculture is a labour-intensive sector, which is especially relevant in a provincial context of high unemployment.
- KwaZulu-Natal has a sub-tropical coastline in close proximity of Gauteng and it is the premier domestic vacation destination with a limited share of international tourists. Tourism manifests as a relatively high labour-intensity and is of special strategic interest in the context of current development challenges. A considerable amount of money is currently being spent on exploiting this potential, for example capital spent on places like the International Convention Centre, uShaka Marine Land and Golfing Estates, Zimbali and a number of planned developments on the North Coast to be further developed within the next eighteen months.
- These major features form part of a provincial spatial framework with the major landmarks being the Durban Trade Port and the planned building of the King Shaka International

Airport (KSIA), confirmed in The Mercury on 8 November 2004. A Trade Port that will be located adjacent to the KSIA is an important feature that will also make a contribution to competitive economic advantages.

Main issues include slower growth rates with a Gross Geographic Product (GGP) growth rate that was only some 1% per year, which equals about one half of the national average with only a slight improvement in provincial growth performance. A rise in poverty and unemployment, downsizing of larger businesses and parallel buoyancy in smaller enterprises, global economic growth brought about by the knowledge economy and the ICT revolution, speed in global linkages, impacts on comparative advantage (McCarthy, 200:7).

KwaZulu-Natal is also characterised by the largest incidence of poverty in the country with 50% if all households in poverty. Comparative advantage causes development in some sectors of the economy leading to spatial disparities between different areas. Structural impediments have also influenced development theory to a large extent. The line of thought is termed structuralist theory.

The Latin-American Structuralists

The structuralist economic growth theory explains this phenomenon. This theory was formulated with the emergence of the United Nation's Economic Commission for Latin America in 1948. This school of thought argues that the structure of Less Developed Countries (LDCs) differed significantly from the Developed Countries (DC). This implied that theories that were formulated for DCs could not be applied to Less Developed Countries. The school protested against Ricardian theory on comparative advantage and the expected advantages of specialisation in international trade.

Raul Prebisch (1950), an Argentinean economist and Hans Singer (1950-48), formulated the Prebisch-Singer model which stipulates that the terms of trade between countries move over time against raw material, agriculture and primary production. This entails that the current specialisation of international trade implemented by the Ricardian theory for comparative

advantage for Less Developed Countries, will lead to a decrease in the terms of trade over the long term. This will be caused by the fact that export prices decrease and import prices increase. Prebisch-Singer based their model on the structure of production in Less Developed Countries and Developed Countries.

Prebisch (1950:473-485) refers to Less Developed Countries as "*periphery*" and Developed Countries as the "*core*". The structure of production on the periphery and the middle is described as follows: "*Given the existing international division of labour, in which the developed centre countries produced manufactured goods for export to the periphery and the less developed peripheral countries produced primary products for exports to the centre, all the benefits of trade would accrue to the centre and none to the periphery*" (Cupher & Dietz, 1997:173).

Traditional agricultural goods oppose produced goods and the dualism is very clear. The Developed Countries specialise in manufactured goods and the Less Developed Countries in primary products which means that the Less Developed Countries will have to trade against decreasing terms of trade for the following reasons (Cupher & Dietz; 1997:173):

- The demand for manufactured goods is more flexible in price, which means that a decrease in demand will lead to less production and less decreases in price whereas the opposite is true for agricultural goods.
- The production of manufactured goods is characterised by oligopolistic market conditions, while producers of agricultural goods find it harder to coordinate their production.
- The income flexibility of the demand for manufactured goods is greater than the income flexibility for the demand for agricultural goods (Engel's Law). The structure of supply and demand is such that industrialised countries offer industrial products and buy raw products and the developing industries do the reverse. According to Engel's law, the demand for raw materials tends to be inelastic while the demand for industrialised goods is elastic. The technological progress in the production of industrialised goods not only makes it possible for industrial countries to increase their incomes and thus the standard of living, but, because of the elastic demand on the world market, also to enforce higher prices. The situation in

developing countries is the opposite namely technological progress in primary production, results in lower prices because of the inelastic demand. This mechanism leads to deteriorating exchange relations between industrialised and developing countries and also between the industrialised and the agricultural sector in developing countries (Prebisch, 1959:251-273).

- Prices of agricultural products are unstable when compared with produced goods.
- Agricultural production creates employment for unskilled labour, which is in surplus in Less Developed Countries (Lewis, 1954:139-191). Labour costs are low and the price for agricultural goods remains low. Manufactured goods are usually developed by semi-skilled to skilled labour organised into trade unions that demand labour increases, which in turn leads to an increase in the price of manufactured goods.
- The use of new technology will lead to increasing prices, which will ensure greater profits and an increase in income. In a Less Developed Country, there is strong competition for the production of manufactured goods. Application of new technology will lead to a decrease in the price of output.
- The implication for long-term decreases in terms of trade is that Less Developed Countries are confronted with two types of development strategies that must be followed, namely internal restructuring to produce for the local market or a new export-strategy that will concentrate on manufactured goods instead of primary products (diversification of export) which is described by Cupher and Dietz (1997:73) as being the best strategy to follow.

Structuralist economists describe the mergence of dualism economies.

Dualism Economies

Development occurring only in some sectors of the economy can be explained by dualism theories. Dualism theories assume a split of economic and social structures of different sectors so that they differ in organisation, level of development, and goal structures. Usually, the concept of economic dualism differentiates between two sectors of economy:

- The traditional subsistence sector consists of small-scale agriculture, handicraft and petty

trade, has a high degree of labour intensity but low capital intensity and little division of labour.

- The modern sector of capital-intensive industry and plantation agriculture produces for the world market with a capital-intensive mode of production with a high division of labour.

The two sectors have little relation and interdependence and each develops according to its own pattern. The modern sector can be considered an economic enclave of industrial countries, and its multiplication and growth effects will benefit the industrial countries but have little effect on the internal market. Several authors stress the dualism of specific factors.

Eckhaus (1955:539-565), for instance, differentiates, in his concept of technological dualism, between labour and capital-intensive sectors, and explains regional dualism as a lack of communications and exchange between regions, the capital sometimes being an island which, in geographical terms, belongs to the developing country, in economic terms, however, to the industrialised country (Botha, 1990:31).

Economic, technological, and regional dualism is often the consequence of a social dualism, the absence of relationships between people of different race, religion, and language, which, in many cases, is a legacy of colonialism (Botha, 1990:31).

Development in dualism concepts is the suppression of the traditional sector by concentrating on and expanding the modern sector. In time, it is assumed that the trickle down effects will reduce and abolish dualism. In this line of thinking, the main problem is capital formation because its degree determines the scope and speed of expansion of the modern sector. In general, agriculture has to provide the resources, labour as well as capital, for expanding the modern sector. In details, the strategies vary.

Some authors, like Lewis and Ranis and Fei (1964), assumed that a reduction of the labour force in agriculture, because of the widespread disguised unemployment, would not reduce agricultural production. The productive employment of these labourers in the modern sector would increase the total production of the economy and hence priority of investment in industry is necessary.

Concentration on the modern sector led to an increasing regional disparity, rural urban migration, urban unemployment, a decrease in agricultural production, and hindrance in industrial development because of a lack of purchasing power in the rural areas. The anticipated "*trickle-down*" effects hardly ever happened. In praxis, development plans following this line of thinking led to failures like the early Indian development planning. Therefore, other authors, like Lelé (1971) and Mellor (1976), emphasise the important role of agriculture at the beginning of development, in other words, preceding or parallel to industrial development in order to provide enough internal resources for the development process.

The reason for dualism or increased development in core areas at the expense of the periphery can be explained in terms of structural unemployment where the disadvantaged are excluded from obtaining employment in the formal economy (growing industries) resulting from a lack of education and employable skills, the resistance of distance between the core and periphery. Development takes place mainly in urban areas and at the expense of rural areas. The unskilled workers in urban areas remain unemployed and development spreads slowly to the rural (periphery) areas resulting from, inter alia, a lack of education. Formal education opportunities become a prerequisite for development in certain areas.

Structural Unemployment

Structural unemployment occurs when the structure of industry changes. As an economy develops over time, the type of industries may well change. Changing preferences, decrease in demand or increase in technological application will determine this change. Many industries that were once major employers have now all but disappeared (Robbins, 2004:4). The building of ships and mining are prime examples of this sort of trend, but there are also many more minor examples as well. The extent of structural unemployment will depend on various things:

- Mobility of labour, which implies that if people are able to quickly switch jobs from a declining industry to a rapidly growing one, then there will be less structural unemployment.

- The pace of change in the economy, which means that the faster the changes taking place in people's tastes and demand and supply are, the more structural unemployment there may be as industry has to adapt more quickly to change.
- The regional structure of industry, which implies that many industries that are dying are heavily concentrated in one area. This may make it much more difficult for people to find new jobs. Both the shipbuilding and mining industries were heavily concentrated and some areas have taken many years to adapt and reduce the level of structural unemployment.

Strucutral unemployment can be explained in terms of the modernisation theory or the emergence of Computer Communications Information Technology (CCIT) as mentioned in the section on comparative advantage.

Modernisation Theory

According to modernisation theories, internal factors in the countries, such as illiteracy, traditional agrarian structure, the traditional attitude of the population, the low division of labour, the lack of communication and infrastructure, for example, are responsible for underdevelopment or structural unemployment (Swanepoel & De Beer, 2000:36). Differences in structure and historical origin are considered of little importance; international dependencies are not taken into account. Consequently, a change of these endogenous factors is the strategy for development (Ngu, 1982:157).

Ngu (1982:57) also points out that capital and training in specialised skills to enable late developers to explore their own natural resources and to eliminate poverty and promote development on the periphery, is dependent on education. Ngu (1982:157) concedes that lack of education leads to structural unemployment as unskilled people find it difficult to obtain employment in the formal sector. The main idea underlying the view of neoclassical theorists is that it is possible to invest in people in the same way as one would invest in infrastructure.

Tilak (1989:11) states: "*Education transforms the human beings into productive human capital by incalculating skills.*" Dejene (1980:29) is of the opinion that neoclassical theorists believe that formal education will help to reduce inequalities within societies. Neoclassical theorists believe

that formal education will redistribute job skills among the inhabitants of a country and that the redistributed skill will lead to redistribution of economic benefits and a decrease in structural unemployment, as people will be skilled to obtain employment in the formal sector.

The validity will depend on a number of factors, namely access to education and job opportunities in the modern sector of Third World countries. Cameron and Hurst (1983:8-9) comment that Third World countries have great disparities in education for example financial, trained teachers, and physical facilities are unequally distributed within the urban and rural areas among social groups. There are also several gender disparities. These disparities limit the access to education, which could lead to a decrease in structural unemployment.

Swanepoel and De Beer (2000:162) argue that education will only lead to greater equity and justice if there is sufficient access to available job opportunities. The school system is based on those of wealthy and industrialised countries. The school system prepares scholars for the next level in the academic hierarchy rather than for a specific job opportunity. Schools create the expectation that matriculants will be able to find employment for example administrative work. At the same time the economic system cannot keep pace with the demand for white-collar job opportunities. Reformists are also of the opinion that education is the key to decreasing structural unemployment, which entails that more formal education opportunities have to be made available. Reformists state that lack of skills can be counteracted by providing more relevant and cheaper education.

Reformists mention a paradox, namely a shortage of skilled professional and paraprofessional people especially in sciences, management and administrative positions. In spite of this there are several jobless educated people who are not absorbed by the economy. Reformists note that the education system is training people for the wrong type of positions or the education syllabuses are not relevant to the needs of the developing economies (Dejene, 1980:31). Education must be linked to planning aimed at meeting labour requirements (Noor, 1981:9-10). Noor also lists three basic requirements, namely communication skills and knowledge (including literacy, numeracy and general civic, scientific and cultural knowledge), values and attitudes. Life skills and production skills are also seen as important.

Radical theorists criticise the reformist theory and state that it only takes into consideration what they perceive to be the lack of abilities in the poor. The radicals state that people could also be poor resulting from the social and economic contexts within which education functions. According to this approach, the expansion of non-formal education (supported by reformists) will not lead to decreasing inequality, nor will it promote social and economic mobility. Bock (1983:167) explains that formal education is unable to contribute to the upward mobility of the poor and that non-formal education is even less able to do so. Bock, as other radicals, believes that social and economic structures have to be investigated.

Radicals believe that only Western models and capitalism are promoted in the education system (Freire, 1982:106). The radicals argue that a total restructuring of education is necessary to reduce structural unemployment. Freire (1982:106) states that there has to be constant interaction between teachers and students, with regard to their contexts. He promotes participation to *"awaken consciousness"* (Freire, 1982:106). Community participation is seen as an important prerequisite of modernisation for reducing structural unemployment in peripheral areas.

The modernisation theory emphasises that the industrialised countries are the model for economy and society proposed for modernisation. There is a continuum between the least and the most developed country and each country's position is on this line. The difference as compared to the industrialised countries is the degree of backwardness, which has to be made up for.

Suitable measures include the modernisation of the production apparatus, capital aid, transfer of know-how, so that the developing countries can reach the stage of industrialised countries as soon as possible. Development is seen as an increase of production and efficiency and measured primarily by comparing the per capita income (Martinussen, 1997:56). Development in this conception, is described by Foster-Carter (1986:22) as *"those who've got it giving it (or some of it to those who haven't). Depending on the author, it can be anything from capital totechnology."*

Structural Unemployment, Computer Communications Information Technology (CCIT) and the Future

According to Gillespie and Williams (1988) the emergence of the computer communication and information technology and the resulting technological impact has been growing exponentially. They describe the creation of information economies where networks that support linkages between firms, their market and their supplier would become vital in competition bringing about fast change in the economy and emerging as a new economic sector (Geyer, 2001:6). Graham (1999) describes the impact of CCIT for the survival of industries and the impact on every individual life. Castells (1993) notes that major structural transformation depends on CCIT for creating new economy systems.

Prebisch (1959:271-293) describes the social polarisation of people in the "*core*" and "*peripheral*" areas. Lambooy and Moulaert (1996) also describe social polarisation of people resulting from economic restructuring due to the emergence of CCIT. In post-industrial cities, shifts have occurred in the upper-end from manufacturing to business services (CCIT). This is accompanied by a significant increase in the informal market, which indicates the inability of a large number of people to find employment in the formal market due to a lack of appropriate skills.

Informal markets flourish in economically depressed and manufacturing zones. Sandercock (1998) describes the fast economic change happening between high technology, low technology and informal industrial activities and between the income levels of the people economically active in these three sectors (Sandercock, 1998). Income levels, described in the structuralist theory, are directly related to skill (Prebisch, 1959:273). Geyer (2001:10) predicts that further inequalities will occur between the urban elite and the poor.

If cities are seen as growth points information will be disseminated to the rural areas at a slower rate, implying that the people in rural areas will have less access to available technology, leading to further disparities and lack of skills (Glasson, 1989:71). Technology will be made available to

people with access to opportunities of education who are employed in the manufacturing and business service sectors. Sandercock (1998) mentions that this may deepen the "*urban dualism*" currently emerging.

Structural unemployment within the city often occurs when low-skilled migrants move to urban centres with high expectations, rather than realistic prospects. This is known as the "*lottery syndrome*" (Gugler, 1968). This is also described in Todaro's model of urban unemployment in 1982. People hope to land a job when they arrive at their urban destination. These people are usually supported by their families but will resort to prostitution or other forms of "*misemployment*" to make a living. Sjaastad (1962) describes financial and social losses that often accompany such a move. There is a continuous urban-rural migration.

Geyer (2001:11) mentioned that this migration of unskilled labourers to the Central Business Districts of large cities was followed by an increase in crime and violence, which resulted in the relocation of many businesses to suburban business centres. Unskilled labourers thus tend to migrate to areas where they hope to make a better living (Sjaastad, 1962). This relocation of businesses is described in a joint World Bank and eThekwini Council study on manufacturing industries, which suggested that the biggest constraint to expansion of existing firms was their aversion of crime in many older areas and that a sustained increase in market demand for their products had to be promoted. Many manufacturing firms are looking for modern operational environments where the neighbourhood effects of crime in particular can be reduced and new international markets can be established. Structural unemployment and migration within the global system is described in further detail in Chapter Four on Integration of the City.

Dissemination of Development: the Growth Pole Theory

Sjaastad (1968:88) describes migration of people from rural to urban areas as being accompanied by investment in skills training. Many young persons migrating from rural areas will typically have made a small investment in themselves through training for and experience in a specific occupation and a relatively large one through formal education, whereas a large portion of the

investment in older persons presumably arises from skill and experience specific to particular employment. Training will be undertaken in the urban area. This indicates that additional training is needed, due to the fact that access to educational information in rural areas, is limited. Educational facilities and opportunities are disseminated at a slow rate (Cameron & Hurst, 1983:8-9). This can be illustrated by means of Perroux's growth pole theory.

Perroux, a French economist developed the growth pole theory (Glasson, 1978:171). Perroux showed that " *growth does not appear everywhere and all at once; it appears in points and development poles, with variable intensities; it spreads along diverse channels and with varying terminal effects to the whole of the economy*" (Glasson, 1989:71). This has led to definitions such as growth pole and growth point. The growth pole is not given a specific geographical location. Bos (1978:67) described it as being an urban centre of economic activity that will eventually become independent to the point where growth spreads outward to the less developed regions of the country. A growth point implies the placing of central points inside a specific spatial location.

The theory aims to predict changes inside the regional structures and suggest possible solutions for the regional problems or lack of development in the peripheral areas. Three key aspects are identified within the theory, namely the concept of growth industry and key contributions, the concept of concentration and the concept of distribution. A growth industry is an industry with great demand for its products. It can be a single key industry or one of a series of activities that forms an industrial complex (Botha, 1990:29). The concept of concentration is used to explain why factors of production concentrate at a certain point (Botha, 1990:29).

Perroux feels that growth is initiated at certain points and distributes to other areas (Dry, 1997:26). The concept of distribution investigates the influence of growth poles on adjacent areas' economy. The expanding growth pole can take over the market, capital and labour of the neighbouring regions. Botha (1990:31) states that the growth pole theory is an effective way to generate growth.

The concentration of investments at a specific point is cheaper than investing at various different points. The growth pole can induce development and prevent stagnation in areas adjacent to the

growth pole resulting from the distribution effect. Perroux's theory explains the spreading of development from the rich to the poor or from urban to rural areas and adds that development is dependent on access to educational opportunities.

2.3 BALANCED DEVELOPMENT

Balanced development places emphasis on the balancing powers in the economy. It accepts that various imbalances exist and places emphasis on balancing forces.

Balanced development sees the main obstacles to development in the narrow market and, thus, in the limited market opportunities. Under these circumstances, only a bundle of complementary investments realised at the same time would have the chance of creating mutual demand. The theory of balanced development refers to Say's theorem and requires investments in such sectors, which have a high relation between supply, purchasing power, and demand as for example, seen in the case of the consumer goods industry or food production. The real bottleneck in breaking the narrow market is seen here in the shortage of capital, and, therefore, all potential sources have to be mobilised.

If capital is available, investments will be made. However, in order to ensure the balanced development, there is a need for investment planning by the governments.

Development is seen here as expansion of market and an increase of production including agriculture. The possibility of structural hindrances is not included in the line of thinking, as are market dependencies. The emphasis is on capital investment, not on the ways and means of achieving capital formation. It is assumed that, in a traditional society, there is ability and willingness for rational investment decisions along the requirements of the theory. As this will most likely be limited to small sectors of the society, it is not unlikely that this approach will lead to super-imposing a modern sector on the traditional economy, in other words to economic dualism.

Swanepoel and De Beer (1997) state that the concept of development has been abused in the past:

"It (development) was used to placate unsatisfied people, get certain infrastructural development done in a cheap way, soften up the people before the government - and sometimes unfortunately its bulldozers - moved in."

Development was historically seen as a process of physical transformation planned centrally. It used to epitomise a top-down approach (Swanepoel & De Beer, 1997). Verhelst (1987) emphasises that this approach did not necessarily promote development and there was growing unhappiness with this approach. Harcourt (1997:6) states that poverty was increasing and impervious to "trickle down" effects of economic growth. Income disparities were increasing. These disparities included north and south disparities as well as between areas.

Influenced by the dependency theory, there was a growing concern that underdeveloped countries could ever hope to compete effectively with northern countries even with sizeable injections of aid. There were calls for more protectionist measures from this quarter, before countries moved more directly into the global economy. Growing global poverty, inequality and unemployment, and increasing doubt to efficacy of the policy application of politically grand theory such as full-blown modernisation and dependency approaches, there was a growing international consensus for social scientists and policy makers to restructure and improve the nature of the development process.

The main reasons for the unhappiness were as follows:

- The unsuccessful attempts of the United Nations to promote development, between the period of 1960 to 1980, where central planning and emphasis of growth in physical production means, did not deliver the expected result (Kleynhans & Naudé, 2001:6). This was termed the two "*development decades*". The first "*development decade*" is characterised as a time during which development policies were formulated by international aid agencies in cooperation with Third World governments.

  They assumed that rising Gross National Product (GNP) levels meant real growth whereby poverty would be eradicated (Sandbrook, 1982: 2). He also states that these policies were in

part based on assumptions about the causes of rural and urban poverty and low growth. It was thought that poverty was in many ways the result of limited ambition on the part of the families. Farmers were seen as being merely content to produce sufficient amounts for their immediate needs, and workers were said to have a poor work ethic and low ambition, working only to satisfy their limited desires (Sandbrook, 1982: 2).

This is similar to the theory of Lewis (1966) where lack of development was seen as a fault of the people themselves whose malnutrition, ill health and poor living conditions reflected insufficient production by them, indolence, the distractions of their lifestyle with its archaic social institutions, and their backward-looking attitudes and beliefs. A range of development programmes was established to assist people to overcome these self-inflicted ills (Sandbrook, 1982:5).

Programmes that encouraged families to produce crops for commercial markets both abroad and in the expanding urban regions were promoted. In order to encourage this change as quickly as possible, foreign experts, accompanied by sophisticated technology, were introduced (Haug & Oygard, 2000:3). External assistance was considered crucial since it was thought that the poor were unable to change things adequately by their own efforts, and that growth would occur only through diffusion, or a spreading of ideas and technology from the advanced countries to the Third World (Haug & Oygard, 2000:3; Katz, 1989:12).

It was assumed that modernisation was best brought about by the exchange of goods and ideas on the national and international markets. The peasants were given the opportunity to produce for these markets (Sandbrook, 1982:7).

The Kenyan Government Development Plan of 1966 – 1970, for example, placed great emphasis on agricultural development, whereby increasing agricultural productivity would encourage growth in the industrial sector as rising rural incomes would lead to a rising demand for consumer goods (Webster, 1990: 32). It would be of little use to the Third World country if these consumer goods were all imported from countries with a more developed

manufacturing sector. Webster (1990:32) stated that this would merely have led to a drain of capital overseas and increasing "balance of payments" problems.

Thus, accompanying the programmes to raise agricultural prosperity were programmes designed to limit imports of consumer goods, to encourage instead the growth in urban regions of new domestic industries that could satisfy the needs of consumer products (Webster, 1990:32). The policy of "import substitution" sought to provide capital and business opportunities for those in urban regions, and was purchased with vigour, though not exclusively, in Latin America and Asia. Webster (1990:32) states that these agricultural and industrial policies attempted to overcome poverty by giving the poor the opportunity to help themselves (Webster, 1990:32). These policies had the characteristics of the subsistence approach which was based upon the growth-oriented development strategy that sought to expand the agricultural and industrial sectors in such a way as to give the rural and urban poor the chance to pull themselves up, in other words, helping the poor to help themselves (Sandbrook, 1982:17).

It was argued that for a decade this philosophy dominated development thinking. By the early 1970s it was clear that all was not well. A number of countries' per capita income had grown over the period and health and education had improved but the standard of living in many countries, which had experienced a rise in their Gross National Product, did not improve for the vast majority of the population. Over this period, many others also fell into absolute poverty (Webster, 1990:27).

According to Webster (1990:27), critics of the growth-oriented approach argued that this was because it had failed to give sufficient attention to real human welfare through prioritising industrial growth and agricultural commercialisation. Rural deprivation was falsely regarded as a problem that any sufficiently motivated peasant could overcome in an expanding economy. Many argued a completely different approach to the Third World poverty and development. They argued that proper growth could only be encouraged by a programme that has an essential ingredient, i.e. a redistribution of income and resources

downwards (for example through taxation) towards poorer rural households (Webster, 1990:27).

Sandbrook (1982:4) stated that such direct intervention in the distribution of resources was completely contrary to the philosophy behind the market-oriented growth models of the 1960 to 1970 period. It also involved a change in the view of poverty to no longer be seen as a condition to be overcome by the individual, but to be seen as the product of the deteriorating social and environmental circumstances of the poor.

Great stress was laid on the failure of the market model to create enough jobs, particularly in the context of an increasing population. As in advanced industrial societies, poverty was very much a problem associated with either underemployment or unemployment, The recognition that the nature of poverty had to be reconsidered led academics, development agencies (such as the World Bank) and some donors in the North to propose a radically different approach to Third World Development.

This became known as the "*basic needs*" strategy. This "*basic needs*" strategy seeks to do two things, namely to relieve absolute poverty as quickly as possible through intensive direct assistance to those in desperate circumstances, and to meet the basic needs of all in terms of material wants such as food, clothing, shelter, and fuel , and also, as some argue, social needs such as education, human rights and what is called "participation" in social life, through employment and political involvement (Sandbrook , 1982:7).

In the past emphasis in poverty assessments has been on measuring poverty without explaining why people are poor. What is causing poverty has been given insufficient attention also with regard to the development of different strategies to reduce poverty. Maxwell (1999) reviews these strategies by pointing out that the main focus was on income and growth during the sixties. McNamara's famous speech in 1973 emphasised redistribution with growth.

This was followed by the "*basic needs*" approach, broadening the concept of income poverty. Chambers's (1983:131-137) work on powerlessness followed in the eighties; gender equity in the nineties where the United Nations Development Programme introduced the denial of opportunities and choices (inspired by Sen) and then came emphasis on how poor people themselves view their own situation, exclusion and multiple deprivation (low income, poor housing, poor access to health and education).

- Many countries in the 1960s and 1970s experienced economic growth but not development (Ray, 1990:328; Somers, 1996:174). Information about Gross National Product and other economic data was obtained from two annual publications namely the World Development Report and the World Bank Atlas. These are official World Bank texts that provide information and statistical data on the performance of the different countries gathered through its agencies around the globe.

  The World Bank recognises that this data are indicative instead of a proper representation of the true extent of relative inequality between countries. The table below shows the differences between the rich and poor countries in terms of Gross National Product (GNP) per person in the eighties. It also shows negligible "*growth*" in GNP for the low-income countries, which, although higher on paper, showed no improvement in real terms since 1960. The GNP per person (in 1980 dollars) is shown in the table below:

Table 2-1: The GNP per person

Type of countries	**1950**	**1960**	**1980**	**1987**
Industrial countries	4130	5580	10660	12500
Middle - income countries	640	820	1520	2000
Low - income countries	170	180	250	300

Source: World Bank (1987: 2)

These figures provide valuable information about the relative levels of development in different parts of the world economy. Yet it must be recognised that the figures are partial in three ways:

1. They are usually national averages which in themselves say nothing about the distribution of resources among the population.
2. They omit certain activities that have an economic value.
3. They imply that development can be measured in straight-forward money terms (Beisner, 1990: 1-6).

- Many countries experienced an economic crisis during the 1980s, resulting from a global economic recession, which necessitated a more pragmatic approach towards development (Swanepoel & De Beer, 2000:48).
- Criticism that the multi-dimensional nature of development was not taken into consideration.
- A realisation that development has to be sustainable and that the natural environmentbe conserved emerged during the 1980s (Mawhinney 2002:2-24).
- Greater political transparency in countries with the fall of socialism and communism in the former Soviet Union in Eastern Europe (Kleynhans & Naudé, 2001:6).
- A growing realisation that development will only succeed if focus is on meeting basic needs, public participation of the poor and sustainability in terms of the natural environment to ensure some measure of global measurement of resources in the long-term interest of humanity (Hope 1996:8).

Centrally planned development strategies and processes of the past were criticised, as they did not put people ahead of the physical process (industrialisation, production, growth in Gross Domestic Product). There was little public participation involved and the population's standard of living and quality of life were not surveyed efficiently. This led to unsuccessful and unbalanced development (Kleynhans & Naudé, 2001:6).

The United Nations Development Programme criticised this development approach of the later 1980s, and the concept of human-centred development emerged in the United Nations Human

Development Report of 1990. This report also introduced the Human Development Index (HDI). The Human Development Index measures the average achievements in a country in three basic dimensions of human development, namely longevity, knowledge and a decent standard of living.

The Human Development Index thus contains three variables namely life expectancy, educational attainment (adult literacy and combined primary, secondary and tertiary enrolment) and Real Gross Domestic Product per capita. It also shows the Gender-Related Development Index which measures the achievements in the same dimensions and variables as the HDI does, but takes account of inequality in achievement between men and women. The greater the gender disparity in basic human development, the lower the country's GDI compared with its HDI. The GDI is simply the HDI discounted, or adjusted downwards for gender inequality.

The Gender Empowerment Measure (GEM) indicates whether women are able to actively participate in economic and political life. It focuses on participation, measuring gender inequality in key areas of economic and political participation and decision making. It thus differs from the GDI as indicator of gender inequality in basic capabilities. The United Nations Development Programme has since the institution of the human development index adapted their concept of development to ensure that humans are at the centre of development.

The 1990 Human Development Report of the United Nations states that balanced development entails improving the living standards of people by developing social capital, developing opportunities for people to participate and by promoting development through people where people accept responsibility for their own development. This approach entails a grassroots, bottom-up approach and ensures an integrated approach to the problems of poverty and development (Batten, 1957:7; Holdcroft, 1982:209).

Within the human-centred approach to development, the process of development is seen as multi-dimensional. Both economic and non-economic factors play a role (Kleynhans & Naudé, 2001:7). Balanced economic development therefore consists of a commitment to long-term improvement of material and spiritual prosperity of people by means of poverty alleviation and alleviation of inequality and creation of suitable jobs for people.

Kleynhans (2001:7) states that economic development has the following characteristics, namely that it necessitates structural and institutional arrangements, that it is a timely process and that it should not be an implementation of fashionable ideas (Smirzai, 1997:2) and that it entails sustainable growth in real capital production. Sustainable growth is a necessary, but not sufficient measure.

This means that even if real capital growth increases, it will not be a guarantee that there will be economic development. Seers (1969:1) states the following: *"What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have become less severe, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse; especially if all three have, it would be strange to call the result " development", even if the capita income has soared."*

Balanced development's main purpose is to deal with poverty alleviation, unemployment and inequality. The structural change needed to ensure economic growth and economic development should preserve the natural environment and resources for the future generation and should be aligned with Allen's (1980) definition of sustainability which entails *"sustainable development: development that is likely to achieve lasting satisfaction of human needs and improvement of human quality of life."*

The United Nations concept of human-centred development led to consensus and uniformity with regard to the process of economic development. Van Zyl (1994:4) described balanced development as an improvement in quality of life and prosperity as seen in consumption and income patterns, poverty alleviation that will lead to an elimination of poverty and disease, structural transformation in the political, social, economical and cultural area which could lead to greater productivity, income, decisions and consumption; the secularisation of the community, industry and urbanisation while needs of the rural communities are being met.

Growth theory places emphasis on savings investment and growth rates. This is shown in the famous growth theory of Solow, a Nobel-prize winner. It is a neoclassical model as it has a macro-economic focus based on maximising functions within households and profit-making ventures. Solow's main contributions are focused around the following:

- The necessity of technological innovation for long-term growth.
- The reaching of a long-term equilibrium situation if there is no technical innovation.
- The Solow model implicates that poor countries will experience faster economic growth than rich countries if both have the same level of growth, rates in savings, investment and population. If population growth rates of countries are the same, the Solow-model forecasts a convergence of per capita income between countries. Convergence implies that all countries' per capita income will be similar to the others.. Convergence implies that countries with a low per capita income will grow faster than countries with a high per capita income, as capital stock is less, which implies larger output from investments. Unconditional convergence ensures free mobility of capital that is attracted by maximum opportunities for investment in capital-scarce countries.
- The inability to increased economic growth over the long-term through investment.
- The importance of savings and investments for a country's per capita-income level.

Van Zyl (1994:5) describes the prerequisites for development by including the following:

- Economic growth must be supplemented with an improvement of quality of life.
- Greater equality in terms of distribution of economic output must be reached.
- Capacity building exercises must be implemented to ensure that the most appropriate jobs are created whereby physical and human potential will become fully developed.
- Participation of individuals and groups in economical-, political,- social- and cultural environments to ensure that people's preferences and needs are made known to government.
- Mutual learning through case studies that have been successfully implemented.

A suitable development policy and development management will enable successful implementation of the above and ensure that all people enjoy creative long lives (Van Zyl, 1994:5). The goal is to ensure a better life for all.

Economic development was originally seen as synonymous with economic growth where growth is measured in terms of an increase in Gross Domestic Product (GDP).

The GDP was originally seen as the means of ensuring the alleviation of poverty (Kleynhans & Naudé, 2001:8). Economic development is not synonymous with economic growth. Economic growth is necessary for development, but not a prerequisite. Growth is imperative to ensure development, as no community will be able to sustain an improved standard of living without economic growth. Population growth necessitates continuous growth in the GDP. If there is no economic growth one person's gain may be another person's loss.

The absence of economic growth can exacerbate conflict in a community (Kleynhans & Naudé, 2001:9). Economic development is dependent on economic growth. Economic growth is not sufficient for economic development, as it does not ensure better quality of life and it gives no indication of the income-distribution of a country. Economic growth does not change the structure of the economy and does not ensure participation or preservation of the natural environment.

"*Jobless growth*" can still be a major phenomenon even if there is economic growth, as it does not reflect changes in the structure of the economy or in production techniques. "*Jobless growth*" occurs when there is economic growth, resulting from labour-intensive methods. Economic growth may be positive but some sectors may undergo negative growth. If a large percentage of the population are employed in the primary sector, e.g. agriculture, there will be a larger number of poor people living in the country.

Balanced development entails taking economic growth into consideration together with other qualitative factors. Economic development that is human-centred has to take this into consideration.

Labour-Based Approaches To Development

Development literature, particularly since the 1970s has repeated the need for development to assist the poorest of the poor by following a labour-oriented approach to development to improve standards of living (Preston, 1996:246). Kleynhans and Naudé (2000:17) state that the human dimension of development must enjoy greater priority than industrialisation or physical development. It is also argued that economic growth does not ensure economic development and vice versa.

The majority of Less Developed Countries are characterised by high levels of "*jobless growth*". Todaro (1994:231) points out that attempts to industrialise countries did not always lead to job creation. Unemployment in Less Developed Countries differs significantly from unemployment in Developed Countries, in that unemployment and underemployment affect a larger percentage of the labour force than in Developed Countries.

The reasons for unemployment in Less Developed Countries are more complex, which requires a larger amount of development policies compared with Keynesian policies required for Developed Countries. Less Developed Countries are characterised by low standards of living.

Structure of labour markets

Todaro (1994:231) is of the opinion that the structure of labour markets in Less Developed Countries (LDCs) are imperfect and labour markets are fragmented. There is plenty of underemployment resulting from inadequate infrastructure, regulation, standardisation, training and the economic structure.

Less Developed Countries consist of three sectors namely the formal market, informal market and the agricultural market.

This formal sector is characterised by high salaries and prestige and comprises the large companies and authorities. High salaries can be explained in terms of minimum salary, out-of-free-will derived from the efficiency wage theory, which indicates that employee-productivity results from a well-paid employee. Reasons include that workers are better off physically, firms can have higher standards on employing someone and a well-paid employee is more stable and decreases the firm's output costs. It is also argued that labourers will work hard to maintain heir positions. There is always surplus labour in this sector.

The informal market consists of small-, medium- and micro enterprises (SMMEs). This sector provides a wide range of goods and services. SMMEs can compete with the primary sector or can fill gaps left by the formal sector. Access is free. Many veterans work in this sector. Access to the informal market is free and many people enter the market, which in turn lowers the wages. The potential problem in Less Developed Countries is that informal activities are depressed by means of regulations and standards developed by the authority.

The agricultural market lies outside towns and cities and provides the lowest wages of all the sectors. Low wages are associated with a difference in cost of living associated with living in rural areas instead of urban areas. Usually, urban inhabitants are wealthier than their peripheral counterparts. Inhabitants of rural areas work to gain a share of the output instead of large wages. The poorest people living in the rural areas work for wages. Agriculture is the primary activity, but non-agriculture activities are an important supplement for agriculture (Kleynhans & Naudé, 2001:112).

Todaro (1994:225) describes the unemployed as people who want to work, actively seeking work, but not able to find any form of employment. Underemployment is mostly found in the agricultural sector where there is not enough work to employ people full-time. Underemployment has different categories namely hidden underemployment or early retirement. Todaro (1994:225) mentions that high levels of unemployment exist in Less Developed Countries, which is associated with increasing poverty. It is argued that the best way to reduce poverty is by means of efficient job creation.

Economic models of job creation

Economic models for job creation include the free market classic model (the traditional approach to providing employment), the output-hiring model that focuses on industrialisation and increasing capital, and the price-incentive macro-model (focusing on the effect of distortion of factor prices for hiring employees). The traditional model has little significance for Less Developed Countries. Conclusions derived from the model include the following:

- Money wages are inflexible downwards as they are determined by means of institutional arrangements, e.g. trade unions, authorised government salary scale and the corporate hiring practices of multinational companies.
- In spite of great reduction in wages resulting from inflation, there are still a number of labourers that seek fixed wages against a certain work load.
- Disturbances in markets can lead to unemployment, but must not be considered in isolation.

The Harrod-Domar model signifies a typical growth model focused on inspiring policies to increase levels of output by means of capital forming. Increases in GDP will automatically lead to an increase in the number of people employed. The Harrod-Domar Model confirms this by stating that economic development can be explained as a combination of the rate of savings and physical capital accumulation on the one hand, complemented by a marginal capital-output ration (the physical productivity of new investments) on the other hand (Grabowski & Shields, 2000:1).

In spite of significant industrial growth and forming of capital in many Less Developed Countries, growth and hiring of employees was not possible, due to the growth in labour productivity which indicates that the percentage output-growth rate minus the labour productivity growth rate equals the growth rate and hiring of the number of employees (Kleynhans & Naudé, 2001:115).

The Harrod-Domar model indicates that labour intensive technologies and industries must be concentrated on (e.g. in rural areas) instead of large-scale urban labour-intensive methods.

Although the urban "labour-saving" capital-intensive techniques increase output and productivity, it could diminish factor-productivity, because it leads to higher total production costs.

Todaro (1994:238) describes the price incentives model. It is neoclassical in character and states that producers are faced with a given set of factor prices (capital and labour, for example), and that producers try to make use of a combination of labour and capital that minimises the costs of output. This level of output can be produced with different technologies resulting from labour-intensive methods or capital-intensive methods. An example is if the price of capital is high in relation to labour, labour-intensive methods will be used. Todaro (1994:238) adds that Less Developed Countries have a surplus of labour but a shortage of capital, which suggests that labour-intensive methods will be used.

According to Todaro's descriptions production methods in both agriculture and manufacturing are often mechanised and capital-intensive. The reasons for this include the fact that the real price of labour is higher than dictated by the proposed prices derived from the relevant scarcity of resources. Market wage structures are artificially high resulting from trade union pressure, politically motivated minimum loan laws, high wage structures of Less Developed Countries, increased labourer advantage and remnants of European colonial wage scales.

The price of capital, which is dependent on growth rate, is kept artificially low through a combination of high capital depreciation advantages, low or negative growth rates, low rates of subsidies of capital imports, tax rebates and overemphasised attempts at finding foreign investment. From a private cost minimisation perspective, the individual should choose a capital-intensive method. For the community as a whole, the social costs of unexploited capital and labour, has a negative effect. Government intervention is required to bring an end to disturbances in labour and capital. Government intervention should also automatically lead to a reduction in scarce resources (Todaro, 1994:238).

It can be concluded that factor prices are important for resource allocation and job creation. Government policies in favour of promoting industrialisation to the detriment of the agricultural sector, exacerbate the underemployment problem of urban and rural areas. Policies based on

stimulating efficient, labour-intensive methods of production, do not have to lead to lower levels of output (Kleynhans & Naudé, 2000:118).

Labour-intensive methods

Labour-intensive methods should aim at providing jobs while taking living standards of the disadvantaged, in particular, into consideration. The early efforts at development, like other processes for dynamic economic improvement, disproportionately, benefit better-off members of the community (Tendler, 1982:56).

Evidence suggests that there is a problem with community development efforts that move towards a pure self-reliance approach. In a regularly referenced 1982 review of international NGO projects Judy Tendler argues that as NGOs move into income-generation, away from more welfare-oriented approach, the poorest of the poor were dropped as participants. The new focus on income-earning activities and labour-intensive methods was a commendable transition away from the perception that the poor are only fit to receive charity (Tendler, 1982:56). It is described that the exclusion of the poorest from production-oriented and labour-intensive programmes, has led full circle back to the perception that the poorest of the poor remain unreachable.

Korten (1990) described this move, facilitated by NGOs, as a move from limited first generation relief and welfare approaches to second-generation, small-scale, self-reliant, labour-intensive development projects. Second generation strategies require participants to have assets to build on. For instance, income-generation programmes generally require of participants to have some skill, land or other asset through which enhanced livelihood can be stimulated.

Osmani (1989) suggests that micro-credit approaches, as seen in Bangladesh, for example, have generally bypassed the landless labourer class, even though they dominate the poorest income class, in favour of households with previous experience in trading and retail. He also mentions that some irrigation schemes draw better-off farmers to ensure sufficient political support among the elite. The result is average income levels considerably above the poorest of the poor. Buckland (1995) points out that NGO development efforts target a relatively disadvantaged group

to ensure skills development and better quality living through the implementation of labour-intensive programmes. White (1991) and Carroll (1992) do however state that in many cases it is not the poorest of the poor that are involved in the projects.

Reaching poverty groups can be a major strength when following a welfare-dominant approach, for instance, with rural work interventions. The nature of work programmes and labour-intensive programmes promotes self-selection for involvement by the poor, and passive exclusion by elites or non-poor (Johnston & Clark, 1982). This reflects the manual nature of the work leading those not in the habit of such work, in other words, the non-poor, not to become involved.

Reaching marginalised groups and overcoming structural constraints is a separate issue (Buckland, 2000:6), for example ensuring equal representation from both genders. Goetz and Gupta (1996) state that labour-intensive programme funding makes provision for micro-loans, especially for women. They state that once the money is released the credit is often controlled by the family head as family structures remain unchanged. Rural work programmes can be easily targeted to women but it is not clear how the household is affected.

The United Nations Development Programme (1988:78) indicates that many participants in labour-intensive programmes benefited in terms of significant improvement in their livelihoods in terms of income, employment and assets as well as a significant marginal improvement of class and ender empowerment. Remenyi (1991) and White (1991) also confirm this.

Buckland (1995) suggests that costs of operating a micro-credit scheme are lower than sub-sector programmes like irrigation and sericulture. According to Buckland a small increase in the interest rate charged of borrowers of the Grameen Bank in Bangladesh, for example, would enable it to achieve financial viability. He states that this is not the case with sector efforts that involve considerable more funding. Rural work programmes are considered the best labour-intensive method to follow as there is little need for technical specialists, and management costs per worker can be kept quite low.

Kleynhans and Naudé (2001:15) state that economic growth is often stunted as more capital investment is needed per unit of production in labour intensive-methods than in capital-intensive investments, leading to a decrease in economic growth.

Basic Needs Approach

The 1960s and 1970s were characterised by a "*top-down*" central planning system with the emphasis on physical and industrial aspects of economic development, whereby Gross Domestic Product had to be maximised. In the 1980s governments aimed to minimise poverty instead of concentrating on maximising Gross Domestic Product (Kleynhans & Naudé, 2002:9).

Preston (1996:246) described basic needs as a shift from grand theory to more "*practical approaches*" aimed at the reduction of poverty by means of social services such as education, welfare and health programmes. Webster (1990:34) confirms that the "*basic needs*" strategy aimed to relieve absolute poverty by means of providing intensive direct assistance to those in desperate circumstances.

Preston (1996:246) reasoned that the basic-needs strategy took up this position: with a reduction of inequality worldwide, there would be less poverty, thus rendering development a more achievable end. Debate on the idea of basic needs became widespread with significantly different emphasis among the participants (Swanepoel & De Beer, 2000:47). The idea was taken up by many international aid agencies, especially the World Bank and by orthodox development circles.

Swanepoel and De Beer (2000:47) confirm Kleynhans & Naude's research by stating that the basic-needs strategy was targeted at meeting the needs of the poor and promoting grassroots development. Preston (1996:246) describes the ambiguity of the basic needs approach by stating that much of the responsibility was taken off local and central government institutions, undercutting the autonomy of developing country governments in their manoeuvring regarding the New International Economic Order thus lending ambiguity to the basic-needs perspective.

The New International Economic Order (NIEO) was an initiative that underlined the importance of the needs for reform of the world's economic system if development policies were to work effectively in the Third World. A series of issues informed the programme, which included trade and monetary reform resource transfers from the First to the Third World and debt relief. The strategic elements of the NIEO were essentially threefold and described by Hope (1996:8) as follows: "*First and foremost, measures were sought to reduce and eventually eliminate the economic dependence of the Third World nations on industrialised-country enterprises in the production and trade of Third World countries, thus allowing those countries to exercise full control over their natural resources. A second element was to have been promoting the accelerated development of the economies of the Third World on the basis of dependence on their internal efforts. Third, appropriate institutional changes were to be sought to introduce some measure of global management of resources in the long-term interests of humanity.*"

The "*basic needs*" approach of the World Bank and other large international development agencies, was mainly the construction of economists, especially those supporting the neo-institutional tradition (Swanepoel & De Beer, 2000:47). It was informed by the notion of redistribution of growth and presumed a range of interventions by "*experts*", usually from the north (Swanepoel & De Beer, 2000:47). The authorities had to choose development strategies aimed at meeting basic needs, especially in poor countries where inhabitants were plagued with malnutrition and chronic disease preventing them from making a significant contribution to the formal economy (Kleynhans & Naudé, 2000:9).

The "*basic needs*" approach became the premonition of what became the human-centred model for development in the 1990s. The basic needs of people are measured as follows (Kleynhans & Naudé, 2001:47):

- Food, as measured in daily intake of calories
- Education, measured in terms of literacy and access to primary education
- Health as measured in life expectancy
- Provision of basic services, e.g. water measured by mortality statistics and the prevalence of contagious waterborne diseases

- Access to adequate housing measured as shelter against the elements

Webster (1990:34) also confirms that the theory aims to meet "basic needs" in terms of material wants such as food, clothing, shelter and fuel, and also some social needs such as education, human rights and what is called participation in social life through employment and political involvement. At the heart of this approach lies a desire for social justice and welfare based on concern that the material resources of a society should be distributed more evenly throughout the population (Webster, 1990:34).

Webster also emphasises that this entails all the assets or resources of the society, including public goods and capital for investment in agricultural or industrial enterprise. For rural regions, the approach stresses the need for land reform to make land available for the poorer farmers, opening up new farmland and making cheap loans or grants available to the rural household (Dorner, 1972; Prosterman *et al.*, 1990).

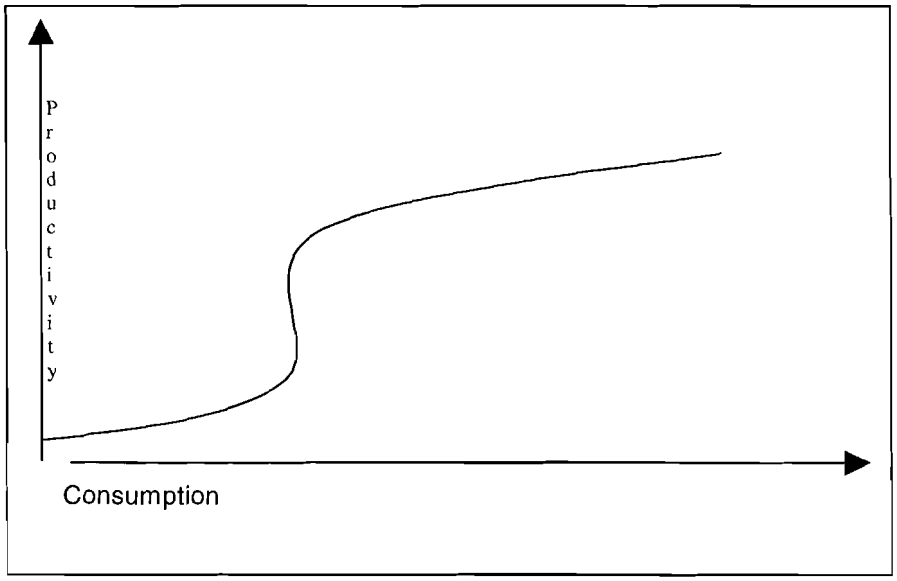
Webster (1990:34) states that this approach argues that the governments should assist all those who have had to rely on their wit, chances and kin assistance to make some work for themselves in the towns. Many people attracted to the town in search of work find that there are very few full-time jobs available in the formal market, resulting from Gugler's "*lottery syndrome*" (Gugler, 1967). In response, an informal job sector has developed where people engage in a mixture of legitimate and illegal activities trading in goods at stalls, roadside booths or just by hawking, laundering, removing night-soil and a range of other trading and service activities (Hart, 1973).

The ILO Mission (1972:504) noted that informal sectors should be encouraged by government, and noted in Kenya that the urban informal sector in 1985 included a large proportion of the urban labour force and stated that it was a vital part of the economy. Rural and urban strategies for relieving deprivation and satisfying basic needs have much in common with the view of poverty as " *relative deprivation*" (Galbraith , 1979:1).

This is indicated in a number of ways, perhaps most clearly in its combining of material and social needs to encourage great participation in the economy and culture of a society. This is

based on the assumption that the provision of right of employment and political involvement in decision making are basic needs of every individual in society. The "*basic needs*" school of thought believe that if a person's basic needs are met, the person will be more productive, which will lead to increased growth (Ghatak, 1995:309). The relationship between meeting basic needs and productivity is shown in the figure below:

Figure 2-3: The relationship between meeting basic needs and economic growth



Source: Ghatak (1995:309)

The figure indicates that increase in human consumption leads to increase in productivity. The levels of consumption gradually increase as needs are met. At a certain level, past point B, consumption will stabilise and productivity levels will not be influenced significantly after this point. If a region is characterised by severe and absolute poverty, steps that meet basic needs of a nation will impact significantly on productivity leading to a better quality life and economic growth (Kleynhans & Naudé, 2001:10).

Despite a more explicit concern with poverty, deprivation, hunger and landlessness, it remained within the domain of aid targeting and delivery, aid related projects and cost-benefit evaluation (Swanepoel & De Beer, 2000:47). Webster shows that very few rural programmes were

implemented during this period by which the poor actually benefited. There were many examples of richer farmers receiving most of the gains. Webster indicates (1990:35) that the World Bank extended most of its credit to countries or groups within countries that were seen as a good commercial bet.

The increasing debt-burden of many Third World countries in the 1980s meant that the World Bank had to be more concerned with policies designed to promote stabilisation, restructuring and growth (Webster, 1990:35). Many poor families became very cynical about the basic-needs approach followed in the 1980s as a weakness of many policies is to take the perceptions of " development" held by the ordinary men and women who are the subject of all the expert attention, into consideration (Webster, 1990:36).

Poor-Oriented Growth

Wallman (1977:2) stated two good reasons why people in the Third World and in industrialised countries were disillusioned with "*progress and development*". However successful a region's development effort, the economic gap between it and its industrialised technological superiors widened continuously. "*Progress*", far from being the explicit arrival point of the development process, tended to recede as one advances.

Even the poor were realising that they could not catch up with the rich and they stopped trying. High Gross National Product (GNP) rates of industrial growth were precisely not progress for the developed regions any longer bringing more ills than one knew how to cure.

There are two crucial points to Wallman's remarks. The first important point to note is the lack of ambition among the poor. The lack of ambition may be a perfectly reasonable response to a set of circumstances, in which the poor could not catch up with the rich. While most people regard the acquisition of material goods as worthwhile, many might not welcome such gains, if it meant that it came at the expense of the poor's personal independence and privacy.

People's perceptions of development or progress are a complex measure of the two objectives that did not necessarily lie with one another. Wallman (1977:14) gave an idea of the tensions that arose in this period. He states: "*Most of us want live better and to live the way we have always done, to participate and to remain separate; to keep up with the Joneses and to distinguish ourselves from them ; to give our children more options than we have had and to see them choose as we would have chosen.*" While the growth-oriented economics may regard such a confusion of ideas as an absence of economic reality, these were some of the thoughts people had which influenced, for example, the sort of response they made to developing economic opportunity.

Development experts may have decided that communities needed to grow to remain viable, while the people within them may have believed that all was well and may have resisted disruption. The studies by Wallman show how people's development goals may be very different from those of planners.

Choices for development are not self-evident. What counts as being "*poor*", "*in need*" and development, depends on value judgments that people make when they perceive social inequality.

Debates over inequality and development are then ultimately ideological disputes that involve political as well as economic choices. Some are at the receiving end of this debate and will find that, whatever their perceptions on how things should be, the choices will be made for them. Development is not always an effective process and in many cases led to the crashing of some Third World economies that were concentrated on the redistribution of wealth as participation did not necessarily lead to economic development (Webster, 1990:36). It is not only the poor who may have resisted development: in prosperous countries the more affluent social classes were also opposed to the growth of towns, industry and transport systems as these disturbed their countryside retreat.

According to Newby's description (1987) the escape of the urban middle class in Britain to commutable country homes had to contend with intensive agriculture and massive growth in leisure activities which sucked a large number of urbanites and their cars. The affluent rural residents tried to limit the pace at which the country side was consumed by the other groups.

Newby stated that the countryside had become a positional good that is something which is fixed in supply and whose consumption is dependent t on one's position in society.

Concern for the rural environment thus became a public issue partly as there was an affluent and articulate population residing in the countryside, no longer dependent upon local farmers and landowners for housing and employment, capable of mobilising themselves politically (Newby, 19878:40). In the Third World, the vast majority of rural residents became the equivalent positional good, as large numbers migrated to towns in search of greater economic security.

It can be concluded that people's perception caused lack of development in Third World countries and a crash in some Third World economies. It becomes clear that a holistic, sustainable approach to development is needed as pro-poor policies do not necessary ensure economic growth.

Pro-poor growth is dependent on the following and adapted from work done by Ray (1990:328). First, market access for Developing Countries is essential to promote pro-poor development. However, benefits from trade reforms and liberalisation would be more effective if combined with appropriate complementary policies. For example, Kleynhans and Naudé (2001:17) underscore the importance of a stable macro-economic framework as well as sound infrastructure and institutional support, and argue that these can help mitigate any short-term costs.

Second, reforming agriculture is central to development. The costs inflicted upon developing country markets from rich country protection of agriculture, are very high. Measures such as subsidies, high tariffs and export dumping seek to undermine poverty reduction efforts. This shows how agricultural protectionism can result in increased financial costs and aggravate debt problems, with reference to Argentina.

Thirdly, it is conceded that an international agreement on investment would be beneficial for developing countries only if an agreement leverages market access in products of concern to developing countries and if companion domestic policy reforms are undertaken .

The New International Economic Order, mentioned as an accompanying "pro-poor" theory to the basic-needs approach was introduced to the United Nations in the 1970s. This strategy entailed a

rethinking of development as determined essentially by economic growth and reflected a new awareness of ecological and environmental costs. It criticised the resource-intensive lifestyle and consumption patterns.

There was a shift in emphasis in development thinking from questions of production to distribution. This challenged the traditional line of development economics that impassed economic growth as the goal of developing economies (Swanepoel & De Beer, 2000:46). It has been mentioned that the NIEO consisted of a series of issues, which included trade and monetary reform, resource transfers from the First to the Third World debt relief.

The success of the Oil and Petroleum Exporting Countries in forcing up oil prices contributed to a great assertiveness among Third World Countries. The growing influence of ideas from dependency theorists informed the programme for the NIEO and helped foster a degree of unity among the disparate group of countries known as the Third World. Measures were sought to reduce dependence of Third World nations on industrialised country enterprises in the production and trade of Third World countries, allowing those countries to exercise full control over their natural resources as mentioned by Hope (1996:8).

Accelerated economic development, based on the dependency of own internal efforts, was a second element. Institutional changes were to be sought to introduce some measure of global management of resources in the long-term interests of humanity. In the 1980s the efforts to establish a NIEO had failed, among the reasons were the disarray of OPEC in the 1980s and the determined opposition of the major western powers, especially the USA, to the NIEO proposals. Attempts by producers of other raw materials to duplicate OPEC's success were less successful. The success of some developing countries such as the East Asian countries and the willingness of the people of China to become more closely integrated with the world economy, all contributed to the weakening of the collective campaign in the Third World on behalf of the NIEO (Ray, 1990:328).

Hendorn (1996:43) shows that poor-oriented growth does not always lead to fruition in less developed countries.

2.4 SUSTAINABLE DEVELOPMENT

Sustainable development is focused on conservation of the environment when economic development is balanced with meeting basic needs. A human-centred approach to development is followed, as humans cannot be separated from the natural environment.

Economic growth impacts significantly on the natural environment. This theory became increasingly significant in the 1970s and 1980s. Humans have become increasingly dependent on their natural environment. A person's existence depends on how he utilises the natural environment.

According to Korten (1999:3), the population grows at such a rate that too many people have to survive on finite land and resources. According to statistics the world population was 5700 million people in 1995, an expected doubling to one billion within a century is expected. The amount of arable land is limited, the air is polluted and natural resources are being depleted (Korten, 1999:3). Within the following hundred years, the number of people that will have to survive on depleted natural resources will be double the number that it is at present.

Presently, the natural resources are being shared between three socio-ecological classes of people,namely the over-consumers, marginals and sustainers (Korten, 1999:3).

The over-consumers make up about twenty per cent of the world's population and include more than one billion people. These people live in the north and industrialised countries. These people's diet consists mainly of meat (the percentage of people from this group who suffer from heart disease is higher than the other two "classes") and they travel by car or aeroplane. The over-consumers drink canned or bottled beverages and the groceries and consumer goods that they use are packaged, disposable products. The excessive use of packaged, disposable goods is to a large extent responsible for the overexploitation of natural resources and this contributes to global ecological damage on a large scale (Durning, 1996:2; Korten, 1992:2; De Beer, 1995:2).

The marginals are a group of the world's population that live in absolute poverty. They live below subsistence levels. Their diet contains almost no meat and their diet usually has a very low nutritional value. Their water is obtained from polluted streams and boreholes. The marginals have no waste of disposable packaging and they often collect waste to earn money, or to build houses or shelters. Many times they do not have shelter and they live on the pavement, in the bush or in very basic, plastic or cardboard shelters (De Beer, 2000: 5; Durning, 1996: 2).

The sustainers are the healthiest people since they have enough to eat, they have access to clean water, and they sensibly make use of scarce resources. They travel by bicycle, train, bus or taxi. Their diet consists of healthy grains, vegetables and small amounts of meat. They drink coffee, tea and home-made drinks instead of canned drinks. The waste that they collect is used for the construction of modest but adequate shelter (Durning, 1996: 2).

Most of the over-consumers inhabit the northern areas of the world so it is in these areas where most of the over-consumption of natural resources takes place. Sixty-six per cent of the world production of important metals is consumed in the north (Korten, 1991: 24 & Korten, 1999: 3). In other words, less than twenty per cent of the world population use more than sixty per cent of the metals produced. Of the global energy production, seventy-five per cent is consumed in the north. Ninety per cent of the produced chlorofluorocarbons, are consumed by the north (Korten, 1991:24).

There is one marginal for every over-consumer and three sustainers for every over-consumer. When considering poverty in a global context it is clear that the extraction of natural resources for the sake of over-consumption by people in the north contributes to poverty in the Third World. The greatest offenders in this situation are international corporations, which have unprecedented economic power (Korten, 1991:24; Durning, 1996:2). According to Korten (1991:24-25) the problem is far greater: "*Most official aid programmes and institutions .... are actively engaged in strengthening and extending this unbalanced, unaccountable and extractive system of economic relationships...The agenda for the South ... is to regain control of their remaining ecological resources to meet domestic needs - beginning with food, clothing, shelter and basic social services.*"

Paul Etkins (1992:8), an environmentalist states: "*We can confidently expect the future course of human lives to be increasingly disrupted by environmental calamity and social upheaval unless and until the human species attains a new equilibrium with its environment.*" Etkins (1992) shows the potential threats that the economic system might have on human survival.

The ozone layer is currently being destroyed by chemicals in the atmosphere. Approximately 80% of the ozone layer in Antarctica has already been destroyed. This has been caused by human-made industrial gases namely chlorofluorocarbons. As a result of this, winter-spring seasonal ambient ground-level ultraviolet irradiation, has increased with ten per cent at mid-to-high latitudes over the past two decades (McMichael & Kjellstrom, 2002:47). This will lead to a five to ten per cent increase in skin cancer in European and American communities.

Acid rain formed through the burning of coal and oil by car exhausts has damaged 35% ofAmerica's rain forests and killed off 80% of all forms of life in the fresh water lakes in Norway. Etkins also describes the plant house effect caused, which entails a one degree Celsius rise in global temperature, every thirty years. This is caused by carbon dioxide and nitrates produced by industries.

It is predicted that global heating will lead to climate changes, floods, droughts, storms and water shortages. The forests in the worlds covered approximately 75% of the earth's surface, but this has diminished to approximately 30%. It is estimated that all tropical rain forest will disappear in twenty-five years' time if no controls are placed on the cutting down of trees.

Approximately 70 000 chemicals are produced worldwide and approximately 500 to 1000 new chemicals are produced annually. McMichael and Kjellstrom (2002:46) state that the most dangerous compounds have generally been taken off the market. Their safe use cannot be assured, but the export market of these hazardous substances to Developing Countries is an ongoing concern. Some of the persistent organic pollutants linger in the environment for very long and can be transported over large distances by evaporation and winds. Etkins (1992) states that 40 000 people in poor countries die annually resulting from contact with harmful chemicals, e.g.

chemicals used in pesticides. Chemical waste and the storage of it has become a problem worldwide. Germany comprises of approximately 35 000 chemical waste sites.

Deserts are slowly covering the earth's surface, with approximately six million hectare of desert resulting from overgrazing (Etkins, 1992). McMichael and Kjellstrom (2002:48) indicate that mounting pressures of human numbers and economic activity has led to a rapid decrease in the number of species of plants and animals. This in turn disrupts the ecosystems that provide "*nature's goods*". Biodiversity means loss of nature's chemicals and genes, of the kind that have already conferred enormous medical and health improvement benefits. Increasingly intensive methods of agricultural and livestock production are stressing the world's arable lands and pastures.

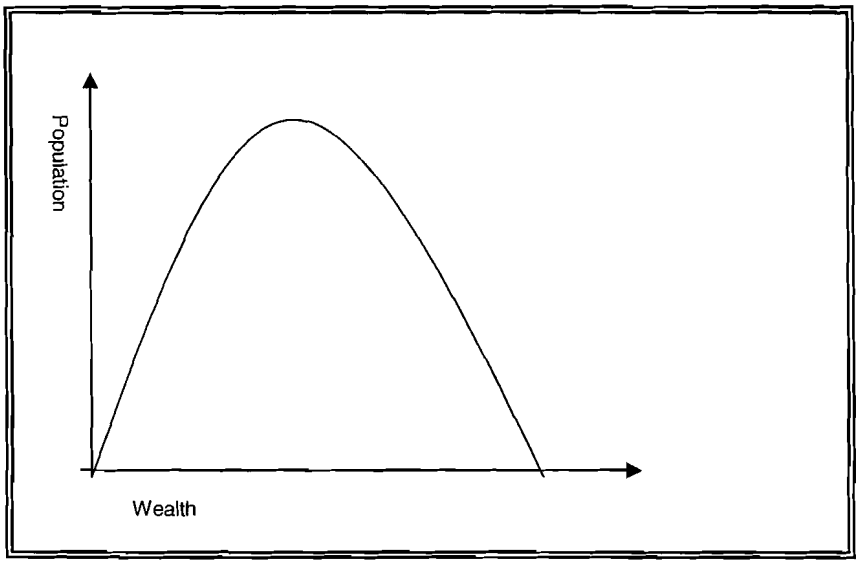
An estimated one third of the world's productive land has, in recent decades, become seriously damaged by erosion, compaction, salivation, water logging and chemicalisation destroying the organic component. Similar pressures have severely depleted or stressed most of the world's great ocean fisheries (McMichael & Kjellstrom, 2002:48).

Human–centred development has to prevent the above-mentioned problems, as "*wrong development*" can lead to increased pollution that can directly exercise a negative impact on people's lives and can create direct costs and can lead to the decrease of scarce resources (Robbins, 2004:8). Robbins describes the example of the Durban South Basin where there has been progressive urban decay and sustained conflict over the management of large-scale primary processing plants and their environmental impacts, which has resulted in direct impacts on the well-being of surrounding communities, as well as an increase and often uncoordinated and uneven regulation of the investment choices (Robbins, 2004:8).

Harrison *et al.* (2002:97) mention that economic growth and the environment were seen as being in conflict with each other. Industrialisation and modernisation were automatically associated with pollution and degradation. Tate and Malguetta (1998:67) show the direct relationship between development, pollution and the destruction of natural resources. It is generally accepted that increased production increases pollution, but this school of thought is questioned. Tate and

Malguetta (1998:69) state: "The *notion that extra output equals more pollution is now being seriously challenged, growth being viewed as part of the solution rather than simply the source of the problem.*" This concept of a decrease in pollution levels and an increase in wealth can be explained by means of the U-shaped curve shown in the figure below:

Figure 2-4: U-shaped curve



Source: Tate & Malguetta (1998:69)

According to the diagram pollution increases as development takes place. Later it decreases as one moves through the stages of development (as described by Rostow, for example) resulting from an increase in technological development and an increase in wealth. Rostow's theory of the stages of growth (1960) tries to explain the long-term processes of economic development from the point of view of economic history by describing five ideal types of stages through which all societies pass: The *"traditional society"* has more than seventy-five per cent of the population engaged in food production, and political power is in the hands of landowners or of a central authority supported by the army and the civil servants. The *"transitional stage"* creates the preconditions for take-off, by bringing about radical changes in the non-industrial sectors. Export of raw material gains momentum; a new class of businessmen emerges; and the idea of economic

progress coming from outside spreads through the elite. The "*take-off stage*" brings a sharp increase in the rate of investment in the per capita output. This stage of industrial revolution is accompanied by radical changes in the production techniques. Expansion takes place in a small group of leading sectors at first and, on the social side, is accompanied by the domination of the modern section of society over the traditional one. The "*drive to maturity*" brings a spread of growth from the leading to the other sectors and a broader application of modern technology followed by necessary changes in the society at large.

The "*stage of high mass consumption*" can be reached after attaining a certain level of national income and formulating an economic policy giving priority to increased private consumption.

The critical phase for development is the "*take-off stage*", during which net investment rates have to increase from five to ten per cent of the national product and during which the political, social, and institutional framework has to be built in order to reach a situation of self-sustained growth.

The financial resources must be accumulated internally by higher saving rates. Income distribution favouring classes and strata, which are willing and able to use capital more productively than others, has the same effect. While this theory became widely known, perhaps because of its author's political post and the fact that it is a counter-position to Marxian approaches, this "*time-table of development*" does little to explain why some societies go ahead on this ladder and others not. As well, its value for forecasting the results of development activities is limited.

The rather fixed stages hardly allow for alternative goals and processes of development and incorporate a high degree of ethnocentrism (Rostow, 1960; Kleynhans & Naudé, 2001:78). When incorporating Rostow's theory with the upside down U-curve it can be concluded that markets and technological innovation leads to economic growth. This should be accompanied by an increase in public participation as described by the human-centred model of growth, a better level of education, a decrease in population growth and the accompanying pressure placed on natural resources as a result of pollution (Tate & Malguetta, 1998:70).

Stable consumer prices, full employment, and increasing per capita wealth are economic and political goals in nearly every nation. Aggregate economic growth has been the principal means for realising these goals. Yet comprehensive and independent scientific investigations provide compelling evidence that the growth of the global economy is not sustainable because it consumes many of the environmental services that underpin the production of goods and services (Houghton *et al.*, 1996).

The figure above shows that consumption patterns could change and environmental degradation will decrease if governments promote conservation of the environment (Hardoy & Satterthwaite, 1989:202).

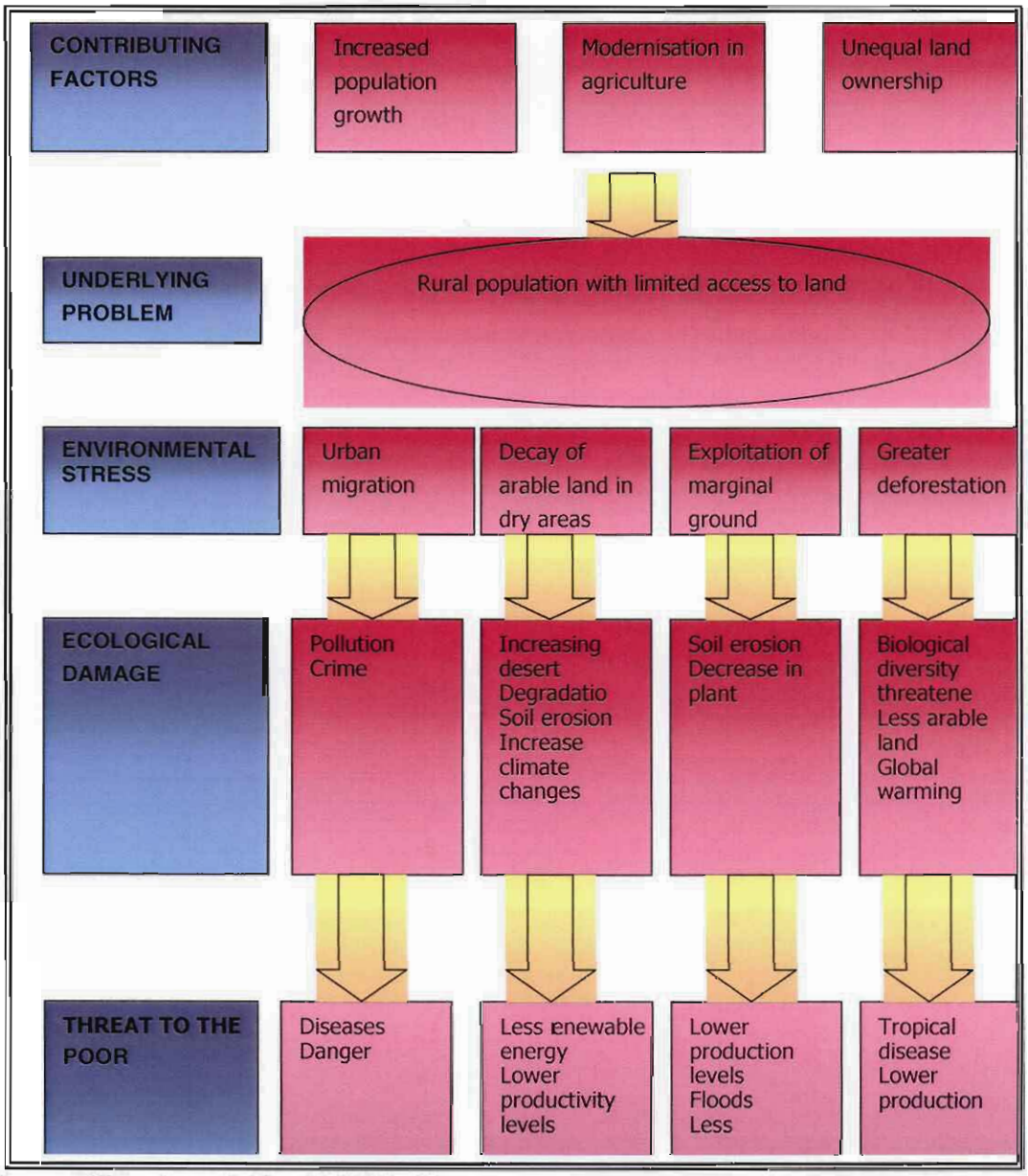
Many poor countries in the 1960s and 1970s saw the problem of underdevelopment as a lack of industrial development, and not pollution or environmental degradation. A greater consciousness of the environment and how it was affected by development arose in the 1960s and 1970s. In 1972 a United Nations Conference was held in Stockholm where the term "*pollution of poverty*" was used to refer to the impact of the environment on poor people in terms of their access to potable water, arable land, sanitation and medical facilities. The idea that preservation and improvement of the natural environment could lead to greater development, and that pollution is often caused by increasing poverty levels, was discussed (UNEP, 2000).

The World Bank (1997) describes the relationship between poverty and the environment as "a *cycle where poverty impacts on the environment and vice versa*". Elliott (1994) explains that factors like fast population growth, modern agricultural methods and unequal distribution of arable land could lead to poverty that "*often leaves them poor with no choice but to degrade and destroy their resource base on which their future livelihoods depend.*" It is termed tragedy of the commons when the amount of arable land is utilised by all but no-one takes ownership for maintaining it. Hardin (1998) states:" *Freedom in a common brings ruin to all.*"

Weaver *et al.* (1990) concede and agree with this statement and describe the dependence of the poor on their environment and their over-exploitation of the available resources. This is also agreed upon by Soja (2001) who suggests that poverty in the Southern African region is one of

the root causes of environmental degradation, and that it poses a threat to human health. The decisions of the poor are guided by absolute poverty and inherent short-time horizons (Van Der Werff, undated)The cycle between environmental degradation and poverty is shown as follows (Kleynhans & Naudé, 2001:13):

.Figure 2-5: The Cycle of degradation and poverty



Source: Kleynhans & Naudé (2001:13)

Elliot (1994:20) necessitates the eradication of poverty based on the fact that poverty is high in places that are economically sensitive. Elliot calls it the "*geographical retreat of poverty*" as half of the twenty per cent poorest in the world are living in ecologically-sensitive, and difficult natural environments.

Hardoy and Satterthwaite (1989:203) state that it is virtually always the poorest groups who suffer most from the floods, earthquakes, landslides and droughts in the Third World. In South Africa, poverty is located in isolated, ecologically sensitive rural areas. In the 1980s preservation of the environment became increasingly integrate with development approaches. The World Wildlife Fund and the United Nations Environmental Program played a leading role.

The most important group of individual researchers called "*The World Commission on Environment and Development*" developed the Brundtland report in 1987, which became the cornerstone of all theory on sustainable development with the famous definition of "*development that meets the needs of the present without compromising that of future generations to meet their own needs* (1987:43).

This covers crucial aspects of interaction between the environment and economic development namely population growth and development, food security, species and ecosystems, energy usage, industrialisation, urbanisation and migration. Sustainability is dependent on a political system promoting effective participation mechanisms, an economic system that deals with conflicts leading to unbalanced development, a production system acknowledging the existence of an ecological system, a technological system promoting trade and finance and a sustainable international relationship of trade and finance as well as an efficient administrative system. By 1992, the interdependence between the environment and economic development was accepted and the biggest convention of world leaders was held by the United Nations in Rio de Janeiro titled the "*Earth Summit.*" A similar conference was held in Johannesburg in 2002 (UN, 2002).

The elaboration of the conclusions of both the Earth Summit in Rio and in Johannesburg in 2002 has gone a long way towards establishing the roadmap for humanity in the twenty-first century and beyond.

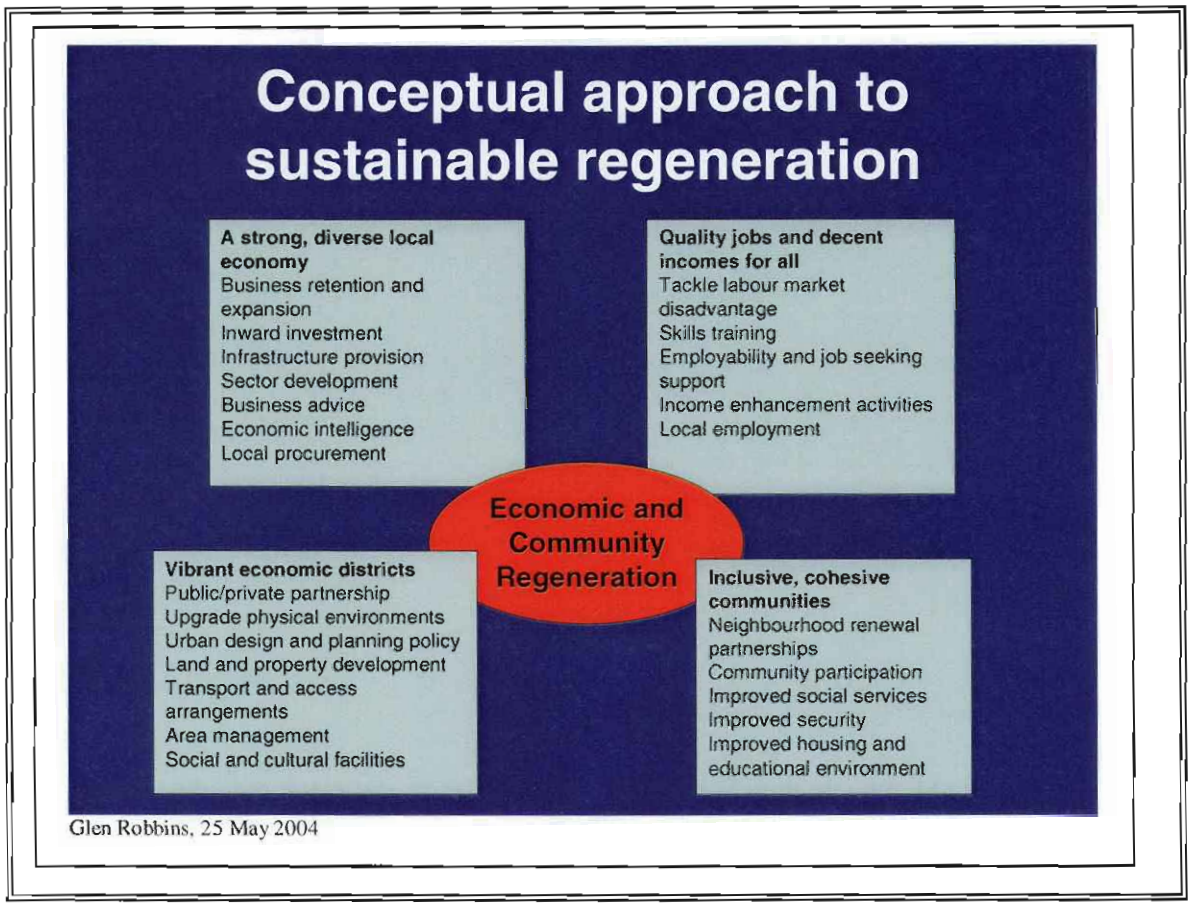
Harrison *et al.* (2004:245) state that the major challenge is for Developed Countries to stabilise economic growth by means of a shift away from over-production and over-consumption and also towards the redistribution of resources to the minority poor within these economies, and the majority poor in the developing countries.

The challenge for Developing Countries is to stabilise population growth and fast-track growth responsibly, in order to meet basic needs of the majority living in squalor and to stabilise consumption by the wealthy elite.

These differentiated requirements of sustainable development for developed versus developing countries have been the root of intense debate and negotiation during the Earth Summit held in Rio de Janeiro in 1992 and World Summit for Sustainable Development (WSSD) held in Johannesburg in 2002.

The redistribution of resources also received much attention during the World Summit. Facilitation of partnerships, for example, opened an opportunity for both public- and private sector resources to be channelled to developmental programmes in developing countries. Key partnerships were formed in a number of areas including water and sanitation, energy, health, agriculture and biodiversity (Harrison *et al.*, 2002:246). All facets of human activities and lifestyles are being reviewed towards re-alignment for sustainability. Hardoy & Satterthwaite (1992) state that sustainable development has as its central theme the integration between two strands of thought about the management of human activities with the first concentrating on societal development goals, and the other on controlling the impacts of human activities on the environment (Hardoy *et al.*, 1993). Sustainable development is dependent on natural, economic and social systems as shown by Robbins (2004) in the following diagram on sustainable regeneration:

Figure 2-6: Sustainable regeneration



Source: Robbins (2004)

2.5 CONCLUSION

There has been a remarkable transformation in the approach to development during the past five decades. The accent has shifted from accelerated growth in output and consequent increase in Gross National Product (GNP) per capita, to alleviation of poverty, generation of employment, more equitable distribution of income and wealth, and satisfaction of basic human needs on the basis of economically sustainable development strategies.

In the 1950s and 1960s, economic development was synonymous with the growth of Gross National Product per capita. The United Nations set the target growth rate of five per cent in Gross National Product for the Less Developed Countries for the decade of the 1960s. This view was greatly influenced by Rostow's thesis of the stages of growth whereby development proceeds along a linear path through a number of stages. The most important stage is the *"take off"*. As far as the problems of poverty, unemployment and income distribution were concerned, they were given secondary importance.

It was believed that gains from the growth of GNP would "trickle down" to the poor in the form of increased employment and income opportunities.

The linear view was further strengthened by the Nurkse's expression of "vicious circles" of low savings, small markets, low investment and low incomes. It was argued that the removal of vicious circles would unleash forces, which would lead to higher growth. For this Rosenstein-Rodan advocated the *"Big Push"*, Nurkse the *"Balanced Growth"* and Hirschman *"Unbalanced Growth"*. A great deal of emphasis was laid on international aid to provide the *"missing components"* in the form of capital and know how.

As a result of the adoption of growth focused strategies, the GNP per capita of developing countries grew at an average rate of 3.4 per cent per annum during 1950 to 1975, which was faster than what either the Developed Countries or the Less Developed Countries had grown in any comparable period prior to 1950. But the growth of Gross National Product per capita failed to make a significant dent in the problems of poverty, unemployment and inequalities in many developing countries.

It soon became evident that a totally growth-oriented approach was not possible in the developing countries; equity has to be a part of the programme. In the short run it may slow the rate of growth, but it is certain that in the long run the pay-off would be substantial and would result in considerable acceleration of further growth. Equity would contribute towards the removal of imbalances and thus towards social stability which is one of the preconditions of evolutionary growth. Its contribution to human capital formation in itself would be rewarding. Better health,

education and skill formation will constitute the real wealth of the poor and will encourage them to contribute towards raising productivity.

Mr. Robert Mcnamara, president of the World Bank, admitted in February 1970 the inadequacy of the Gross National Product growth rate as an index of development in these words. "*In the first development decade, the primary development objective, a five per cent annual growth in GNP did not bring satisfactory progress in the development .In the developing world, at the end of the decade malnutrition is common, in fact mortality is high, life expectancy in low, unemployment is endemic and growing and the re-distribution of income and wealth is severely skewed.*"

Since the 1970s, the emphasis has shifted from the growth of GNP to the quality of the development process reflected in progressive reduction in absolute poverty, unemployment and inequalities. All those engaged in the development process started giving attention to largely complementary strategies namely alleviating poverty, reducing unemployment, reducing inequalities in income and wealth and meeting basic human needs.

It is now clear that most of the problems of underdevelopment are rooted in poverty. Low standards of health and high mortality rates can be attributed directly to malnutrition and squalor. Public health delivery systems barely touch the poor and have only notional relief to offer. Education, given the feeble efforts of governments in many developing countries, does not make much progress among the poor. Much of what is offered to them is non-functional if not dysfunctional. It has little relevance to the conditions in which they live and takes little account of learning mechanisms among them. Education does not function as a mobility multiplier as it was originally assumed it would do.

The high correlation between poverty and fertility has never been adequately explained, but it is a fact that fertility tends to decline progressively as people cross the threshold into freedom from want and later move into conditions of relative plenty. Poverty is also the greatest pollutant - the most important single factor responsible for environmental degradation. Additionally, poverty breeds social tensions and cultural corrosion.

The notion of poverty is essentially relative and should be viewed in a comparative perspective. There can be no poverty if there is no affluence. Demeaning poverty is made more obvious when it co-exists with dazzling prosperity.

Conspicuous consumption is made more obvious when it co-exists with demeaning poverty. Conspicuous consumption and waste increases poverty.

Extensive research has been conducted on poverty, but a universal solution remains unknown. On the economic front, the problem is now beyond charity and state welfarism.

The productivity of the poor has to be raised and a more equitable distribution of income and wealth brought about. Productivity and development will pick up if poverty is eradicated. It is evident that in a large number of countries there is a conspiracy to politicise poverty, not always and necessarily in the interest of the poor. The anti-poverty programmes are often just a vote catching gimmick. From whatever action that takes place, the real target groups derive only minimal benefits. If the level of conflict in society is to be minimised promises alone will not do; they must be matched by performance. Failures on the poverty front are likely to generate lethal social and psychological trends, which may unsettle the social order.

Poverty alleviation and the promotion of development now emphasise direct provision of basic needs in terms of education, health, water, food, clothing and shelter. Empirical studies conducted by the World Bank and many development research institutes across the globe have clearly shown that there is no conflict between economic growth and basic-needs strategies.

The "*basic needs*" approach to development has been instrumental in accelerating the growth rate in a number of Less Developed Countries. Development experience of the last five decades has demonstrated that good governance is essential to Developing Countries' continued economic prosperity, as it has a direct impact on economic efficiency and growth. I conclude that there is a need to attend to the inner limits to growth set by social structure, cultural norms, value attitude systems, individual and collective motivations, work ethics and organisational efficiency. These, however, involve such diverse specifications, that each society has to seek its own solution.

It can be concluded that it is widely agreed by development theory that the preservation of human dignity and fulfilment of basic needs are the foremost duties of every society. While there is wide agreement on this goal, differences of opinion exist on the question of the degree to which these basics should be supplied and, as well, how they should be supplied. These differences allow for different paths of development.

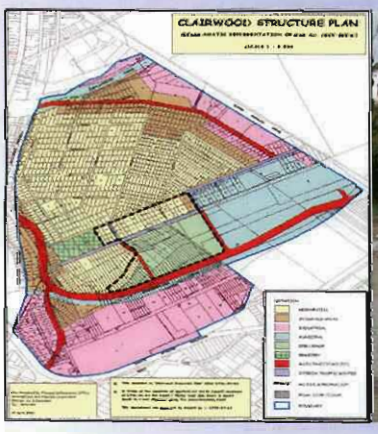
From the common denominator "*basic needs*," of human-centred development, five basic goals of development can be deducted, namely economic growth to secure food and other requirements for the population; social justice to reduce inequality; employment as means of earning an income but, as well, because of its ethical and social value; participation as political involvement and social sharing; independence as freedom from external domination.

While individual societies may have different opinions on the priorities of these goals, in the absence of a general theory of development, one can use the criterion of fulfilment of these goals as a yardstick in development. Development is then understood as a simultaneous progress towards these five goals to ensure sustainable development.

Sustainable development aims at eradicating poverty by minimising imbalances. These imbalances manifest in geographical spaces that have to be planned for in a sustainable way. This will be addressed in the following chapter.

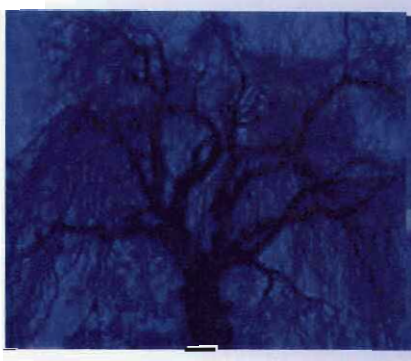
CHAPTER THREE

THE DEVELOPMENT FRAMEWORK













CHAPTER THREE: THE DEVELOPMENT FRAMEWORK OF SOUTHERN AFRICA

3.1 INTRODUCTION

At the heart of many development issues lie decisions concerning land-use and development in a region (Glazewski, 2000:229). Land-use management and planning offers development options that address social and economic problems. This chapter gives a brief overview of the planning context, before and after 1994, by describing terminology, levels of planning, history of planning in South Africa as well as early and modern planning law arriving at issues which have to be addressed when considering planning for urban sustainability. A conclusion of the relevance of planning in the context of the contemporary city and its contribution towards development is given as a synopsis.

3.2 THE PLANNING CONTEXT

Terminology

A summary of development in the context of modern urban and regional planning is given. It is shown how urban and regional planning developed from problems encountered during the Industrial Revolution. The contributions of Howard, Geddes and Abercrombie to development and urban and regional planning are discussed. Planning and regions are defined whereafter a short summary of the origin of the role of planning in development is given.

Planning has many definitions. Peter Hall (1992:1) described planning as follows: *"The verb "to plan" and the nouns "planning and "planner" that are derived from it,...do not refer to the art of drawing up a physical plan or design on paper. They can mean, 'to arrange the parts of' or 'to realise the achievements of', or, more vaguely 'to intend'."*

Friedmann (1966:19) describes the term as follows: *"Planning is primarily a way of thinking about social and economic problems. Planning is oriented predominantly towards the future; is deeply concerned with the relation of goals to collective decisions for comprehensiveness in policy and programme."*

Regional planning can be interpreted in many ways and is defined by many as a means of achieving certain regional and national goals, by being concerned with the centrally directed allocation of resources between

regions (Glasson, 1978:9). Other schools of thought define planning as the physical, economic and social planning of development within regions and sub-regions and they place more emphasis on the land-use content (Glasson, 1978:9). Regional planning is not clearly defined within the planning framework; its objectives are not always clear, and there are several different interpretations of the concept *"region"* (Glasson, 1978:17).

Alexander (1986:43) gives a general rule for defining planning: *"Planning is the deliberate social or organisational activity of developing an optimal strategy of future action to achieve a desired set of goals, for solving novel problems in a complex context, and attended by the power of intention to commit resources and to act as necessary to implement the chosen strategy."*

A more recent definition of planning is that of Cullingworth (1997:6), where he describes planning as " *a process of formulating goals and agreeing the manner in which these are to be met"*. Many authors concede that the aim of every plan is to achieve a goal or objectives (Robbins, 1980:128; Smit & Cronje, 1992:8). Planning is described as determining the future actions of an institution or an individual, and to identify guidelines that are necessary to achieve these. It must be kept in mind that planning deals with choosing between alternatives (Starling, 1986:165).

Planning also takes place within an urban region. Keeble (1972:162) defines a region as an area with certain characteristics that gives it a certain identity. The characteristics can be physical, economic or social. A region can therefore be a group of countries, which are inhabited, by a specific cultural group, or it can refer to a certain area where similar cultural groups live. At a national level, the region can be formed by means of a political unit, for example a state, a metropolitan area or any other geographical area, which has one or more characteristics in common (Leveler, 1971:9). Glasson (1978:37) defined three types of regions, namely the formal region, the functional region or the planned region.

The concept of a region as a method of classification developed by means of two phases, which are reflected in economic terms by means of a simple economy evolving to a complex economy. The formal region is defined as a geographical area uniform or homogeneous in terms of certain selected criteria. In early definitions of formal regions, the criteria referred mainly to physical attributes, such as topography, climate or vegetation linked with the concept graphical determination. Later there was a shift to using economic criteria, e.g. industrial or agricultural types. Social and political characteristics were also applied in specific instances for example party political allegiance (Glasson, 1978:37).

Homogeneity and uniformity with regard to one or more aspect, is a prerequisite to define a region as formal in nature. McDonald (1966:515) states that regional distinctions are defined in terms of a single significant factor, usually a political limit, which fixes the position of a variety of satellite factor limits, creating an image of importance and permanence. McDonald also states that regions that are similar in terms of two or more delimitations, for example physical or natural characteristics, are frequently found.

The classification of a functional region is based on functional cohesion with the region. A functional region results in the development of a functional area that deals with interdependencies, especially the interdependencies between regions. The node is sometimes referred to as a nodal or polarised region and it consists of towns that are functionally linked or interdependent (Glasson, 1978,38).

The planning region is a combination of the formal and the functional region. Boudville (1978) describes the region as areas displaying some coherence or unity of economic decision. Another characteristic of the region is that it is large enough to cope with changes in migration patterns or distribution of population and to provide jobs within its boundaries, but small enough to deal with planning problems in the region (Glasson 1978:39). There are many other types of regions but it is important to define sub-regions, which are seen as part of a bigger region. It is characterised by similarities in terms of physical characteristics, problems and potential.

Planning is essential in acting as a control-mechanism. It has several characteristics, which includes a sequence of actions that are designed for future problem-solving (Glasson, 1974:17; Conyers & Hills, 1992:7). Planning problems generally include economic and social planning. The planning period tends to be oriented predominantly in the future, but varies according to the type and level of planning (Glasson, 1974:18). The planning process is divided into several stages namely:

- Identification of the problem
- Setting of goals and specific objectives, which are measurable relating to the problem
- Identification of possible constraints
- Projection of the future situation
- Generation and evaluation of alternative sources of action
- Production of a preferred plan, which in its general form may consist of a policy statement or strategy, as well as a definite plan

Miller (1985:83-92), Technikon SA (1996a: 40-43) and Swanepoel (1997:152) agree on the stages of planning. The stage in the urban planning process where the generation of alternatives is discussed, is vital to

ensure that sound decisions are made about the desired future form for the city. The process of forethought leading up to planning decisions, namely the process that informs responsible choice, is critical. The act of choice implies the existence of alternatives. Good results do not come from poor decisions, and the generation of sound options is essential (Bayne, 1995:303).

Decision makers often have limited options (Bayne, 1995:304). Bayne (1995:305) states that this defeats the object of the exercise to improve the quality of intervention on the urban scene. Bayne (1995:305) argues that there might always be a better alternative. An alternative should be chosen on a rational basis if it is seen as superior to all other alternatives.

It is only fair that a range of alternatives should be developed to meet the diversity in society (Bayne, 1995:304). Alternatives are very important to an informed and reasoned process of choice (Bayne, 1995:304).

There is a big difference in the mechanism of creativity when it comes to the activity of search and the invention of new solutions. The intent to design must be present, and the action taken must be in part from a creative sense, rather than from instinct or institution (Bayne, 1995:308).

Regional planning has to be done to plan for the future. Regional planning consists of several types of planning namely physical and economic planning. Physical planning can be defined as an area's physical structure and this includes examples such as land use and communication. Physical planning has its origin in the regulation and control of town development (Glasson, 1974:19-20). Conyers and Hills (1992:7) agree that the time element in planning is of utmost importance as planning entails forecasting and scheduling of future activities.

Physical planning is linked to site planning, which is the art of arranging structures on the land and shaping the spaces between them. Site plans locate objects and activities in space and time. These plans may be a single building and its grounds, a small cluster of houses or a small community built in a single operation (Hack & Lynch, 1998:1).

Site planning's aim is moral and aesthetic, as it aims at making places which enhance everyday life and liberate people to become aware of the world they live in (Hack & Lynch, 1998:1).

Hack and Lynch (1998:1) also state that the only way to achieve this is by professional skill, which indicates a familiarity with behaviour settings, grading, planting, drainage, circulation, microclimates or survey.

Hack and Lynch (1998:2) point out that all sites are shaped by someone's decision. Large-scale development has many technical and economical advantages since sites can be organised in a more comprehensive way, than when there had been time for the gradual adjustment of use and structure. Site planning is often neglected and this is dangerous, since the site is an important part of the environment and has an important biological, social, and psychological impact that goes far beyond the influence it has on cost and technical function

Site planning is described by Hack and Lynch (1998:2) as a normal process, where a site plan is made by a professional, for some paying client, who has the power to implement the plan. The development is to consist of a group of buildings, which are to be built on some largely open piece of ground, already chosen for the purpose. A moderate size project will include the planning and the design of the buildings, which will take place simultaneously. Hack and Lynch (1998:2) also comment that development will take a few years to finish and the site will continue to be used in the same way as far as can be predicted.

A large and complex site takes longer to create. The site plan may be prepared first, and the buildings thereafter. The first step in the site planning process is defining the problem by asking questions such as for whom the site is being built and for what purpose, what resources are available and who will decide on the form of the site and what type of solution is expected (Hack & Lynch, 1998:3).

Hack and Lynch (1998:3), Schwella (1991:53) and Miller *et al.* (1985:89) define the stages of site planning as the following: defining the problem, programming and analysis of site and user, schematic design and the preliminary cost estimate, developed design and detailed costing where design is defined as the imaginative creation of possible form. During these stages many possibilities originate, both fragments and whole systems, in places vague or very precise, with stern criticism and childish suggestibility. The following step involves setting up contract documents, bidding and contracting, construction and occupation and management.

People and their habitat co-exist and therefore site planning, which is the organisation of the external physical environment to accommodate human behaviour, is so important. It deals with the qualities and locations of structures, land, activities and living things and creates a pattern of those elements in space and time which are subject to continuous future management and change. Physical planning is linked to site planning, which is the art of arranging structures on the land and shaping the spaces between them.

Site plans locate objects and activities in space and time. These plans may be a single building and itsgrounds, a small cluster of houses or a small community built in a single operation (Hack & Lynch, 1998:1). The only way to enhance everyday life for others is by professional skill, which indicates a familiarity with behaviour settings, grading, planting, drainage, circulation, microclimates or survey (Hack & Lynch, 1998:1). All sites are shaped by someone's decision. Large-scale development has many technical and economical advantages, since sites can be organised in a more comprehensive way than when there was time for the gradual adjustment of use and structure.

The economic structure of an area and its overall level of prosperity can be defined as economic planning (Glasson, 1974: 20).

There can also be distinguished between two other types of planning namely allocative and innovative planning. Allocative planning involves the coordination and the resolution of conflicts to ensure the efficient working of the current system in coordination with the existing policies. This is in contrast to innovative planning, which sets out to improve or develop a new system, introducing new objectives and bring about change, instead of merely planning the efficient functioning of existing systems (Glasson, 1974:20).

Multi- and single objective planning can be distinguished. An objective has an explicit rather than an implicit purpose, is measurable and can be attained, whereas a goal is idealistic and can only be expressed in abstract terms (Glasson, 1974:20).

Planning may consist of a single objective or several, for example, an authority may build a new parking lot to provide more parking space for shoppers, and an individual may build a higher fence to gain more privacy, improve his family's safety and attempt to increase the market value of his property. This shows further distinction between manifest aims and latent aims, where manifest aims are obvious and latent aims unconsciously pursued (Glasson, 1974:21).

Indicative and imperative planning are defined as follows; indicative planning gives general guidelines which is in contrast to imperative planning, which has specific directives (Glasson, 1974:21).

Levels Of Planning

Regional planning contains the same basic features and is a combination of all the types of planning. It is different from other planning in that it involves planning for a region (Glasson, 1974: 21).

The term "region" can be defined as a continuous, localised area intermediate between national and urban levels. Regional planning refers to the process where clear, social objectives are formulated in the ordering of activities in supra-urban space. Sub-division is necessary. The different levels at which planning takes place include national-level of government (which is strongly economic in content), local-authority level (a more land use orientated approach) and intermediate level (Glasson, 1974: 23).

Intermediate level can be compared to the regional level of planning which is concerned with the planning for an area, which has distinctive economic and social characteristics, opportunities and problems, distinguishing it from another region. The emphasis is on economic factors, when dealing with this level (Glasson, 1974: 23).

The physical and economical elements tend to be woven together at the regional and sub-regional levels. The sub-regional level is a bit of a "*hybrid*", relating to a part of a bigger region. It is a more localised area with its own particular structure, problems and potential. More emphasis is placed on the physical elements at this level and the sub-region can be regarded as the highest level at which physical elements are major components of the plan. Not all these levels may be present in any one country, at any particular time. In certain places, the national and regional levels may be collapsed into one, and in others the regional and sub regional levels are almost the same (Glasson, 1974: 23).

The Need for Regional Planning

The existence of separate regional cultures and political identities may have caused the necessary pressure for action, with regional planning being a response to regionalism (Glasson, 1974:25).

The problem of congested urban regions, has led to the birth of an aspect of regional planning with a physical or environmental character, in other words, a land-use planning approach with the aim of improving living conditions and creating a better environment (Glasson, 1974:25).

Another major problem is depressed industrial and rural regions, which has resulted in an aspect of regional planning that is economic in nature. It is derived in social welfare and seeks to find answers to economic inequalities between regions and people (Glasson, 1974:25). The climate of need for regional planning is dynamic and does not remain constant (Glasson, 1974:26).

Inter and Intra Regional Planning

The planning response to the regional problems it is confronted with varies. Regional planning can best be described as the planning response to urgent regional issues, at any given point in time, in any particular country (Glasson, 1974: 26).

Regional planning is a branch of public planning and its concern for an area is shown in "*inter-*" and "*intra-*" regional planning. Regional planning is related to local planning, particularly in certain cases, for example the movement and distribution of population and employment, the relation between social and economic needs, provision of services and facilities, for example recreational facilities and the main communication network (Glasson, 1974:27).

Inter-regional planning entails inter-regional flow of population and employment, the best utilisation of resources, and the possibility of long-term economical prospects, which can only be considered properly in the context of growth in one region, and growth requirements in other parts of the country. This planning is in the hands of the government (Glasson, 1974:267).

"*Inter-*" and "*intra-*" regional planning reflects the planning response to several problems. Intra-regional planning allocates resources within regions, in other words, between the sub-regions of the region and between various policy fields such as economic development, social development and environmental development, within the regions and their sub-regions. The main aim of this planning is to create a good relationship between people, jobs and the environment.

Intra-regional planning's content differs from one region to the next. In a depressed industrial area the emphasis may be on stimulating economic growth, whereas a metropolitan region may be more concerned with accommodating growth, which entails controlling the location of population and employment (Glasson, 1974: 28).

Inter-regional relationship entails allocating resources between regions. This type of planning originated as a response to the growing economic inequality between regions and as a result of the changing locational preferences of industry. It is more focused on addressing economic problems in relation to the creation of a satisfactory relationship between people and jobs (Glasson, 1974: 28).

Both "*intra-*" and "*inter* - " regional planning are multi-objective, based on the national economic objectives of promoting economic growth, full employment and social equity and providing them with a spatial dimension (Glasson, 1974:28). Economic growth means utilising resources effectively to bring about a higher rate of output. Some regions may have higher levels of unemployment and under-utilised capital assets (Glasson, 1974: 28).

Balanced growth is one of the main aims of regional planning and entails providing equal opportunities for each region to enable the region to redress demographic, economic, social and environmental weaknesses and to achieve its full potential, thereby ensuring that the "*quality of life*" is not a function of the area of the country, in which people happen to live or work (Glasson, 1974:30).

Regional Planning and The Management of Regional Development

Regional planning inevitably leads to regional development. The concept of development is complex, especially when considered within a society. Some areas are more developed than others. Development is multi-dimensional and is much more than merely a process, promoting economic growth. All the processes relating to development are interrelated and interdependent processes, for example the distributional effect of economic growth and the productivity effect of social factors.

Regional development is the process of development in a certain region (Glasson, 1974:32). Geyer *et al.* (1988:307) describe the process of regional development as a process that "*finds its culmination in a situation where spatially distributed and specialised activities are internally integrated and form an integral part of a larger whole*".

Regional development promotes economic growth and results from economic activities, which result from differential regional attractions. A shift in the location pattern has direct repercussions on income, welfare and employment (Glasson, 1974: 32).

Spatial organisation is a function of activity and interaction patterns. Regional planning results from these patterns and is expressed by means of these patterns. Regional planning also includes several processes, for example economic-, social- and political processes, which take place within a supra-urban, sub-national or spatial-temporal framework.

Regional planning is absolute or relative. In a relative context it means the prosperous regions are compared to the problem areas, or in the national context, on the basis of a variety of socio-economic indicators. An

absolute context refers to the development in a specific region. For regional planning to be effective in promoting regional development, it must endeavour to influence the different role-players and to encourage them to implement policy guidelines and regional plans (Glasson, 1974:33).

Regional Planning: A Form of Art

"Regional planning is a form of art. Sometimes we conceitedly deem ourselves its masters, as we boldly direct, renew, reform and proclaim it, sell it for money, flatter the powerful with it or use it as a stop-gap or a weapon for transitory power and limited social needs. Art is not sullied by our efforts, but grants us a share of its inner light, however applied." (Solzhenitshyn, 1972:1.)

The Christian planner should see regional planning as a form of art with the purpose of glorifying God. Art has so many facets and is not easily defined. Regional planning should be seen as a form of art and the Christian planner should know there is a higher power over him and should work as an apprentice under God's heaven. The Christian planner should take great responsibility for everything he paints and draws (Solzhenitshyn, 1972:4).

The Christian planner is well aware of the fact that he only has the gift of perceiving the harmony of the world more acutely than others and also the beauty and ugliness of man's contribution towards it, and the gift of acutely conveying this to others. The Christian planner has no doubts about the fundamental principles of the world and knows he is not the ruler. The Christian planner has an important role to play in the community since Dostoevsky stated: "*The world will be saved by beauty.*" (Solzhenitshyn, 1972:5.)

3.3 THE HISTORY OF DEVELOPMENT PLANNING

Humanity has always been obsessed with producing an environment. Ratcliffe (1974:25) describes it as follows: "*The Egyptians expressed themselves monumentally but statically, the Greeks created a more varied and dynamic urban style which the Romans standarised in their functional manner, the Middle Ages achieved that unlikely state of harmonious cacophony; the Renaissance contributed unsurpassed beauty and magnificence, the Baroque, a "planned achievement" as opposed to the ideal plan at the Age of Enlightenment - a conscience as well as a concept."*

The concept of planning for development cannot be ascribed to a specific nation. Abercrombie (1943:87) states that the modern subject of planning of towns and country is not the invention of any one nation or

group of individuals. Modern urban and regional planning for development resulted from reaction to specific social and economic problems resulting from the Industrial Revolution at the end of the eighteenth century. Kapp *et al.* (1982:336-339) explain that Britain was one of the most important trading countries in the world in the eighteenth century. Three quarters of the population lived in the country and farmers used traditional labour-intensive methods for subsistence.

The agricultural and farming methods improved, farming stock increased (e.g. the number of cattle) and the smaller farmers had to sell their land to the bigger farmers. Greater harvests demanded better industry. Industry was as that stage limited to household production. Britain's many colonies made it impossible to provide in the need for refined products.

The steam engine was developed which would act as a catalyst for further development. In its simplest form the Industrial Revolution can be seen as mass production of consumer products through the use of energy generated by machines. It is only after the problems of the Industrial Revolution developed that modern urban and regional planning was initiated (Benevolo, 1967).

Examples of problems identified during the Revolution include overpopulation, pollution, unhygienic conditions in which people lived and worked. It was caused by the migration of people from rural to urban areas and the incapability of the urban areas to accommodate the migrants (Ratcliffe, 1974:26).

During 1776 to 1832, the Industrial Revolution had almost come to an end, but planning measures still had to be put into place. A "*laissez-faire*" approach, as described by Benevolo (1967:12) was followed. This process of "*laissez-faire*" can be described as follows: "*The most advanced section of economic and political thought persuaded both government and public opinion against interference, blinded them to the use of land and discredited and weakened the traditional methods of town planning, though it did not suggest any new ones to replace them.*" (Benevolo, 1967:26.)

Gallion and Eisner (1986:79) also mention that "*laissez-faire*" took root in the affairs of men as the commercial city formed. It soon became increasingly apparent that some order would have to be established. Glasson (1978:18) states that the "*laissez-faire*" approach was followed by society, but this evolved to such an extent, that state intervention became acceptable to varying degrees in many aspects of everyday life. Planning can be seen as a control-mechanism or an answer in an attempt to control situations unacceptable to the nation, resulting from interplay of private action and market forces, for example the lack of family planning and families (Glasson, 1978:17).

Glasson (1974:17) states that the main problem the *"laissez-faire"* approach faced was the inequality of income distributions between groups and regions. The gap between voluntary private costs and the involuntary social costs and benefits of private actions, is another example.

The conditions in which people lived did not go by unseen. The Baroque period noted the official beginning of formal urban and regional planning for example the changes that were brought about in Paris by Napoleon III. Hausmann was appointed during this period and within seventeen years the streets of Paris were widened and different routes were connected.

Gallion and Eisner (1986) note that Hausmann was aware of the need to design for the traffic generated by the new industrial age. The greatest progress in planning and development was made during this period. Evidence of this includes the regeneration of Rome, the development of the Tuileries- gardens, the Champs-Elysees in Paris, and the development of the Palace of Versailles and the surrounding town. Another example includes the development of the planned town of Karlsruhe in Germany as described by Hall (1992:13).

The development of regional planning resulted from problems encountered during the Industrial Revolution. In 1797 the regional planning concept was developed to counteract the decaying circumstances in which the people lived (Gallion & Eisner, 1986:86). Two socialist utopians, Fourier and Owen, described by Weaver (1984:31), contributed to the concept of development in planning, by developing the concept of work hours and salaries and the concept of improving the working conditions (Gallion & Eisner, 1986:86).

Fourier and Owen hoped that life in cities could change through the planning of industrial towns. Weaver (1984:31) states: *"These two men presented one of the most compelling ideas of the nineteenth century social theory namely the hope that urban life would be transformed by building new, planned, industrial towns."*

Howard, who is seen as the author of modern day regional planning contributed to the concept by developing the Garden City Movement. Howard mentions that there is controversy surrounding the concept. Weaver (1984:35) described it as follows: *"Its fundamental purpose was to change the quality of life for inhabitants of the crowded metropolis and the emptying countryside alike."*

Weaver (1984:35) describes the movement as a decentralisation of urban areas to rural areas. Hall (1992:14) disagrees with Weaver and points out that Howard was focused on the planning of conurbations with many people, and did not mean that people had to be consigned to small towns isolated in the countryside. Hall (1992:14) describes the fact that Garden Cities are seen as a means of bringing about change in the

capitalistic community. He states (1988:87) that "*these garden cities were merely the vehicles for a progressive reconstruction of capitalist society into an infinity of co-operative commonwealths*" (Hall, 1988:87). Howard described a nodal region as "a *cluster of new towns linked to the central city in a functional relationship*" (Howard, 1946:50). This concept of decentralisation of economic activity remained a central point of discussion in early development theory and planning laws.

Geddes also researched Howard's work. Geddes emphasises the interdependence between regions. Hall (1988:137) states the following: "*Regional planning began with Patrick Geddes.*"

Geddes emphasised that an area should be studied and analysed before any plans are drawn up. Geddes'stheory led to the phrase "*survey before plan*". Geddes's theory on place, work and people is shared by Abercrombie (Abercrombie, 1943:103-130).

Abercrombie became famous for his plan on counteracting overpopulation in London in the 1940s. The plan was based on the assumption that a decrease in population had to be brought about in Central London, a Green Belt had to be developed to define the boundaries of Greater London, and industries were to be relocated to the peripheral areas (Gallion & Eisner, 1986:568). Abercrombie became the first person to propose a land-use plan on regional planning in 1944 in London (Ratcliffe, 1974:66).

Geddes, Howard and Abercrombie can be seen as the early leaders in regional planning. They showed that planning should pay attention to more than merely the urban area, and should also encompass adjacent areas or "*hinterlands*" or even a group of cities that will form a conurbation. The term regional planning had an economic connotation, with the goal of promoting development in lagging regions or areas. These areas were generally characterised by a high level of unemployment in relation to the rest of the country.

3.4 HISTORY OF PLANNING FOR DEVELOPMENT IN SOUTH AFRICA

"Roads and buildings, even gardens, do not grow by themselves. They are shaped by someone's decision, however limited or careless" – Kevin Lynch

The planning system existing in South Africa today (laws, policies, institutions and practices), has been shaped by many different governments, each responding to the problems which they defined as the most significant of the day. Since all South African governments before 1994 were elected by a minority, the definition of problems and the planning systems created to address them, primarily reflected minority interest. The nature of these interests varied regionally, so that the planning systems ended up being complex, multiple and contradictory. These systems have had dramatic impacts on urban and rural settlement patterns (Development and Planning Commission, 1998:4)

This section provides an overview of the political background, main decisions and development and planning policies developed in South Africa form the beginning of the 21st century. The bottom-down approach followed during the 1949 to1990 is described. The planning period between 1990 and 1994 is discussed as well as changes in regional planning after 1994. The aim is to provide an overview of the policies, changes in development planning and the current approach on planning for sustainability.

Political Background

Usually significant changes to the planning system followed periods of considerable stress and turmoil. A number of milestone periods can be identified in South Africa's planning history. These periods are discussed in more detail in 3.4.

1910 to 1930: The spreading of the British influence

Glazewski (2001:231) states that political transformation in the period before 1948 affected planning through the dissemination of British planning ideology, approaches and methods following the South African War and intensifying after the First World War. This led to the formulation of land administration mechanisms such as town planning schemes, the introduction of institutional bodies such as the Township Boards, the introduction of public agencies in the housing supply system and the location of planning-, administrative- and decision-making powers within the provincial realms. As a result, strong provincial influence over land and housing markets emerged, together with an increasing tendency to shape human settlement patterns along racial and class lines. The exclusion of Black African people from urban areas took root during this time (Development and Planning Commission, 1998:5).

1930: The Second World War and post-war reconstruction efforts

The Development and Planning Commission (1998:5) states that the Great Depression swept through the global economy, creating conditions of economic hardship in South Africa. This intensified already existing poverty levels. This was addressed by the government of the day through the implementation of new approaches to planning such as slum clearance initiatives, mass government housing, job reservation for poor Whites and the development of rigid and unsustainable "*betterment planning*" methods in the rural areas.

The idea of reconstruction for the post-war period saw increasingly enthusiastic acceptance of central precepts of the modernist movement, such as the separation of land uses, the concept of inwardly-oriented neighbourhood units, and the dominance of the private motor car. These concepts powerfully underpin the mainstream practices of South African spatial planning to this day. This period saw the consolidation of the control-oriented and fragmented approach to planning already in place and the basis for apartheid planning (Development and Planning Commission, 1998:5).

The post –1948 era and grand "Apartheid"

The coming to power of the National Party government brought about previously oppressive features of planning into systematic formulation and implementation of a racist planning system, in response to both ideology and shifting economic patterns, including the effects of increased urbanisation. Strengthening of the pass laws and exclusion of Black people from towns were a central feature of the system.

The implementation of the Group Areas Act, giving effect to the ideology of separate development mostly in urban areas, was accompanied by massive forced removal in rural areas. Increasingly inequitable access to urban and rural-, economic-, social- and political resources along racial and ethnic lines resulted, symbolised by rural settlements and the characteristic segregated and alienated urban township. All of these activities were accompanied by the rapid growth of planning as a distorted and repressive activity, which took political ideology as its starting point, instead of something based on a people-centred and environmental ethic.

This was not the case of all planning done during this period In some quarters, efforts were being made to ameliorate the negative effects of the government's approach at that time (Development and Planning Commission, 1998:5).

The period following the Soweto uprising of 1976

The challenges posed to the political and economical control exercised by the minority government, through the 1976 Soweto uprising, were met within increased control and oppression. The Apartheid government dismissed and thwarted demands for change resulting, in planning terms, in a strengthening of the control-oriented system. The results included rapidly increasing numbers of informal settlements (Development and Planning Commission, 1998:5).

Post 1985 – late apartheid reforms

In the face of increasing internal and international opposition, and the growing economic and political need to accept the permanence of an "*inside*" Black Group within towns and cities (as opposed to the majority of Black people kept outside urban areas by influx control laws), the government was confronted with the necessity for change. The civic movement and various non-governmental organisations pressed for change.

Policy responses included the relaxation of the Group Areas Act, the recognition of the permanency of African urbanisation and the official realisation that municipal planning was unable to tackle development need in its existing fragmented and unrepresentative from. More rapid and consistent urbanisation, unmatched by sufficient housing, land and service delivery, entrenched the significance of informal housing and economic opportunities in the urban context. It also saw the growing acceptance of the need for security of tenure for an "insider" group of African urban dwellers.

The planning system, which has emerged as a consequence of these influences, has a number of overriding characteristics (Development and Planning Commission, 1998:5).

3.5 CHARACTERISTICS OF SOUTH AFRICA'S PLANNING SYSTEM

The respective characteristics of the Planning System are described in the Draft Green Paper on Development and Planning (1998:6). Harrison *et al.* (2003:29) also discussed these characteristics in detail.

Fragmentation

The planning system is fragmented in the following ways:

- Across scales, national, provincial and local planning systems interpenetrate in complex and different ways.
- Across race groups as historically, different race group have operated under different planning systems. For example, African "*locations*" or "*townships*" never fell under local authority planning systems. Instead, parallel systems (own laws and administrations) for controlling African areas were created. Similarly, a system which included "*homeland*" areas, designated for African occupation with their own planning laws and systems, was instituted.
- Across ethnic lines, the creation of different ethnic homelands and so-called independent states led to different systems operating in these different areas.
- Across geographic areas, particularly urban and rural areas, historically operated under entirely different systems.
- Across provinces, as significant differences existed between provinces.
- Across jurisdictional boundaries - entirely different land planning and allocation systems operated in areas under traditional and tribal leadership.
- Across sectoral uses, for example various line function departments undertook planning independently of one another and different norms and standards prevailed.
- In terms of jurisdictional instruments, for example an important historical planning instrument was titledeed restriction on individual erven. These are still very much in force, despite the fact that they frequently contradict Town Planning Schemes.

The characteristics of the planning system can be ascribed mainly to the apartheid ideology which was described by Judge Kriegler (1998) in a Constitutional Court Judgement in which he stated the following:" *The apartheid city although fragmented along racial line, integrated an urban economic logic that systematically favoured white urban areas at the cost of black urban and peri-urban areas. The results are tragic and absurd: sprawling black townships with hardly a tree in sight; flanked by vanguards of informal settlements and guarded by towering floodlights, out of stone throw reach. Even if only a short distance away, nestled amid trees and water and birds and tarred roads and paved sidewalks and street lit suburbs and parks, and running water, and convenient electrical amenities... we find white suburbia. How did it happen? Quite simply, in reality the economic relationship between White and Black (African, Coloured and Indian) halves of the city was similar to a colonial relationship of exploitation and unequal exchange. The genius lay in the system, of apartheid zoning; major commercial and industrial areas were located in the white areas, and fell within the jurisdiction of white local authorities. Not only did this impose a cost burden on those who had to commute the distance to and from these centres of economic activity, but also the bulk of the tax base was located in the white city. Black people came and went, and workers and spent, leaving brings their labour and their money."*

Control

Although mechanisms for forward planning have long existed, the town planning scheme, imported from the United Kingdom, is at the heart of the town planning system. This is based on the erroneous assumption that it is possible and desirable to predetermine the use of all land parcels. While this system was strictly enforced in most White, Indian and Coloured areas, only simplified versions were later introduced to urban townships, further complicating the land administration system.

Modernist Influences

The shaping of town planning in the 1930s corresponded with a wide international acceptance of modernism. Most current norms and standards associated with spatial planning were devised to entrench these ideas. The ideals promoted and fostered in the modernist movement, have included the concept of free-standing buildings within large private green space as the basic building block of settlements; the separation of land uses; the concept of inwardly-oriented neighbourhood units; focusing on embedded social facilities and the dominance of the private motor car.

Similarly "*betterment planning,*" intended to increase efficiency, based on the systematic separation of uses, was implemented in rural areas. A prevailing belief underpinning this system was that it was possible and desirable to plan comprehensively, to predetermine the use of all land parcels in settlements. A number of the precepts of modernism, particularly the emphasis on separation and the idea of self-contained neighbourhoods, accorded neatly with the ideology of apartheid.

Implications

In urban areas influenced by "Apartheid" planning, land market forces and increasing urbanisation have created a pattern of human settlement primarily characterised by racial, socio-economic and land-use segregation.

The phenomenon of displaced urbanisation led to the rise of the large dormitory towns and other settlements, lacking any functional autonomy, designed to serve as holding areas for people who had been removed from areas designated for White occupation, dammed up behind homeland boundaries. This process also saw the extreme overcrowding of areas with a limited agricultural base with dramatic, negative, environmental consequences. In response, the accelerated rationalisation of agriculture through "*betterment*" programmes, was intensified. In towns and cities large tracts of the urban fabric were destroyed, frequently under the

pretense of slum removal, or to consolidate the grand apartheid plan for separate ethnic and racial areas. This resulted in the systematic uprooting of settled communities and the creation of large, alienated islands of poverty.

The physical consequences of these processes are settlement patterns in both urban and rural areas, that are often grotesquely distorted. Spatial environments are inconvenient and dysfunctional for the majority of citizens as they generate enormous amounts of movement with great costs in terms of time, money, energy and pollution.

Settlement patterns make the provision of efficient and viable public transportation almost impossible, making servicing costly to the public and constraining affordability. In addition, large tracts of land with agricultural and amenity potential has been destroyed, poverty and inequality have been aggravated and opportunities for individual entrepreneurship have been dissipated.

3.6 DEVELOPMENT OF URBAN AND REGIONAL PLANNING IN SOUTH AFRICA

Planning Before 1945

Planning concepts developed before 1945 were aimed at improving social conditions such as poverty and illness, by bringing nature into the city (Glazewski, 2001:230). The movement was also concerned with de-densifying the city and introducing proper municipal infrastructure (sanitation, refuse removal, storm water , for example), green belts and access to nature as part of the paradigm.

Low-density single dwelling residential developments with public parks became the preferred urban form. The technical revolution created desire for new urban form which advocated laying out the towns in a more orderly and integrated fashion. This sowed the seeds for demarcating certain use areas in cities and towns (Glazewski, 2001:231). Pinelands in Cape Town, is an example of the first Garden City in South Africa. This became the dominant model for development in South Africa.

The concepts were combined with "*Apartheid*" planning legislation, which could be termed as racial and economic zoning. This has created the fragmented spatial patterns found throughout every South African town, with the poor people living on the periphery. The concept of use rights was further developed in the United States (USA), pioneering the concept of zoning at the turn of the century in an attempt to ensure some sort of consistency in the growth of urban areas.

The first zoning ordinance was developed and enacted by New York City in 1916. This act against urban decay led to establishment of the first national act in the United Kingdom, namely the 1909 Housing and Town Planning Act. This was followed by the 1909 Town and Country Planning Act, which is still enforced today.

These concepts were adopted in South Africa and embedded in the four Town Planning Ordinances of the four provinces, which came into existence with the Act of Union in 1910. Planning law was based on the respective Town planning Ordinances, which were enacted before World War Two, some of which have survived to today (Glazewski, 2001:231). The Ordinances remained in place except for Gauteng, which adopted the Town Planning and Townships Ordinance 15 of 1986 and the Cape Province, which replaced its 1934 Township Ordinance in 1985 with the Land Use Planning Ordinance, 15 of 1985.

Regional Development 1945 to 1948

The Second World War necessitated the development of an industrial development plan in South Africa. This led to the development of the need for management control of urban land use. Botha (1990:42) stated that planning came into being in South Africa purely as a technical necessity. The government of the day needed laws to administer and control the use of land (Planning History Study Group, 1993:288). This gave rise to the South African Planning Council, who would change planning in South Africa drastically (Botha, 1990:42). The Council emphasised the fact that South Africa was in dire need of regional planning. The Planning Council suggested that the government play a bigger role in the control of the economy. The Council was of the opinion that the state could only gain control over economic activity and the distribution of the population by instituting control measures that would determine land use, the basis of human activity (Botha, 1990:43). A special organisation was developed by the state to control land use, namely the Department of Physical Development and Regional Development (Botha, 1990:43).

Regional Development In South Africa Between 1948 and 1970

The regional planning policy and the methods of execution were greatly influenced by the National Party who gained control of the country in 1948. The state played a major role and a "*top-down*" approach followed. As part of the "*top-down*" actions the state accepted responsibility for providing employment, upgrading townships, spreading development to the rural areas.

A great issue for the government of the day was the migration of Black South Africans to traditionally "White" urban areas. The Tomlinson-commission was generated to research the possibilities of promoting industrial development in rural areas, to prevent the urbanisation process (Botha, 1990:46). The commission's report indicated that South Africa needed to make a decision that consisted of choosing between separate development and total integration of the two population or cultural groups. Geyer (1989:253) states that the Tomlinson report contained recommendations of consolidating fragmented Bantustans into more economically viable areas as far as possible, and that industrial development be stimulated within the Bantustans on a partner basis between both Black and White entrepreneurs, but as far as possible away from their borders. The report stated that industrial development on the White side would not stimulate skills development among Black entrepreneurs and would exploit the cheap labour force.

The report also stated that placing industrial development points close to the borders on the inside of the Bantustans would also be to the White people's advantage. The report argued that agglomeration of White controlled industries adjacent to Black growth centres would create competition, which would harm the prospect of the Black entrepreneur in general.

The government rejected the proposal on the following grounds namely the possibility of unfair exploitation of Black entrepreneurs by the White population. Other grounds included the unwillingness of White entrepreneurs to invest their money in a Bantustans and withdraw after a few years and the possibility of creating an unacceptable political precedent whereby no grounds would be found to reject undertakings in so-called White areas (Geyer, 1989:254)

South Africa chose the second model, which was a different political model to that of the rest of the world. Regional planning developed in the same way as the rest of the world.

In 1959 the Natural Resources Development Council, instructed by government, identified suitable land close to Bantustans to be developed for industrial purposes, which aligns with the growth point concept of Perroux. Almost all the points were on the White side of the proposed borders. In 1960 the implementation of the policy of industrial growth points near boundaries of Bantustans became official.

Industrial growth points were locations in close proximity of Bantu areas, in which industrial development took place by means of European initiative and control, but which were located in a way that allowed for the

Bantu workers to maintain their residences and family lives in the Bantu areas and move to their places of employment (Geyer, 1989:255).

The border area policy was four-fold, namely it would create opportunities for Black people living in the Bantustans, it would draw the Black people working in urban areas towards the periphery, it would serve as an industrial deconcentration method to exploit plenty resources of cheap labour in and around the Bantustans, without providing the Black entrepreneur an opportunity to do so at the same locality. It was also supposed to lead to the "*trickling down*" of multiplier effects from the "*growth points*" into its hinterlands (Geyer, 1989:256).

Geyer (1994:78) states that racial segregation became a deep-rooted phenomenon. Apartheid has its root in the pre-Republican era, but it was more rigorously applied in the first decade after the country's independence in 1961. The policy did not only develop an extensive web of discriminatory legislative measures, which adversely affected the lives of Blacks in the country, but also a group of instruments that supported this legislation. The legislation formed included the following, namely the Prohibition of Mixed Marriages, the Population Registration Act 30 of 1950, which made provision for the separate registration of ethnic groups while the Electoral Act 45 of 1979, consolidated laws relating to the franchise and the registration of voters on a racial basis. Other legislation included the Black Land Act, which restricted acquisition of land by Africans to certain areas. In terms of the Group Areas Act of 1936, certain areas outside the Bantustans were allocated for habitation by certain population groups only and squatting could be controlled by the Prevention of Illegal Squatting Act 52 of 1951, and the Development Trust and Land Act 18 of 1936.

The establishment of legislative assemblies and executive councils in African area was provided by the National States Constitution Act and was construed with the Black Authorities Act of 1995, which provided for the establishment of African authorities in African areas. The Blacks Consolidation Act 25 of 1945, consolidated laws relating to the control of Africans in urban areas. Urbanisation of Black people was controlled. This act was supplemented by, both the Black Authorities Act 102 of 1982, and Act 4 of 1984.

The laws allowed for the establishment of communities, councils and town councils for Africans and isolated development of homelands on peripheral areas. The Promotion of Black-Self Government Act 46 of 1959, provided for the gradual development of self-governing Bantustans, while the promotion of Economic Development of National States Act 46 of 1967, promoted the economic development of Bantustans.

The National States Citizen Act 26 of 1970, provided for citizenship for residents of territorial authority area or self-governing African authorities. The number of African labour-intensive industries was to be reduced by the Physical Planning Act 8 of 1968, to reduce the amount of job opportunities in urban areas. Until 1986 the Act provided for the declaration of controlled areas. The expansion of industry and appointment of a higher than officially approved Black- White ratio was prohibited (Geyer, 1994:378).

"Apartheid" policy had to be revised by the end of 1970s as the government was under pressure resulting from disfranchised people, increasing sanctions from the international community and the financial burden that the Homelands had become. The loss of productivity resulting from the *"Apartheid"* policy also took its toll. The lack of enthusiasm among the African population to participate in the economic system, as they were not allowed to own property in certain areas, contributed to increase pressure with regard to the *"Apartheid"* policy. Twenty-five per cent of the economically active White groups were employed by the state, which at the time was notorious for low productivity levels.

It can be concluded that the government followed a decentralisation policy, which was based on the development of industries in transitional areas between the traditional "White" South Africa and the homelands. The areas were demarcated with the aim of implementing policies, for example industrial centres located within 48km from the boundaries of a homeland (Botha, 1990:48).

Urban and regional planning during this period had to be seen against the backdrop of an increasingly difficult economic situation. Regional planning was bold and comprehensive. It was of a world standard, and provided a basis to meet the needs of the population, avoid potential difficulties and work with government structures (Planning History Study Group, 1993:50).

The law on Physical Planning and Utilisation of Resources, Law 80 of 1967, contributed to the execution of the decentralisation policy. The goals of the law were to promote coordinated planning and the utlisation of Republic resources. The same law also empowered the minister to restrict the influx to urban areas (Planning History Study Group, 1993:150).

Industrial decentralisation was aggressively stimulated during 1960 to 1975 through the Board for the Decentralisation of Industry. Many incentives were provided to settle at the identified growth points, as

entrepreneurs were at a disadvantage as locational advantages, markets and agglomeration advantages in the border areas, compared to the four metropolitan areas across the country, did not exist (Geyer, 1989:255).

The Period 1970-1980

During this period it became clear that the decentralisation policy had not succeeded. The government realised that the physical planning policy had to be adjusted (Botha, 1990:53 & Geyer, 1989:255). The government still saw the decentralisation policy as the most effective method to stimulate development in Bantustans, but in addition it was also seen as a means of counterbalancing industrial development in the major industrialised areas of the country (Geyer, 1989:255). During this period there was a definite shift in the planning policy. Planning shifted from a "*physical planning*" mode to embrace social and economic considerations at all levels, while ecological approaches were also being incorporated into "*planning*". Planners became involved in public participation at community level, in practising sustainable development in rural areas, in sophisticated local government schemes and in contributing to natural policies (Planning History Study Group, 1993:53).

The Permanent Committee for Industrial Establishment, which came into existence in the early 1960s, coordinated the industrial decentralisation process on behalf of the government. The Committee was restricted to form the Industrial Decentralisation Board (Geyer, 1989:255). A commission was appointed to investigate the decentralisation policy of South Africa. The Pretorius report publicised in 1970 indicated that the decentralisation policy had been insufficient in dealing with the concentration of the population in urban areas (Botha, 1990: 54). A proposal was made by the Pretorius report that mapping of relationships and functions of the various spheres had to be done.

The government continued with the implementation of the decentralisation policy and supported the policy, which became official government policy in 1961 according to Geyer (1989:255), with the implementation of the National Physical Development Plan (NPDP). The NPDP was aimed at providing a framework for the implementation of regional planning. It was also aimed at preventing the reconcentration of people in urban areas (Botha, 1990:17). It also contained many planning instruments aimed at the arrangement of physical development according to specific development and political ideals (Geyer, 1989:256). Different "*nodal points*" varying in size and function as planning instruments, were included in the plan. No clear indication is given in the plan of the differentiation between the nodal points. Growth poles, planned metropolitan area

and main towns were regarded as nodal points, focused on development of regions in the "White" areas, while growth points were focused on the development of Bantustans.

The identified "*main points*" should, according to the plan, be focal points of intra-regional economic and administrative concentration. Geyer (1989:256) states that the NPDP provides a geographical framework for the development of a set of thirty-eight planning regions in the plan. The PWV- area, Durban-Pinetown-Pietermaritzburg (DPP), Cape Town-Bellville and Port-Elizabeth Uitenhage were excluded from the planning regions. Growth poles and planned metropolitan areas would also be nodal points that would aim to promote development in the "*White areas*" but would be of a higher order than the main towns.

The aim was to promote economic development away from urban areas by providing the development of growth axes. Economic rationalisations were given for the implementation of growth poles but the political intentions were also clear (Geyer, 1989:256). The Planning Advisory Council initiated the plan with full cognisance of all the social, economical and political policies. Development potential within the Bantustans was not explored, while growth points on the "*White side*" of the boundaries were planned thoroughly. The Eiselen line emerged, a line separating the Western Cape form the rest of Africa which prohibited Black people from working in certain areas or, if doing so, under very strict conditions.

Growth points provided incentives and were backed by the Physical Planning Act 88 of 1967, which was aimed at deconcentration of industry from urban areas to reduce jobs for Black people in metropolitan areas. The Act provided for controlled areas, which prohibited expansion of industries or a working labour force and which had a higher Black-White ratio than was specified. In 1986 the discriminatory clauses were abolished but the establishment of industrial estates in controlled areas, still remained. This stipulation was widely protested against by industrialists who chose to close down their industries instead of moving.

Geyer (1989:256) stipulates that there were several socio-economic implications. The possibilities for Blacks to obtain employment in industries located in "*white areas*", led to invasion of large numbers of people which led to the establishment of large numbers of uprooted Black people adjacent to "*white* " growth points (Geyer, 1989:381). It also made it very difficult for the Black entrepreneur to set up a business in the Bantustans areas. If the entrepreneur were to succeed, it would lead to unnecessary replication of urban areas.

This implied that two urban centres would service an area that could have been served by one centre. The necessity of duplication of urban areas in border areas became evident at a later stage. The biggest disadvantage of the South African Development Centre policy was that it was not based on sound economical principles, which were imperative for the economic success. Most of the growth points or "*industrial development points*" were located on the periphery and very far away from established markets and resources. The NPDP was a pioneering attempt for the formulation of a national development strategy (Geyer *et al.*, 1988:309).

The criteria used for the delimitation of planning regions identified in the NPDP were as follows: urban nodes with their spheres of influence, population distribution patterns, natural resources, infrastructure, physical features, economic activities and administrative and political boundaries (Geyer *et al.*, 1988:309).

Browett evaluated the South African space economy up to 1960 and distinguished between different areas in terms of their relative development namely core areas and inner-, intermediate- and outer-peripheral regions. The regions were demarcated on statistical-, development-, functional- and urban hierarchy terms.

During the second half of the 1970s it became clear that political change was necessary. The government made concessions, but were reluctant to do so. A new constitutional model that included Asians and Coloureds, but excluded Black people, was introduced in 1970. The constitutional model was never implemented and the existing instrumentation and laws were still applied.

The late 1970 years were characterised by a lack of political guidelines. Planning was implemented ad hoc. Municipal officials were not skilled in executing decisions in some instances and did not know how planning and development functions were to be implemented. The national government planning department produced plans toward the end of this period, but very few were finalised. Spatial development strategies for the Cape Town-Bellvillle and Pretoria-Witwatersrand-Vereeniging (PWV) triangle were developed (Geyer, 1994:381). These plans were submitted as drafts. The purpose was to guide structured development in the major metropolitan areas.

Regional Planning Between 1979 And 1989

This period was characterised by the implementation of the Carlton conference held on the 22nd of November 1979 (Botha, 1990:72). This period in South Africa is characterised by controversial political issues

characterised by international isolation, violence and internal conflict. A State of Emergency was declared over specific areas, the country experienced economic downturn and urbanisation continued apace (Planning History Study Group, 1993:54).

The Carlton conference was aimed at formulating proposals for neighbouring states (Botha, 1990:62). The Good Hope conference followed in 1982. This conference focused on the development of industrial development strategies. This plan constrained a number of proposed industrial development guidelines for the country as a whole, a framework guiding the implementation of the government's industrial decentralisaiton policy. This contributed to the spatial support of segregated residential development and Bantustan policy (Geyer, 1994: 381).

The National Physical Development Plan identified thirty-eight socio-economic regions with nine development regions (Botha, 1990: 64). The Good Hope conference was aimed at deconcentration of industrial development to smaller centres (Planning History Study Group, 1993:201). The value of both the Carlton commission and the Good Hope commission is that it developed principles for demarcating areas for development and defined areas where development should not take place.

This indicated that development only took place in certain areas. A characteristic of this period is that a top-down approach was followed. An example of this was the Regional Development Advisory Board responsible for informing and advising the government with regard to regional development issues, for which the city had to take responsibility (Botha, 1990:68; Geyer, 1994:383).

Geyer (1989:259) states that the Good Hope Plan (GHP) contained several industrial development guidelines for the country as a whole and acted as a framework through which the government intended implementing its industrial decentralisation policy. Eight functional regions were developed based on the 38 planning regions identified in the NPDP. These points were indicated in the Good Hope Plan. The boundaries were revised and in 1989. There were nine regions.

The Good Hope Plan also consisted of forty-seven designated "*industrial development points*" and ten deconcentration points, which were to be developed at the same time.

The GHP included the majority of "*growth points*" that were indicated in the NPDP. The growth points were termed "*industrial development points*" in the GHP even though the results obtained over the years did

not show adequate returns (Good Hope Plan, 1982:75). The points increased from 16 in 1975 to 47 in 1981. In 1989 the Decentralisation Board assessed the industrial development points. The industrial development points grew to 52 from 1981 to 1989 and the deconcentration points to twelve. The industrial points were seen as a counterbalance to existing metropoles, by providing alternative agglomeration advantages and employment opportunities (Geyer, 1989:259).

The government's ideology remained unchanged, as policies were still being implemented that counterbalanced metropolitan development, with deconcentration growth points in Bantustans, to create alternative employment and industrial development.

Duplication of urban centres on both sides of Bantustans was inevitable and can be seen when the positions of the growth points in the NPDP are compared with the industrial development points in the GHP.

In 1982, as described by Geyer (1989:384), a new regional approach was announced which entailed greater flexibility in incentive measures and development policy on a regional level resulting from possible regional differences in development circumstances. Growth centre-oriented development was enclosed in the policy together with provision for grass roots industrial activity. It was presented as a "*bottom-up*" approach but enforced in the local community from the top downwards. No meaningful consultation with Black electorate was done and stakeholder participation for the various communities in South Africa remained limited. Regional and urban development policies were still characterised by political undertones (Geyer, 1989:259).

Glazewski (2001:230) states that the respective Town Planning Ordinances, the Town Planning and Townships Ordinance of Gauteng and the Township Ordinance of Cape Town, were applied by and large only in the former White, Coloured and Indian areas. In the historically African areas, a crude and rudimentary planning system applied, described by the Black Communities Development Act 4 of 1984. An example is that tribal areas' chiefs were granted permission to occupy land, without any regard as to how the broader public interest would be affected.

Geyer (1993:303) states that a third of the African population were accommodated in informal housing, located in close proximity of urban residential, industrial and commercial areas. The influx control measures prevented Black people from settling in urban areas but with the abolishment of control measures in the

1980s, the Black urban population increased significantly during this time, settling in close proximity of formal employment opportunities.

Orderly urbanisation was instituted which stipulated that people could only settle on urban land, properly zoned for residential purposes. Urban land has been annexed on a large scale by Black communities since 1990 and the communities made many attempts to settle as close as possible to available employment opportunities. This resulted in forceful removal of a " *human* " nature Geyer (1993:304).

Regional delimitation was instituted in 1985 and this culminated into a set of development regions that were delimited and officially announced by the Department of Constitutional Development and Planning. The sets of regions contributed to synchronising public development thinking and government action.

Regional Planning Between 1990 And 1994

The period is characterised by an absence of definite development principles. Any development was condoned and no investment was prohibited. Investment in any form whether in companies' investment portfolios or any other avenue of investment, was approved. Development outside the PWV (Pretoria-Witwatersrand-Vereeniging) area or Durban area received little or no support, except for the Relocation assistance provided for a period of five years (Botha, 1990:75).

This step shows a definite change in urban and regional planning. Since 1948 strict statutory guidelines were followed which stipulated where development had to take place. South Africa started moving in the same direction as America where a free market paradigm was followed. Hall (1988:343) describes this approach as: *"Instead, planning turned from regulating urban growth, to encouraging it by any and every possible means."* Authorities did not practise any control measures with regard to growth.

Planning Between 1994-2004

The enactment of the Development Facilitation Act (DFA), Act 5 of 104 and the Local Government Transition Act 209 of 1993 as well as few other statutes by the new government soon after transition to democracy, represented a swift and committed signal that action was going to be taken in planning law. The

idea is that the individual provinces follow-up the trend by setting their own planning and development acts (Glazewski, 2001:232). This is described in the Green Paper on Development and planning (Development and Planning Commission, 1999). The new government inherited a "*fragmented, unequal and incoherent planning system, which developed under apartheid*" (Development and Planning Commission, 1998:6).

Wide-reaching changes, with profound implications for planning, were ushered in from 1994. Planning law in contemporary South Africa is based on provincial ordinances and laws, but must be seen against pertinent national legislation passed by both pre-1994 and present government. National laws passed before 1994, which are still in place, include the Physical Planning Act 88 of 1967, although many of the provisions have been repealed. Other legislation still in place includes the Black Communities Development Act 4 of 1984 and the Less Formal Township Establishment Act 113 of 1991. Particular resource related status e.g. Conservation of Agricultural Resources, Act 43 of 1983, is also pertinent in planning law (Glazewski, 2001:233). The present government has superimposed a number of further national statutes, which impact directly on planning law.

The DFA is seen as the earliest law statute passed by the government. It is a framework Act administered by the Minister of Land Affairs in consultation with other governments such as the Department of Housing. It is motivated by the urgent need to provide housing and residential areas for vulnerable groups and previously marginalised communities, and to fast track planning procedures. It sets the overall tone and framework for provincial planning legislation, and is dealt with in more detail in a later section on national legislation. Provincial legislation is also discussed.

Glazewksi (2001:233) states that the DFA is monitored on an ongoing basis and its implementation is monitored. This is evident from the introduction of the Green Paper on Development Planning, which culminated into a White paper during 2000. The National Development and Planning Commission initiated the Green Paper with a view to " *review*" and recommend changes to the legislation and process of land development. It recommends that the DFA and its principles be in an amended form as the basis of national enabling legislation for integrated development planning (Development and Planning Commission, 1998:23). The notion of integrated development is a key concept, which should underlie all planning instruments (Glazewski, 2001:234).

Pertinent national legislation passed by the post 1994- government includes:

- The Local Government Transition Act 209 of 1993. The purpose of this law is to restructure local government so as to shift it away from the old apartheid structures on which local government is currently based (South Africa, 1993:1)
- The Local Government Municipal Structures Act 117 of 1998. This Act gives effect to the various categories of Municipality provided for in the constitution (South Africa, 1998:1 & Department of Constitutional Development, 1998:29)
- The Communal Property Association Act 28 of 1996, which enables communities to form juristic persona and to be known as communal property associations in order to acquire, hold and manage property on a basis agreed to by members of a community in terms of a written Constitution (Glazewski, 1998:234).
- The Restitution of Land Rights Act 22 of 1994, which aims to enable restitution of land rights to persons and communities who were dispossessed of their rights after 19 June 1913 as a result of past racially discriminatory laws or practices. In the same way the Interim Protection of Informal Land Rights Act 31 of 1996, and the Extension of Security Act 67 of 1997, protect the rights of individuals and communities to remain in occupation of land, which they inhabit (Glazewski, 2001:234).

3.7. THE CONSTITUTIONAL DIMENSION

Planning Law and the Bill of Rights

The legal context since 1994 has been influenced by the Constitution, the DFA, new planning laws passed by some of the provinces and national pieces of sector legislation with planning implications (Department of Constitutional Development, 1998:4). The Constitution has a bearing on the planning system in that new constitutional requirements were incorporated, e.g. co-operative governance, procedural and participatory rights to ensure accountability for decision making, the promotion of social and economic rights and the protection of the environment, that all create imperatives that profoundly affect planning. The new constitutional model redefines the relationships between government by replacing the system of a vertical hierarchy of tiers with three overlapping planning processes and a set of plans, each relating to a different sphere of government (Development and Planning Commission, 1998:52)

In the planning sphere legislation has shifted with the passing of the DFA from being control-oriented, toward being normative-based. This means that the law introduces principles (norms) that must guide development and decision-making. In addition to principles, the DFA introduces the concept of land development objectives (LDOs).

These are plans approved by the political decision-makers, setting objectives and targets for development and informing the spatial and development imperatives of an area. These policy plans, which later will be more clearly defined, but which can also be referred to as integrated development plans, are also normative in that they set out desired aims. Normative legislation calls for a proactive planning system, which places the emphasis on considered judgements and the discretion of decision makers, as opposed to the application of standardised rules and regulations.

All the rights in the Bill of Rights are relevant to planning law, but property rights in particular are central to the subject. Even balance has to be found in planning law between individual property rights, mainstay of the western capital economy on the one hand and to the public interest at large, to determine and decide how land should be used and developed (Department of Constitutional Development, 1996).

The Bill of Rights also states that everyone has the right to adequate housing, which remains a major challenge to government (Department of Constitutional Development, 1996:2).

Many provinces have been reformulating their planning and development laws in an attempt to create legal uniformity and to redress the apartheid legal and administrative chaos. KwaZulu-Natal, the Western Cape and the Northern Cape have passed laws, as well as Gauteng. In all four cases, the paradigm ushered by the DFA of normative-based legislation, has been followed with some provincial differences. The other provinces are all intending to follow suit.

The problem with the provincially-led law reform process, is that each province is pursuing its processes independently of the others, and in the absence of national guidelines other than the DFA in its current form, certain gaps and inconsistencies are inevitably creeping in.

In addition, a number of new laws with powerful implications for planning have been developed, such as the Local Government Transition Act, the National Environmental and Management Act, the Housing Act and the Water Services Act. The regulations passed in terms of the Environmental Conservation Act, have been enacted that superimpose a powerful set of procedural obligations on other spheres of government, especially local government.

Administration of planning law

Local government competence

Planning law spans across all spheres of government namely local, provincial and national, which makes it difficult to isolate aspects thereof, as being inclusive, or any spheres in practice, although certain practical procedures and responsibilities are very clear. All spheres of government participate in decision making for a particular development. All spheres of government are seen as "*distinctive, interrelated and independent* (Department of Constitutional Development, 1996).

The Constitution also recognises and notes that each level of government derives its power from the Constitution but in the case of local government, the powers are subject to definition and regulation by either the national or the provincial governments, which are the competent authorities for enacting such legislation.

The Constitution suggests a new framework for local government to abolish discrepancies in local government structures. The Local Government Transition Act started the process of restructuring aimed at providing revised measures with a view to promoting restructuring of local government.

The Constitution also provides three categories of municipalities and stipulates that national legislation must define the different types of municipalities that may be established within each category. This is elaborated on in the Municipal Structures Act and the Municipal Systems Bill where operational systems of local governments are described.

National and provincial government planning competence

Schedule 4 of the Constitution lists are of concurrent national and provincial jurisdiction and includes regional planning and development under its part A. Schedule five lists areas of exclusive provincial legislative competence and includes provincial planning. It is not helpful, as it is impossible to distinguish differences between regional and provincial planning. It was not clarified in the DFA or the Local Government Municipal Structures Act 117 of 1998.

Local government planning competence

The Constitution stipulates in Part B of Schedule 4 that local government is obliged to promote a safe and healthy environment, ensuring the provision of services to communities in a sustainable manner. It established local government as a distinct and independent sphere of government. A municipality has the right to govern over the local government affairs of its community, subject to national and provincial

legislation as provided for in the Constitution. The Constitution (1996) states that: *"National or provincial government may not compromise or impede a municipality's ability or right to exercise its powers or to perform its functions."*

The Constitution lists municipal planning in Part B of Schedule 4, which sets out matters of concurrent national and provincial jurisdiction. This inclusion of municipal planning in Part B of the schedule provides local government with the mandate to administer development functions.

Respective Authority of National, Provincial and Local Authorities in Planning

All spheres of government exercise planning authority. Local governments enjoy substantially more authority and autonomy in terms of both law making and administration of the laws. This is acknowledged in the new planning laws.

All spheres of government can make planning decisions, provided it is aligned with Constitutional principles (Glazewski, 2001:238). Local government has legislative and executive authority in respect of certain matters but national and provincial legislatures both have competencies in respect of structuring of local government and overseeing its functioning.

3.8 THE POLICY CONTEXT SINCE 1994

Since 1994 a significant number of policy initiatives, driven by various government departments, with focus on development and planning, have emerged and are described by the Development and Planning Commission (1998:9) as follows:

The White Paper on Local Government

Whilst existing government policy provides a great range of inputs for planning and development, the White Paper on Local Government is critical as it places municipalities at the centre of planning for better human settlements. The new municipal planning system is founded on the concepts of "*developmental local government*". It emphasises integrated development planning as a tool for realising the vision of developmental local government.

The Medium Term Expenditure Framework (MTEF)

The MTEF requires the formulation of departmental budgets on a rolling three-year basis. This should permit greater levels of predictability, thereby potentially enhancing the planning system. It also provides an important component of a new planning system which ensures that plans and budgets are linked to one another.

The Urban and Rural Development Frameworks

The Urban Development Framework (1995) published by the Department of Housing, examines the current dilemmas and realities facing South Africa's urban areas. It provides a positive and common vision, albeit a very general level, of desired future for South Africa's urban areas in the year 2020. The Rural Development Framework, published by the Department of Land Affairs, describes how government aims to achieve a rapid and sustainable reduction in absolute rural poverty.

Spatial development initiatives

The Department of Trade and Industry's spatial development initiatives (SDIs) and the proposed industrial development zone (IDZ) policy are important national development initiatives with potentially enormous spatial impacts. However, these are in general poorly co-ordinated with local and provincial plans. Their impact on local and provincial planning is profound, expressing opposing priorities. SDIs are also replaced by the development of Spatial Frameworks.

Other sectoral policy frameworks

Other national departments, such as Housing, Water Affairs, Transport and Environmental Affairs have developed policies that have spatial impacts on planning and development. Some of these have been expressed in new regulations and legislation referred to above and have a significant impact on provincial, but particularly on local-scale planning.

Other policy initiatives of relevance

A variety of other policy initiatives also have relevance in the spatial planning context. For example, policy with respect to land tenure will in the long-term greatly affect the security with which land is allocated, occupied and used in large parts of the country. Funding policies for municipal infrastructure and housing

exercise a strong impact on settlement planning, and are increasingly being brought into the integrated planning system. Transport subsidy policy impacts on people's choices of residential location, and the Department of Transport aims to alter these policies in order to reduce the costs of transport subsidies to the National Treasury. Cabinet has recognised the importance of the spatial implication of various national policies, and has given the Coordination and Implementation Unit in the Executive Deputy President's office (CIU) the task of developing guidelines for more efficient spatial alignment of public programmes and projects.

The Commission is aware of these initiatives, but has not sought to address their implications in detail in the Draft Green Paper. Instead, it has tried to define the elements of improvement in the planning system more generally, with potential implications for the alignment of national policy in the spatial planning field.

3.9 THE INSTITUTIONAL CONTEXT

The institutional context since 1994

Since 1994 important institutional developments have taken place. These changes have had, and will continue to have, an impact on the manner in which the agents of development and planning are defined, and on the nature and scale of their respective functions (Development and Planning Commission, 1998:7).

Local government

While the Constitution allocates powers over planning differentially among the three spheres of government, it also insists on national and provincial action where provincial or municipal spheres cannot discharge their responsibilities respectively. There is some confusion around the level of exclusivity of jurisdiction of municipalities with regard to local planning. A significant problem for local government is the lack of a clear definition of roles and responsibilities of different government actors. This gives rise to uncertainty and poor intergovernmental coordination and communication.

The DFA tribunals

The DFA provides for the establishment of development tribunals at the provincial level throughout the country. They have not yet been established in every province. Provincial tribunals currently exist in Gauteng, KwaZulu-Natal, Mpumalanga and the Northern Province. The DFA tribunal is only required in the provinces that have adopted the DFA. No tribunals have been set up in the Western Cape, as this province

did not adopt any aspects of the DFA. Even in provinces where they do exist, developers, can choose whether or not to use them over and above any other route for approval of a development application. This means their significance has not been as great as it could have been, given the wide powers they potentially have to fast track development by overriding certain laws.

Coordination and implementation Unit (CIU)

The coordination and implementation unit (CIU) in the Office of the Executive Deputy President is a national institution with the potential to influence improved planning through coordination and communication. However, it does not necessarily have the capacity in terms of person power to take on more than a minor coordination role. This responsibility should probably be delegated to the Department of Land Affairs, with the CIU playing more of a management role.

Traditional and tribal leadership

Although the Constitution gives some recognition to the role of traditional leadership, the lack of specificity about the nature and scale of its involvement remains a problem. This has led to significant uncertainty, confusion and even contest over the decision-making powers of these authorities in development processes.

Leaders in traditional and tribal areas have had powers to allocate resources in rural and informal communities and have also played an administrative role in respect of land use matters. Many of them have real capacity problems and their relationship with local government has been problematic. The Municipal Structures Act recognises that traditional leaders have a role to play in municipal governance, and provides for their participation in local government affairs.

A number of broad conclusions can be drawn from the above, namely:

South African settlements in both urban and rural areas are generally inefficient, fragmented, inconvenient and massively wasteful in terms of both publically- and privately controlled resources. For many they are hostile places in which to live, offering few economic, social, cultural, environmental or recreational opportunities. This is the result of the interplay between historical spatial planning policies and practices and the implementation of the ideology of apartheid. Despite this, there are few signs that significant and wide-reaching improvement has been set in place since 1994. To this extent the planning system must be judged to be ineffective.

The spatial planning system in South Africa is currently under severe strain. Some of the problems may be ascribed to teething problems associated with political transition and the establishment of new political dispensation and developmental direction. Structural elements impacting on the planning system, are as follows (Development and Planning Commission, 1998):

- There is no strong relatively standardised planning system in place that is clear but flexible enough to allow for local variation.
- Large parts of settlements nationally are unaffected in a positive way by the benefits of a spatial planning system. They receive little or no protection from the law in land-related matters.
- An enforcing system of co-operative governance between spheres of government is essential for effectiveness, but operationally this is not yet the case.
- The legislative and procedural framework of planning is excessively complex.
- Severe problems of capacity, relating both to official and decision maker, exist at all spheres of government.
- Land development approval procedures are excessively slow and cumbersome, to the extent that the economics of land development is being compromised and the private-sector development community is losing faith and patience with the system. In particular there is no single, simple route for land-related applications.
- The new government instituted in 1994 replaces a top-down approach with a bottom-up approach. The section shows how the ANC (African National Congress) utilise statutory documents, e.g. the Development Facilitation Act and the Land Use Principles and the Integrated Development Plan to execute the new regional policy.

3.10 PLANNING INSTRUMENTS

The Integrated Development Plan Process

Integrated Development Planning (IDP) is a process by which future development is achieved in a waythat is orderly, sensible and manageable. Financial resources for such development are allocated in a disciplined and responsible fashion (Department of Constitutional Development, 2000: 21). The IDP follows an integrated approach and plans to bring transformation, strategic focus by means of leverage, synergy and optimisation of resources (CSIR, 2000:45). It also plans to democratise the planning process by means of accountability and it aims to ensure sustainability and integration. It plans to be part of development, which improves quality of life by means of co - operative governance (CSIR, 2000:48). IDP is done with the future

in mind, it is realistic and it prioritises to determine key development issues. The IDP is a continuous process, which has a long-term vision and is location-specific. The IDP attempts to acknowledge the need to build a new planning system, methodologies and products (CSIR, 2000:55).

The Purpose Of The IDP

The IDP process is summarised and derived from the IDP: User-Friendly Guide developed by the CSIR in 2000. The purpose of the IDP is to redistribute resources, facilitate effective governance, provide a clear ideology for development, ease the burden of limited resources, promote local economic development, and emphasise strategic advantages through strategic spatial development initiatives (Retief & Sandham, 2000:1). The IDP process (Department of Constitutional Development, 2000:21):

- Establishes a specific development programme.
- Sets a budget to enable the programme to be implemented.
- Monitors and evaluates how well it is implemented.
- Allows for an ongoing process of change and improvement to the programme.

The IDP business plan

An IDP process plan or business plan that literally describes the who, what, where, when , how and how much, has been compiled.

The phases of the IDP

The various phases as described by the CSIR (1998) are as follows: the analysis phase, strategic phase, projects phase, integration phase and the approval phase. These phases are followed to plan for various projects, to prioritise and identify the issues.

The analysis phase

During analysis existing information is analysed, community ward meetings are held, as well as meetings with councillors to identify the issues and to prioritise. The duration of this phase is twelve weeks.

The strategy phase

This phase concentrates on how to move forward and how to address the problem(s). Strategies on how to address the problem(s) are identified and formulated. .

The project phase

Projects are practical ideas to make strategies work. Projects are identified according to the strategies that have been listed and project task teams are assigned to draw up terms of reference and a budget.

The integration phase

Integration takes place and this is an arrangement between local authorities with provincial and national government to provide funding for local projects.

The approval phase

The project is approved and implemented according to budgets and time frames.

Approaches to the IDP

There are several approaches to the IDP, namely the event-, integration-, public participation- alignment -, and budget approach.

The outcome of the IDP

The structure plans are the outcome of the IDP. There are 12 plans of which four are compulsory. They are listed as follows:

- Transportation plan necessitated by Department of Transport
- Environmental Management Plan necessitated by the Department of Water Affairs
- Waste Management Plan necessitated by the Department of Water Affairs
- A Water Service Management Plan necessitated by Department of Water Affairs
- A Health Plan necessitated by the Department of Health
- A Local Economic Development Plan

- Safety and Security Plan
- Housing Plan
- Social Welfare Plan
- Infrastructure Provision Plan
- Spatial Framework Plan to guide future development
- Land Use Management Development Plan

Another outcome of the IDP is a five-year budget for local government. The IDP is an instrument used to integrate and align the budgets of the various spheres of government, to prioritise use of limited resources wisely and to ensure sustainability in the future. It is ultimately a thorough planning process. It is said that councils that fail to plan, plan to fail and the IDP provides Councils with powerful planning tools.

3.11 FUTURE SPATIAL PLANNING

Glazewski (2001:242) states that future spatial planning entails a written description accompanied by a graphic depiction of optimal land use of the areas to be developed. The Physical Planning Act of 1967 mandates future spatial planning, for example in places where guide plans were developed.

The Physical Planning Act 15 of 1991 repealed the development of Guide Plans. Some of the Guide Plans are still in place. The 1991 Act refers to policy plans, which include national-, regional development and regional structure plans. It refers to "*urban structure plans*" but this is not included in the definition of the policy plan. The Act stipulates the contents of such plans, but none of the sections providing for the plans, had been involved. The Western Cape, for example, used the power assigned to them to convert guide plans under the Act. "*Structure plans*" are now incorporated in spatial planning.

In the United Kingdom these plans are easily provided for, but in South Africa they were first noted in the 1985 Land Use Planning office of the old Cape Province. The general purpose of this structure plan is to lay down guidelines for future spatial development of the area to which it relates. It includes urban renewal, urban design or the preparation of development in a way that will most effectively promote the order of the area, as well as the general welfare of the community.

Structure plans are not to deprive any right in respect of land. Structure plans are to be viewed as a guideline for future planning and the guidelines are not legally entrenched (Glazewski, 2001:242). The structure plan is aimed at addressing socio-economic-, infrastructure-, environmental and spatial issues in the area concerned, epitomised in the IDP as discussed in the previous section.

Zoning and town planning schemes

Zoning was initiated in the United States of America towards the beginning of the twenty-first century. Zoning is imperative for the "*developed*" section of South Africa. In South Africa there are a number of types of zoning classifications namely industry, commercial development and agriculture, general residential (including duplexes), special residential shopping and service industries, schools and open spaces. The zones are reflected in town planning schemes which each local authority is mandated to draw up in its respective Town Planning Ordinance (Transvaal Town Planning Ordinance – Ordinance 15 of 1986). Glazewski (2001:243) notes that structure plans do not confer rights in land but zoning does.

Environmental assessment

Environmental assessment has emerged in the last few decades. Environmental legislation was developed in isolation from planning law, but attempts are now made to incorporate legislation in both national and provincial planning laws (Retief & Sandham; 2001:2). The DFA (Government Gazette, 2000:1) states that "*an evaluation of the environmental impact of a proposed land development, conducted in accordance with the integrated environmental management guidelines which are from time to time issued or amended by the Department of Environmental Affairs and Tourism, is conducted*".

The DFA necessitates an environmental scooping report, prepared in accordance with the environmental impact assessment guidelines or other requirements which are form time to time issued or amended by the National Department of Environment and Tourism (Government Gazette, 2000). Retief and Sandham (2001:12) investigate possible methods of combining Integrated Environmental Management as part of the IDP process. Five corresponding aspects of the Integrated Environmental Management (IEM) and IDP processes were investigated with a view to implement IEM as part of the IDP process. These aspects include the principles of IEM, legislative requirements, IEM procedures, participation requirements and sustainable development instruments. Many overlaps were identified. The following was concluded:

- IDP and IEM principles show considerable correspondence. The principles are adequately incorporated in the IDP and do not need further attention apart from raising awareness of the environmental issues amongst role-players during the formulation of community principles, as part of the Development Framework Phase of the IDP process.
- The legislative requirements demonstrate a substantially different approach between IEM and IDP. The IDP process is dominated by local level planning, whereas the IEM process is dominated by national and

provincial level planning. The onus of resolving the dilemma is on the local authority that will need to act creatively to avoid neglect of environmental issues in drafting its IDP. As a first step this could be achieved optimally by including environmental data in the Spatial Frameworks, in order to determine environmental sensitivity zones.

- The procedures for IEM and IDP present a considerable degree of integration possibilities. The proposed IEM procedures for existing and new activities and for land use zoning plans, are well-suited for integration into the various phases of the IDP process, to ensure sustainable development practice.
- Participation requirements show a degree of correspondence both in terms of these being mandatory and desirable. Moreover, the existing IDP process provides ideal vehicles for public participation to function on an ongoing basis. The IDP structure also allows for the creation of an IEM Task Team to maintain correct level of inputs on environmental issues. It can be concluded that there are several opportunities for incorporating IEM with IDP.

If South Africa aims at maximising development potential with the limited resources available, the integration of developmental processes is imperative (Retief & Sandham, 2001:12).

3.12 NATIONAL PLANNING LEGISLATION

The Development Facilitation Act (Act 67 of 1995)

The Development Facilitation Act makes provision for extraordinary measures to facilitate and speed up the implementation of reconstruction and development programmes and projects in relation to land, and in so doing, lays down general principles governing land development throughout the republic (South Africa, 2001:102). The act introduces general principles for rural development on a nationally uniform basis, to be amplified over time by the publication of further principles and policies at national, provincial and local government levels (South Africa, 2001: 102).

As the implementation of the RDP became bogged in bureaucratic delays, it was deemed necessary to provide a "fast track" for development. This arose from two concerns (Chipkin, 1997:1). Business and civics complained that projects became caught-up in lengthy administrative procedures (Chipkin, 1997:1). The legal profession worried, on the other hand, that a myriad of laws and regulations embroiled developers in complicated and sometimes parallel legal processes (Chipkin, 1997:1). As a result, the DFA was promulgated in October 1995. If the constitution only gestured towards political criteria for a developmental role, the DFA was much more explicit and comprehensive (Chipkin, 1997:1).

Section 2 of the DFA listed the 9 principles. It requires development initiatives to promote integration with respect to social, economic, institutional, and physical aspects of development, promote integrated development of rural and urban areas in support of each other; promote the location of residential and employment opportunities in close proximity to, or integrated with each other, optimal use of the existing resources; mixed land use; discourage urban sprawl; contribute to more compact cities and towns; contribute to the correction of the historically distorted spatial patterns of South African cities and towns and the better use of oversupplied infrastructure (Chipkin, 1997:1). For these principles to be realised, chapter two of the act provided for a development and planning commission in each province. Amongst others, these bodies have policy-making powers with respect to the following:

- Planning frameworks, including the scope of planning, the levels of planning and authority.
- Policy and legislation relating to measures of identifying assembled land and releasing development land for the benefit of low income and disadvantaged communities.
- Policy and legislation relating to land development and land-use control.

A planning and development commission is responsible for setting the overall development framework in each respective province (Chipkin, 1997: 1). Moreover, the act sets out measures to monitor and ensure that these policies are implemented. This is the space it gives to a local government policy-making role (Chipkin, 1997: 1).

This development and planning commission is therefore established that it may act on its own accord, and advise the minister, responsible for the implementation of the Reconstruction and Development Programme, on any matter falling within the scope of its terms of reference (South Africa, 2001:102).

Administrative, non-political tribunals are established in each of the provinces to implement the principles and policies (South Africa, 2001:102). Provision is made for the introduction of land development procedures in both the urban and agricultural contexts, which will operate parallel to and as alternatives for existing land development procedures, countrywide (South Africa, 2001:102).

Other features of the Act include the incorporation of various measures potentially accelerating the pace of land development, the creation of a mechanism for the early delivery of title and the establishment of national and provincial commissions with the task of making recommendations to government at provincial and national levels regarding future reforms to land development administration, policy and law (South Africa, 2001: 102). Various ministries are directly responsible for the administration of the seven chapters of the Act as summarised below:

- The minister responsible for the implementation of the reconstruction and development programme (now the deputy president)
- The minister of land affairs
- The minister of agriculture
- The minister of housing

At present the Departments of Agriculture and Land Affairs are separate departments, under one ministry, known as the Minister of Agricultural and Land Affairs (South Africa, 2001:102).

General principles in Chapter One of the Development and Facilitation Act, have the heading "*General principles for land development and conflict resolution*", thus providing general principles in the form of legislation (South Africa, 2001:102). It sets out two kinds of general principles, namely principles for decision making and conflict resolution. The first kind consists of very general guiding principles, binding both the executive and legislative arms of government (South Africa, 2001:2001).

The second kind guides decisions of the development tribunals and the content of future legislation, dealing with conflicts regarding land and land development (South Africa, 2001:201).

The general principles apply both to the actions of state, and to those of local government bodies. They serve to guide the administration of any physical plan, transport plan, guide plan, structure plan, zoning scheme or any plan or scheme administered by any competent authority in terms of any law. The entire range of land-use control systems and instruments of the country are affected, irrespective of whether or not they are administered under the Act or in terms of local government zoning schemes or provincial ordinances (South Africa, 2001:202) .The general principles serve as guidelines by reference to which any competent authority must exercise any decision in terms of the Act.

No discretion by any competent authority may therefore be exercised without reference to the general principles. The principles also serve as guidelines for the administration of Chapters Two to Six of the Act (South Africa, 2001:2). In section four, the Act details interim planning measures. The role envisaged for municipalities is especially noticeable in this section. In this regard section 17 states that "*interim performance criteria shall, in the first instance, be set in local government areas of jurisdiction, by the relevant local government bodies*" (DFA, section 17).

This criteria, the DFA suggests, must be set with reference to *inter alia*:

- Tangible objectives relating to urban and rural growth and form, including objectives to integrate low - income areas, environmental considerations, transportation planning, bulk infrastructure, overall densities, coordination of other authorities and land use control objectives.
- Development strategies that include ways of facilitating the optimal involvement of sectors, funding objectives and administrative structures.
- Quantifiable development targets, including number of units, forms of delivery, rate of build-up over five years (DFA, 1995:3).

The definition of land development objectives in the DFA thus mandates local councils to develop policies for service delivery, spatial planning and social and economic development. It obliges them to work out, in detail, the way in which they will execute their functions in a framework where the political criteria for land development are determined nationally in the Constitution, and provincially, in development and planning commissions.

In other words, the constitution and the DFA enable municipalities to determine appropriate ways of executing their developmental mandate. At the same time it sets very real limits to that role. Local governments may not select the political criteria that inform such a function (Chipkin, 1997:2). They are obliged to perform their developmental tasks in a way that prioritises basic needs. This is the sense in which policy-making applies to the notion of metropolitan integrated development planning as discussed in the Local Government Transition Act (Chipkin, 1997:2).

Analysis of sectors of DFA that play a role in township establishment

The act sets out the following objectives:

- To introduce extraordinary measures to facilitate the implementation of Reconstruction and Development programmes and projects in relation to land, and in so doing, general principles governing land development throughout the Republic (Moodliar; 1997:1).
- To provide for the establishment of a development and planning commission for the purpose of advising the government on policy and laws concerning land development at national and provincial levels (Moodliar, 1997:1).
- To provide for the establishment in the provinces of development tribunals which have the power to make decisions and resolve conflicts in respect of land development projects.

- To facilitate the formulation and implementation of land development objectives and performance management systems for the various spheres of government (Moodliar; 1997:1).
- To provide for nationally uniform procedures for the subdivision and development of land in urban and rural areas, so as to promote the speedy provision and development of land in residential, small-scale farming or other needs and uses (Moodliar; 1997:1).
- To promote security of tenure while ensuring that end-user finance in the form of subsidies and loans becomes available as early as possible during the land development process; and to provide for matters connected therewith (Moodliar, 1997:1).

Arrangement of the Act

The DFA is arranged into the following sections, namely definitions, general principles for land development and conflict resolution, development and planning commissions, development tribunals, land development objectives, land development procedures excluding procedures relating to the development of small-scale farming, land tenure matters and general provisions (Moodliar; 1997:1).

General principles for land developments and conflict resolution

The general principles for land development are set out in section 3 and stipulate that the policy administrative practice and laws should include the following:

- Provide for urban and rural development and the facilitation of settlements (formal, informal, existing and new).
- Discourage the illegal occupation of land but should recognise the informal land development process.
- Promote efficient and integrated land development, should encourage and optimise the contributions of all sectors of the economy to land development.
- Encourage sustainable development at the required scale.
- Promote speedy land development.
- Stimulate the effective functioning of a land development market based on open competition between suppliers of goods and services, to enable members of communities affected by land development to actively participate in the process of land development. The skills and capacities of disadvantaged persons involved in land development should be developed.
- Promote the fact that laws, procedures and administrative practice relating to land should be accessible to provide guidance and information and give content to constitutional rights.

- Promote that each proposed land development area be judged on its own merits and that land development should result in security of tenure. The interests of the various sectors involved in land development, should be coordinated by a competent authority, to minimise conflicting demands on scarce resources (Moodliar, 1997:2).

The general principles for decision making and conflict resolution are set out in section 4 of the DFA. This section provides for decisions to be consistent with the general principles for land development. Provision is made for procedural fairness with regard to decision making, and for the review of decisions in the high court (Moodliar, 1997: 2).

Development and planning commission

The DFA establishes a development and planning commission (Moodliar, 1997: 3). The functions and powers of the commission are set out in section 6. The commission will consist of up to twenty-four members composed of nine persons nominated by the premiers (one nominated by each premier); up to three persons nominated by the property-owning sector; up to three persons nominated by community organisations and up to nine experts in land development (Moodliar, 1997: 3).

The DFA also provides for the establishment or recognition of provincial commissions by the premier of the province. The development and planning commission advises the minister on policy and laws relating to the appropriate scope of planning; including the relationship between spatial and non-spatial planning; the appropriate levels of government at which planning should be carried out; the kind of planning to be done at each level and the coordination between different departments, levels of government and other bodies responsible for planning. The commission also advises the minister on appropriate documentation or instruments to be used for planning at each level of government; the appropriate emphasis that should be placed upon development, for the benefit of the low-income and historically disadvantaged communities (South Africa, 2001:104).

The commission also advises the minister on the appropriate methods of monitoring compliance with the general principles and the setting and achievement of objectives for land development by national, provincial and local government; the appropriate levels and methods of public participation in planning at different levels of government as well as the integration of environmental conservation with planning at different levels of government (South Africa, 2001: 104).

The commission also advises the minister on policy and laws relating to measures to identify, assemble and release land for land development, particularly for the benefit of low income and historically disadvantaged communities. Advice is also provided to the minister, in terms of the following:

- Including measures to provide incentives to the owners of land to release land for land development, Measures to discourage the withholding of land, which is suitable for land development.
- Setting of objectives for land development by national, provincial and local government (South Africa, 2001:104).

The minister is also advised on policy and laws relating to land development, land development procedures, environmental sustainability, heritage conservation and establishment and administration of appropriate land use control systems for land development in both urban and rural areas; nationally uniform policy and laws relating to the cadastral tenure types, land registration procedures, alternative forms of land tenure and measures to facilitate and speed up the disbursements of end-user finance (South Africa, 2001:104).

The commission also advises the minister on policy and laws relating to engineering infrastructure and services and related services to be provided by public authorities. Financial and fiscal policy and laws relating to land development which might have an effect on the relationship between the different government bodies and any other matter specified by the minister, by notice in the Government Gazette, will also be developed after the Commission has advised the minister (South Africa, 2001:104).

Development tribunals

The Act establishes a development tribunal for every province (Moodliar, 1997; 2). The tribunal will consist of a chairperson, a deputy-chairperson and other members appointed by the premier, with the approval of the provincial legislature. Where practicable, half the members of the tribunal must be appointed from appropriate officers in the service of the provincial administration and local government bodies in the province, and the other half from outside such service (Moodliar, 1997: 3). The powers and functions of the development tribunal are set out in detail in the DFA.

A development appeal tribunal will be established or recognised by the premier for each province (Moodliar, 1997: 3). The functions of a tribunal are to deal with any other matterit is required to deal with in terms of the Act, and to deal generally with all matters necessary or incidental to the performance of its functions in terms of, or under the Act (South Africa, 2001:105).

Land development objectives

Section 28 provides for the setting of land development objectives relating to land development services, including public transport and water, health and education facilities, urban and rural growth and form as well as development strategies. These objectives are to be set by the local government body with the approval of the MEC (South Africa, 2001:104; Moodliar, 1997:3). A tribunal or any other competent authority shall not approve a land development application, which is inconsistent with any land development objective (Moodliar, 1997:3; South Africa, 2001:106).

Land development procedures

The DFA puts forward who may make a land development application and details the manner in which such applications should be made. The consideration of applications by a land development tribunal is regulated in sections 33 and 51 (Moodliar, 1997:3).

Land tenure matters

This section regulated registration arrangements involving surveyors and conveyancers. It also provides a form of tenure to be known as initial ownership and for the conversion of such tenure into ownership (Moodliar, 1997:3). Informal tenure may also be converted into ownership. Provision is also made for special deeds of transfer to be prepared and lodged for the registration of initial ownership under the act (Moodliar, 1997:3).

The following shows the procedure for application. An owner of land (including the state or a local government body), an agent or independent contractor, a person acting with the consent of the owner or on behalf of the owner of land in any other capacity or a person to whom land has been made available by the state or local government body, in terms of a land availability agreement, may apply for establishment of a land development area (South Africa, 2001:107).

An application must be accompanied by the prescribed documents and information is lodged with a designated officer in the prescribed manner. Notice of a land development application must be given to the prescribed persons or bodies. A tribunal may approve or refuse a land development application (South Africa, 2001:107). In approving a land development application, a tribunal may impose any condition of establishment relating to the matters referred to by section 33 (2) of the DFA.

A tribunal may, with the consent of the holder or beneficiary of a servitude or restrictive condition, impose a condition of establishment in respect of any servitude registered against the title of land and any other restrictive condition registered or otherwise operative, if it is of the opinion that the servitude or condition is inconsistent with, or undesirable in relation to the use, occupation, development or subdivision of the land (South Africa, 2001:107). A person who has suffered damage as a result of the removal may claim compensation from the person who has (???) the owner of the land (South Africa, 2001:107).

After a land development applicant has taken steps to establish a land development area, no person may enter into any contract for the sale of the erf (site?), the erection of a dwelling on such erf, the granting of an option to purchase or sell such an erf, or to otherwise acquire such an erf, unless the application has been approved or the prescribed steps had been taken. After approval of his application, an applicant lodges the prescribed documents with the surveyor-general and the registrar of deeds (South Africa, 2001:107).

If in terms of a condition of establishment, it is unnecessary for building plans to be lodged, then no restriction on the erection of buildings and the settlement of persons exist. The act appropriately makes provision for applications for the establishment of a land development area in terms of a more likely agricultural context, without impacting on large-scale commercial farming activities. These applications are more relevant in circumstances where communities have succeeded with claims for restitution of land or have become beneficiaries of a state-assisted programme of a small-scale farming settlement (South Africa, 2001:107).

An application must be brought in accordance with a prescribed form. Such a land development applicant must give notice of his application to the prescribed bodies or persons, calling for comments in writing or appearance in person, or through a representative before a tribunal, on a date specified in the notice. After submission of an application to the tribunal by the designated officer, the tribunal approves or refuses the application (South Africa, 2001:107).

In approving an application in terms of Chapter Seven of the Act, any condition of establishment may be imposed relating to the matters in section 51 (2). A land development application may be amended, any condition of establishment amended or deleted, and a land development area may be divided into two or more land development areas (South Africa, 2001:107).

An applicant intending to subdivide land in terms of land development contemplated in the Act, must draw up a settlement plan indicating the intended subdivision, which forms part of the application. After approval

of the application for land development the applicant submits the prescribed documents with the surveyor - general and the registrar of deeds (South Africa, 2001:107).

Any land development applicant referred to in Chapter Five may apply to a tribunal for the approval of registration arrangement (South Africa, 2001:107).

At any time after an application has been granted, the professional land-surveyor may issue a certificate that the beacons were placed in accordance with the layout plan and that he is of the opinion that there is no substantial risk that a general plan will not be approved accordingly (South Africa, 2001:107).

As soon as the necessary documents have been filed with the registrar of deeds and the entries in his records have been made, a form of title to be known as initial ownership may be registered in a deeds registry (South Africa, 2001:107). Land, in respect of which initial ownership has been transferred, may not, until the initial ownership has been converted into ownership, in any way be alienated or encumbered (South Africa, 2001:107).

Whenever land development takes the form of upgrading an existing settlement, informal or unregistered tenure arrangements existing among occupants of the settlement may be converted into ownership (South Africa, 2001:107).

The Development Facilitation Act (DFA) can be summarised as follows:

- The Act is aimed at fast-tracking development of the Reconstruction and Development Programme.
- It has to contribute to the execution of labour guidelines and development. It has to contribute to the development of the Land Development Objectives.
- It has to contribute to the allocation of subsidies for the process of land use development (Development Facilitation Act, 1995).

Land Development Objectives

The Land Development Objectives developed out of the DFA. In the following section the principles of land use development are summarised:

The general principles put forward in the DFA provide guidelines with which the Land Use Development Objectives (LDOs) are to be aligned. Land Use Development must have relevance for the topics discussed in article 28 (1) of the Act. Land development objectives must take the Integrated Development Plan, as put forward in article 10 D (4)(b) of the Municipal Transition Act, 1993 (Act 209 of 1993) of the local authority, into consideration.

The major objectives of the land development objectives include:

- Improvement in service delivery.
- Improvement of urban and rural growth with regard to:
    1. Integration of low-income groups with the area as a whole
    2. Sustainable utlisation of environmental resources
    3. Planning of transport and traffic
    4. Integrating land use development with surrounding areas
    5. Land Use Development Control (DFA, 1995:27-28)

Development of a land use work plan

Developing a land use development work plan is described by the Provincial Gazette (1997:5) to be a detailed procedure that has to be followed with setting up a work plan. The plan must

- provide details with regard to the process that will be followed within a certain period to allow for evaluation of the land development objectives;
- provide details on how the local authority is going to encourage public participation;
- provide information on how the LDOs will be coordinated;
- provide information on which resources are available; and
- evaluate the available capacity with the development of LDOS in terms of the Work Plan.

Approval of a work plan

The approval of the work plan will be done by the MEC after submission. The work plan will be handed back to the local authority with the MEC's comments (Provincial Gazette, 1997:5). If it has not been approved, the plan should be accompanied by reasons for refusal. If the land use development plan is approved, notice will be provided in the Provincial Gazette, an English newspaper, or any other official language (Provincial Gazette, 1997:5).

The Land Use Development Plan provides a planning mechanism that has to be reviewed every five years. It shows that it is a continuous process that has to provide feedback to the public on a regular basis.

Public participation

Public participation became a catchphrase after 1994. Public participation is seen as a democratic right of the community (Kemp, 1997:18). Public participation is also a method utilised to ensure consensus among different spheres of government, the public and all relevant stakeholders. Local authorities are also compelled to provide a detailed public participation framework in the land use development plan. The rationale behind this is to ensure that communities are involved in decision making with regard to LDOs.

Arnstein was the first person who investigated the phenomenon of public participation scientifically. Public participation is seen as public power or community control. Participation without the devolution of power is a frustrating process that will lead to a status quo situation. Arnstein (1969:216) describes public participation, as follows: *"Citizen participation is a categorical term of citizen power."* A practical description of public participation includes an ongoing communication process between the public and the professional teams. There must be a contract or some form of agreement between the two groups that the decisions made will not be changed and will be implemented (Sowman, 1994:21).

The public participation process can be divided into eight levels. Arnstein describes it in the form of a ladder with two extremes, where the public has total control or no control. Any model has shortcomings and the danger of public participation is described as follows:

Public participation had to be implemented to execute the land development objectives and the objectives of the DFA.

Local Government Transition Act 209 Of 1993 (LGTA)

Glazewski (2001: 251) states that the LGTA provides a mechanism for restructuring local government and transformation is proposed in three phases, namely:

- A pre-interim phase, during which negotiating forums are established.
- Appointment of interim Councils, to execute functions of local government.
- An interim phase, which commenced in 1994, when the first democratic local government election took place.
- A " final phase", which is to be initiated and regulated by new legislations which have not come into effect. This would take effect after implementation of the Municipal Structures Act.

Part 6 of the Act, applicable during the interim phase, provides for important aspects of the IDP namely to consolidate Land Development Principles and the LDOs, and give them practical reality. This is done by providing local government (metropolitan councils as well as metropolitan local councils) with a mandate to formulate the IDPs for their region incorporating land use-, transport-, infrastructure planning and the promotion of integrated economic development. Local authorities are also obliged to supply water, sewage, waste disposal facilities and environmental management (Glazewski, 2001:251).

Local Government: Municipal Structures Act 117 of 1998 (LGMSA)

The LGMSA expands on Chapter 7 of the Constitution, which provides information on local government. It sets out objectives of local government, which include the objective of promoting safe and healthy environments for all. The Constitution provides for three types of municipalities as put forward in the LGMSA:

A category A municipality is defined as a municipality that has exclusive municipal executive and legislative authority in its area. Category B refers to a municipality that shares municipal executive and legislative authority in its area with a Category C municipality within whose area it falls. A Category C Iisdefined as a

municipality that has municipal executive and legislative authority in an area that includes more than one municipality.

The LGMSA builds on this constitutional imperative by providing for categories and types of municipalities, by establishing municipalities and by providing for municipal councils, and by setting out various formalities in this regard.

Green Paper On Development And Planning

The Green Paper on Development and Planning follows a normative approach to planning. It states that planning should be guided by principles put forward in Chapter One of the DFA. Geyer (1999:1) states that one of the important issues the Green Paper deals with is the role which the different spheres of government should play in guiding spatial development in South Africa, especially national and regional government. The maximum devolution of executive power in development planning to local levels of government, in which the national and provincial government only play a monitoring role in terms of the DFA guidelines, is an acceptable principle (Geyer, 1991:1)

Monitoring the degree to which the lower levels of government adhere to DFA principles alone, may not be enough to ensure the optimal utilisation of South Africa's financial, natural and human resources (Geyer, 1999:1). Local politicians and planners may adhere to the DFA principles to understand the underlying national or regional spatial economic forces, affecting the development of their particular town, city or local area. Geyer (1999:2) states that an example would be if a particular town experiences a huge influx of new migrants in a time period of four years, which in terms of local perception may warrant a large investment in social overhead capital (roads, electricity, schools), but in terms of the longer term migration trends, the influx of migrants to a such a small town may only have been a first phase in stepwise migration after the abolition of the apartheid legislation (Geyer, 1999:1). Many newcomers may want to leave the particular town again to find more suitable locations for longer-term settlement over the short-term. This is something national and provincial planners should be able to comprehend better, as a result of their broader planning focus (Geyer, 1999:1).

Very little scope is given in the Green Paper concerning national and provincial structural guidelines. Geyer (1999:1) states that the Green Paper proposes that the door be opened for the identification of, and eventually a National Integrated Development Plan. The national and provincial LDOs and IDPs, could in turn assist local government to reconsider elements of their present LDOs and IDPs in terms of overall spatial economic and social priorities set by provincial and national government (Geyer, 1999:1).

The LDOs and IDPs should address the national and provincial, social and economic issues that will assist local government to better comprehend underlying forces that are affecting their areas. National, as well as provincial LDOs and IDPs could serve as instruments to coordinate overlapping spatial development decision making between government departments, and this has been clearly put forward in the Green Paper (Geyer, 1999:1). The aim of national and provincial LDOs and IDPs should be to guide development at the local level, not to limit it. Certain limits might have to be imposed on certain local authorities in the national interest.

Geyer (1999:1) states that the lateral coordination is also an issue discussed in the Green Paper. Mention is made of vertical coordination at the local government level (Geyer, 1999:2). The absence of lateral coordination between an urban local authority and its local district counterpart leads to many planning mishaps and problems at local level. An example of this is where many commercial and industrial entrepreneurs tend to settle in peri-urban areas adjacent to, but outside the areas of jurisdiction of urban local government to avoid tax, and because settlement costs are lower (Geyer, 1999:2).

More often than not such industrial and commercial enterprises are an environmental disaster, but cannot be effectively controlled, as District Council invariably does not have the means to do the necessary planning control. Neither can the urban local authority take action since the area does not fall within its area of jurisdiction. The provincial authorities do not have the power to take the necessary action. These issues, together with many other planning issues, are of mutual interest to urban and district local governments.

More explicit guidelines should be provided in the Green Paper regarding the establishment of lateral coordination mechanisms between urban local governments and their local district counterparts (Geyer, 1992:2).

The Green Paper should have mentioned areas in which vertical and lateral coordination is necessary between decision-making bodies in spatial planning matters (Geyer, 1999:2). This includes coordination in terms of location, time, and levels of authority, levels of ability or capacity. Not all of these fundamental elements of coordination are always born in mind in spatial planning (Geyer, 1999:2).

The Green Paper emphasises the role of the politician in policy formulation. The important role which the planner should be playing in the process is totally negated. Politicians already undermine the role of planners in urban management and this statement will re-enforce this position amongst local politicians (Geyer, 1999:2). Planning policy formulation and urban and regional development management are processes in

which both the planner and the politician should play an important role. If the planning process were to be over-politicised, more problems would be created than solved in the long run (Geyer, 1999:2).

The more developed the environment, the greater the realisation of local politicians of the importance of planners in the development management process, and vice versa. This is a shortcoming in the Green Paper. The importance of planners in the spatial management process beyond the issue of mere coordination can be stressed much more in this paper by merely changing the text (Geyer, 1999:2).

Conclusions that can therefore be drawn are that the Green Paper does not deal with the importance of planners concerning spatial management and regional planning. It does not refer much too vertical coordination between the spheres of government as well as where interaction between vertical and lateral coordination is a necessity. The devolution of power to local government forces a local government to take responsibility for its area but incapacitates national and provincial government to guide spatial development.

White Paper On Spatial Planning And Land Use Management (March 2001) &Land Use Bill

Introduction and objectives

The main objective of the Draft White Paper on Spatial Planning and Land Use Management (DWPSPLUM) is stipulated in the title namely wise land use. The executive summary shows that South Africa's resources are limited, and that one should prioritise to ensure the economic, social and environmental sustainability in the country (Department of Agriculture and Land Affairs, 2001:6).

This White Paper proposes to introduce new legislation to parliament that provides a uniform framework, which would be efficient and effective for spatial planning. The Paper endeavours to develop integrated areas to resolve the separation brought about by the "*Apartheid*" era and to obtain a national objective of wise land use. The White Paper rationalises existing laws into a national system that will be applied throughout the country in each province.

Previous contributions

The White Paper is compiled from work done by the Development and Planning commission of 1997, the Green Paper on Development and Planning, the concept of a Municipal Integrated Development Plan (IDP) as described in the Municipal Systems Act 23 of 2000 and the DFA 67 of 1995 (Department of Agriculture and Land Affairs, 2001:7).

Principles

The principles guide planning to obtain objectives namely wise land use and one national system for spatial planning that would include sustainability, equality and integration, fair and good governance. The principles are applied in all the spheres of government, state organs and other agencies, i.e. an integrated approach is used. The principles guide the preparation of IDPs, especially the Spatial Development Framework component of the IDPs. It thus guides anybody with decision-making powers. This basically means principles are used to reach objectives but are also used as criteria for decision making (Department of Agriculture and Land Affairs, 2001:14).

The purpose of the proposed legislation

Section 3 of the White Paper shows the role and purpose of local spatial planning, land use management and land development. Land use management includes the regulation of land-use changes, the regulation of "*greenfields*" land development, the regulation of the subdivision and consolidation of land parcels, the regulation of the regularisation and upgrading process of informal settlements, neglected city centres and other areas requiring such processes, the facilitation of land development through public-private partnership and community involvement. These two underlying rationales provide resistance to uncontrolled development and the wish to promote desirable development.

The Department of Agriculture and Land Affairs (2001:12) state that a conclusion can therefore be drawn that the role and purpose of spatial planning and land use management indicates the directions of growth, the major movement routes, integration of rural and urban areas, prioritising to sustain the natural and built environment, the encouragement of certain types of land use in certain areas and an increase or decrease, in the intensity of development in certain areas.

The integrating aim of spatial planning

Spatial planning includes the following terms namely urban and regional planning, land-use planning, physical planning and development planning. The key developments of spatial planning are land-use management and land development functions. It is therefore integrated, flexible and strategic and addresses various spatial issues on various aspects (Department of Agriculture and Land Affairs, 2001:19).

Spatial planning is done by means of implementation of social and economic programmes (macro- and micro scale), capital expenditure programmes and by land use management.

This White Paper necessitates prioritisation of the objectives by all the spheres of government to ensure the survival of South Africa. Planning takes place according to principles mentioned above, to ensure positive outcomes. Spatial planning acts as a control mechanism to strike a balance between ownership of land and maximum output from use of land. Spatial planning also stresses integration and is geared towards helping previously disadvantaged groups from the "*Apartheid*" era. Spatial planning aims to exploit the potential of land for tourism, to protect land with natural resources, since the country's inhabitants are dependent on these resources, and to promote the development of agricultural areas, which in turn also contributes to local economic development (Department of Agriculture and Land Affairs, 2001:6).

A single procedure

The Department of Agriculture and Land Affairs (2001:21) states that the White Paper aims at setting a single procedure for an application, which will take the place of the different procedures currently linked to the different Acts. It states that it will provide for speedy, yet effective consideration of application. Alignment of procedures will take place. This will be an amazing achievement as waiting for applications and costs are often a problem. All will thus welcome one procedure.

Dynamic development

Municipalities are obliged to actively participate in development of land. Implementation is dependent on the development of mechanisms that will encourage land development. This leads to a change in policy. Local Councils often follow a top-down-approach. The implementation of the White Paper will lead to the formation of much more public-private partnerships and a good relationships between community based - organisations and the public.

The fact that municipalities are obliged to actively participate in development makes municipalities responsible for economic development in their local community, and this will ultimately improve the quality of life as well as the socio-economic circumstances in the community. Municipal budgets have to make provision for development projects (Department of Agriculture and Land Affairs, 2001:19).

Integration and alignment of the different spheres of government.

The White Paper will be a national law, and a significant change is that of a "*land use regulator*", which refers to a body which can be an organ in all spheres of government, and will align the spheres of government and simplify planning processes (Department of Agriculture and Land Affairs, 2001:27).

The shape of the planning system

The White Paper states: "*Efficient and effective planning requires and integrated and co-ordinated effort from the different spheres of government. This also suggests that planning should be a consensus building exercise about what should be done and how. This necessitates a clear definition of the roles of government, so as to avoid duplication, conflict and wastage of resources.*"

Two principles are used to determine the role of government, namely incrementalism and minimalism. Incrementalism assists municipalities in practising proper planning functions by means of proper planning instruments. Minimalism ensures that government directs its resources towards achieving key actions that have a large impact.

Defining the role of the different spheres

The national framework proposed by the White Paper, will be established by national government responsible for developing a coherent, national framework and intervening only in extraordinary situations. This increases the authority of local government (Department of Agriculture and Land Affairs, 2001:19).

Enabling legislation

National policy is developed, as well as norms and standards. It sets a framework, which is easily comprehensible and will bring uniformity to all the different legislation on land-use that currently exists (Department of Agriculture and Land Affairs, 2001:19).

Land use principles and norms on policy

The fact that it is stated in the White Paper (p.29) that planning should be flexible to adhere to changing circumstances and to make best use of resources and opportunities and minimise possible threats, is welcomed. In the past planning processes were rigid (Department of Agriculture and Land Affairs, 2001:12-16).

Repealment of legislation

Legislation that will be repealed includes the following:

- The DFA (Act 67 of 1995)
- The Physical Planning Act (1967)
- The Physical Planning Act, 1991 (Act 125 of 1991)
- The Less Formal Township Establishment Act
- Removal of Restrictions Act, 1967 (Act 84 of 1967)
- Provincial ordinances

This is welcomed seeing that there will be one law and procedure.

Advantages of the White Paper

- A process for permission to change land use rights will be a uniform procedure.
- Development will be efficient and will be part of national budget.
- Procedures from different legislation will be aligned for land use approval with the Environment Conservation Act for Environmental Impact Assessments.
- More authority is given to local authority.
- Performance can be measured according to principles.

The proposals put forward in the White Paper will make a significant contribution to development, which will in turn lead to local economic development and a dynamic environment, where the relationship between the municipality and the public will be strengthened to contribute to urban sustainability.

3.13 TOWARDS A FRAMEWORK FOR URBAN SUSTAINABILITY

The State of the Cities Report compiled in 2004 developed an urban development framework for urban sustainability based on an urban vision of creating a city that is inclusive, productive, sustainable and well governed. The report was compiled from data collected for nine major cities in South Africa. Chapter One describes the importance of people as being at the centre of urban sustainability as shown in the figure 3-1.

The various components of an inclusive, productive, sustainable and well-governed city will be expanded upon in the following chapters.

Urban sustainability relates directly to quality of life of people living in urban areas, as it is mandated to promote a healthy, clean and safe environment for all. Quality of life analysis is complex and involves measuring the level of one's satisfaction with social life, family life and personal life. It allows for an indication of what one's general quality of life is, as well as which factors influence an individual's quality of life most. Quality of life is to be measured according to specific indicators to ensure urban sustainability.

The Massachusetts Institute of Technology (MIT) defined quality of life (2002) as: *"The ability to integrate a fulfilling and productive work life with a fulfilling personal and family life."* This implies that a range of indicators needs to be examined in order to gain an accurate measure of quality of life. Quality of life is directly related to urban sustainability as the individual is at the core of development.

The most important variables examined by quality of life surveys include the following:

- Satisfaction with housing and service provision
- Community safety and health
- Education levels
- Employment
- Personal economic status
- Community attachment

Having a formal dwelling, with good access to basic services indicates a high quality of life. Residents who feel safe in their community, have good access to health care facilities, have a high earning potential (because of high education levels), have a secure, high-skilled job and a sense of belonging and attachment to their community, are deemed to have a good quality of life. Internationally countries are increasingly becoming concerned with measuring and monitoring the quality of life of their citizens, and are conducting surveys in order to determine their satisfaction levels. Most of the work serves to guide policy makers to estimate and assess the effectiveness of their public service provision (MIT, 2002).

Major international surveys on quality of life include the Gallup International End of Year Poll, the Pew Global Attitudes project, Mercer Human Resource surveys, the Master Index (run by MasterCard international). These surveys have done research on quality of life at an international level. Their aim in

doing such work is to compare how different countries fare in terms of quality of life, and what countries can learn from each other. However, surveys have also been administered at regional and national levels, such as work undertaken by the European Union on monitoring the quality of life of European countries (2003) and New Zealand's Big Cities Survey, which looked at the quality of life nationally in New Zealand's eight largest cities.

The New Zealand survey has been conducted twice, in 2001 and 2003 and has yielded very promising results. It has led to raising the profile of urban issues, contributing to local authority planning and outcome measurement, and providing a framework for monitoring quality of life, locally and nationally. What is important to note about these various surveys, is the manner in which they define quality of life, and therefore the different social indicators they use in order to measure it.

The European Union views quality of life as referring to the overall level of well-being of individuals in a society. A central element in improving quality of life deals with enabling people to attain their own goals. This is interesting, since it not only implies that there is a need to improve people's material living conditions, but also, their access to opportunities and resources, at a household and an individual level (Fahey, 2003:1).

This speaks of the present and the future, simultaneously. Social indicators used in their study, include:

- Employment (rate of, gender pay-gap, age)
- Social cohesion (distribution of income, poverty rate, number of early school leavers, number of those being unemployed for long periods of time)
- The environment (access to and quality of municipal waste, public transport, intensity of energy-use)
- General economic background

In contrast, the New Zealand study seems to focus more on the impact of growth and urbanisation on its residents' quality of life. The Big Cities survey is designed in such a way that it facilitates the identification of areas in need of improvement. It incorporated three phases. In the first, indicators were identified to monitor social, economic, environmental and cultural conditions. A final indicator set was then used to conduct the surveys and to write up a report, in stage two. The final stage takes the form of an advocacy programme, which focuses on the issues raised in the final report, and proposes points for action. The social indicators they used in their study included the following:

- People (population growth, ethnicity, age, families, households)

- Knowledge and skills (qualifications, community education)
- Economic standard of living (income, costs, household expenditure, social deprivation)
- Economic development (growth, employment, number of businesses, retail sales, building consents, tourism)
- Housing (tenure, costs & affordability, crowding, government housing provision, urban housing intensification)
- Health (life expectancy, low birth weights, infant mortality, teenage parents, diseases, access to GPs, emotional well-being, health status)
- Natural environment (waste management, biodiversity, drinking water quality)
- Built environment (look & feel of city, green space, graffiti, noise, traffic, public transport)
- Safety (perceptions, child safety, road casualties, crime)
- Social connectedness (quality of life, diversity, community strength and spirit)
- Civil and political rights (voter turnout, involvement in decision making)

It is evident that the New Zealand study takes a very in depth examination of quality of life, using not only survey results, but other sources, and other data in order to reach proposed points for action. This is a commendable practice that could be embraced by other "*quality of life*" studies.

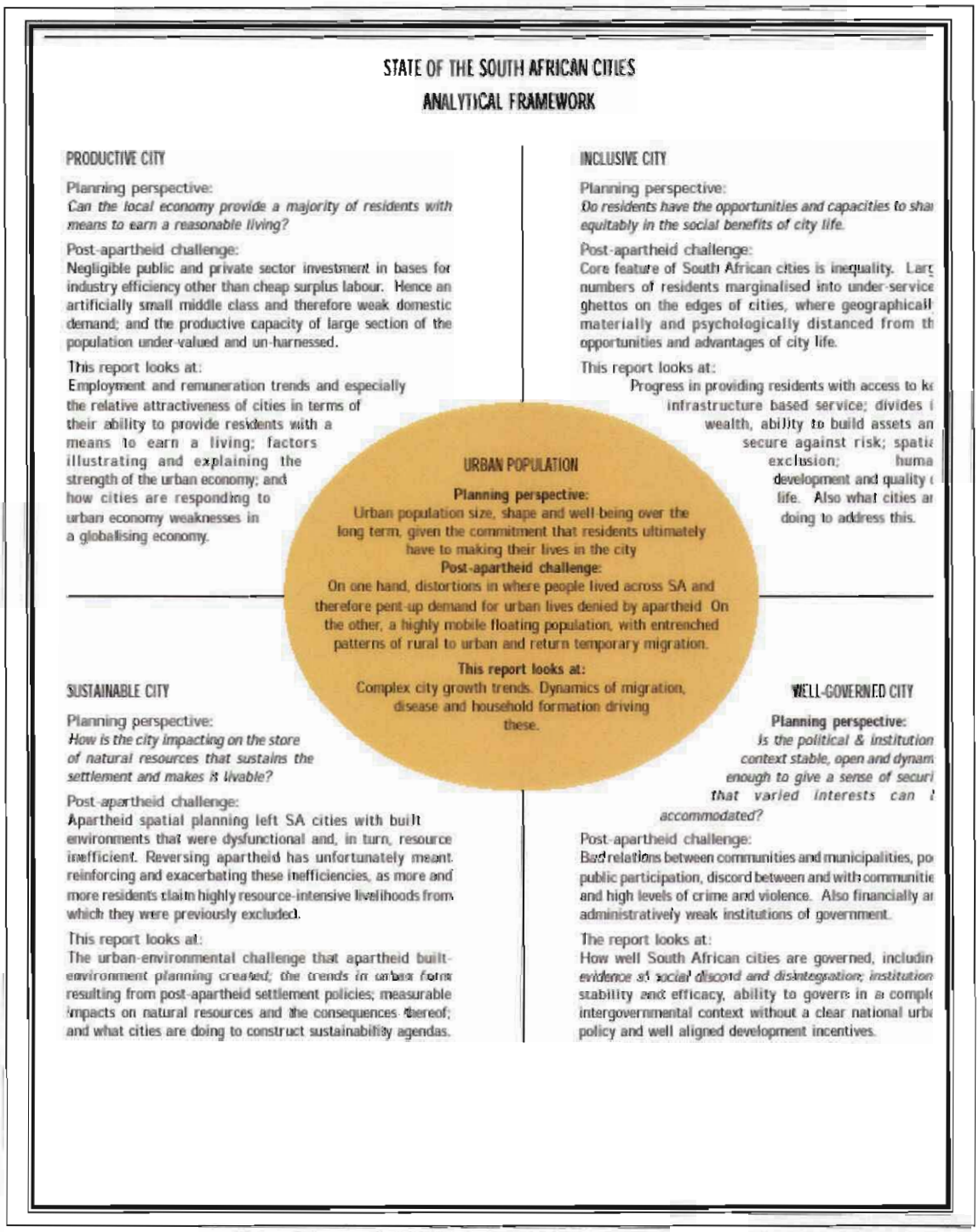
In general, however, surveys often use the following social indicators in order to measure and monitor quality of life:

- Employment
- Housing
- Health
- Education level
- Recreation
- Service provision
- Natural environment
- Political participation

These indicators will be incorporated into the various indicators of urban sustainability namely good governance, environmental sustainability, economic growth and inclusiveness.

It can be concluded that the individual as component of the urban population is at the heart of development and that quality of life and urban sustainability are the most important components of an urban development framework. This is shown in figure 3-1.

Figure 3-1: Components of urban sustainability (SACN,2004)



Source: South African Cities Network (2004)

3.14 CONCLUSION

The emergence of urban and regional planning as a scientific discipline owes its existence to the problems encountered during the Industrial Revolution in England. It developed as a discipline over time. The chapter dealt with the definitions of planning and the contributions made by Howard, Geddes and Abercrombie, for example. Many theories and definitions have developed based on history, and contributions made.

Urban and regional planning theory is suffering in our scientific and industrial society from tremendous time-lag, and can be said to stand today where medicine stood a century ago. There are several definitions of planning, e.g. it is seen as a means of achieving specific objectives, determining impacts on a defined area or it is seen as a form of art.

What is needed for planning is the construction of a scientific base by creating a body of scientific and experimentally verified facts, and the construction of a systematic method of using such facts as a continuous operation in the implementation of development initiatives.

Creating a scientific base for planning is difficult. A very long road lies ahead, for even basic objectives and values, are subjects of controversy. It has been agreed upon for almost a hundred years that a slum is a disease that should be excise from cities, but some planners place great value on slums, stating that it should retained at all cost. It is unknown whether physical improvement (e.g. new housing) is a social good.

New towns have been built with a ceiling of so-called "*optimum populations*", but there is no proof for that assumption, and there is no evidence that there is any inherent limit to urban growth in any industrial society. It cannot be agreed that central congestion, or urban sprawl is good or bad; and it is equally uncertain whether the object labelled "*town*" or "*city*" really exists in any sense, except in terms of administrative convenience.

All these uncertainties spring from the absence of any "*scientific base*" which would therefore, eventually, be resolved. Until that has been achieved the planner will be forced back continually upon abstract concepts and intuitive judgment.

In 1967 planning seemed to be on the edge of reason, as it gradually emerged from a pre-scientific age in which decisions were based on such irrational criteria as intuitive and experiential judgment, human values, and aesthetic appreciation. An instrumental reason seemed to be taking shape through the application of scientific method to policy making.

It is conceded, however, that even the most accurate set of facts, the most sophisticated systems of analyses, the most intricate of models, and the most powerful innovations cannot give the answers to planners. The future cannot be mapped or predicted as planners are dealing with all the vagaries, uncertainties and apparent irrationalities of human behaviour.

It is conceded that the answers to the vexing questions about the future of human settlement cannot be objectively determined. The answers do not pre-exist waiting to be discovered through the application of application of scientific or rational method. Instead, the answers require political choice and value judgment, albeit choice and judgment informed by empirical data and skilful analysis.

Planners cannot continue to be technocrats with hidden values but they must be explicit about their values and planning, seen as the *"art of situated judgment"* (Campbell, 2002).

I am of the opinion that planning has developed over the last forty years from a *"top-down approach"* as being a political instrument for the implementation of ideologies, to a **"bottom-up"** planning process whereby emphasis is placed on public participation and sustainable development. It is important to develop all aspects pertaining to urban sustainability namely the physical environment, economical environment and social environment as well as integrated governance.

Over the past decade, there has been a very significant shift in the philosophy and theory of planning as the self-assurance and belief of planners in their right and ability to shape urban and regional space through the application of a scientific or instrumental rationality, has been challenged in multiple ways by the neo-Marxists; the neo-liberals; intellectual currents such as postmodernism and poststructuralism; the globalisation agenda; economic instability; and, ordinary people who no longer trust the knowledge of the expert.

The concepts of reason and rationality, which were at the heart of the planning project, in the 1960s, have been confronted by the seemingly irrational, by urban politics, by notions of value, difference, power and identity, and also by the market, and the demands and practices of ordinary people.

These challenges may conceivably have overwhelmed and even ruined the discipline and practice of planning, but planning has managed to adjust through the pragmatism of practice, and through the intellectual leadership of individual theorists. The hazardous terrain of post-positivist philosophy and social theory are redefining the role and meaning of planning in the current age. The principal themes of post-

positivist planning include communication, language, interpretation, power, values, ethics, the construction of knowledge and the relationship between thought and action.

Planners are gradually coming to terms with a world in which an instrumental rationality must take its place alongside the other ways of knowing and doing. I am of the opinion that planners are being brought to the "*edge of reason*", to a place where planners must engage with alternative rationalities, that would, in the past, have been labelled as the '*non-rational*' or even the '*irrational*'.

Planning must be a combination of instrumental rationality of planning and a creative engagement with and between alternative rationalities, for it is in the engagement with "*the other*", that new and better ways of thinking and acting arise. There are different rationalities that are shaping the contemporary city, especially the city in Southern Africa.

The role of planning is to challenge, to provoke, to support, and engage with the diversity of agents whose decisions are shaping our urban futures, and to produce individuals who can influence these futures and connect with these agents in creative, meaningful ways. The primary challenge is to find the most contextually appropriate and effective means to influence decision making in the city towards outcomes that meet the criteria of distributive justice, sustainability and spatial quality.

The city is an ensemble of diverse social relations, with different cultural referents and spatial dimensions. It is a locus of overlapping webs of relations on diverse spatial scales from the neighbourhood to the globe. This is the imagery of electronic networks of the worldwide web, which points to a far more complex practice of planning.

The emergent new urban planning practices of South Africa are informed by post-colonial literature, with its emphasis on the hybrid and fluid identities and relationships that are forged in the interaction between the coloniser and the colonised. Planners think in more nuanced and contextually relevant ways about: informalisation and networks of livelihood formation, the relationships between the global and the local, connections between the social and physical, identity formation and territorial allegiance, the relationships between the rural and the urban, the matrix of connections between places and vulnerability and exclusion in the city.

These new definitions impacting on policy and institutional arrangements are helping to conceptualise the relationship between formal planning systems and the informal networks and relationships that sustain livelihood and shape places in the South African city.

It is clear that post-1994 good progress has been made in the development of policy and of planning legislation to abolish the dormitory townships created during the Apartheid era. The present day planning challenges are promoting the Development Facilitation Act principles in all developments and also taking the individual needs and importance of quality of life into consideration when planning for urban sustainability.

The new system of planning in South Africa is focused around the notion of integrated development planning. Integrated development planning is a real and positive contribution to the transformation of local government in South Africa. The IDPs are beginning to impact on the performance of local government in multiple, although still very uneven, ways. Integrated Development Plans still fall far short of a meaningful engagement with the multiple rationalities that are shaping our cities, towns and rural areas. IDPs are good instruments for directing annual and medium-term budgeting, and for identifying projects, and are potentially important mechanisms for inter-sectoral integration, but they have yet to prove their worth in the making and remaking of space and territory. They have yet to direct us towards futures that are different from the present.

Many IDPs do little more than replicate existing patterns of spatial development rooted in the colonial and apartheid eras. They do not engage creatively with ways to shift patterns by engaging in an activist sense with investment decisions, and with the ways in which people are constructing their own spaces. Participation in the IDP process is still largely understood in a traditional way and not in terms of the process of crafting joint narratives.

The importance of urban sustainability has become an integral part of government policy. After 1994, the Government introduced constitutional policies and introduced legislation, which set out a framework for an integrated approach to policy and practice, both within Government and other sectors, including business.

From a planning point of view, the adoption of these principles has seen radical changes to policy, whereby sustainable development has become fundamental to the decision-making process. The concept has been woven into planning and into planning policy guidance. Since the early 1990s, when the emphasis was on environmental protection, the scope has been extended to include social and environmental factors.

The quality of life of citizens has become increasingly important and it is evident that planning for the individual contributes to the sustainability of the city. This chapter has attempted to provide a simplified view of the overall concept of urban sustainability namely that at its heart is the simple idea of ensuring a

better quality of life for everyone, now and for generations to come. The main objectives for meeting sustainable development are to contribute to the following:

- Social progress, which recognises the needs of everyone, and questions whether all citizens have access to opportunities to share in the benefits of city life.
- Effective protection of the environment, by taking care of the resources available, prudent use of natural resources.
- Maintenance of high and stable levels of economic growth and employment to ensure that the local economy allows the residents to earn a reasonable living.
- Political and institutional stability encouraging participation and engagement in public processes.

The current approach to development would appear to be all-embracing, through the implementation of the integrated development plan. Nevertheless, there is no doubt that urban and regional planners are very much involved in the process and in the delivery of sustainable development at all levels of government.

There is no doubt, therefore, that there will continue to be a strong role for planners, as well as for the planning system, in promoting the principles and practice of urban sustainability.

This chapter dealt with how urban and regional planning is contributing to urban sustainability and development. The definition of planning and how planners' roles have changed and evolved throughout South African history were discussed. The chapter addressed the status of the contemporary planning system and the constitutional, policy as well as the institutional context. The most significant planning legislation was also discussed and the rationale for planning is seen as ensuring a better quality of life for all, which is at the heart of urban sustainability.

CHAPTER FOUR

INTEGRATING THE CITY





CHAPTER FOUR: INTEGRATING THE CITY

4.1 INTRODUCTION

This chapter investigates the South African urban landscape, the demographic status and trends in terms of global trends and urban systems. The chapter then determines the key indicators of urban sustainability and discusses the main issues contributing to sustainability.

4.1 THE SOUTH AFRICAN URBAN LANDSCAPE

Definitions

Urban trends are dependent on the definition given to urban. Translating the "*intuitive obviousness*" of knowing an urban area when one sees one, is difficult to explain in formal terms (South African Cities Network, 2004:22). The Municipal Demarcation Board (2005) states: "*The Constitution and the Municipal Structures Act are silent on the concept of urban and rural when describing category B municipalities. However, the White Paper on Local Government correctly points out that, in some cases, the separation of rural areas from cities and towns has imposed artificial political and administrative boundaries between other areas that are functionally integrated. It also creates inequity for real residents who contribute to the town's economy but don't benefit from its resources. The inclusion of rural areas within urban areas in the demarcation of category B Municipalities is not only allowed for in law, but also regarded as appropriate.*"

In the demarcation of the municipal boundaries, provision was made for the incorporation of peri-urban areas, which were the product of "*Apartheid*" era displacement (StatsSA, 2003:2).

Countries use many different criteria to define urban and rural and many countries use administrative boundaries and criteria to define an urban area (Hartshorn & Truman, 1992:2; Famighetti, 1997:3). The South African definition has changed throughout the years. Many countries agree that settlements over twenty thousand people and over one hundred persons per square kilometre, is urban, while many countries use lower numbers (South African Cities Network, 2004:22). Some countries use activity to distinguish areas where agricultural livelihoods predominate as non-urban, often in combination with other criteria (South African Cities Network, 2004:22).

The Urban Development Strategy (South Africa, 1995:2) distinguishes between different settlements as being urban or rural on the basis of size and identifies four principal city size classes:

- Large metropolitan areas (over two million)
- Large cities (500 000 to two million)
- Medium sized cities (100 000 to 500 000)
- Small cities and towns (up to 100 000)

Since the strategy had an urban focus, it did not include any rural towns, villages or farmsteads. The *White Paper on Local Government* (DPLG, 1998:32-33) extended the interpretation of settlement types in South Africa to include rural settlements as well. These settlement types were distinguished on a more random basis, including size, location, function and tenure type. The *State of Human Settlements Report* (CSIR, 1999) identified two sets of typologies for human settlements in South Africa, based on size and location. This is shown in table 4-1 below:

Table 4-1: Settlement types

Urban core	**Urban Fringe**	**Displaced urban or dense rural**
Core informal settlements	Fringe informal settlements	Peri-urban traditional/tenure settlements
Core townships	Fringe townships	Former homeland border towns and townships
Inner city – high rise flats	Collective dwellings	Agri-villages
Inner city houses	Informal settlements	Peri-urban informal settlements
Squatting in disused buildings	Fringe suburbs	Informal settlements in commercial farming areas

Source: CSIR (1999:2)

StatsSA (2003:2) indicates that South Africa is currently using a method that involves dividing census enumerator categories based on a mix of criteria which includes the structure of the built environment, land uses and political institutions. Practically that can be translated as the formal versus informal housing, land use and political institutions present.

Incorporation Of Areas

According to the Municipal Demarcation Board, all boundaries and municipalities were redrawn to rationalise the number of municipalities in the South African local government system. Before 2000, municipalities could be easily identified as their boundaries extended to the edge of a built up area (Municipal Demarcation Board, 2004). The hinterland consisted of a system of regional services councils and rural local councils with much reduced power. Demarcation amalgamated urban and rural hinterlands as well as municipalities, but also several separate municipalities.

Geyer *et al.* (2000:1) in an article titled, "*Revisiting the South African magisterial districts of 1999*" emphasise that several discrepancies between district boundaries and functional economic space have been highlighted, and that continued use of dysfunctional regional entities for planning and administration is pointless, and will cost much money in the long-term. The article also emphasises that the new districts correspond to a large degree with the areas of influence of the largest centre in each district. Large centres regarded as inferior centres in the previous settlements have now been included. The article also concludes that activity patterns of people are reflected accurately and the proposed districts form a sound spatial foundation.

The South African Cities Network (2004:23) indicates that rural and municipal municipalities no longer exist. There may be several town centres and peri-urban areas, isolated traditional homesteads or rural villages on agricultural land within a metropolitan area. There are many peri-urban zonesPrior to democracy in 1994, outside of the "*homelands*", rural and urban areas were managed and administered independently in South Africa. Relevant policy and legislation were fragmented.

The peri-urban zone was at the boundary of urban and rural administrative authorities, so it was seldomly managed as a transition zone between urban and rural systems. Recent legislation, policy and institutional structures do address this problem (Harrison *et al.*, 2004:28).

However, while new instruments of policy are being introduced, old ones still apply on the ground with the result that policy and legislation are often overlapping and at times contradictory. In a number of areas, the capacity to implement policy is lacking, as is the capacity to govern and police the new legislation. These issues apply to most South African peri-urban areas, but the effects are most striking in the former homeland areas (Barry, 2004:4).

Urban fragmentation

The South African Cities Network (2004:23) states that many African people were displaced out of cities in which they may have become permanent residents, had it not been for "*Apartheid*". The African people were moved to areas of displaced urbanisation. These areas are densely populated with clustered village settlements, informal settlements and micro-sized town centres. These areas are known as "*dormitory*" areas, and some are located close to towns or centres while others are in isolated parts. The areas have a small city-sized population.

Metropolitan versus local

The local government system distinguishes between single tier metropolitan municipalities and the two-tier system of local and district municipalities. The Municipal Structures Act (1998) stipulates criteria for defining a metropolitan area. The most important includes the fact that it should be a conurbation consisting of a high population density, movement of goods, people and services; extensive development; multiple business districts and industrial areas. It must also be a centre of economic activity with a complex and diverse economy and have strong social and economic linkages between its various units.

Metropolitan municipalities deal with problems of high externalities in built-up areas. In areas where areas lie adjacent to another and are managed by different municipalities there is an incentive to engage in competitive and cost shifting behaviour (South African Cities Network, 2004: 23) When the Municipal Demarcation Board (MDB) demarcated the boundaries of municipalities in 1999 and 2000, it identified some areas in the country as aspirant metropolitan areas. These are areas that at that point in time substantially complied with a significant number of the prescribed criteria for metropolitan areas, but not to the extent that they could have been declared metropolitan areas. It was anticipated that they would meet the criteria in the near future, at which time they would be declared metropolitan areas.

The aspirant metropolitan areas include, and have at their core, so-called secondary cities. Secondary cities are fairly significant urban settlements that are usually surrounded by smaller and even very small urban, peri-urban and rural settlements. For the settlements surrounding the secondary city, the urban area gains most of the income. For example, the district municipality raises the bulk of its revenue in the city, but the surrounding areas receive the bulk of its allocations and benefit the most from its programmes (South African Cities Network, 2004:23; Smith, 2001:1).

Metropolitan areas are classified according to specific criteria, put forward in Section 2 of the Local Government: Municipal Structures Act 117 of 1998. The Act further states that an area must have a metropolitan municipality if that area can reasonably be regarded as a conurbation featuring area of high population density, an intense movement of people, goods and services, extensive development, multiple business districts and industrial areas; a centre of economic activity with a complex and diverse economy; a single area for which integrated development planning is desirable; and having strong interdependent social and economic linkages between its constituent units.

A conurbation can therefore be defined as the following:

- An extensive urban area formed when two or more cities originally separate, coalesce to form a continuous metropolitan region.
- A continuous built-up urban area formed by the merging of formerly separate towns or cities.
- The built-up area established between two existing urban settlements.
- Continuous built-up area formed by expansion and coalescence of previously separate towns.

In terms of the criteria listed in the Municipal Structures Act (1998), such an extensive urban area must feature areas of high population density, probably measured in persons per square kilometre, intense (internal) movement of people, goods and services, extensive development, and multiple business districts and industrial areas. The Municipal Structures Act places a high premium on the economic character of a metropolitan area. There is a direct link between the required intense movement of people, goods and services, multiple business districts and industrial areas, and a complex and diverse economy. Consequently, an analysis of the economic character of an area may determine whether an area is metropolitan or not. If the economy of an area is dominated by primary economic activity (agriculture, forestry and mining), it cannot become a metropolitan area. If primary economic activity is present but not a dominant economic characteristic, Smith (2001:1) indicates that the area may become a metropolitan area. An analysis of the economic character of an area should take the following into account:

- Daily commuting patterns and the number of people who commute within the area.
- The movement of goods and services within the area.
- The distinction between primary and secondary business districts and neighbourhood shopping centres; and the definition of an industrial area as a locality, which has one or two factories and commercial undertakings.

The area must also feature extensive development. Smith (2001:1) states that the Metropolitan Demarcation Board limited its own definition on extensive development. Given the South African tendency to define development in terms of *"things"* (infrastructure and buildings), it may be that the legislature contemplated that a metropolitan area would be almost entirely built-up. Seen in this light, a metropolitan area should be an urban settlement in its entirety. It may include the non-urban hinterland, to which the urban settlement would expand naturally.

The South African Cities Network (2004: 24) states that one such example is the Mangaung local municipal area. A part of the area that is now included in the Mangaung local municipal area, namely Bloemfontein, Bloemfontein District and Botshabelo, was identified as an aspirant metropolitan area. Before the December 2000 general municipal election, the municipal area consisted of the Bloemfontein, Botshabelo and Thaba Nchu Transitional Local Councils, the Bloemfontein District Council and the Thaba Nchu Transitional rural Council. The area comprises large tracts of land used for commercial agriculture and, near Thaba Nchu, communal farming. Despite the significant non-urban settlements in the area, it is possible that the current Mangaung local municipal area could become a metropolitan municipal area. South African metropolitan areas would therefore differ from international metropolitan areas, in that they may include large portions of land used for commercial and communal farming purposes.

All the *"aspirant metropolitan areas"* currently fall within one or more local municipal area(s). These local municipalities share jurisdiction (executive and legislative powers) with the district municipalities in whose areas they fall. When eventually an area becomes a metropolitan area, the local and district municipalities in the new metropolitan area will be collapsed into one. Therefore, for some local and district municipalities the restructuring of local government is far from over. The most important requirement for becoming a metropolitan area is a clear and rational declaration by the local and district municipalities concerned to become a metropolitan area.

The support and commitment of the relevant provincial government would also be required, as the provincial government controls significant public resources that could be employed to assist in the effort of becoming a metropolitan area. This, in turn, requires that these three stakeholders separately, and jointly commit themselves in public to realising the ideal of becoming a metropolitan area. However, they would first have to make up their collective minds as to whether they want the area to become a metropolitan area (Smith 2001:2).

The most obvious result of becoming a metropolitan area is that the metropolitan municipality gains all the municipal (including fiscal) powers and functions set out in legislation. It does not share jurisdiction with any other municipality. Smith (2001:2) states the following in connection with this:

- Development planning may become easier than when two levels of municipality have to coordinate their development plans for the same area.
- One municipality commands all municipal sources of revenue in the area, which can contribute to making more rational and focused investment decisions.
- Intergovernmental co-ordination and collaboration is easier, simply because there are fewer government institutions to interact within the area.
- Residents are likely to understand the local government system in their area more readily; and as there will be fewer municipal institutions, the cost of maintaining them should decrease.
- The three most significant functional competencies of district municipalities that are currently being performed by local municipalities through an authorisation of the Minister for Provincial and Local Government include potable water supply systems; bulk supply of electricity, which includes for the purposes of such supply and the transmission, distribution and, where applicable, the generation of electricity and domestic wastewater and sewage disposal systems.

Water and electricity provisions are classified as trading services. A municipality determines the service charges payable for them in such a manner that it realises a trading surplus. This surplus is used to subsidise services, financed through the rates account (Smith, 2001:2).

Sewage removal and disposal are economic services. Consumer charges are determined in such a way that the consumers pay the full cost of providing the service. Should the Minister withdraw the authorisation, a local municipality would lose the trading surplus on its trading services (LGL Bulletin 2000: 9).

Some of the advantages and disadvantages of withdrawing the authorisation for a local municipality are listed below. The advantages that the local municipality will experience will automatically become disadvantages for the district municipality. Likewise, the disadvantages for the local municipality would translate into advantages for the district municipality:

- The payroll of the local municipality will decrease, as the staff involved in a particular function would follow the function concerned.
- The local municipality would need much less office and other workspace.

- The local municipality would no longer have to maintain costly assets and reticulation networks, as these would follow the function concerned.
- The local municipality would not have to invest in and install new infrastructure to provide these services.

On the downside, the following would be in store for the local municipality:

- The revenue sources of the local municipality will decrease.
- The trading surplus the local municipality realises on water and electricity will be lost, thereby reducing the amount of money available to subsidise rates and general services. Consequently the municipality would have to increase property rates tariffs and other service charges more drastically.
- Debt collection will become more difficult because the local municipality would not be able to suspend services, for example, electricity.
- Several governance issues would arise; for example, it is likely that local municipalities would become centres for receiving complaints about services.

As the district municipality would be required to spend more of its own revenue on providing services, less money would be available from that source to fund capital works; and employees would for the time-being, remain uncertain about their employment prospects.

Smith (1997:1) points out that if the authorisation of the local municipalities to perform district municipal functions is withdrawn before the determination of an area as a metropolitan area, massive restructuring of services, systems and structures and transfer of assets, liabilities and people must occur. It is entirely possible that shortly thereafter the district and local municipalities would cease to exist altogether and be superseded by a metropolitan municipality. Everything must then be transferred and overhauled again. Such a course of action will definitely cause an inward focus, perpetuate uncertainty and contribute to massive confusion.

A metropolitan municipality levies and collects levies within its area. This means that the metropolitan municipality has more sources of revenue that yield significant income than the existing district and local municipalities respectively. In most cases the bulk of the income from the levies currently raised by a district municipality is levied on business and industry within the aspirant metropolitan area. The downside is, of course, that those areas that are excluded from the metropolitan area are cut off from the income generated

from these levies in the metropolitan area. They would be included in other district municipal areas that may not be as financially sound, as the one from which they have been excluded.

Smith (2001:1) concludes that becoming a metropolitan area must be on the agenda of the relevant local and district municipalities and the provincial government. Certainly the Minister for Provincial and Local Government, the MEC responsible for local government in the province and the MDB must also take the "status" of these areas into consideration, when making recommendations and resolutions about the adjustment of municipal functional competencies and amending authorisations granted to local municipalities to perform district municipal functions. On the face of it, it appears that becoming a metropolitan area would be advantageous for the residents within that area, even if the advantages were only a simplification of the government system. Those communities that currently benefit from being in the same district as the aspirant metropolitan area would definitely, and unfortunately, lose out.

Sutcliffe (2001:1) differed on many aspects from Smith. The major differences are discussed below:

- It is not true that the legislature placed a high premium on the economic character of a metropolitan place. It is much more the economic significance of metropolitan areas that must be addressed.
- The Board did not limit its definition of extensive development. It analysed each case on its own merits. While the Board has extensively analysed the urban edge in Cape Town, it is not really applicable in Durban, for example, where topography constraints are more critical.
- South African metropolitan areas certainly differ from international metropolitan areas, not only because our municipal system differs but also because we have become world leaders in producing an integrated, developmental vision for metropolitan (and other) municipal areas. South Africa's approach to integrated developmental local governance means that even metropolitan areas may contain large portions of land used for commercial and communal farming purposes.

On the procedural aspects, the Board has made it clear that it would like to engage in a process that ensures that the process of declaring further metropolitan areas is not disruptive to the municipal transformation and restructuring process. Stakeholders are being consulted. This process will continue in the next few years to ensure that the process is clearly defined.

Sutcliffe (2001:1) does not argue that there will be a simple, cost-benefit process or that the process will be politically driven. The Board will consider broader economic-, financial-, administrative-, social- and political issues in defining such a path. Indeed, immediate political considerations are not taken into account at all in the Board's decision-making process.

Sutcliffe (2001:1) states that The Board will not simply convert existing Category A or B municipalities into metropolitan areas. Rather, the process to be embarked upon by the Board is likely to be as follows:

- Firstly, the Board will undertake an analysis of existing and possible metropolitan areas.
- Secondly, the Board will engage with stakeholders such as the Minister, MECs and SALGA to discuss possible scenarios.
- Thirdly, a public process will be embarked upon to invite comment.
- Fourthly, if the Board decides to declare further areas as metropolitan, the normal legislative process will be followed.

The National Space Economy

The National Spatial Development Perspective (2003:1) analyses the interaction between economic activities, transport connections and public infrastructure investment across South Africa. This analyses settlement dynamics. The report stresses the need for understanding the national economic space.

The Post –""Apartheid"" City and The Legacy Of ""Apartheid""

Tomlinson states (Harrison *et al.*, 2003:91) that the principles of racial segregation in "*Apartheid*" South Africa, has resulted in urban development patterns characterised by the spatial segregation of the population on the basis of their racial classification. This corresponded to income-based segregation based on the fact that the White population earn higher incomes, than other racial groups.

Social and spatial integration are the main priorities of planners. Spatial integration is defined as an effort to counteract the low-density suburban areas typical to the South African landscape. Social integration is defined as an integration of races but it is generally accepted as meaning the integration of different cultural groups by integrating low-income and high-income areas. This is done through upgrading of informal settlements next to housing development through legalisation, and upgrading.

This is done to rectify the forced removal in rural areas to allow for separate development in urban areas as described by the Draft Green Paper on Development and Planning (1999:5). Smith (1992:314-317) describes

the "*Apartheid*" city as resembling cities of the capitalist industrial world, with the Central Business District surrounded by residential areas differentiated by socio-economic status as a city reserved for Whites. Enclaves of better housing came into existence.

These enclaves housed mostly middle-class Coloured and Indian cultural groups. The rest of the urban landscape was zoned the same with similar basic dwellings for Non-Whites. The group areas were also segregated in terms of housing class. This pattern has survived the repeal of the Group Areas Act. Entry by different cultural groups into traditionally "*White areas*" was selective based on affordability. The Whites would not move into other areas. The only change that could be expected is housing improvements. The changes were likely to occur in the fringe areas of the Central Business District (CBD) as the process had already started the peri-urban accretions of informal shacks, which represented the greatest change to the "*Apartheid*" city.

Barry (2003:1) states that peri-urban environments are complex and development and regularisation projects have to take the complexity of these areas into account. Barry (2003:1) states that peri-urban areas should be preserved for agriculture, as it is critical to prevent urban sprawl and to retain valuable agricultural land for food production. Smith (1992:314-17) states that continuous expansion would still continue and spontaneous occupation would still occur, based on the fact that unused land in a more central location would pose great opportunity to the person living in the "*shack*". Buffer zones between the areas consisting of vacant land and major transport routes, railways and highways, have contributed to the segregation that has to be planned for.

Mayekiso (Harrison *et al.*, 2003: 68) states that although public policy has changed, the dormitory townships of the past were "*economic ghettos*," based on the uneven nature of development under the racial capitalist system of "*Apartheid*". Marcuse and Van Kempen (2000: 250-260) reason that the predominantly White upper- and middle-classes live in walled enclaves and zones that are protected. Professionals, escaping the poverty and instability of the existing townships, have joined them.

South Africa has inherited a legacy of townships consisting of racialised tinder boxes accompanied by lack of service delivery, poverty, crime and congestion. These are still a prominent part of the urban landscape of South Africa today (Mayekiso, 2003:69).

South Africa's history is one characterised by a political economy of systematic underdevelopment. Geyer (1989:90) describes the fact that the physical planning model was a set of institutional arrangements that

ensured that areas not designated for Whites, remained underdeveloped. It was a double-barrelled physio-economic development policy that had been followed. It was an "*ideologically modelled industrial decentralisation policy cast in an "Apartheid" model - a policy aimed at the provision of white controlled job opportunities for Blacks near black reserves formed the one cornerstone, and the basic needs development strategy the other leg*" (Geyer, 1989:90). This was aimed at advancing the standard of living of Blacks, especially those living in reserves. It was presented bottom-up but was executed from the top downward. No attention was given to the economical and constitutional development of Black communities in White areas while more attention was given to Blacks living in reserves.

All policies instituted still supported "*Apartheid*". White local authorities could remove Black people to the areas covered by the Black Local authorities, beyond their boundaries and off their budgets. They were able to govern areas of concentrated economic activity and small wealthy population (Marcuse & Van Kempen, 2000:250 –260).

The South African Cities Network (2004:25) states that relatively wealthy local authorities could easily raise the majority of their own income from service charges and property taxes and kick-start a virtuous development cycle, as they could control and defend their own borders and budgets. Black authorities could only attract very little business to their areas, and were responsible for a large poor population. The areas have very little commercial activities and the tax-base was further weakened due to the commuting and expenditure in white local authority areas. The black authorities had very little capital available for service provision and infrastructure. This led to the emergence of urban anti-"*Apartheid*" movements, e.g. " *one-city-one-tax-base"* (South African Cities Network, 2004:25).

Maharaj (1999:1) states that the present South African city form is a hybrid product of the colonial and formal ""Apartheid"" discourse, which ordained urban spaces as the domain of the white race. As the democratic initiative of the 1990s gained momentum, various strategies were pursued to reverse the effects of racial planning. The legacy of "*Apartheid"* was first addressed in the Reconstruction and Development Programme (1994:7). The Urban Development strategy was developed aimed at integrating the city, managing urban growth, investing in infrastructure and promoting sustainable development. The private sector welcomed the Urban Development Strategy (US) but were concerned that it was too market-oriented and a departure from the Reconstruction and Development Programme (Maharaj: 1998:1).

Market-led urban development reached greater heights with the Growth, Employment and Redistribution (GEAR) policy. Kleynhans & Naudé (2001:62) state that GEAR's neo-liberal orientation was criticised as it only addresses the needs of the big business and foreign investors and it was stated that inequality between rich and poor would increase. The abandonment of the RDP meant that the poor would be the last priority in South Africa's new non-racial urban hierarchy. GEAR's neo-liberal orientation ran the risk of a production of a class cleavage and the reproduction of socio-spatial inequalities distinctive of the "*Apartheid*" city (Kleynhans & Naudé, 2001:63). GEAR was implemented in cities by means of the Urban Development Framework and the White Paper on Local Government. Great emphasis was placed on local economic development strategies and public-private partnerships in delivering services. A major issue was whether the poor would benefit from such partnerships (Maharaj, 1998:1).

The White Paper on Local Government (SA, 1998) set the foundation for a new developmental local government system with an emphasis on integrated development strategies. It offers three specific techniques to offer relief namely "*service subsidies, support to community organisations in the form of finance, skills and training. Linkage policies to directly link profitable growth or investment with redistribution and community development.* "

The policy stresses the importance of the role of the mega-city in reaching development goals. This offers a new approach, a shift in planning from being parental to normative (Maharaj, 1998:1) as urban and regional development policies were always controlled by central government and intended to implement ""Apartheid"". He emphasises that the "*Apartheid*" planning discourse was organised along the lines of racial separation and operationalised through spatial partition and therefore agrees with Geyer (1989:980). Africans were denied access to and participation in all political structures especially with regard to the allocation of resources.

The Blacks were exploited through the spatial and social segregation. Swilling *et al.* (1991:175) state that management of the "*Apartheid*" city has been a complex process of functional inclusion, spatial separation and political exclusion. Bekker and Jeffrey (1989:3) explain the role of local government in South Africa as being the responsibility of White city and town councils who acted as guardians of the urban areas demarcated for other population groups. The Urban Areas Act of 1923 affected the urban administration that developed as Blacks were seen as "*temporary sojourners*" in White cities. Maharaj (1998:2) mentions that cities continued to grow despite the attempts to institute separate development, influx control as poverty and

lack of access to economic opportunity led to the migration of large number of rural Black people to the cities.

Hindson (1992:6) describes the legacy of "*Apartheid*" as a city characterised by racially fragmented and discontinuous land-use and settlement patterns, population density and concentration of poor in relatively dense areas on the peripheries and the rich in the core intermediate urban areas. This encrypts the racially informed power relations. The redress can be done by creating new planning discourses as an alternative to the planning apparatus inherited from the "*Apartheid*" state, the physical and economic reconstruction of the state, the introduction of a transparent and unified system of urban revenue creation and the social, political and psychological incorporation of Black South Africans into legitimate state structures and the sensitisation of the state to survival systems and social networks that dominate the lives of the poor citizens (Parnell & Pieterse, 1998:4).

Maharaj (1998:15) states that South Africa has an opportunity to redress the situation by promoting integrated development strategies. All over the world many of the local authorities are fragmenting, but South Africa has moved in the opposite direction, consolidating local authorities into bigger structures to tackle urban problems in a co-ordinated way over a larger geographical area. Maharaj (1998:15) stresses that the metropolitan or mega-cities approach would help to achieve spatial, economic and social integration in cities. However, there is concern that mega-cities reduce efficiency and become bloated bureaucracies. He also states (1998:2) that urban planners in South Africa attempted to reconstruct "*Apartheid*" cities by offering alternative development discourses to reverse the affects of racial planning.

Challenges Of Cities

The South African cities and towns play a major role in the social and economic life of South Africa. Cities contribute to accommodating the South African Population, funding local development needs and driving the national economy (South African Cities Network, 2004:25).

The collective contributions and challenges of nine of the major cities in South Africa are analysed in testate of South African Cities report. The nine cities include Buffalo City (East London and Bisho). Ekhuruleni (East Rand), eThekwini (Durban), Cape Town, Johannesburg, Mangaung (Bloemfontein), Msunduzi (Pietermaritzburg), Port Elizabeth and Pretoria. These provide the most recent statistics available with regard to challenges and contributions in South African Cities and provide an objective summary of the state of the South African city.

Together, the nine member cities of the South African Cities Network play a vital role in the social and economic life of the country. They make a very substantial contribution to accommodating the South African population, funding local development needs and driving the national economy.

The nine cities are only a few of the hundreds of "*settlements*" that accommodate South Africans. Yet as of 2001 they were home to 16 million people, and some 37% of the country's total population on a small percentage of its land area. The nine cities make up a large proportion of South Africa's built environment. In 2001 they had some 4,6 million formal and informal dwellings, 41% of South Africa's total of 11,2 million dwellings. Of these, 74,2% were formal dwellings. The nine cities' total number of formal dwellings, i.e. 3,4 million units, represent 44,8% of all formal dwellings across the country.

Municipalities approved 25,8 billion in new building plans in 2002. The nine cities contributed R17; 7 billion of this new fixed investment, which is 68,6%. The combined municipal budget for the nine cities stood at R50, 5 billion. In 2002/3 the expenditure amounted to R7, 7 billion for the capital budget and R42, 8 billion for the operating budget. This was 65% of the total local government budget of R77, 5 billion, 58% of the total capital budget and 66% of the total operating budget.

The per capita local government spending power in these cities far exceeds that for the rest of the country. Dividing 2002/3 budgets by estimated populations in 2002 shows that municipalities in the nine cities spent on average R452 million per capita on infrastructure expansion, and other capital items. By comparison, the average municipal capital budget for the rest of the country was only R188, 8 per capita. On aggregate, municipalities for the nine cities were able to spend R2 511,3 per capita in their 2002/3 operating budgets, compared to R754, 5 per capita in all other municipalities. By 2001, the nine cities were providing water to the dwellings or yards of six million households. This was 32,5% of the total number of South African households, (excluding collective living quarters), and 53% of all households in the country receiving this level of service.

In 2001 the cities gave employment to 4 866 812 people, some 50, 7% of the country's total working population of 9 583 761. The quality of work opportunity available in the cities is on average much higher than that in the rest of the country. In 2001, the average monthly income for employed people in the nine cities was R5 927,22. The average monthly income per worker in the rest of the country was R2 789,26 (South African Cities Network, 2004:26).

The aggregate contribution of South Africa's major cities cannot be ignored. However, the cities also present huge challenges. Together they represent the greatest relative concentration of poverty in the country. The major challenges are summarised in the State of the Cities (2004:28) report:

- Twenty-five per cent of households in the nine cities, some 1,2 million households, continued to live in informal dwellings in 2001. This was 33,9% of all informal dwellings in the country. Twenty-one per cent of households lived in dwellings with only one room (including households that shared one room with other households). The national average was 17,6%.
- Huge progress has been made over the last decade to extend infrastructure to previously disadvantaged communities in all the cities. In 2001, some 1 020 783 households (22, 1% of total), still had inadequate access to toilet facilities, and were using a ventilated improved pit latrine (VIP) or even lower level of sanitation.
- Despite the jobs they provide, the nine cities continue to see high and growing levels of unemployment. Census 2001 showed that of the 7, 8 million people of working age in the cities, 28% did not have a job. This figure grew with 58,8% from the previous census of 1996, equating to a million more people without employment. In 2001, the cities contained 44,22% of South Africa's total unemployed population.

It is clear that the relatively high average wealth of the cities masks considerable levels of urban poverty and inequality. It is a national priority to make sure that cities are able to make a significant contribution to address issues of poverty.

4.3 THE SOUTH AFRICAN POPULATION: URBAN SYSTEMS, DEMOGRAPHICS AND MIGRATION TRENDS

There is a general hypothesis in demography that demographic changes in a country (or a region) have an impact on the way its people use the land available to them, in other words, the shape of the city, and, vice versa. That land use also influences the demographic development of a country (or a region). A very important question which is closely related to these hypotheses is whether the current expectations and demands regarding land use in South Africa can be reconciled with demographic developments in the country.

An understanding of demographic-, economic-, social-, built environment and institutional trends, and the implications for the future, leads to a better understanding of urban sustainability. One trend is the demographic shift taking place in South Africa, namely increasing urban-rural migration. The second is that

where normally a positive relationship between urbanisation and development could be expected, in a country where the urban labour market cannot absorb many new entrants, high population growth will constitute a major future challenge for urban sustainability in South African cities. Predicting urban populations is a difficult task as it is subject to different variables namely the impact of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS). Under-urbanisation and slow growth could pose a greater challenge to cities instead of rapid urbanisation, even in a context of scarce formal sector jobs (SACN, 2004:36). This section investigates South Africa in the light of the global urban system, demographic history and trends in South Africa as well as migration in the Third World and in South Africa.

The urban system evolution

Human Activities and urban systems

Mumford (1961) states that a human life swings between the poles of movement and settlement and it is influenced by several external factors namely social, economic and environmental factors. Geyer (2001:2) described how the core-peripheral relationships within the urban environment, and between urban and rural areas, could only be appreciated if the human interaction patterns, in each layer of human activity, aredescribed.

Geyer (200:1) describes the importance of rural towns in the evolution of an urban system. He states that most settlements originated from agricultural activity and for long periods of time agricultural towns dominated the urban world. It is explained that agricultural centres often dominate the economy and that industry and commerce are subordinate and develop gradually, and that this will still be the case, based on an evaluation done by Berry on rank-size distributions of countries (1967:125).

This can be explained in terms of the central place theory, which is explained as follows. This theory emphasises the provision of services in an area and states that the quantity of services within a town or city are dependent on the size of the area. Christaller's (1966:17) service activities are based on a hierarchy. Different services have different threshold values, and a combination of different services will be formed, based on the quantity of people and the available clientele.

Christaller's theory is based on the fact that markets are the key to centrality, and that centrality is the key to the provision of services, that are necessary for subsistence. Commercial activities within these regions tend to grow quickly, especially if they are linked to national and international trade. The basic principle of the central place theory is the potential of a place to provide services to bigger areas. This is determined by two

things, namely the threshold of a product and the potential of a product. A threshold can be defined as the number of people necessary within an area, to justify the provision of a service. Dry (1997:24) states that the focus of the central place theory is settlements, and the ways in which they provide services (Dry, 1997:24).

Christaller (1966:17) describes seven levels of central places, namely a market place, a town centre a regional centre, a district centre, an administrative centre, provincial centre and an area centre. Geyer (2001:2) mentions that in terms of the central place model, rural settlements are seen as small, dispersed central places, catering for the local markets and serving as market areas to the local communities, similar to the traditional "*marketplace*".

Agriculture differs in all parts of the world in their levels of sophistication, but there are several similarities. Similarities generally exist in terms of scale of production, commercial orientation, technological sophistication and the size of the market, nominally and spatially. Less complicated, technologically less sophisticated and small-scale agriculture can be found mostly in the Developing World but also in terms of the Developed World, in rural towns associated with informal agricultural market activities. The agricultural sector in Developed Countries is aimed at higher output and global distribution levels, based on better technology available (Geyer, 2001:2). This has a definite effect on the population and economic levels at the lower-end of the urban scale of agricultural centres.

Industrialised agricultural production processes, and the commercialisation of product marketing, have in many instances caused loss of identity of rural towns in the Developed World. Rural centres in Developing Countries are often economically weak, as they are based on a subsistence culture, where the economic activities are mostly non-basic. The rural towns have very little income that flow in from elsewhere (Geyer, 2001:2). Richardson (1973) points out that large urban agglomerations in the Developed World were non-central places when they first started out, and were based on economies formulated by locational constraints, for example mineral deposits, sea parts, natural surroundings, locations of historical significance.

The areas originated as non-central places but gained regional and international centrality based on their various attributes, for example manufacturing of products, finance or social monitoring. Information systems, together with an increase in the role of culture and religion in spatial politics, are important components in the formulation of urban systems. This can be grouped together as the intellectual sector, as the information system is a way of disseminating information, and the assimilation of social-, cultural-, political and economic information for personal fulfilment, becomes an end in itself (Geyer, 2001:2).

According to Geyer's description (2001:2) it has become more than merely a personal service or luxury, but has become, and still remains, a socio-economic entity moulding urban space. It can therefore be concluded

that the upper levels of the human activity model are becoming important features in shaping urban geography.The Developing World, for example, uses religion as a defense against what it regards as social and cultural indoctrination from the Developed World. Another example is where people in the Developed World investigate social-, economic-, and political information for the sake of personal satisfaction (Geyer, 2001:1).

Urban issues in the developed world

Friedmann (1972:106) describes urban systems as being spatially organised space. Castells (1993) differentiated between world systems and global networks. Global systems cover the entire earth, and world systems cover subsets of it. This shows that urban systems can be terms as national, sub-continental, world, or global in scale (1998:161).

Geyer (2001:3) reasons that functional economic urban networks, instead of political-administrative boundaries, seem to be the most appropriate framework for urban systems evaluation. Functional urban space can be directly associated with core-periphery relationships. Criteria used to discern between these two include population densities described by Vining and Strauss (1977), population potential described by Clark (1966), growth in various economic sectors (Perroux, 1995), economic spatial dominance (Graham, 1999), urban networking (Castells, 1994) and urban systems maturity (Friedmann, 1996).

There are different types of cores and peripheries based on the factors used to differentiate between cores and their peripheries. Wallersteins's 1974 world-system theory proves this, as the economic links between countries have formed a hierarchy, consisting of more and less powerful countries. It divides the world into core and peripheral states. Core states are those that have centrality in trade and military interventions, cities that have maintained dominance by means of a superior armed force and centrality, in a network of diplomatic information and exchange. Periphery states are defined as being less central in terms of military, economic, trade and diplomatic domination.

Uncertainties about data do sometimes exist and trends are difficult to track, but international migration has always been a reality. The United Nations and the International Organisation of Migration state that the number of people who lived and worked outside their country of origin worldwide, ranged between 75 million in 1965, and 150 million in 1990 (United Nations, 1995; International Organisation of Migration, 2000). Of these numbers, an estimated 97 million people were migrant workers and members of their families (International Organisation of Migration, 2000) and between 12.1 million (UNCHR, 20001) and 14.5 million (UNCHR, 2001) were refugees. Increased possibilities of international migration have been

associated with greater awareness of growing disparities in life chances, between the rich and the poor countries, and the spread of violent conflict in poor regions of the world.

Global cities

Beaverstock *et al.* (1999) describe the global cities as gravity points within Wallerstein's explanation of core-periphery relationships. Global cities are at the centre of prominent urban regions, dominating the economic, social, political and cultural networks of the world. Population size and urban function are used as criteria to determine these cities.

Sometimes a city may be large in size, but with little global significance. Taylor (1997) states that it is problematic to classify global cities hierarchically, without reference to the inter-city relations in a global context. It is stated that true global cities are those primary centres that are located in the global-core regions of the world (Wallerstein, 1974). Geyer (1998) points out that cities should thereafter be classified on the basis of functional importance, and should be classified as being of continental, sub-continental, regional or national importance. Beaverstock *et al.* (1999) attempted to define global cities based on particular criteria, thereby contributing to a clearer definition of the concept.

Industrial restructuring

Wallerstein (1974) further argues that the global system has its origin in the industrial mass production. Large urban agglomerations in Developed Countries were focused on industrialising and this led to urbanisation as people moved to cities to look for employment. This led to uneven development around the world. There was an over-accumulation of capital and functional inefficiency that resulted from efficiency due to location of advantages, agglomeration economies and industrial integration at all levels (Geyer, 2001:4; Scott, 1983:233). Restructuring of industries followed. Emphasis was placed on downsizing, capital mobility and networking, as described by Knox (1997). Scott (1983:233) describes three mew types of geographical arrangements of industries, namely the branch plant colonisation where large multi-national companies locate in rural areas with sufficient infrastructure, the growth of small-firms with some linked to multi-national companies and the location of high-tech firms and professional services in areas of high environmental quality.

Computer and information technology

Graham (1998:165) emphasises that innovations in the information technology sector have facilitated efficient decentralised management and production. The technological innovation impact of the computer

communication and information technology (CCIT) sector, also known as the information communication technologies or ICT sector, has grown exponentially with each new development challenging the development of new products (Graham, 1999:168). Geyer (2001:4) states that these information economies, defined as the networks that support links between firms, their markets and their suppliers, would become important in competition, causing tension between economies of scale and economies of scope.

Graham (1999:169) describes the significant impact of these changes on world cities based on the fact that the CCIT brings about new combinations of concentration of central-, financial-, institutional-, social-informational and infrastructure industries. Douglass & Friedmann (1998:10) state that the transnational companies dominate the economy and the engineers and financial experts are advantaged at the expense of the workers.

Castells (1993) agrees and states that a new global division of labour is occurring. There is a widening of urban dualism globally (Castells, 1993). It impacts on every person's everyday life, economically and socially, but only the intellectual capacity of those with access to CCIT is increased dramatically. Geyer (2001:1) refers to urban information "*ghettos*" being created. Graham (1999) states that Computer Communications Information Technology (CCIT) compresses time and space and leads to the societies becoming fragmented and localised. Castells (1993) described CCIT as the main element in providing structural transformation in the economies of the West, because it serves as a vehicle of new functionally inter-related global economic systems (Geyer, 2001:4). The growth of CCIT has lead to the growth of innovation and new and exciting production and distributional options (Geyer, 2001:4).

Beaverstock *et al.* (1999) emphasise the fact that in the midst of all technological innovation and concentration of multi-national companies and supra-governmental institutions in the world cities, the need for face-to-face contact still remains. This is argued by Graham, 1998:168) who states that conventional, geographical space will be replaced by technological space, resulting from the tendency of electronic interaction in the network society to transcend conventional geographical arrangements and the fact that international electronic interaction in many aspects intercedes local communication as the dominant process. Graham (1999) believes that concepts like city, regions and states will become obsolete in time. Geyer (2001:4) describes the view, which is supported by Batty (1993) that technological space is created in between, within and between the fabrics of traditional geographic space. Graham (1998:185) adds that it was feared earlier on that the development of telecommunications, e.g. facsimile or telephone would also take over the role of geographical space. Geyer (2001:4) states that the development of telecommunications did not take away the need for face-to-face contact, and stated that it consolidated social relationships instead. The personal face-to-face contact remains the dominant limiting force in human interaction patterns.

According to Philbrick's description (1957:305) the interconnection of establishments is responsible for the evolution of areal units of organisation, larger and more complex than the individual establishment. This principle recognises the basis of community, neighbourhood, settlement, town, village, city, area, region, or national life to say nothing of world society. Philbrick recognises that people enjoy being with people, and even more important, is that people need other people to reach objectives. The same interaction fields are still applicable today, created by physical and economic friction, resulting from conventional forms of communication, as only certain individuals have expanded their reach globally and only certain economic sectors are spatially integrated (Geyer, 2001:4).

Traffic congestion and social overhead costs where people live show the direct relationship between urban size and friction of distance, which remains a limiting actor when determining the size of a city. Agglomeration economy is still a major factor contributing to the location of industries and Geyer (2001:4) describes:" *Concentration is still the most outstanding feature of economic activity and a clear indication of the pervasiveness of increasing returns to scale. In fact, the presence of the city is evidence of the impact of increasing returns to scale, despite post-modernistic changes that are evident in its structure. The persistence of concentration of manufacturing is an indication of the continued importance of economies of scale, agglomeration economies and of social-institutional externalities.*"

The effect of CCIT on the urban system is dependent on its availability based on Hagerstrand's theory (1952) on the dissemination of information. The assimilation of an innovation is dependent on its availability threshold limitations and time of exposure. CCIT is an explosion of information in all fields and it affects all sectors of the economy and also leads to the propagation of cultural and religious consciousness through the telecommunication media, which indicates a new economic sector (Geyer, 2001:4). People's intellectual curiosity is satisfied as CCIT informs, educates and entertains.

Demographic change and migration

CCIT can be described as an external influence on the urban system. Demographic changes also impact on urban systems and communities directly. Champion (1992) describes the drop in fertility rates from the 1960s in Europe, which was followed by a drop in fertility rates in the rest of the Developing World. Champion (1992) also described the rise in life expectancy levels in the Developed World. He states that both factors have had a significant impact on the ageing and social stratification of the population, and on the sizes of the compositions of households. There has been a significant decrease in the size of households.

People are becoming older and single parent families are also on the increase. These changing needs have resulted in different redistribution trends. This has led to increases on elderly migration, the migration of

youths and international migration (Geyer, 2001:5). Hart (1983) describes "*productionism*" and "*environmentalism.*" "*Environmentalism*" refers to older people migrating towards scenic environments for retirement, for example, and "*productionism*" refers to younger people migrating towards cities to find employment opportunities, as they are less affluent.

Geyer (2001:50 states that migration in the Developing World is more predictable and higher levels of mobility of people in the Developed World make them more prone towards seasonal and circular migration. Urban dynamics is also influenced by international migration. Champion (1994) mentions that international migration happens at two levels, namely highly skilled workers entering the upper end of the labour market, and unskilled workers doing work at the lower end of the market.

Bohning (1991:445-458) describes three categories of international migrants, namely the invisibles that fit in with the local people and the "*gap fillers*", which refers to people filling vacancies that are not filled by local people, and people treated as local inhabitants based on blood lineage. International labour migration, especially low-skilled labour migration, is not welcomed by affected countries, especially Europe (Geyer, 2001:5).

Polarisation of people

The postmodern society is dualistic in nature based on economic restructuring leading to an urban elite whose values are determined by the life they can afford, in contrast with the poor, whose lives are based on subsistence in a harsh economic environment. The economies have shifted from being manufacturing-based, to being based on advanced business services, increasing the polarisation of income and occupations (Douglass & Friedmann, 1998:120). Growth in technologically advanced activities is accompanied by the growth of an uncomplicated informal sector (Lambooy & Moulaert, 1996).

These circumstances are not conducive to the presence of a middle-class (Geyer, 2001:5). Douglass and Friedmann (1998:120) note that in the milieu of social and spatial transformations in Asia, the emergence of an urban middle class is not solely an indicator of historic process toward enlightened society and governance; it is equally a process of potentially widening social conditions and class stratifications. Informal sectors grow in a depressed commercial and manufacturing zone. Economic polarisation leads to social polarisation (Sassen, 1996).

This is a worldwide phenomenon and occurs in Developed and Developing countries (Geyer, 2001:6). Sandercock (1998:271) states in her book "*Towards cosmopolis*" that there is severe competition for urban

space based on the fast-widening gap between high-income, high technology and low-income, low technology and growing informal market activities.

Geyer (2001:6) states that in some places economic enclaves co-exist peacefully and in some parts, tension has caused "*enclosurism*" which appears at various levels, namely local-, national- and international urban levels. Enclave economies are similar to dual labour economies where dual economies develop with low paid manual labourers and highly skilled workers. Migrants often fill positions reserved for unskilled labourers. Unskilled people from the specific country also apply for these positions.

Skilled people living in the country tend to work in more stable environments. Enclave economies refer to groups of people that locate and control the local economy of a specific area to protect employment opportunities for their own people. Enclave economies form safe havens providing social, cultural and economical infrastructure. Some people hereby obtain access to a place that they would never have been able to move to, had it not been for the enclave in the area.

Socially unintegrated areas are more difficult to infiltrate than an enclave. Examples of enclaves include the Chinese enclave in a city in the United States. Vertical enclavism is a phenomenon where a certain population group obtains the mandate for a certain type of industry, e.g. the Irish in the construction industries in the States. Enclaves often lead to people settling in an area permanently (Sandercock, 1998:271).

Sandercock (1998:271) discusses a spatially integrated environment that is free from spatial segregation, caused by social polarisation, caused by living differentials. Sandercock (1998:271) terms this a "*cosmopolis*".

Polarisations are present in many forms, e.g. vertical polarisation where many people from different income groups settle in the same space and are socially and economically integrated. This can occur instantly or over a short space of time. The government often supports vertical polarisation openly or covertly. Horisontal polarisation occurs when people from different socio-economic groups settle in the same city, but in different parts. They are tied together functionally and economically in an integrated whole. Polarisation changes as the structure of the city changes and is dependent on factors like unemployment, the division of labour, age structure, household composition and income (Geyer, 2001:7-8).

Urban competition

Cities are constantly competing to attract labourers, infrastructure, effective governance, high environmental standards and a good quality of life (Lever & Turok, 1999). Innovations and improvements in the technological sphere have led to increasing returns in the great economies of the Developed World, with cities like Taiwan and Singapore competing from the Developing World, but with the rest of the Developing countries falling behind. The CCIT sector has a significant impact, and the effective functioning of modern areas is dependent on the expansion of kinetic energy of the urban elite and urban poor. The energy of the people with access to CCIT will grow exponentially and the other proportion of the population will be forced to seek employment outside the formal urban environment (Geyer, 2001:7).

Individuals with access to CCIT will have more choice and will live a more individualistic life due to the fact that they have the ability to utilise financial and technical systems and knowledge. The cohesion of the urban elite will wither. Similarities in technology should result in the narrowing of social, cultural and religious differences. The opposite is true of the people living outside the privileged circle, excluded from access to CCIT. These people tend to become more altruistic and culturally conscious and enclosure-oriented inside cities. They are dependent on one another for subsistence and the communal cohesion manifests itself in the social, political and cultural spheres.

Information technology is important but will not replace manufacturing or commercial industries. The CCIT will benefit a small minority, and may lead to increasing urban dualism in cities. This will cause a division between the poor and the rich, in the postmodern societies (Sandercock, 1998:272). The urban elite function well in a cosmopolitan environment while the unskilled component resorts to informal ways to survive in a situation conducive to enclosurism. Böhning's gap filling will increase the likelihood of enclavism in Developed cities (Castells, 1993). Enclosurism may increase with the lenient immigration policies.

Urban maturation

Vining and Strauss (1976) suggest a fixed spatial development sequence for Developed Countries. The sequence consists of urbanisation, intra-urban diffusion and inter-regional deconcentration from urban to rural regions. The Klaassen-group described by Geyer (1996:310), identified various phases through which an urban settlement could go successively:

- A phase of urbanisation when urban settlements grow at the cost of their surrounding countryside.
- A phase of suburbanisation when the ring grows at the cost of the core.
- A phase of disurbanisation when the population loss of the core exceeds the population gain of the ring resulting in the agglomeration losing population overall.

- A phase of reurbanisation when either the rate of population loss of the core tapers off, or the core starts regaining population, although the ring might still be losing population.

Geyer (1996:310) states that Richardson sees the spatial dimension of industrial development almost identical to Vining's description (1977) of migration processes in the First World. He states that urban-industrial development starts in one or two core regions of a country. Geyer (1998:164) states that there is decentralistion within a core, resulting in a multi-nodal urban structure. This is followed by interregional deconcentration, leading to a limited number of nodes within the inner periphery, which is followed by deconcentration towards the outer peripheral regions.

The stages of turnaround are termed polarisation reversal (Geyer, 1998:164). This phase is followed by counter-urbanisation, when the core loses population in absolute terms. Geyer (1998:173) states that Developed countries do go through the polarisation reversal stage.

Geyer (2001:8) derives the following conclusions with regard to economic development of urban systems:

National urban systems go through a primate city stage where a large number of economic developments and a large number of migrants are attracted to one or a few primary centres and a core-peripheral system develops. The national system expands and new urban centres are added to the lower ranks, while many of the existing centres move up in the ranks. Economic development spreads and the urban systems become more integrated (Friedmann, 1966; Geyer, 2001:8). National urban systems can be divided into different strata namely regional, sub-regional and local levels.

The polarised region as a functional entity describes the core-peripheral subsystem, (Geyer, 2001:8). There is more interaction between the urban centres within the region than with centres outside. The sequence of tendencies is not dependent on the national system, but can manifest at a lower level as the same spatial forces that operate at the national level, also operate at sub-national and local levels (Geyer, 2001:8). Secondary centres usually develop close to primary centres (Richardson, 1977).

Geyer (2001:9) concludes that the world-system already has existing core-periphery relationships at the global level, which can be explained as follows:

- Globalisation of the market economy has a significant impact on the market economy.
- Capitalism starts in Europe and extends outwards to North America and the Far East, as core nations of the world.
- New York, London and Tokyo serve as apexes within these cores at international level.

- Developed Countries penetrate the markets, leading to the displacement of unskilled labour in the peripheral regions of the world.
- The mobilised population is prone to migrate.
- Employment opportunities in global cities for skilled financial management and service industries are created by globalisation. Employment opportunities are also created in the centres for ancillary workers in entertainment, accommodation, construction, maintenance and services if one applies the same principles outlined in the propositions.

Geyer (2001:9) adds that the global system can be explained as follows:

Several primate city phases have been covered in the maturation of the urban system. Initially urbanisation and economic power were concentrated in the Middle and Far East, it then extended to Europe and North America. Currently the focus is shifting back to the East. As the primate cities mature, new urban centres are being formed as primate cities and the previous primate cities move up in the ranks. New focal economic points emerge on the world map, and economic development is dispersed while the spatial system becomes more integrated. New core-periphery relationships emerge in the expanding international urban system from the global through the continental and sub-continental, as well as the national and local levels.

The sequence of tendencies in the development of urban systems manifest at high levels of aggregation as the same spatial forces that operate at a national and sub-national level also operate at higher levels of aggregation. Locational advantages play a major role in spatial networks between large cities and satellite cities and intermediate sized cities closer to them, more than between world centres and other similar sized centres further apart. The odds favour stronger economic ties between Developed nations, than between Developed nations and Less Developed nations.

Further generalisations are made, namely that world cities and large urban regions around them have become spatially highly integrated. The same factors contributing to capital agglomeration, access to the market and global resources, apply to the larger areas surrounding these apexes. The global apexes and their surrounding areas that are economically integrated are located relative to one another, leading to the fact that the global system can be further divided into inner and outer core areas, as well as freestanding intermediate-sized city regions and peripheral regions. The global apexes and their surrounding urban areas constitute core-peripheral subsystems at the highest level of aggregation. Core-peripheral subsystems with the same spatial economic characteristics can also be defined in continental, sub-continental or national terms.

In terms of human resource potential the focus of urban settlements at the global scale is likely to shift increasingly towards the east and the Developing World over the next century. The gateways to large centres

in the Developing World will become very important in the future. Each continental and sub-continental core will enjoy similar advantages in terms of economic dominance of large peripheral areas surrounding it, similar to what world cities enjoy at the global level. All strata are part of the same urban system namely local, national, sub-national , continental and global (Geyer, 2001:10).

An Urbanising South Africa

The world is generally urbanising. The Developed World is already 75% urban and urbanisation is slowly increasing (SACN, 2004:36). The Developing World, by contrast is seeing the demographic tectonic event the Developed World saw in the mid-to-late 1800s resulting from the Industrial Revolution, which in many cases can be seen as '*premature*", where people move to cities or towns looking for employment without having sufficient skills to be employed by the formal economy (Geyer, 1989:387).

The current era is described as the "*age of migration*" (Castles & Miller, 1993) as international migration has increased dramatically worldwide, impacting significantly on urban development. Urbanisation has always occurred when people conquer new territory (Easton, 1954). Mumford (1961) pointed out that most urban settlements in Western Europe developed during 1250 to 1350. The majority of all people still lived in villages by the 1800s. Between 1800 and 1950 the world population increased by two hundred and fifty per cent and the urban areas grew up to ten times faster, especially in the Developed World. Fox (1984:1) revealed that there were 1,67 billion people on earth in 1950, with only seventeen per cent residing in urban areas. The South African Cities Network (2004:36) states that urbanisation stood at 27% in 1975 and escalated dramatically to 40% in 2000.

Geyer (2001:1) describes the growth of large urban agglomerations where cities grew into metropolitan, and megalopolitan areas. Geyer (2001:1) describes the populations of certain areas continuing to grow until they become "*ecumenopolis*". Clark (1967:280) was convinced that urbanisation would continue and formulated the law of population concentration which is as follows: "*The macro-location of industry and population tends towards and ever-increasing concentration in a limited number of areas, their micro-location, on the other hand, towards and increasing diffusion or sprawl.*"

Urbanisation did not continue as urban deconcentration took place in many Developed Countries, as described by Fielding (1982:13): "*Urbanisation, used in the sense of a positive relationship between net migration and settlement size, has ceased in almost all of the countries of Western Europe in the period 1950-80. In seven out of the nine countries in which it can be shown that urbanisation has ceased, the metropolitan and principal industrial cities showed, during the 1970s, signs of net migration loss, and rural regions containing small and medium- sized towns showed signs of net migration gain.*"

Urban growth rates in the Developed World, lost momentum (Cochrane & Vining, 1988:108), but the Developing Countries began to urbanise rapidly, e.g. Mexico (Aguilar, 2001:6). Fox mentions that in 1950 only 34 cities had more than 5 million residents and twenty-two were located in Developing Countries. More people were living in urban areas in the Developing World, than in the urban centres of the Developed World (Geyer, 2001:1).

Rogers (Geyer, 2001:1) mentions that eleven of the world's fifteen largest cities were located in the Developed World in 1950, but this had all changed by 1980, as the number decreased to eight. The SACN (2004:36) states that urban growth in the Developing World is accelerating and that over the next three decades, the urban population of the Developing World is expected to grow at 2.4% per annum, double the average rate of population growth as a whole at 1.2%.

Urban growth in Sub-Saharan Africa is even faster than this. It is estimated that early in the 21st century the threshold will be crossed where more than fifty per cent of people will live in urban areas. It is estimated that by 2030 approximately 5 billion people, sixty per cent of the world's population, will be urban. Most will be living in large cities in the Developing World. The South African Cities Network (2004:36) also states that by 2015 there will be approximately 550 cities of over one million people and four hundred and twenty-six of these will be in Developing Countries. The world is also projected to have at least twenty-one mega cities of over ten million people. All but a few of these will be in the Developing World.

Geyer (1989:268) describes urbanisation in the Developing World as being the result of "*premature urbanisation*", a term which means that people migrate to urban areas without sufficient skills to be absorbed and employed in the formal economy. Castells (1993:257) also states that Developing Countries, especially those in Africa, are being left behind by the fast economic development happening in the Developed World. Global population is currently levelling out (Geyer, 2001:1) resulting from the second demographic transition in Developed Countries and in Developing Countries as a result of continuous economic, political and health crises increasing mortality rates in these countries.

The State of South African Cities Report (2004:37) states that South Africa is following this trend. It is already ahead of the global curve and well ahead of sub-Saharan Africa. In 1996 53.7% of the population was urbanised, but this has grown to 58% compared to 34% in Sub-Saharan Africa. It is projected to rise to 64% in 2030 whereas Sub-Saharan Africa will be where South Africa had been in 1996 at 53%.

Stats SA released the 2004 mid-year population estimates. As part of its adherence to the International Monetary Fund's special data dissemination standard, StatsSA publishes population estimates for the country as a whole and the nine provinces annually. This is particularly important in the years between each

population census. In mid-2004, the population was estimated at 46.6 million, an increase of 1.8 million over the October 2001 census figure. The statistics released also suggest that positive net migration will lead to substantial growth in Gauteng and the Western Cape in the short term. For Gauteng, it is estimated that 850 000 people will move to the province and 350 000 will move out of the province between 2001 and 2006, resulting in net positive migration of 500 000. For the Western Cape, the estimated net migration for the same period is 225 000 people, while it is projected that KwaZulu-Natal will have a negative net migration. These inter-provincial shifts in the population suggest that Gauteng might become the most populous province by 2011, when the next full population census takes place (StatsSA, 2004:1).

The Census Statistics of 1996 and 2001 released by StatsSA show that the population of the largest 21 urban centres in South Africa has grown with 14,23% from 1.4 million to 21.1 million. This indicates a growth rate of 2.7% per annum on average. The South African Cities Network (2004:37) states that the Developing World average is 2.4%. By contrast, the annual average rate of growth of South Africa's population as a whole was 2.01%, which is higher than the Developing World's growth rate of 1.2% and higher than the growth rate for the twenty-one urban centres of 1.41 %. Focusing only on the last half decade and on average growth rates is to miss a much bigger and more nuanced picture. It is therefore crucial to investigate growth rates and other demographic trends of the past fifty years to gain a realistic picture of the South African situation.

Demographic History and An Urban South Africa – The Last Fifty Years

The demographic transition

Until 1994 very little was known outside South Africa about the demographic transition that has been underway in this country for most of this century (Oosthuizen, 1994). The first population group to embark on this transition was the Whites. Mortality and fertility among Whites started to decline as early as the first decade of this century.

The mortality and fertility decline among the other three population groups started much later, only in the 1950s, but accelerated after the introduction of the South African family planning programme in 1974. The first significant decline took place in the Indian and Coloured populations followed by the Black population. The Indian and Coloured populations experienced mortality and fertility declines since the late fifties. The Black population followed in the late sixties, at least two decades before the other forerunners of the demographic transition in sub-Saharan Africa (Kenya, Zimbabwe and Botswana), started their transition.

Mortality transition

Although Statistics South Africa (formerly the Central Statistical Service) officially collects data on deaths for all four population groups, it is generally known that the quality of these data vary from population group to population group. The data for the Indians, Coloureds and Whites are reasonably good, partly because these are urban populations among which the collection of vital statistics is much more effective than among rural populations. This, however, does not apply to the black population which has been predominantly rural in the past and therefore much more difficult to reach. The vital statistics of the urban Blacks, however, are of an acceptable standard. In view of these problems, indirect methods have been used to calculate the life expectancy and mortality rates that will be given for the different population groups.

A comparison of the most important mortality indicators, namely life expectancy at birth, the crude mortality rate and the infant mortality rate are quite revealing. They clearly show that the Whites have almost completed their transition. The Indians and Coloureds are not far behind them and close to completing theirs as well. The Blacks, however will still need quite some time to complete their transition (Mostert & Lötter, 1990).

Table 4-2: Average annual life expectancy at birth, by population group: 1945-1995

Period	Blacks	Coloureds	Indians	Whites	Total
Men					
1945-1950	39.2	44.8	53.2	63.4	45.0
1950-1955	43.6	50.3	57.3	64.2	48.7
1955-1960	51.7	51.3	58.7	64.5	54.3
1960-1965	53.8	52.0	59.7	64.3	55.7
1965-1970	55.3	50.9	59.4	64.2	56.5
1970-1975	56.0	51.2	59.5	64.9	57.1
1975-1980	57.3	53.7	61.0	65.8	58.4
1980-1985	58.8	55.9	62.7	67.0	59.8
1985-1990	59.8	57.2	63.9	67.8	60.7
1990-1995	62.3	58.7	64.9	68.3	62.7

Increase: 1945-1995	23.1	13.9	10.7	4.9	17.7
Average annual increase: 1945-1995	0.5	0.3	0.2	0.1	0.4
Women					
1945-1950	42.0	46.8	53.3	68.3	47.9
1950-1955	46.5	51.1	58.3	69.9	51.7
1955-1960	54.9	55.3	61.0	71.0	58.1
1960-1965	57.1	56.5	62.9	71.2	59.7
1965-1970	58.8	56.7	63.8	71.7	60.9
1970-1975	59.5	58.0	64.8	72.3	61.6
1975-1980	60.8	60.9	66.8	73.4	62.9
1980-1985	62.7	63.5	69.2	74.5	64.6
1985-1990	64.7	64.8	70.5	75.2	66.3
1990-1995	66.2	66.8	72.5	76.2	68.3
Increase: 1945-1995	25.2	20.0	19.2	7.9	20.4
Average annual increase: 1945-1995	0.5	0.4	0.4	0.2	0.4

Source: Mostert *et al.* (1998: 75)

Since the Second World War life expectancy has significantly increased for all population groups. There was a slight difference in the increase for males and females. For the total male population it increased with 17.7 years and for the female population with 20.4 years. For Whites the increase was much smaller than for the other groups because life expectancy was already relatively high at the end of the Second World War where these statistics start. At that time life expectancy was still quite low for the three Non-White population groups, but it has risen sharply since then. Modernisation and a general expansion of health services combined with much better accessibility of medical services explain the sharp rise in life expectancy among these groups. Before the war droughts and the worldwide economic recession had an adverse effect on life expectancy for all. After the war it increased rapidly but then stagnated for two decades. Since the late 1970s it was rising again. This was a result of a general improvement of living conditions in the country and better access to medical services, especially for Blacks in rural areas.

Table 4-2 shows the crude death rates for the South African population groups from 1945 to 1995. The crude death rate for the whole population has declined from 19.7 to 7.9 per 1000, which is more than 50 per cent for the 50-year period covered by the statistics. Since the crude death rate is strongly influenced by the age structure of the different population groups (older populations experience relatively more deaths than younger populations) the changes in the crude death rate were the smallest among the Whites because the white population was already fairly old in 1945. The ageing of the white population therefore cancelled out most of the reductions in the crude death rate of the group. The other three population groups, which were still demographically young at the beginning of the period, have experienced rapid declines in crude death rates. The main reason for these declines was the declines in their child mortality rates. Relatively high fertility rates also juvenated these population groups, which led to a further decline in the crude death rates.

Table 4-3: Average annual crude death rates, by population group: 1945-1995

Period	Blacks	Coloureds	Indians	Whites	Total
1945-1950	23.4	18.3	11.6	8.8	19.7
1950-1955	19.9	16.4	9.2	8.5	17.1
1955-1960	12.8	14.5	7.9	8.4	12.0
1960-1965	12.2	13.9	7.0	8.6	11.6
1965-1970	11.0	13.6	6.8	8.6	10.7
1970-1975	10.7	12.3	6.6	8.4	10.4
1975-1980	9.9	10.0	6.1	8.1	9.5
1980-1985	9.1	9.1	5.7	8.2	8.9
1985-1990	8.1	8.9	5.9	8.7	8.4
1990-1995	8.0	8.8	6.0	8.9	7.9

Source: Mostert *et al.* (1998: 76)

Table 4-4: Average annual infant mortality rates, by population group: 1945-1995

Period	Blacks	Coloureds	Indians	Whites	Total
1945-1950	182.5	114.5	57.8	35.6	142.6

Period	Blacks	Coloureds	Indians	Whites	Total
1950-1955	154.3	116.4	50.6	32.7	123.6
1955-1960	97.6	112.2	48.5	29.3	84.5
1960-1965	92.7	109.7	45.7	27.5	81.0
1965-1970	83.5	113.4	41.3	22.0	73.9
1970-1975	82.4	98.3	37.5	19.8	71.0
1975-1980	75.0	76.7	27.4	16.9	64.4
1980-1985	67.6	56.9	19.9	12.8	56.7
1985-1990	60.6	50.5	16.6	11.5	51.3
1990-1995	51.0	44.1	13.5	9.8	46.2

Source: Mostert *et al.* (1998:77)

Infant mortality also declined during the period 1945 to 1995 among all population groups. As in the case of crude death rates the smallest declines in infant mortality rates occurred among the Indians and the Whites. The most significant declines were among the Black and the Coloured population groups where infant mortality rates dropped from very high to moderate levels. This corresponds with what has been observed in other Developing Countries where infant mortality rates have also declined rapidly among populationswhich find themselves in the early stages of the demographic transition.

Table 4-3 shows the declines in infant mortality between 1945 and 1995. Since infant mortality is a good indicator of the general standard of living in a population, these declines suggest that living conditions among the Black and the Coloured populations also improved significantly since 1945 (Rossouw & Jordaan, 1997:3).

It is important to note, however, that the mortality declines that have been noted above are likely to be cancelled out again soon by the increasing AIDS epidemic in South Africa. It is expected that, as a result of AIDS, more recent statistics will show a rise in mortality for both children and adults and a subsequent decline in life expectancy. A recent projection suggests that life expectancy for the total South African population could decline to 45 years again - the same as it had been after the Second World War, thus destroying all the gains that were made since 1945. The macro-economic impact of AIDS on South Africa will be pervasive.

About twelve per cent of all adult South Africans are already infected with HIV. This is more than twice the percentage three years ago. It is likely that within a few years from now, about 25 per cent of all adult South Africans will be infected, unless strong prevention programmes are adopted soon. The impact of the AIDS epidemic on skilled human resources will be devastating.

Labour cost is likely to increase, not only due to the paucity of skilled workers, but also as a result of high morbidity and increased absenteeism and labour turnover. The quality of the workforce is also expected to deteriorate with the loss of skilled and experienced workers, resulting in a decline in productivity. From a medical and social point of view, huge burdens are likely to be placed on the state and society in general in terms of care for AIDS patients and orphans of parents who died of AIDS (Mostert *et al.*, 1998:97-103).

The fertility transition

The total fertility rate for the South African population is currently the lowest in sub-Saharan Africa. Although the transition has not yet been completed among all population groups, the pace of decline has accelerated remarkably during the last decade. For the Black population in particular, the total fertility rate has gone down from about 4.6 to 3.6 in the last ten years. Most women in sexual unions are now regular users of contraceptives and the number of children they desire is below three. Within the African context this is very low (Mostert & Hofmeyr, 1997).

All this is not surprising if one takes into account that South Africa is a highly developed industrial country, which, as will be shown further on, is very different from most other sub-Saharan African countries. Although the focus has now shifted from family planning to reproductive health in general, South Africahad the advantage of an exceptionally forceful family planning programme, which commenced as far back as 1963 - roughly the same time when the well-known Taiwan family planning experiment was launched.

The impact of the South African family planning programme on the demographic transition in this country can hardly be underestimated. Caldwell (1993: 243) stated the following with regard to the South African family planning programme: "*In most respects the ... South African family planning program far exceeds what might be described as a moderately strong one, and it represents an experiment of African, and even global, significance ... (the South African family planning program) is Asian or super-Asian, by measure of the density of services it offers*" (Caldwell, 1993: 258).

Private family planning initiatives in South Africa already started in 1932 when a number of white women who were primarily involved in social welfare, established a family planning association in Cape Town. Through their work these women became concerned about the high fertility they encountered among women,

Black, Coloured and White alike, in the Cape Peninsula. Several privately funded clinics were opened to promote family planning and to provide advice to women who wanted to curb their own fertility.

In the next three decades family planning associations similar to the one in Cape Town were also established in Johannesburg (1940s), Durban (1950s) and East London (1950s). Apart from distributing information regarding family planning, these associations also established family planning clinics in the cities just named. Initially these clinics, and the services they provided, were entirely in private hands. Because family planning was then still a very sensitive issue, their efforts to obtain financial support from the local town councils were unsuccessful. It was only in the early 1960s that local authorities and the central government started to show an interest in the activities of these associations.

The watershed was reached in 1963 when the central government decided to give formal support to the initiatives taken by the family planning associations, and to provide substantial funding, not only for all private family planning clinics, but also for the hospitals and clinics that were run by local authorities and the central government. This support included the supply of contraceptives free of charge to those who demanded it.

The next important phase in the development of family planning in South Africa was the establishment of the National Family Planning Programme in 1974. The main objectives of this programme were "*to strengthen the provision of contraceptives by making family planning an integral part of all health services; to establish a major organizational and information unit within the Department of Health; to recruit family planning educators to carry out individual motivation beyond that being done by the family planning associations; to employ the media for family planning messages; and to fund relevant social and medical research*" (Caldwell, 1993: 239).

Mostert *et al.* (1998: 124) explain that at the beginning of the 1980s it was generally felt that, despite the success that was achieved by the National Family Planning Programme, there was a need for a broader programme that would not only focus on family planning but would also concern itself with the social and economic needs of the South African population. This new programme, which was launched in 1984, was called the Population Development Programme. The main objectives of the Population Development Programme were to establish a stable population of 80 million at the end of the next century; to accelerate the social and economic development of all population groups; to achieve an average of two children per woman by the year 2010; to promote a maximum level of health among all population groups; to affect an orderly geographic distribution of the population in the country; and to develop the rural areas.

In the post-"*Apartheid*" era, after 1994, a new population policy was formulated which, as in the past, followed the lead of the United Nations' international conferences on population. This time the conference, International Conference on Population and Development, was held in Cairo in 1994. The aim of this new population policy was to improve reproductive health services and empower women. One of the first results of this new policy has been the liberalisation of legislation with regard to abortion. Since 1997, legal abortion services are provided at numerous government hospitals throughout the country. Thousands of women, a large proportion of them teenagers, who had to deal with unwanted pregnancies, have since then obtained abortions. This had, without doubt, accelerated the fertility decline, especially among black women, in South Africa (Mostert, 1998:124).

Although the quality of population data varies from population group to population group, South Africa has conducted censuses since 1904. Vital statistics have also been collected for at least 50 years. These statistics allow us to form a fairly clear picture of the fertility transition in South Africa. The fertility transition among the white population started shortly after the Anglo-Boer War, in other words, during the first decade of this century. The fertility transitions among the other three population groups followed in the 1950s, 1960s and 1970s.

Before the Second World War large fertility differentials still existed between the White and non-White population groups. The total fertility rates for the three non-White population groups were around seven children per woman during the 1930s, while the total fertility rate for Whites declined from 4.5 during the first decade of this century to below three during the 1930s. After that it increased slightly, but since 1960 there was a consistent decline in white fertility. White fertility finally dropped below replacement level in the early 1980s. This means that the white fertility transition in South Africa closely resembled the fertility transition in the more developed countries in Europe and North America.

Table 4-5: Average annual total fertility rates, by population group: 1945-1995

Period	Blacks	Coloureds	Indians	Whites	Total
1945-1950	6.8	6.2	6.5	3.5	6.0
1950-1955	6.8	6.4	6.1	3.4	6.1
1955-1960	6.7	6.5	5.5	3.5	6.0
1960-1965	6.7	6.5	4.7	3.3	6.0
1965-1970	6.5	6.0	4.1	3.0	5.8

Period	Blacks	Coloureds	Indians	Whites	Total
1970-1975	6.3	5.2	3.6	2.8	5.5
1975-1980	5.8	4.0	2.9	2.2	4.9
1980-1985	5.4	3.6	2.7	2.1	4.6
1985-1990	4.6	3.3	2.3	1.7	4.0
1990-1995	3.6	2.5	2.1	1.5	3.5

Until 1950 the fertility of the three non-White population groups was just as high as in other developing countries. The first of these three groups to experience a significant fertility decline was the Indians. Indian fertility declined rapidly during the second half of this century, as also happened in the newly industrialised countries in Asia. Initially the most important reason for this fertility decline among South African Indians was the rise in age at first marriage. This decline was amplified by the strong cultural taboo on premarital sexual intercourse among Indians. Since the early 1960s the use of modern contraceptives had made the most important contribution toward the lowering of Indian fertility in South Africa (Mostert *et al.*, 1998:124).

The decline in Coloured fertility only started after 1960. The baby boom after the Second World War was much more persistent among the Coloureds than among the Indians and the Whites. Factors responsible for the rise in Coloured fertility between 1945 and 1960, were the following: rapid urbanisation which led to a general improvement in the living conditions and health of Coloured people; large numbers of Coloured women entered the labour market, thus causing a shortening of breast-feeding and post-partum abstinence; rapid urbanisation of the Coloured population also led to an increase in premarital sex, especially among teenagers. However, psychologically the modernising Coloured population, which was mainly concentrated in the Cape Peninsula, was ready to turn to modern contraceptives when they became available. This explains the very rapid decline in Coloured fertility after 1960. Black fertility in South Africa has shown a steady declining trend during the second half of this century. This trend sharply deviates from the general trend in sub-Saharan Africa where fertility generally remained on very high levels.

The fertility decline among South African Blacks, however, was much slower than among the other three population groups. There are several explanations for this. Although South Africa was developing much faster than the other sub-Saharan Africa countries, the restrictions that were placed on immigration to the cities forced the majority of Black women to live in rural areas. Thousands of Black women therefore had to raise their children in a very traditional environment where women still had a very low status and high fertility norms prevailed.

The rising levels of social and economic development in South Africa have led urban black women to adopt more modern attitudes toward fertility, but the proportions of women residing in the cities were still too small to cause a rapid fertility decline among the black population as a whole. Although the South African family planning programme had already been in operation for two decades, it initially received little support from the ten homeland governments who were very reluctant to give formal backing to any form of anti-natal population policy. It was only in the 1980s that the programme succeeded in getting full support from the homeland governments. This accelerated the fertility decline among black women significantly.

Most black women lived in the homelands where contraceptives were not always readily available. Black fertility remained relatively high compared to fertility among the other three population groups (Oosthuizen, 1999:6).

Despite the slow start Black fertility has plummeted during the past decade - in both rural and urban areas. The most important factors responsible for this decline in black fertility are the following (Oosthuizen, 1999:7):

Integration in the workplace: Although close social contact between Whites and non-Whites in South Africa was severely restricted during the "*Apartheid*" era, it must be kept in mind that South Africans had always been integrated in the workplace. Whites and non-Whites rubbed shoulders daily, often in very intimate circumstances, for example where black women working as housemaids took care of white working mothers' children. Given these circumstances, it was inevitable that large numbers of black people must have been deeply influenced by Western lifestyles.

Minibus taxi business: Another factor, which had a major affect on the lifestyle of Black South Africans in recent years, was the emergence of the minibus taxi business in the early 1980s. Since the minibus provides a fast and very convenient way of travelling long distances, it has become the most important means of transport for black people in South Africa. Minibus taxis enabled migrant workers to visit their families much more frequently than in the past, and, in turn, also provided rural people frequent opportunities to visit family members in the cities. This has become another forceful way in which rural black people got exposed to modern urban lifestyles and values.

Role of the mass media: Most Black people in South Africa, even those in deep rural areas, are exposed to the pervasive influence of the mass media. The impact of these media, especially radio and television, on black people in South Africa, can hardly be overestimated. Radio and television not only play an important role in the dissemination of modern urban lifestyles and values, but have in recent years also become the most important vehicles of conveying information regarding family planning to black people.

Health care and family planning: Probably the most important factor contributing to the fertility decline among South African Blacks, was the very extensive network of clinics provided under the National Family Planning Programme. Mobile clinics not only brought health care, but also contraceptive services right into the rural communities. The crude birth rates (births per 1000 of the population) for the four population groups are shown in Table 4-5. Comparisons between the different population groups on the basis of this will be misleading because the age structures of the groups are different. The crude rates, however, also broadly confirm the declines in fertility.

Table 4-6: Average annual crude birth rates, by population group: 1945-1995

Period	Blacks	Coloureds	Indians	Whites	Total
1945-1950	46.8	42.9	44.3	26.1	42.2
1950-1955	46.3	44.3	41.5	24.7	41.8
1955-1960	44.8	45.1	38.2	24.4	40.8
1960-1965	43.8	45.0	34.9	23.2	40.0
1965-1970	42.3	41.4	32.3	22.3	38.5
1970-1975	41.3	36.6	29.7	21.8	39.2
1975-1980	40.0	31.2	25.3	17.3	35.1
1980-1985	37.5	28.5	24.1	16.8	34.0
1985-1990	34.9	27.9	21.2	14.4	31.0
1990-1995	30.1	24.8	19.8	13.0	27.9

Source: Mostert, Hofmeyr, Oosthuizen & Van Zyl (1998: 124)

The mobility transition

Zelinsky's theory (1971:220-249) regarding the relationship between demographic change and geographic mobility is described in an article on the "mobility transition" in the modern world. Zelinsky (1971:219) suggested that, as populations move through the different phases of the demographic transition, migration patterns, both international and internal, change in predictable ways. When a population reaches the phase of rapid population growth, described as the phase during which mortality declines but fertility remains relatively high, migration tends to increase.

Characteristic of this phase in the transition is an increase in the number of young people and an intense competition for scarce resources such as land and work, particularly in rural areas. When this happens, people tend to move away, either to less densely populated rural areas, but more likely to nearby urban areas (internal migration), or even to further off destinations in other countries (international migration) (Zelinsky, 1971:247). The migratory movements in South and Southern Africa can be explained in terms of this theory.

International migration in southern Africa has mostly taken the form of labour migration, with South Africa as the receiving country and its neighbours the sending countries. Rapid population growth in Southern Africa together with abundant work opportunities in South Africa, especially in the mining industry, has been the most important force driving international migration in Southern Africa. In recent years, however, internal strife in Mozambique and Angola has also led to a substantial refugee problem in Southern Africa, with Zimbabwe, Malawi and South Africa at the receiving end of the refugee movements (Oosthuizen, 1993).

The history of labour migration in Southern Africa falls into three distinct periods: the period before the discovery of diamonds and gold (1652-1867), the period of the mineral revolution (1867-1945) and the period of industrialisation that started after the Second World War (1945). This is described by Van Der Merwe, 1983:45):

First period: The first foreign workers in South Africa were the slaves who were brought to the Cape Colony as far back as the seventeenth century. The abolishment of slavery in the Cape Colony in 1734 gave a particularly strong impetus to migratory labour. Due to a shortage of labour on white farms, black labourers were employed to fulfil the labour needs of the farmers. The Boers who migrated to the Free State and Transvaal after 1834, and established their own republics in those areas, were totally dependent on agricultural production. Subsistence farming was the main source of income for both Whites and Blacks in these areas. The British Colony of Natal, was slightly wealthier than the Boer Republics due to its thriving sugar industry. As a result of the refusal of Blacks to work in the sugar cane fields, it was decided to import indentured Indian labourers from 1860 onwards.

Second period: Before the discovery of diamonds and gold most farmers, both black and white, were, as was said above, mainly involved in subsistence farming. The discovery of diamonds in Kimberley (1867) created a complete new situation. A huge demand for unskilled black labour in the diamond industry developed and surpassed the demand for black labour in agriculture. Most of the Blacks in the diamond industry came from Damaraland (in Namibia), Swaziland and Transkei. The discovery of gold at the Witwatersrand (1886) and the subsequent gold rush soon overshadowed the diamond-mining industry in Kimberly and increased the demand for black labour. Since both Kimberley and the Witwatersrand were situated in sparsely populated

areas there was a great need to import labourers from elsewhere. The Chamber of Mines therefore set up separate organisations to recruit black labourers outside South Africa. Most of these labourers were recruited in Botswana, Lesotho, Swaziland, Zimbabwe, Malawi and Mozambique.

Third period: The diversification of the South African economy after the Second World War made an important impact on migrant labour. This diversification created a rapid expansion of employment in the manufacturing as well as in the public and private construction sectors. The large increase in labour demand caused a rise in black wages and significant discrepancies between wages in the mining and other industrial sectors. This in turn led South African Blacks to abandon employment in the mining sector. The Chamber of Mines' reaction to this development was to intensify its recruitment of black labourers outside South Africa instead of competing with the secondary and tertiary sectors in South Africa for domestic black workers.

Although the number of foreign workers employed by the mining industry has declined gradually since the 1970s the Chamber of Mines is still the most important employer of foreign black workers. More than 80 per cent of foreign black workers currently employed in the various economic sectors in South Africa are employed in the mining industry. Another important employer of foreign black workers is the agricultural sector. It is common knowledge that thousands of destitute black workers from Mozambique are working illegally on farms in Mpumalanga. Large numbers of workers from Botswana, Lesotho and Swaziland are also working illegally on South African farms close to the borders of these countries.

It is important to note that all the countries that have supplied labour to South Africa in the past have shared in the relative prosperity of South Africa. The real income of mineworkers has improved significantly over the years. The countries supplying labour to South Africa have therefore benefited accordingly. Apart from the remittances received from the migrant workers these countries were also able to channel their surplus labour to South Africa thus reducing unemployment among their own people. What must be kept in mind, however, is that the proportion of the labour force employed in the formal sector in most of the Southern African countries is very small. The major components of the labour force in these countries are employed in the informal subsistence sector.

Zelinsky's theory on the "*mobility transition*" is particularly relevant for the explanation of the various forms of *internal migration* in South Africa. Of specific interest for the explanation of problems of land use in South Africa, is Zelinsky's explanation of different forms of internal migration. The rapid growth of cities in many Developing Countries, can, according to him, be attributed to rural-urban migration, which is the most common form of internal migration in Developing Countries. Rural-urban migration itself is a result of rapid population growth in rural areas where fertility is mostly still very high. Other forms of internal migration that were identified by Zelinsky, and are important for the explanation of current trends with regard to land

use in South Africa, are circular, urban-urban and/or intra-urban migration. Zelinsky's original theory was later refined by other authors, *inter alia* Kelly and Williamson (1984).

Kelly and Williamson predicted that, as a result of high levels of rural-urban migration, unusually rapid urbanisation would occur in the Developing Countries between 1980 and 2020. They suggested that urbanisation in a typical Developing Country would take the form of a logistic curve (an extended S-curve) with a relatively steep positive incline between the years 1980 and 2020. This means that although urbanisation is expected to increase sharply in the Developing Countries, it will later (after 2020) tend to become asymptotic to a saturation level of 85 per cent which in their view is an "urban limit" for non-island states. They hypothesised that the worldwide urban transition would largely be completed by the year 2000 and produced evidence from Developed Countries, which shows that an urban equilibrium is reached when 85 per cent of the population in a country is urbanised. In the United States of America, for example, this has been the "urban limit." Most of the Developing Countries, in their view, will reach this urban limit by 2020, after which urban growth will stabilise close to zero. If their predictions are correct, urban growth in Developing Countries will soon start to decline. Urban problems will decrease and "*over-urbanisation*", which is the root cause of urban environmental decay, will most probably also lose some of its urgency. Slower urban growth rates after 2000 will also make it easier to cope with the numerous problems associated with rapid urban expansion during the preceding decades (Kelly & Williamson, 1984: 428-429).

Most of the Developed Countries have already reached the "urban limit" of 85 per cent of their total populations urbanised or are close to this limit. Many studies of urbanisation in developing countries (Williamson, 1988; Preston, 1979) have shown that the urban populations in most of the Developing Countries are growing at much higher rates than were the populations of Western Europe around the turn of the century. The immense size of the cities in these countries makes the volume of the growth unprecedented in human history. Analyses of this growth show that the largest component of urban population growth in the cities of the Developing Countries is the natural increase of the urban populations themselves and not of high rates of rural-urban migration.

According to Preston (1979:196-198) "*the rate of change in the proportion urban in developing countries is not exceptionally rapid by historical standards; rather the growth rates of urban populations represent an unprecedented phenomenon. Urban grow, through most of the developing world, results primarily from the natural increase of urban populations. Around two thirds of urban growth has resulted from a natural increase.*"

The question here is whether the theories and findings above bear any relevance to South Africa. Research on the patterns of internal migration in South Africa seem to support Preston's statements above. When

studying internal migration in South Africa it is important to distinguish between Black and non-Black migration patterns. As far as the non-Black population groups (Coloureds, Indians and Whites) in South Africa are concerned, Kelly and Williamson's "urban limit" has already been reached. All three these groups are already predominantly urban and rural-urban migration among them has slowed down to a trickle. What has struck most observers in South Africa until the middle 1970s, however, was the relatively low rates of rural-urban migration among the Blacks. This is particularly remarkable when one takes into account that South Africa is the most industrialised country on the African continent, with a very high level of per capita income compared to other countries in Africa.

Oosthuizen (1999:22) states that there can be no doubt that the policies of mining companies and urban authorities until 1948 and subsequently the National Party's ""Apartheid"" polices were largely responsible for this very low urban growth rate among Blacks during the first three quarters of this century. Although the "*Apartheid*" laws applied to all three non-White population groups, *i.e.* Indians, Coloureds and Blacks, the Blacks were more severely affected by these laws because they were the least urbanised of all the population groups in the country. Several of these laws were deliberately aimed at keeping black people out of the urban areas. These laws not only stemmed the flow of black people to the major cities and metropolises in South Africa, but also caused new patterns of internal migration that differ in many aspects from what is found in other parts of Southern Africa. Geographically South Africa was divided into ten "homelands" which were set aside for the different black ethnic groups and "mixed areas" which were shared by Whites, Indians and Coloureds. Blacks were allowed to work and live in the "mixed areas" but could never acquire property rights there. Blacks were considered to be temporary residents in these areas and were allowed to stay there as long as they had work. One of the most visible outcomes of "*Apartheid*" policies regarding rural-urban migration has been the development of what is today called "dense settlements" in the black rural areas close to the major metropoles of South Africa.

To understand the current patterns of internal migration in South Africa properly, one has to take account of the various types of settlements that have developed in South Africa over time. The urban foundation identified five major types.

Metropolitan areas, which comprise of very densely populated industrial areas where the population depends on incomes generated from non-agricultural activities. Six such areas can be distinguished, namely the Pretoria-Witwatersrand-Vereeniging area (previously called the PWV area - now Gauteng Province), the Durban-Pinetown-Pietermaritzburg area, the East LondonPort Elisabeth-Uitenhage area, the Cape Peninsula, Bloemfontein and the Free State Goldfields. These are the largest and most densely populated urban areas in South Africa.

Cities and towns, which are smaller than the above-mentioned metropolitan areas and are mostly surrounded by white commercial farms.

Informal settlements,-which are mostly found in and around the major metropolitan areas or cities and towns. Most people living in these areas originate from townships and other more or less urban areas - not from rural areas as is often thought.

Dense settlements, are found in the rural homelands only and they consist of agglomerations of mainly informal dwellings. Most of the people living in these settlements do not derive significant income from agriculture. The emergence of these settlements was a product of the following factors: a shortage of land in the erstwhile homelands due to high population growth; the lack of residential land for Blacks in or near cities, towns and metropolitan areas in the mixed areas; forced removals from "*White*" land; and the comparative ease with which informal settlements could be established in the former homelands.

Rural areas, which are areas with relatively low population densities compared to the above-mentioned areas. Some people living in these areas still derive income from agriculture but most of them rely on state pensions and remittances from family members working in urban areas. Today less than 40 per cent of the Black population in South Africa is still found in rural areas.

The influx of rural people into the urban areas of South Africa happened in waves. For the Indians, the most urbanised of the four population groups, this process already started during the last quarter of the previous century. The Whites followed them during the second quarter, the Coloureds during the third quarter and the Blacks during the fourth quarter of this century. Except in the case of the Indians where the immigration policy of the colonial government in Natal played a determining role, the onset of rural-urban migration corresponded closely with the onset of the demographic transition in the different population groups as described by Oosthuizen in 1997.

The first wave (Indians): The first Indians arrived in South Africa in the 1860s as indentured labourers to work on the sugar cane fields in Natal. They were indentured to their employers for three years. At the end of their indentured service they could return to India or become free men and accept a piece of crown land for their service. The majority of them chose to remain in South Africa (Natal) and to settle on the land, which was the reward for their service. By 1891 two thirds of the indentured Indians were already free and working on their own account, initially as farmers on the land given to them, but later on as hawkers and peddlers in the urban areas of Natal because the land they received was too small to make a living out of agriculture. As time went on, Indians dispersed throughout Natal and also other parts of South Africa working in all kinds of professions, but mostly as traders. Today about 97 per cent of all Indians live in urban areas in South Africa.

The second wave (Whites): During the previous century more than three quarters of all white people lived in rural areas and made a living out of farming. The Anglo-Boer War (1899-1902), however, caused a watershed in the urbanisation history of Whites in South Africa. The destruction of the farms and the disintegration of many families (due to, among other things, the death of male breadwinners), forced the remaining members of families to abandon their farms and move to the cities, or to work as "bywoners" (tenants) of more fortunate white farmers. More important than these immediate effects of the war, was the "baby boom" (similar to the one after the Second World War), which took place among the white population during first and second decades of this century. A shortage of land and farming opportunities in subsequent years drove large numbers of young white people to the cities. The deteriorating farming conditions during the late twenties and most of the thirties (due to the world wide economic depression and the severe droughts in Southern Africa) eventually forced thousands of white farmers to abandon farming and make a living in the cities. Most of the children of those who remained on their farms eventually chose to pursue professional careers in urban areas because they saw no future for themselves in farming. Almost 95 per cent of all White people live in urban areas.

The third wave (Coloureds): The Coloured population went through the explosive phase of its demographic transition during the late 1950s and 1960s. Mortality, especially infant mortality, among the Coloured population declined rapidly during this period. The Coloured population was the only population group in South Africa, which experienced a major "*baby boom*" after the Second World War, but, as in most of the other countries that experienced a "*baby boom*" after 1950, the boom was short-lived. It nevertheless contributed significantly to the juvenation of the Coloured population and rapid population growth in particularly the rural Coloured communities in the Western Cape where the majority of Coloured people lived at the time. Since there were not enough employment opportunities for young Coloureds on the farms, they had to move elsewhere. Job opportunities in the Cape Town metropolitan area (their most likely destination) were limited, but conditions in the cities and metropoles outside the Western Cape were very favourable. Large numbers of Coloured people, especially young people, therefore moved to urban areas in the northern provinces of the country (the Free State, Transvaal and Natal). Today more than 85 percent of all Coloureds live in urban areas.

The fourth wave (Blacks): The final wave of rural-urban migration - the one involving the black population - started in the mid-1970s and continued until the late 1980s. This is the period during which the Blacks were crowded into homelands which soon became so overpopulated that they could no longer make a living by means of subsistence farming. It is rather ironic that this happened in a period during which the laws and regulations, which were meant to keep Blacks out of the "white" urban areas, were still firmly in place.

The massive influx of black people into the urban areas of South Africa, especially the metropolitan areas of Gauteng, KwaZulu-Natal, the Eastern Cape and the Western Cape, was not very visible because the impact of this wave of in-migrants were "camouflaged" by the fact that black people converged in black townships or dense settlements on the borders of *"White"* South Africa. When the influx control measures were repealed in 1986 most rural Blacks who aspired to work in a city had already found urban employment. Most of them lived in backyard shacks in the townships or in squatter (informal) settlements close enough to the "*White*" urban areas to commute to work. This is why the massive influx of rural black people into the cities and metropoles which was expected after 1986, did not take place. On the contrary, in 1986 rural-urban migration had already peaked and started declining.

Another important factor explaining the absence of a massive influx of rural people into the cities was the phenomenon of *"circular migration"*, which referred to Blacks working in urban areas but leaving their families in rural areas where they would visit them regularly. In the past the tendency in South Africa was to explain circular migration in terms of the constraints *"Apartheid"* had placed on migration or the existence of large institutions such as the gold mine labour system to sustain it. However, international studies of migration strongly suggest that circular migration is not unusual. They also suggest that circular migration takes many different forms. As Mabin (1990: 314) puts it: "*Within the notion of circular migration fall differential mobility and actual movement on the part of members of single households, splitting for varying periods of the location of the household's "base", differing movements at various "life-cycle stages" for individuals, movement for economic and 'non-economic' reasons and many other complexities of migration.*"

For many Black workers in South Africa moving back and forth between their places of work and their "homes" where their families live, has become a way of life. Most of them became so accustomed to this that they preferred to keep their families in rural areas even after the abolishment of influx control.

The *"Apartheid"* legislation was primarily aimed at the black population and had a long-lasting effect on the behaviour of black people in South Africa. Labour migration became institutionalised. As a result of the crowded living conditions and the high levels of crime in the townships many Blacks today still prefer to commute on a daily, weekly or monthly basis (depending on how far their homes are from their places of work) between their rural homesteads and their places of work in the urban areas. Retiring in a rural environment rather than in a township is still a much more attractive prospect for many black people. Labour migration has affected almost every rural household in South Africa.

Research in rural areas has shown that there are very few rural households who do not have one or more of its members working in urban areas. In most cases the earnings of these labour migrants also form the

household's most important source of income. Other sources of income that these households manage to access (e.g. vegetable gardening, brewing of beer, or pensions of elderly members of the household) merely supplement the remittances they receive from household members working in urban areas. Households who are not fortunate to have members with urban employment are usually the poorest in the rural areas. Working in urban areas has not only become a necessity for able bodied rural people but also a status symbol. A strong healthy person who is not at least seeking urban employment is considered to be lazy and not caring for his/her family (Oosthuisen, 1999:12).

Young people in rural areas usually move to urban areas for secondary schooling because there are no (or very few) secondary schools in rural areas. After completion of their schooling very few of them return to their rural places of origin. The need to earn cash incomes to support their families also forces large numbers of black women from their rural homes to towns and cities. Many of them work as housemaids in white homes in urban areas and usually leave their young children in the care of other family members (especially elderly grandparents) at their rural homes. They only see their children when they return home at weekends or at month-ends when they receive their pay cheques. During the "*Apartheid*" era, the need not to become pregnant, and in that way jeopardise their employment prospects, was a major incentive for black women to use contraception despite their awareness of the negative racial undertones of the national family planning programme (Preston-Whyte, 1990).

Some of the factors leading to and sustaining circular migration - especially among Blacks still steeped in rural traditions - are the following: adherence to the moral and social authority of their traditional homeland chiefs; the shortage of homes and the high cost of living in urban areas; the benefit of being allocated a piece of tribal land on which one can build a house of one's own; and access to communal grazing land which enables one to still keep cattle and other animals.

Throughout the "*Apartheid*" era, there has been a measure of selectivity in Black migration. Generally speaking the destinations, which were the most attractive to black migrants, were the metropolitan areas. But people moved to these areas on a selective basis. Due to the oversupply of migrants in these areas only the better educated and those who had some non-agricultural job training found work in the metropoles. Many of those who were less qualified and driven by pure economic necessity moved to less attractive destinations such as the smaller towns and cities in the rural areas of South Africa (Manona, 1988).

Oosthuizen (1999:13) states that more than 65 per cent of the black population are now living in areas that can be defined as urban. This has led to a decline in the pace of rural-urban migration but an increase in urban-urban and intra-urban migration. Intra-urban as well as inter-urban migration, which has been a very common phenomenon among Whites, Indians and Coloureds for many decades already, has now also

emerged as the most important form of internal migration for Blacks living in urban areas. Contrary to what many people think, the recent emergence of informal settlements in and around most of South Africa's cities and metropoles is not caused by a continued influx of rural black people into the urban areas. What it really signifies is the emergence of a new dimension in Black migration.

As South Africa becomes more urbanised, many black people already living in townships are starting to move around within and between different urban areas. Large numbers of Blacks, particularly young people, are now also moving out of the townships to occupy vacant land in the urban environment for the following reasons: to escape overcrowding in the townships where population densities have become intolerable; to obtain land (for poor people living in backyard shacks in townships, this is the only way to obtain a piece of land that they can call their own); to escape crime (crime is generally much less in informal settlements which form more close-knit communities than in the townships); to save on items like rent, water and electricity; to be closer to their work (workers living in informal settlements are on average closer to their work than those living in townships); and to start their own family (setting up a home in an informal settlement is often the only choice young people wanting to start their own families have) (De Wet, 1995).

Factors unique to South Africa

It is important to realise that South Africa is by far the most Developed Country on the African continent and therefore in many ways different from most other African countries. This is borne out by the following characteristics which clearly illustrate the uniqueness of South Africa on the African continent.

Population composition and cultural mix

Oosthuizen (1999:15) states that although ethnic diversity is a fairly common feature of most African countries, the ethnic differences in South Africa are much more striking and demographically significant. The South African population can, in a way, be seen as a microcosm of the world population in the sense that its population consists of people originating from Africa, Asia and Europe. Although people of African origin make up more than three quarters of the population, people of European and Asian origin make up much larger proportions of the total population than in any other African country. Furthermore, people of European and Asian origin have been permanent residents of South Africa for more than three centuries which means that the black population in South Africa had been exposed to Asian (particularly Indian and Malay) and European cultural influences for a much longer period than the black populations of other African countries. Christian missionaries, in particular, have not only brought their religion to South Africa but also the full range of Western norms and values. In South Africa, also in the workplace, people of

African origin have been rubbing shoulders with Europeans and Asians for much longer than in any other African country.

Industrialisation and urbanisation

South Africa is the leading industrial nation in Africa. Since the mineral discoveries in the latter half of the late nineteenth century, the South African economy has gradually changed from an agricultural to an industrial economy. Initially the mining industry made the single most important contribution to the industrial output of South Africa. South Africa has an immense concentration of mineral wealth, out of proportion to its geographical size. The most important minerals are gold, diamonds, chrome, platinum vanadium and manganese. In addition to these minerals the country also has deposits of almost all minerals of significance to industrialised nations. After 1950, however, South Africa's industrial output became more diverse. The output of the mining sector was overtaken by other sectors of the economy such as manufacturing. The contribution of the manufacturing sector to the country's gross domestic product increased from 4% in 1911 to 18.8% in 1950 and 25.5% in 1992 and is still increasing. Agriculture's share decreased from 21% in 1911 to 17.5% in 1950 and only 4.1% in 1992 and had since dropped to below 4 per cent. Less than 15% of the country's total work force is currently involved in agriculture. These figures clearly illustrate the declining importance of agriculture in the economy of South Africa (South African Foundation, 1994).

Industrialisation usually goes hand in hand with urbanisation. South Africa is currently also one of the most urbanised countries in Africa. The urban revolution in South Africa started with the discovery of diamonds in Kimberly (1867) and gold on the Witwatersrand (1886). The increasing demand for labour at the mines attracted more and more people, first to Kimberly but later also to the Witwatersrand, particularly Johannesburg. At the beginning of the twentieth century South Africa was still predominantly rural with only a small proportion of its population living in towns and cities.

Changing socio-economic and political conditions in the country forced thousands of rural residents to move to towns and cities to make a living. Four waves of rural-urban migration can be identified. The first group who migrated to the towns and cities and became largely urbanised were the Indians who left the sugar cane areas of Natal in the late nineteenth and early twentieth century to become traders in Durban and other towns in Natal. The Whites, many of whom were forced off their farms by droughts and the economic recession of the 1920s and 1930s, followed them.

The Coloureds who were concentrated on farms in the Western Cape moved to the Cape Town metropolitan area and larger towns and cities in the north and east of the country in the 1950s and 1960s. The last group to

migrate to towns and cities, but especially the metropolitan areas of Gauteng, KwaZulu-Natal, the Eastern Cape and the Western Cape was the Blacks. Their great exodus from the rural areas to towns and cities started in the 1970s and continued through the 1980s. About 65 per cent of the total South African population are currently living in urban areas. This is a higher percentage than in any other country in sub-Saharan Africa. In Africa as a whole, only Libya is more urbanised than South Africa (Kok & Gelderblom, 1989).

The outlay of towns and cities

Cities are always changing because they are the product of constantly shifting and usually unpredictable socio-political and economic dynamics. The current shape of most towns and cities in South Africa is largely a result of the "*Apartheid*" policies of the recent past. The settlement and movement of people in the "*Apartheid*" era were controlled by a whole gamut of discriminatory laws, all of which were aimed at segregating the different population groups in the urban areas of South Africa.

The most important law in this regard was the Group Areas Act (No 41 of 1950). This act not only controlled the movement of black people form rural to urban areas, but also allocated separate residential areas to the different population groups within the country's towns and cities. As far as the Blacks are concerned, these acts created a system which distinguished between "*temporary*" urban residents who lived in rented "*matchbox*" houses in townships which were located on the outer periphery of the so-called "white" towns and cities and "migrant workers" from rural areas who were housed in hostels in the townships as long as they could prove that they were employed.

Only Whites qualified for full and permanent urban citizenship. Although the repeal of the "*Apartheid*" laws enabled the three Non-White population groups to obtain permanent urban citizenship and settle wherever they chose, socio-economic and even cultural factors inhibited large-scale integration in the urban areas of South Africa. Most non-White people still live in the former non-White residential areas and commute to their places of work in the central business districts or suburbs of the former "*White*" cities and towns (Swilling, Humphries & Shubane, 1991).

Long-term view

The last fifty-five years show an annual average population growth rate of 3.22% which is marginally slower than the average growth rate of the South African population outside the growth rate of 3.41% of the nine major cities, according to studies conducted for the South African Cities Report (2004:37). This is based largely on the distorting effects of "*Apartheid*" spatial planning, in particular the removal of millions of

people to areas of so-called "*displaced urbanisation*", as well as misguided decentralisation policies during the 1980s.

The South African Cities Network (2004:37) states that since the 1970s populations have been growing much faster than the national population, but the growth picture is distorted by the establishment of the "*homelands*" as these "*Apartheid*" constructions were never covered by the South African censuses (Geyer *et al.*, 2000:263).

The South African Cities Network (2004:37) states that growth rates of the nine identified cities was fast, but not nearly as fast as in previous periods. Two important periods are identified. The end of "*Apartheid*" saw a sudden jump in city growth, as some of the cities now consist of areas that previously belonged to "*homelands*".

Their re-incorporation in the mid 1990s looks like an abnormally large spike in population growth, both for the affected cities and South Africa as a whole. Even if the anomaly is taken into account by removing the affected cities, the average annual growth rate still was 4.5% between 1991 and 1996. The current average annual growth rate of 2.8% therefore represents a slowing down from a more rapid urbanisation trend noted only a few years earlier (StatsSA October Household Survey, 1998:1). The household survey shows migration of heads of households leapt with 82.2% between 1985 to 1989 and 1990 to 1994. It fell by –5 per cent between 1990 to 1994 and 1995 to 1999.

Current city growth is said to be much slower than the first half of the last century, except for Johannesburg, which grew at a rate of 4.01% per annum between 1996-2001 (South African Cities Network, 2001:38). Not all cities are growing at the same rate. The South African Cities Network (2004:37) shows that Johannesburg, Ekurhuleni and Tshwane are seeing strong growth between 3.3% and 4.1%. eThekwini and Cape Town are relatively stable and growing at a rate which is similar to the natural national population growth rate of 2% per year. Four out of the nine identified cities (Nelson Mandela, Buffalo City, Mangaung and Msunduzi) are growing very slowly at rates even lower than the rural areas outside South Africa's twenty-one major cities (1.4%per year). The average of the nine cities studies is higher than the average growth rate of the secondary cities, but this is deceiving, as some of the secondary cities, namely Mogale City, Polokwane, Rustenburg and uMhlathuze grew at 5.1%. The nine cities also showed a rough correspondence between population growth and employment rates (SACN, 2004:39).

Understanding Population Shifts

Populations of the major cities are changing fast (SACN, 2004:39). One has to consider various options of movement and not only "*rural*" to "*urban*". Population processes are complex and very few cities can table their population movements. It is necessary to research migrations theories, Third World trends and effects of international and local migration.

Migration Theory And Trends Expanded

Migration is a form of geographical or spatial mobility, between one geographical area or urban system and another, and it can be categorised as permanent or temporary. The motivation to migrate can also be classified as voluntary or involuntary. It is, however, not easy to make a distinction between voluntary or involuntary migration. For example, in some instances rural-urban migration might seem to be a free choice but on close inspection, the migrant might not have been left with many choices, but to leave the rural area (Stark, 1984). In Africa, refugee problems are mostly a result of interplay of political, social, economic and environmental factors (Kibreab, 1991). Migration must be seen as part of a global urban system.

Third World migration

Prothero (1987:1292) states that movement can be seen as phenomena with roots in traditional custom and practice, which change and develop according to challenges, potential and opportunities. People have been redistributing themselves for ages, temporarily and permanently, voluntarily and under some degree of pressure. Circumstances change. New opportunities are presented. Some constraints are removed and new ones introduced. The human capacity to adjust to change is based mainly on experience from the past.

Prothero (1987:1285) investigates Third World Migration. He states that inter-regional and international migration is the result of inequality in income and wealth distribution. Generally the Third World records high natural birth rates resulting in pressures on resources, and consequently significant movements of population within rural areas, and from rural areas to urban areas.

Urban development also occurs without complementary provision of civil and social services (Prothero, 1987:12860). Movements can be urban, rural, rural-urban, urban-rural, rural-rural, urban-urban and intra- or inter-regional migration. Not enough attention has been given to distinction between migration (permanent) and temporary (circular) migration.

Prothero (1987:1288) defines two types of migration namely regular (where migrant has free choice) or irregular (where the migrant has no free choice). Circular migration, discussed by Prothero (1987:1289), can

be daily, periodic, seasonal, or long-term. Neoclassical explanations for migration are given (1987:1289), namely mechanistic, where migrants concentrate on sector differences, macro-scale where regional differences are under-emphasised, and economic factors are stressed where aggregate permanency is given to migration and other movements are neglected.

Social-anthropological explanation is less mechanistic and less singularly focused and has recognised that factors operate on different scales. It is focused on the continuing dialetic between modern needs and traditional demands. On the one hand, there were the centrifugal attractions of wage employment in more economically advanced places (e.g. mines and towns), and on the other the centripetal attractions of ties, relationships and obligations in home places (Prothero, 1987:1290).

Further work has viewed this total field of social and economic relationships, involving both town and country, within which the decision of potential movers are constrained through time, as composed of setting (macro in scale involving economic, political and administrative factors) and situation (micro in scale, and involving individual and personal circumstances).

Prothero (1987:1291) describes that movement by neo-Marxist political economics and those of similar persuasion in other disciplines, have strongly advanced the view that too little attention has been paid to the externally determined political and economic structures, within which movements were penetrated in the colonial period by capitalism, which expropriated their surpluses for its growth and continuation. Increasing local need for cash (e.g. by introducing new currencies, taxes and consumer goods) has led to the fact that capitalism has forced people in peripheral rural societies to move to satisfy their need of more precocious economic development.

Structural explanations are strong on theory, weak on supporting evidence. Rural-urban migration is a comparatively recent phenomenon in the Third World. Rural and urban populations grow, resulting from high rates of natural increase. Rural-urban migration is caused by poor quality land, bad climate, and population pressure to good quality land, better climate, and prospects of better wages. Also government projects and some rural-rural movements are seasonal based on seasonal needs of advanced agricultural areas. Rural-urban migration is more visible, contributes to high urban growth, impacts negatively on labour in rural-urban areas and puts pressure on urban services. Urban places were identified as centres of colonial administration, commerce and religion, since the fifteenth to the seventeenth centuries (Prothero, 1987:1295).

In countries that have well-developed urban systems, such as India, rural-urban migration is replaced by urban-urban migration (Prothero, 1987:1296). This is currently happening in South Africa with a large

movement of Blacks from rural areas to urban areas. It is described that migration can occur in two ways namely stepwise and direct. Stepwise migration entails the migrants moving from rural areas through smaller to larger towns and ultimately to larger cities. These steps or stage processes have advantages since they provide opportunities for the progressive acquisition of skills that are required for urban employment and for adjusting to life in urban places. They may be inter-generational in their time sequence (Prothero, 19 87:1297).

Rural-urban migrants are generally younger, more active, better educated, economically more advantaged than those that remain behind.

Women are becoming more prominent in migration as they play a more dominant role in service, industry and informal sectors of the economy. Men and women have distinct preferences for urban against rural life, notwithstanding the problems that have to be faced in towns and this refers to "*productionism*" discussed earlier (Prothero, 1987:1299). The disadvantages are outweighed by prospective opportunities for improved incomes, which may be realised only in the long-term together with advantages of urban services and amenities. Although it may take time to achieve improved incomes there are short-term means of support for newcomers to towns, through relatives and kinsmen who are already established there and by means of employment in the informal sectors of the economy,

Migrants locate in urban areas and squatter areas. Prothero (1987:1299) states that squatter areas in Latin America are viewed more positively as they are seen as helping to meet immediate pressing needs for shelter and can be progressively improved through self-help schemes with basic services being provided. Urban areas are seen as having the capacity to accommodate a whole lot of newcomers from rural areas. Prothero (1987:1299) stresses the importance of enclaves based on ethnicity and regional identity, family and kinship in helping people to adjust to city life.

Ethnic and regional enclaves where people of similar origin concentrate, are distinctive features of urban cities. Prothero (1987:1300) does remark that the enclave is not as strong as in the past. The impact of rural-urban migration on rural areas is positive and negative, for example, it leads to relief of population pressure, and relief of resources, but in selecting more active and more enterprising elements, could have detrimental effects, e.g. an impediment of the productivity capacity as young people leave.

Migrants remit substantial proportions of incomes and other resources to their places of origin, which is a positive effect (Prothero, 1987:1300). It has been proved that families with migrants have higher incomes in the rural areas than families that have none. Remittances may have a negative effect on agricultural production in rural areas.

Urbanisation in the Third World will take much longer as increasing periods of urban residence are not necessarily accompanied by the emergence of an urban proletariat, which depends entirely on urban wages and which has increasingly tenuous links with rural areas of origin. This can be classified as the one-family-two-households phenomenon, where migrants have a household in the rural area, and another household in an urban place. By working diligently in the latter, but at the same time retaining a place in the former, it is possible for families to maximise their incomes and their welfare and to avert or minimise risk (Prothero, 1987:1302).

Another interesting Third World migration phenomenon is "*relay migration*" where the father leaves, and then the children, to obtain employment in towns, in order to enable the family to continue in agriculture and reproduce itself.

Migration can be positive, as responding to regional disparities, with the more enterprising people improving themselves by moving to more dynamic groups; or negatively, as emphasising regional disparities with bias in favour of urban areas and with little investment in rural areas. This results in low productivity, insufficient food production, and the need to import food is required, even though there is enough land to grow the food. (Prothero, 1987:1303).

Despite opposition to "*Apartheid*", labour migration to South Africa has continued over the years (Prothero, 1987:1308).

The costs and returns of human migration

Gross migration is not a good indicator of the equalising ability of population movement. There can be as many people moving out of areas as there are moving in. It is a weak demographic indicator but an even worse economic indicator. Even net migration is not necessarily a useful measure to test shifting earning differentials. Disaggregating migrant and parent population by age and occupation, may be required to determine income shifts. Sjaastad (1962:80) forms a modest response in net migration to income differentials in the United States of America (USA). Income differentials within sectors should also be taken into consideration in an area. One industry may be paying more and others less in the same area (Sjaastad, 1962:80). Geyer (2001) states that the reason why the equalising effect of migration is less than expected can be ascribed to the fact that the mobility of the larger number of less qualified, lower income groups that could make a difference, is lower than the higher qualified, higher income groups that are less likely to cause income shifts.

Sjaastad (1960:80) states that due to high rates of natural increase the earning level of a particular state in 1940 had to be roughly one half the natural average of migration from that state to offset the natural increase. Roughly the same argument would apply in Third World countries. Since natural growth rates in many parts of the Developed World are negative, much smaller differentials could result in a demo-economic shift. At the time it was found that low-income states are dominated by occupations with relatively low earnings at the national level and vice versa. Sjaastad (1960:83) concludes that migration does constitute a response to spatial earning differentials and migration is a search for opportunities in higher-paying occupations.

Sjaastad (1960:83) states that another problem is that *"the impact of migration can be offset by further changes in the economic forces which originally generated the earning differentials"*. The problem with the equalising hypothesis is that the economy of the receiving or leaving region is not static. As an area's earning levels could be changed by migration, inherent changes in the economy of such an area could offset the migration impact. There are direct (money) and indirect (psychological) costs involved in migration. Money costs are incurred while the migrant looks for a job. Psychological costs include things like familiar surroundings and families (Sjaastad, 1960:83-84; Stark, 1991).

Sjaastad (1960:84) states that salaries are higher in large cities due to higher living costs in cities. Migrants have to invest in formal education and experience. Young migrants will typically have made only a small investment in themselves through training for an experience or a specific occupation, and a relatively large one through formal education, whereas a large portion of investment in older persons presumably arises from skill and experience specific to a particular employment (Sjaastad, 1960:88). Sjaastad (1960:98) states that the larger life expectancy of younger migrants increases their present value. As age increases there is a shortening of the time-period over which the migrants expect to recapture costs. Older people are therefore more reluctant to migrate than younger people, as they have less time to make good migration costs (direct and indirect).

The work of Sjaastad (1960:80-93) concludes that:

- Salary differences must be significant to lead to immigration.
- Bruto and net migration rates have to be taken into consideration when looking from an indicator of population movement.
- The relationship between salary differences and population movements has to be investigated.
- The various costs involved in migration have to be taken into consideration (this includes financial and psychological costs).
- The relationship between different age groups and migration must be investigated.

Institutional policies and migration behaviour

Shreshta (1987:329-345) states that migrants respond to imbalances in the distribution of production factors. Cost imbalances are the result of a long historical process of geographically imbalanced development in society. He states that people "*vote with their feet*". Geyer (2001) states that this geographically deterministic way of viewing people's migration behaviour is related to their level of development. The more developed people are, the more control they have over their environment, and the more independent they become in their migration destination.

Shreshta (1987:331) states that migration has a material basis. He emphasises the fact that there is an undeniable link between the demographic process and socio-economic transformation. A clear understanding of migration behaviour remains a theoretical problem that cuts across various disciplinary boundaries. Shrestha (1987:332) indicates two major interpretations of migration namely conventional and Neo- Marxist migration. Conventional migration is more popular, and is the mainstream theory, supported by Todaro and Sjaastad (1960).

This is equilibrium-oriented where people migrate as a result of response to physiographic deterioration and economic pressure. This is based on Malthusian economics. This conventional theory associated migration with "*place utility*". When such utility of a different environment is thought to be greater than that of the present environment, migration occurs. Both of these views suggest that migration is a behavioural response to some ecological constraints or opportunities and environmental version of Lee's "*push-pull*" theory. This migration theory is based on the fact that migration behaviour is an expression of "*free choice*" a confirmation of economic rationality.

Neo-Marxist theorists believe that migration is a systematic process, where migration is directly related to structural process, and thereby manipulated by proletariat. It cannot be explained by individual motivations. The social and spatial division of labour, production and capital is what causes Neo-Marxist-migration .

Shreshta (1987:332) states that the common denominator is the social economic disparities that exist. The difference between the different schools of thought is what causes the disparities. Both schools agree that disparities are responsible for economy material-based migration. Migration is both a cause and effect of spatial disparities. Both conceptualisations are theoretically inadequate to explain contemporary migration in most Underdeveloped Countries. The gap between the individualistic and supplementary approaches should be bridged.

Shrestha (1987:335) mentions that during the Mercantilist period before 1776, the government was in control of economics and migration. After the Mercantilistic period, liberalism, described by Adam Smith in 1776, promoted the reduction of government control and the promotion of a free market system. This meant free migration, which led to the provision of industrial labour, which created a consumption market for industrial products. The rural-to-urban migration greatly contributed to Europe's urban-industrial development and a progressive differentiation between industrial and agriculture and spatial disparity.

Migration rates overhauled industrial growth rates and there was a rise in urban unemployment. Colonialism became necessary to prevent civil war in England as the urban unemployment was excessive. Colonial markets and resource control can be necessary to cope with increasing migration (Shreshta, 1987:333).

In Underdeveloped Countries migration is important because urban-rural development differentials have deepened. Migration and policies in the Third World aimed at promotion of rural-urban migration, decentralisation of industries, resettlement policies, rural development and increasing informal activities in cities and rural areas. Thesewere evaluated by Shreshta (1988:337-338).

Promotion of rural –urban migration

There is a dynamic relationship between migration, urbanisation and industrialisation. Neo-liberal thinking followed from classical liberalism, industrial revolution and colonialism (Ranis & Fei, 1961). Urban industrial development is very important, as agriculture sectors have become stagnant, and this has led to the domination of industry in the economy. Rural-urban migration occurred as urban-industrial development was regarded as indispensable. The industrial capacity of the city was exaggerated and migrants and industries could not gainfully absorb incoming migrants (Shreshta, 1987:336)

Decentralisation industries

Regional development is promoted by means of regional policies aimed at decentralisation to create small and medium sized centres. Migrants diverted from primary centres to smaller towns, through the creation of incentives. The redirection of migrants was not successful, as improved transportation between the core and peripheral region, drained the latter. Centres closer to cities did gain momentum, but growth centres on the periphery did not (Shreshta, 1987:337).

Resettlement policies

Governmental projects and schemes were implemented but the new settlers were disillusioned as it led to renewed urbanisation and related problems. The main reasons for this were that the allocated land for

development of government schemes was insufficient, and that a shortage of technology, capital and knowledge did not reduce housing in the cities (Shreshta, 1987:338).

Rural development

Integrated rural development, with provision of a wide range of services and activities through the creation of incentives, had very little effect on migration to the cities and could in many cases be considered as inflated migration, because advancement of the population made the people more susceptible and ready to migrate.

Informal activity in cities and rural areas

In many cases Shrestha (1987:338) states that this exacerbates rural-urban migration as these industries led to the development of proper skills promoting stepwise migration.

The following conclusions with regard to Shrestha's work are made (1987:339-340):

- When institutional goals are in harmony with individual needs and aspirations, people's migration behaviour will generally mirror their compliance with state policies. If institutional goals fail to respond to individual needs and welfare, migration behaviour tends to conflict with government policies.
- Migration increases as development activities expand.
- Disappointing results have been found in some cases to control migration behaviour namely urban-industrial policy was aimed at drawing surplus population from the rural-agricultural sector to urban areas, where they would be employed by the industrial sectors. Similarly, land resettlement policies are often designed to create better geographical balance in the distribution of the population and resources by attracting resettlers, or rechannelling city-bound migrants to newly opened settlements. Studies show that the policies attracted people, but that the areas did not have sufficient capacity to absorb migrants. Migration must be planned for at a micro-scale.
- Shreshta (1987:340) states that migration in the Third World is occurring in conditions of rapid population growth, agricultural underdevelopment, generally capital-intensive industrialisation and defective socio-economic structures. Attempts to rectify the colonial economic structures in the post-colonial period through systematic economic planning, have fallen victim to restrictive production relations and neo-colonial forces, which make the development process in underdeveloped societies heavily dependent on external resources namely capital, technology and even raw materials.
- Voluminous migration is occurring at the time when Third World economies are characterised by labour surpluses on the one hand, and low absorptive capacities and backward economic structures on the other

hand. Under such circumstances migrants cannot be productively utilised no matter where they move. As a result, the dynamic economic energy embodied in them remains suppressed and unable to make any tangible contribution to the process of development. The solution lies in tackling every situation in its own historical and geographical context, and according to its own needs and capacities. Current policies to deal with migration through spatial arrangement and rearrangement of the economy without paying attention to class relations and structures, will not solve any problems, as migration is as much a function of socio-economic class disparities as spatial imbalances.

Until governments devise policies that can effectively redress migration's class-related roots and respond to individual needs and desires, migration will continue to occur and migration behaviour will reflect migrants' tendencies to move to places where they aim to improve their living and socio-economic conditions.

Although international migration is not a new phenomenon, literature has shown there has been a steady acceleration in the number of people moving around the world, and shifts in the pattern of these movements are also apparent (Roer-Strier & Ohlshtain-Mann, 1999; Stark, 1984). There are various theories that attempt to explain why people move.

Throughout history, migration has been related to economic and social development whether as a cause or as an effect of such development. The theoretical approaches that have been used to explain migration such as Zelinsky's "*mobility transition theory*", Lee's "*push and pull*" theory and Ravenstein's law of migration models, have been recently modified resulting from the complexities brought about by international migration during the last quarter of the twentieth century (Massey *et al.*, 1998).

Massey *et al.* (1998) state the following: "*Recognition of these complexities has led to a renewed interest in the nature of migrant decision-making, a reconceptualisation of the basic motivation that underlie geographic mobility, greater attention to the context within which the decisions are made and more informed efforts to identify the specific social and economic dimensions.*"

Massey *et al.* (1998) further explain that a complete understanding of the current patterns and trends of international migration will not be achieved if only one model is used. A number of models for describing why international migration takes place have been formulated.

Neoclassical economics focuses on the income and employment conditions between countries and on migration costs. This theory views migration as the strategy decided upon by households to maximise their income. Among the theories that attempt to explain why migration begins, is the neoclassical economics

macro-theory, which views the differences in supply and demand for labour in the countries of origin and of destination as the major factors driving individuals to migrate. This theory assumes that international migration will not occur in the absence of the demand and supply factors (Massey *et al.*, 1998).

According to the neoclassical economics micro theory, an individual's decision to migrate is most often viewed as a cost-benefit decision where a migrant's expectation of higher wages at the place of destination makes the decision to migrate rational (Oberai & Billsorrow, 1984; Massey *et al.*, 1998).

The expected outcomes of migration comprise monetary and non-monetary benefits. According to Sjaastad's theory of human investment there are also monetary costs (such as transport and other costs that involve money while in transit) and non-monetary costs (such as the emotional conflict of leaving the family behind). The distribution impacts on quality and standard of life.

Even though people with a low standard of living are seen to be migrating, it is also important to note that the decision to migrate is not homogeneous among people, and it is unpredictable. An example of this is that it is not always the case that all poor people will move or send one of the family members away to search for better opportunities. This makes it clear that the decision to migrate is influenced by many factors, which affect different people differently.

The new economics theory places migration within a broader community context. This theory views migration as a family strategy to diversify sources of income and to minimise the risks that household members face. International migration is seen as a means of compensating for the absence or failure of certain types of markets such as unemployment insurance or capital markets. In this theory, governments influence migration of different populations through their policies that affect the relative deprivation of certain groups and thereby their inclination to migrate (Massey *et al.*, 1998).

The network theory stresses that migrant networks serve to reduce the costs and risks of international migration and thus increase the likelihood that people will engage more in international migration. According to Massey *et al.*, the development of such networks is often facilitated by family reunions and family visits to migrants. Once these visits have started, networks make international migration relatively easy (Massey *et al.*, 1999). "*When migrant networks are well developed; it becomes easy for other community members to access employment opportunities at the place of destination, and this makes emigration a reliable and secure source of income.*" (Massey *et al.*, 1998.)

The theories described by Massey show that current migration flows do not occur in the response to economic or social conditions only, and that it is not the "*push-pull*" factor described by Lee (1966) that

primarily influences the volume and direction of migration. The distance of the direction may be small, but the government policies could determine and influence the volume of migrants. There are more voluntary movements associated with international migration; there is a need to understand the root causes and consequences of movements.

The structuralist approach asserts that migration can be understood if analysed in the same context as the socio-economic and political structural changes in societies. The behavioural approach assumes that both men and women are influenced by the ideologies and cultural norms that determine gender roles, which make them prone to adapt to the expectations placed upon them (Chant & Radcliffe, 1992). This approach has also been identified by other scholars, who argue that it is important for examining the interaction of the migrant's individual characteristics with the prevailing norms and values that determine relations and gender roles in female migration (Todaro, 1984.) The household approach implies that power relations and decision-making structures in the family mould the aspiring female migrant.

Chant and Radcliffe (1992) state that sending a male family member to work as a migrant may be more rewarding, because he will bring in more money. However, it may also be that women are restricted from migrating by the socio-cultural hierarchies and power in the family.

Women's roles as mothers and wives can be deeply rooted in the socio-cultural patterns of gender division and labour, and these may obstruct the female migration process, which could explain low participation in migration (Rodenburg, 1993). In line with the behavioural approach, women's position in their families is likely to affect both their wish to migrate and the likelihood of their decision to migrate.

Goss and Lindequist (1995:317) recognise two distinct approaches to migration namely functional and structural migration. Functional migration is defined as the phenomenon where individuals migrate to improve their life chances. Individual decisions lead to reduction in spatial inequalities

Structural migration refers to macro-economic processes, that produce socio-economic spatial inequalities, thereby inhibiting individual chances of self-improvement.

Goss & Lindequist (1995:318) aim at developing a migration systems paradigm where the structural and functional approaches are reconciled. International labour migration is seen as a unified social process and individual decisions and actions are seen to be conditioned by contextual factors (structural forces operating at each stage of migration).

A migrant network approach is described by Goss & Lindequist (1995:318) as individual migration decisions that have a cumulative causation effect, which over time alters the decision-making context. It is stressed that a migration theory must take account of both inter-level and inter-temporal dependencies amongst individual, household, community and vertical-level factors.

The functional approach described by Todaro (1994) refers to the fact that migrants respond rationally to perceived wage differentials, rather than actual differences, and migrate in spite of unemployment in urban areas. Kearney (1986:335-336) explains that once it admits of non-equilibrating tendencies in migration, and incorporates information and supra-individual decision making, the model loses its theoretical distinctiveness and explanatory value. Goss & Lindequist (1995:318) state that it does have equilibrating results if unemployment is higher in rural areas than in urban areas.

The structural approach has closely related forms of this approach:

- The Neo-Marxist dependency theory, the world systems theory and modes of production theory.
- The Neo-Marxist theory is explained where the Third World periphery provides cheap labour to a selection core, which suppresses the periphery's economy.

The modes of productivity theory argue that pre-existing forms of production co-exist with capitalism. These forms of productivity are unevenly distributed, which necessitates migration. The new interest of the division of labour leads to investments in cheap labour areas, while fixed or immobile means of production like agriculture, construction, retail and social services, attract overseas contract workers to capitalist countries.

Goss & Lindequist (1995:322) are concerned with the "*structuration*" theory. Structures are defined as rules and resources, which enable and constrain actions of human agents. Social agents act individually and collectively and collective social agents lead to social interaction. Rules are defined as techniques or general procedures applied in the enactment or reproduction of social practices. Semantic rules refer to interpretive schemes through which individuals make sense of reality drawing upon structures of signification. Moral rules refer to norms of social behaviour drawing on structures of legitimation. Resources refer to means by which actions are facilitated and constrained. Authorative resource refers to conditions with access to the material world and powers of wealth and poverty. The structure of domination is determined by a combination of authorities and allocative resources.

Social systems are defined as cemented social practices of long-term, everyday social action and interaction. Institutions refer to practices that are deeply sedimented in time and space. People are seen as knowledgeable with knowledge distributed at three levels namely unconscious, practical consciousness and discursive

consciousness. Unconscious knowledge occurs when motivations cannot be articulated, practical consciousness where motivations are rational but cannot be verbalised or where knowledge can be employed and communicated. Social knowledge is always limited and an individual's actions will almost always be affected by the simultaneous actions of others. Relations of domination occur where subordinations are reciprocal which means that both dominant and subordinate people are able to find spaces of control (Goss & Lindequist, 1995:333).

Social systems can operate at two levels namely social integration, which refers to daily interaction of people present in time, and space and system integration, which refers to interaction between people and institutions across time and space where co-presence is not necessary. Time- space distinction (the time-scale problem) is also made, where social interaction is both situated in time and space and stretches across time and space (Goss & Lindequist, 1995:333).

Locals are arenas of interaction and containers of social power, a place where the individual faces the institution, where agency connects with social structure from the family room to the global economy. Social interaction and action are embedded in time. Time has three levels namely day-to-day, the life span of a human being or intergenerational time institutions (Goss & Lindequist, 1995:337).

Understanding International migration

Since the early 1950s, international migration has been characterised by movements from Third World countries, e.g. Caribbean (Latin America and South Asia) to European countries. Until the 1970s, this type of movement was encouraged, as there was a shortage of labour in European countries. However, with the high levels of unemployment, most European countries introduced a quota system to control the number of people admitted in the countries (Parnwell, 1993).

In Germany, foreign labour became significant in the 1960s after the construction of the Berlin Wall. The majority of migrants passed through the state recruitment agency known as the "*Bundesantal fur Arbeit*". A gender breakdown was available from the 1960s and it became evident that women were being recruited to work in the manufacturing of consumer goods industries and services as during those years, women were prohibited from participating in the labour force (Kofman *et al.*, 2000).

Female migrants to Germany came from countries such as Turkey, Spain, Greece and Yugoslavia. According to Castles and Kosack (1985), as well as Kofman *et al.* (2000), even married women were labour migrants in Germany because it was easy at that stage to migrate while labour demand was high. Despite the stoppage of labour recruitment in 1973 the number of immigrants to Germany increased (Koffman *et al.*, 2000). Under

the 1948 British Nationality Act, people from the Caribbean and India were able to enter Britain and settle with their families. Kofman *et al.* (2000) state that by 1950 women from different class and educational backgrounds were able to lead the migration process between the Caribbean and Britain (Kofman *et al.*, 2000).

Many Developing Countries also encouraged international labour migration more implicitly than explicitly. Such countries included the Phillipines, Turkey, South Korea, India, Pakistan, Bangladesh, Sri Lanka, Mexico and Cuba. Their reasons were multiple. Migration provided well-paid employment especially for governments that were not able to cope with the rapid increase in their labour force (Kofman *et al.*, 2000).

Countries such as India, Egypt, and Sri Lanka produced highly educated graduates in excess of the country's labour demands. In such instances emigration became a reality for most people who could not be absorbed in the labour markets (Russel *et al.*, 1990).

In Africa, migration is historically characterised by the circulatory migration of males. Early evidence suggests that traditional Southern African societies increased their volume of migration as the young men were sent by the local chief to work on nearby farms in exchange for guns and other European commodities (Timaues & Graham, 1989:367).

Many of these young men could move to and from their parents' homes and farms. Although very few, young women also worked as domestic labourers on these farms, most women used migration as a vehicle to escape from domination in their communities. Timaues and Graham (1989:372) observed that most of the BaSotho Women (three quarters) were employed as domestic servants, and many of them supplemented their income by brewing beer and selling it (Timaeus & Graham, 1989:374). The available literature suggests that women have always migrated and numbers are increasing as the world demand for women's labour increases. Most studies appear to be gender-neutral while utilising the models that are based on men (Castle & Miller, 1998).

The European Foundation for the Improvement of Living and Working Conditions investigated migration trends in enlarged Europe (2004:2). It states that the volume of intended migration is likely to be around 1.0% of the population of 15 years and older in the Advanced Countries. The largest migration potential is around 4.5% in the same time span. The prediction of this study for migration from the ten Central and Eastern acceding and candidate countries, excluding the three Mediterranean countries, concur with the latest results of an econometric study of the European Commission.

The study predicts a gross migration of around 1.1 million within five years. The profile of the typical migrant from the acceding countries is a young person, well-educated or studying at third-year level.

An increasing number of migrants are female. The sending countries face the prospects of a major *"youth drain"*, in the region of 2-3% of the youngest age category. In Bulgaria and Romania, it may lead to an outflow of nearly 10% of the youngest age group in the next five years. The potential youth drain is combined with a potential "brain drain."

The sending countries are in danger of losing between 3% and 5% of people who have achieved third-level education and more than 10% of their students. These figures represent the wider migration potential. Looking at the firm intention to migrate, there may be a brain drain of around 2-3% among graduates and students in the next five years. Recent hypotheses of an increasing feminisation of migration are confirmed.

Looking at the wider migration in the Czech Republic, Hungary and Slovakia, a greater proportion of women among the female population expressed a general inclination to migrate than did men among the male population. Conversely, in Bulgaria, Poland and Turkey, the male percentage of migrants per male population is higher than the female percentage per female population. There are clear signs of an accelerating trend over time.

Unemployment has an influence on migration, but to a much lesser extent than predicted and only in a limited number of countries. Overall 2% of unemployed people want to migrate. The strongest push due to unemployment is in Turkey, Bulgaria and Estonia. Married people are less willing to migrate. The main potential consists of single people (European Foundation, 2004:3).

The International Organisation of Migration (2000) discusses the motives for migration. The International Organisation of Migration (2000) states that there is no single explanation for migration potential but rather a combination of explanations, depending on the country under consideration and the kinds of migration that occur. Employment and financial motives are the dominant rationale for migration, which is supplemented within the IOM study by the objective to enhance living conditions. Women have a similar but less economically pronounced motivation. Unsatisfactory housing conditions play a role. Family and social reasons are less important, but their relevance increases in some quarters, particularly for potential female migrants of the richer countries.

The inward migration is less than expected and the EU countries will mostly remain unaffected. Negative labour market effects will be limited, and will be concentrated in certain regions and on specific occupational labour markets. Negative effects on the housing market are mitigated by a high percentage of single

migrants, indicating a decrease in demand for larger accommodation. The positive demographic for old member states of the European Union will be marginal, due to the relatively small increase in the number of potential gross migrants up to 2030, and the expected return migration, triggered by improved living and employment conditions in the Member States.

The profile of potential migrants is relatively positive as the receiving countries of the EU can expect a high quality labour supply of young, qualified and mainly unmarried people, which should improve its short-term and its long-term socio-economic base through an improved demographic structure. This would seem to offer more opportunities than risks for old EU Member States. The education and skill level of the migrants poses a potential concern, which could reduce the effects of effective inward migration. This study should be seen more as a significant contribution to a micro-level of intention to migrate, the profiles of potential migrants, and the reasons for migration.

Migration characteristics in Africa

Migration in Africa can be described before and after colonisation, and can also be explained by the political, economic and historical evolution of African societies (Adepoju, 1995). During the pre-colonial period, population movements occurred as a result of the search for subsistence, food, better shelter and greater security. During the colonial period, most population movements became a logical response to the economic benefit of colonial government. Colonial economies needed an expanded labour force to work in South Africa's gold mines and on the farms, to export cotton in Mozambique and Angola, and to construct roads in Uganda.

During this post-colonial period and after their independence, most countries built up strategies of colonial governments, and there were few cities with concentrations in investments. These imbalances led to considerable inequality, which continues to affect the region (Adepolju, 1995). The migration literature has almost confirmed that most population movements became a logic response to the regional inequalities in development, income and employment. Migration became eminent in meeting the needs of labour demand (Adepoju, 1995).

Whether voluntary or involuntary, internal or international, migration has social, cultural, economic and political ramifications for individuals, families and communities in both countries of origin and destination. Migration flows are currently changing the political, social and demographic map of Africa. The International Organisation for Migration (2000) reviewed African countries as follows:

East African countries are experiencing movements of refugees because of environmental disasters (drought and desertification) as well as in Somalia, Ethiopia and Southern Sudan (IOM, 2000). Migration in Central Africa is attributed to ethnic conflicts which peaked in 1994 following genocide in Rwanda, civil war in Burundi and the disintegration of the Democratic Republic of the Congo in 1997 (IOM, 2000). The West African sub-region has the longest history of population on the continent. Large numbers of migrants from this region go to Europe (IOM, 2000)

South Africa has a long history of international migration. The origins of the labour migration dates back to the 19th century when South Africa set up a recruitment policy to encourage workers from Mozambique, Namibia, Lesotho, Malawi, Swaziland and Botswana to work in South African gold and diamond mines (Wilson, 1976). Male migration outnumbered female migration during this period (Seller, 1994). Similarly in the 1960s and 1970s the Zambian copper belt attracted such labour from neighbouring countries. Wars of independence in Mozambique, Zambia and Zimbabwe and "*Apartheid*" in South Africa also heightened population movements and displacement in the region (IOM, 2000). According to the IOM, because Developed Countries have imposed stagnant migration policies, a growing number of Sub-Saharan migrants have moved within the content (IOM, 2000).

Apart from migration to mining sectors, foreign workers are still employed in the cash crop sector of South Africa. They are mostly employed in the sugar cane plantations that are close the borders of neighbouring countries (Ricca, 1989). The agricultural workers are supposed to gain authorisation from the labour office to work in the sector, however, literature shows that it has been difficult to monitor legal employment outside the mining sector (Ricca, 1989).

One of the complexities is the number of undocumented migrants in South Africa. Studies have shown that a large number of cross-border migrations have been undocumented (Hough, 1995). This is mainly due to the poorly controlled borders, the complementary economies of neighbouring countries and most importantly, the cultural affinity between ethnic groups in different groups (Adepolju, 1995). Factors such as cultural affinity across borders perhaps facilitate a network formation. Boyd (1989) states that social networks based on kinship, friendship and community and community ties are central components in migration system analysis. Social networks mediate between individual actors and larger structural forces thereby linking sending and receiving countries.

Social networks explain the continuation of migration long after the original impetus for migration has ended. The establishment of contact has always been important in initiating and facilitating international as well as internal migration. Although movement of individuals depends entirely on their personal aspirations, motivations and attitudes, family ties also determine whether or not someone is able to migrate.

Consequences of international migration

Economists tend to suggest that the demand for remittances from migrants enhances the survival of those who remain in the countries of origin, and therefore access to remittances may perpetuate or propel migration (Russel *et al.*, 1990). Although literature on Sub-Saharan Africa maintains that remittances are used for investments (Russel *et al.*, 1990), a study conducted by Paler also revealed that in Lesotho, remittances are primarily sent for household use.

Chilivumbu (1985) found that in Zambia, 76% of remittances were used for household purposes, 80% for agricultural improvements, 2% for establishment of enterprises, 2% for building houses and 1% for education. Another indication regarding remittances is that parents tend to send children they think will be "*good*" remitters away to find employment in other countries. A study conducted in the Philippines revealed that households send the people they think will be the most trustworthy remitters.

Gender was an important factor here because households claimed that they thought daughters would send more remittances than sons. While young women in domestic service in Singapore earned less than their brothers who were in construction companies, they were more likely to send remittances back home (Stalker 1994).

In other countries of the world, gender and remittances show distinct and disparate behaviours and practices, for example, migrants to the United States of America from the Dominican Republic showed the distinct savings and remittance behaviours. Men saved to take money home and women did not; instead, they invested in their new locality and purchased durable items (Grasmuck & Pessar, 1991). Rural –urban migrants in Thailand also showed distinct remittance behaviour.

Although men and women are equally likely to migrate, women remitted wages and gifts to their parents' home at a significantly higher rate, and were expected to do so by their parents (Curran, 1996). The way migrants send their remittances home, may be related to their role in the community and their family.

Current Demographic and Migration Trends In South Africa That Will Impact In The Future

Temporary rural-urban migration

Many people believed that there would be mass rural-urban migration after the repealment of all "*Apartheid*" legislation, as people were now free to settle where they wanted to. The October Household Survey conducted in 1998 shows that 969 941 heads of households moved into the nine cities used for the South

African Cities Network report between 1990 and 1990 compared to 760 0654 over the entire period 1940-1989 (South African Cities Network, 2004:40).

Rural to urban migration has been tentative and can be explained by means of the migration system concept which is defined by Nogle (1994) as specific locations that link bystreams and counterstreams of migrants. It is linked to the concept of migration streams, which is defined as dominant migration flows along specific routes (Lee, 1966).

Counterstreams are movements in both directions. A definition can be made between counterstream and return migrants (Campbell & Johnson, 1976). Return migrants form part of counterstreams, but not all counterstreams would necessarily contain return migrants. In differential urbanisation patterns, mainstream migration refers to dominant migration trends, while sub-counterstream refers to "*reverse stream i.e. minor migration streams that flow in the opposite direction continuously*" (Geyer & Kontuly, 1993).

The South African Cities Network (2004:41) states that demographic studies on rural to urban migration in South Africa presents a picture of tentative urbanisation, despite the fast growth of cities. The Wits School of Public Health conducts a Demographic Survey in the Agincourt village of Bushbuckridge annually to determine the quality of life and give a picture of 68 000 rural lives. The results from 2001 show that there has been some permanent migration to urban areas since 1992, but a relatively small number of households are moving permanently out of the villages to cities. Fifteen per cent of all "out-migrations" went to rural towns and only six per cent went to cities.

The 1996 and 2001 census data indicate increases in densities in major urban areas. Todaro (1982) explains this phenomenon in terms of expected rather than real aspects to find employment. Todaro sees migration decision making as a rational decision of lowly skilled migrants based on the possibility of finding employment in the informal sector initially, but with hopes of finding employment over the long-term (Stark, 1984:476). Gugler terms this phenomenon the '*lottery syndrome*" where people are taking a chance rather than being sure that they will be able to secure a job when they arrive at their urban destination (Gugler, 1968). While this happens, the migrants may live off their family, or any other support structure they can find, whether legitimate or illegitimate.

Census data of 1996 and 2001 both indicate density increases in typically rural areas and small towns (substream migration). This confirms Agincourt evidence of people moving to urban areas and smaller towns. Migrant-labour patterns from the "*Apartheid*" era are, characterised by rural youth moving to urban areas, only to return when urban opportunities are closed off, or when capital has been built up to invest in rural homesteads, seem to be continuing.

This supports the explanation of *"one-family-two-households"* described earlier, as it is possible that even though there is rapid urbanisation, there is *"under-urbanisation"* which refers to a lack of full investment by rural in-migrants in their new urban lives.

Harrison *et al.* (2003:101) state that rural-urban migration patterns impact on integration and social justice. Contrary to expectations the Inner City Housing Upgrading Trust's Inner City Residents' Housing Usage and Attitude survey published in 1997 and prepared by Dr. Owen Crankshaw on the City of Johannesburg, indicates that 35% of households with urban origins and only 28% of households with rural origins declare that they have no income. In fact, 72% of all households who declared that they have no income have urban origins. The survey also indicates that many migrants do not perceive their stay as permanent and that they plan to return to their place of origin, which proves lack of investment in urban life.

Oelofse (1997:1) states that many migrants living in Johannesburg indicate that they would like to have their families with them, but prefer their children growing up in societies that are not overcrowded and crime ridden. Harrison *et al.* (2003:193) emphasise the lack of commitment to inner city living of migrants living in Johannesburg.

People are migrating at younger ages. The large increase in all cities in the number of fifteen to nineteen year old people, confirms this (South African Cities Network, 2004:41). This could be the result of disintegrating rural families or youths sent to find schooling in better urban-based institutions to give them a better education, as migrants may have to invest in formal education, in-service training and experience first before risk factors diminish, as described by Sjaastad (1962). It could also be that the rural families confronted with survival risks try to diversify their income portfolios by *"placing"* family members in the urban sector and ties are retained to send remittances to the migrants in the urban areas when they do not find employment, or remittances back to the rural areas when they do (Gugler, 1968).

The younger age profile could also be the result of productionism described by Prothero (1988) and Hart (1983), which refers to the phase in people's lives where improved job opportunities, education, income and upward social mobility are a priority. In the case of unskilled migrants, people are often willing to bear poor living conditions in order to find employment in the formal urban sector.

Moving From City To City

Migration form city-to-city may be increasing as census data show that in cities where employment is on the increase the number of jobless migrants is also increasing. In cities where there is weak employment growth the cities are losing population, both relatively and in absolute terms, especially in the 20 to 24, and 25 to 29

age groups. This can be explained in terms of Berry and Prothero's theories on stepwise migration (1988). Stepwise migration occurs from rural areas through small- and intermediate-sized towns, to large urban agglomerations, each step allowing migrants to become accustomed to a larger urban environment and providing opportunities to acquire new skills that are needed to survive.

Prothero (1988) mentions that in cities with primate urban distribution, which refers to countries that only have a few secondary centres, migrants move directly from rural to primate cities, augmenting core-peripheral disparities. Geyer (2000) indicates that unskilled migrants tend to move to the nearest city while maintaining ties with the relatives in the rural area. Remittances might move from the rural families to the urban migrant. Once the urban migrant settles, remittance practices are reversed. Pioneering migrants could be forced to circulate for some time before migration moves become permanent.

Intra-Provincial And Intra-City Migration

The latest statistics concerning intra-provincial and intra-city migration are obtained from the South African Cities Network (SACN) State of the Cities Report (2004:41). The report indicates that 73.6 % of residents were living in the same suburb in 2001 as the one that they were living in during 1996. A further 8.8% moved house within the city and 9.1% of those living in the SACN cities in 2001, were new-migrants into the city.

The differences in the extent of intra-city movement are worth noting. Eleven per cent of the total population in Cape Town moved house between 1996 and 2001, and ten per cent moved in Tshwane. Only 5.9% moved suburb in Msunduzi (Pietermaritzburg) and 7.1% in eThekwini. Intra-city movements are as important in shaping post-"*Apartheid*" cities, as inter-city and rural-urban migration. Different cities are likely to see different dynamics.

Movement in Cape Town resulting from a more liquid property market, in which predominantly White residents are trading up in homes, is evident. The relatively high level of intra-city movement in Tshwane may reflect a different dynamic, such as the movement of peri-urban population in the Winterveld, close to Ga-Rankuwa, into more conveniently located housing developments and the inner city. One dimension of intra-city movement can be ascribed to the large numbers of households out of formal and informal dwellings in the backyards of township and suburban properties (South African Cities Network, 2004:42).

International Migration

International migrants in South Africa are difficult to track. The census cannot assure accurate statistics for people who do not want their presence to be officially registered. Two dynamics are important in this instance, namely that there was a sudden increase of foreign migrants in the country, illegally in search of work opportunities in the early 1990s, and an increasing number of migrants are here legally on study permits, work permits or as asylum seekers.

The Department of Home Affairs and United Nations High Commission for Refugees keep record of people applying for asylum at its five reception points in Johannesburg, Tshwane, eThekwini, Nelson Mandela and Cape Town. In the year 2000 there were 2728 people who applied for asylum, in 2001 there were 4786. There was a significant increase in the number of asylum seekers to 20 842 in 2002. This is ascribed to three factors described by the South African Cities Network (2004:42), namely the ongoing conflict in the Democratic Republic of the Congo, resistance to repatriation of refugees from Angola and Africa's Great Lakes region, currently in camps in Zambia and Tanzania.

The conflict in these countries has subsided but the people still do not want to return home, thus increasing population numbers in Malawi, Namibia and South Africa. The third reason is stricter immigration provisions in the new Immigration Act, introduced early in 2002. This imposes harsh penalties on anyone giving illegal immigrants work or shelter.

With options becoming fewer because of this law, many economic migrants may be trying to legalise their presence by applying for asylum, since the Refugees Act holds that nobody who applied for refugee status may be removed until his/her application has been considered. There is a substantial backlog in processing these applications (SACN, 2004:42).

Harrison *et al* (2003:102) state that foreigners, especially those from other African countries, experience severe xenophobic treatment from South Africans. The inner city becomes their escape from discrimination in townships and squatter settlements. Harrison *et al.* (2003:102) state that in Inner City Johannesburg, the number of foreign households is relatively small at around 3 300 or approximately 10% in total. These households consist of the poorest in the inner city and 39% of the families have no income and 71% with no income are from African countries. The main problem with foreigners is that they are not entitled to state support in any form, including housing subsidies. They are excluded from social housing projects. Social justice in this case is reserved for South African citizens.

The Impact of HIV and AIDS

The South African Cities Network (2004:43) states that the effect of HIV/AIDS will soon lead to a drop in the population groups of those age groups that were sexually active ten years ago. StatsSA has indicated (2004:1) that there has been much concern about the effect of HIV on fertility in South Africa. There is evidence that being HIV positive lowers the biological ability of women to have children. There are also arguments that behavioural changes among persons who are HIV positive might impact on fertility rates. However, fertility in South Africa has been declining since the 1970s.

Given that fertility in South Africa declined from the mid-1980s to the mid-1990s by an average of 15 per cent a year, and declined further between 1996 and 2001, the estimates suggest that the overall impact of HIV on the level of fertility is unlikely to be large in comparison with other factors. There has also been some controversy over the impact of HIV on mortality. The mid-year estimates indicate that the HIV-positive population in 2004 amounted to 3.83 million, or an HIV-prevalence rate of about 15 per cent of the adult population. This is based on empirical data from the causes of death study released by StatsSA in 2002 and the Human Sciences Research Council study on HIV.

Together with the data from ante-natal clinics, these studies provide the only empirical evidence about HIV/AIDS in South Africa. The accumulated AIDS deaths up to 2004 were estimated at 1.49 million. Census data between 1996 and 2001 suggest declines in population in the age groups of 20 to 24, 24 to 29 and 30 to 34 between 1996 and 2001. There is also a steep decline in the number of newborn to four year-old children.

The Actuarial Society of South Africa has developed a model of the likely progress of the disease. The results of a conservative scenario indicate that the country's population will decline slightly after 2007 as a result of the epidemic. All research indicates that its impact on population growth will be significant. Cities are unlikely to escape this demographic event.

The biggest impact is estimated to be terminally ill AIDS sufferers, who will return to rural homesteads to be cared for by extended family, if they are unable to secure meaningful care in overcrowded urban centres. HIV/AIDS is also estimated to impact on the economy, households, markets, human capital, the health sector, agriculture, education and social welfare in the future.

Cross and Whiteside (1993:178-179) describe the excessive costs of AIDS, based on the fact that it is a liability on an already burdened economy. The reason for this is the fact that AIDS does not discriminate, it

is the major cause of adult mortality and it leaves many people (especially children and elderly people) economically dependent and uncared for.

AIDS morbidity and mortality exercise a significant impact on the ability of households, by reducing their time and labour, the stock of education and health of the household (Essex *et al.,* 1994:563).

More time and money has to be spent on caring for persons suffering from AIDS. This leaves less time to earn money, resulting in fewer resources to care for the household, with the added burden of money to be spent on medical care for the infected person. To pay for care, people may be forced to sell their land or livestock, withdraw from their savings or borrow from others, which will put burdens on the already weak household. When the infected person eventually dies, funeral costs are added to the burden.

AIDS will have an impact on a single sector or market, the holding prices, and supply and demand in other sectors. For example, if a firm produces articles for export, and the workforce become HIV-infected, the firm's labour supply is reduced. This raises costs and lowers the firm's profit margin (Essex *et al.*, 1994:566-567). This will be reflected in the economy, as such a firm will contribute less towards the economy as a whole. Cross and Whiteside (1993:191) state that the basic idea behind the theory of human capital, is that economic capabilities of people are a produced means of production, so that the embodiment of skills through education and training is as much a form of investment as the purchase of a machine (Cross & Whiteside, 1993:191).

Essex *et al.* (1994:567) described the effect of AIDS in respect of both supply and demand in health care, as a number of people becoming HIV-positive will place a heavier burden on health services because treatment is needed for the opportunistic illnesses occurring on account of the HIV-infection. This means that the demand for health services will be higher and the supply will be influenced as health services will have to support and care for more people. The result is a higher demand on an already burdened health service system.

Cross & Whiteside (1993:274) explain that the agricultural sector will also be influenced in terms of supply and demand. Not only will the supply of agricultural products decrease resulting from lower productivity levels on account of AIDS, but the demand for agricultural products will be lower because those who die from AIDS consumed agricultural products too.

Education will also be affected negatively, as the number of children enrolling in schools will decline as a result of loss of labour in the household, which leads to lower productivity and fewer resources to pay for school fees (Cross &Whiteside, 1993:195). When AIDS sufferers die, it also means that training is *"wasted"*,

as resources are scarce, educational opportunities rare and the cumulative effect is very negative on education.

Cross & Whiteside (1993:299-300) state that the vulnerable groups who are AIDS survivors namely children, widows, widowers and elderly parents of AIDS sufferers, will largely depend on social welfare for support. As AIDS spreads, many children may lose both parents and become orphans in need of care and financial support (Essex *et al.*, 1994:572).

Implications Of Current Trends

Demographic trend perspectives have been dominated by the perception that the population is rapidly urbanising. This is recognised, but this broad understanding must be nuanced. Some cities may continue to see fast urbanisation, under certain conditions, such as the failure of urban economies in other parts of the country. Some cities may see much faster growth than experienced currently, and a few may even follow those secondary cities that have become hyper-growth centres. In this scenario fast growth in some cities goes hand in hand with much slower growth in others, as people abandon those centres in search of urban opportunities elsewhere.

Cities are dependent on urban economies in different parts of the country and some cities may be seen as growing faster than others, as people tend to migrate to areas where tier prospects of making a better living are greater, whatever the definition of "*better living* " might be.

For the poor, better living implies finding better employment, and for the more affluent better living may mean moving to a safer, cleaner area with a more moderate climate, for example. This can be compared to core-peripheral relationships and the balance between the cores and peripheries when based on Lee's (1966) view of "*push and pull*" factors. The greater the difference in the level of development of the people between the core and the periphery, the greater the kinetic charge between the two.

A uni-directional migration stream is more likely to flow predominantly from predominantly negatively loaded areas to the predominantly positive loaded areas (the core) (Straubaar & Zimmerman, 1993). As the difference becomes less, the migratory patterns become less complex and more predictable (Champion, 1992). It is estimated that fast growing cities in South Africa will drop back to stable growth rates under the impact of under-urbanisation and HIV/AIDS. The current weak-growth cities are estimated to develop at their current pace (South African Cities Network, 2004:43).

The impact of HIV and AIDS and under-urbanisation may be greater than expected, dragging all the cities towards a weak –growth trajectory, and causing a few cities to fall into the malaise of population decline, that has affected some secondary cities.

Primary cities being filled up with migrants, resulting in overpopulation, state that the appropriate strategic response is naturally how to deal with the basic needs of huge newcomers of residents within the limits of the municipal budget. Jobs for newcomers cannot be guaranteed and the prospect of deepening poverty must quickly face up to the prospect of deepening urban poverty, spreading slums and increasing social welfare demands. The principal planning concern is how to address widening backlogs in facilities needed for social reproduction. This translates into rolling out basic-service infrastructures as quickly as possible to new households and getting as many as possible involved in the economy.

Slower growth can also result from under-urbanisation, as people are not fully committed to invest in urban life. An increasing amount of foreigners, especially from Africa, are encountered in South African cities. Their social and economic distributions are often discarded, and perceptions remain negative. Multiculturalpopulations with significant foreign national minorities and increasing cosmopolitanism are viewed as characteristics of the post modern city, which is one of the main concerns when planning for sustainability (Douglass & Friedmann, 1998:165).

It can be concluded that the size, form and character of its population would be the ultimate concern of any city. Population size is the result of three things, namely birth, death and movement into and out of a city. Form refers to a range of population features including age structure, life expectancy, family size and typical household composition. Character refers to the relationship between policy and place, chiefly whether residents are historically settled and inclined to regard themselves as belonging to the city, or are mostly new in-migrants, temporary inhabitants or highly mobile potential out-migrants that see a possible future elsewhere. The city has several other factors contributing to its sustainability that will be discussed in the following section.

4.4 INDICATORS OF URBAN SUSTAINABILITY

Habitat II, the United Nations Summit on Cities produced the Habitat Agenda. Urban sustainability has to be created to cater for changing needs of people living in cities. The Habitat Agenda was based on principles of equality, eradication of poverty, sustainable development, liveability and diversity, family, civic engagement and government responsibility, partnerships, solidarity and international co-operation. It set out recommendation and concepts and it laid down a basis for substantive input from local authorities, the public and private sectors, NGOs and professional bodies. It emphasised the important role of private individuals and market forces.

Several key points of consensus emerge, namely that the economic, social, political and environmental futures of the Earth will depend on how issues are addressed. Government decentralisation and involvement non-public actors are of importance when developing strategies to address issues.

Local and national institutional and financial capacities have to be strengthened to address urban issues. Most financial and technical resources have to originate from countries, cities and communities themselves. Indicators were highlighted to emphasise the most innovative instruments towards catering for urban sustainability.

Einstein (World Urban Forum, 2004:7) stated: "*The world we have created today as a result of our thinking thus far, has problems which cannot be solved by thinking the way we thought when we created them.*" The World Urban Forum (2004:7) states that urban sustainability entails the application of creative urban design and new engineering approaches that must underpin the establishment of sustainable built and natural environments within cities and must serve to mitigate the negative impacts of cities to connected ecosystems. City management must pursue more environmentally friendly consumption patterns and solutions. This entails the development of indicators of urban sustainability and investigating these indicators in terms of trends in South Africa.

Huang (2004:1) defines the following indicators of urban sustainability in Taiwan:

- Socio-economic development, which entails households below the poverty line, informal employment, hospital beds, child mortality, life expectancy at birth, adult literacy rate, school classrooms, crime rates.
- Infrastructure, which entails household connection levels, access to potable water, consumption of water, and median price of water.
- Transport, which entails modal split, expenditure on road infrastructure, travel time and automobile ownership.
- Environmental management, which consists of treatment of wastewater, solid waste generated, disposal methods for solid waste, regular- solid-waste collection and housing destroyed.
- Local government, which includes major sources of income, per-capital expenditure, debt service charge, local government employees, wages in the budget, contract recurrent expenditure ration, government level providing services and control by higher levels of government.
- Housing which includes house price to income ratio, house rent to income ratio, floor area per person, permanent structures, housing in compliance, land development multiplier, infrastructure expenditure, mortgage to credit ratio and housing production and housing investment.

The European Foundation for the Improvement of Living and Working Conditions suggested a set of urban indicators (European Union, 1998:16). The environmental indicators investigate responsibility for global climate, acidification of the environment, toxification of ecosystems and local disturbances. They express, together with the energy and water consumption indicators, with the exception of the local disturbances indicator, together with the air quality indicator, the urban mobility and the waste management indicators, important aspects of the local quality of life linked to global considerations.

The indicators of social justice, housing, urban safety and citizen participation have been chosen to express some of the key social elements of sustainability. The quality of green, heritage and public space indicator serves as a measure of the quality of spaces promoting public health, social life and cultural identity (Council of Europe, 1992). A unique sustainability indicator, representing the contribution of unique assets, characteristics or events to the sustainability of the city, has also been developed.

Neighbourhood sustainability indicators have been developed in the United States (Urban Ecology Coalition; 1999:6). Sustainability indicators are focused on assets, engaging local residents, expressing community values, integrating across diverse issues, focusing on the future and assessing distribution of resources and opportunity. Indicators are seen as a way of building consensus around the long-term goals and evaluating the impact of local action. Sustainability is defined as being the long-term social, economic and environmental health of the community.

The CSIR (2004:4) states that the sustainability of human settlements is a multi-dimensional problem, dealing not only with settlement dimensions, but also with spatial characteristics, geographical location, environmental conditions, economic viability, institutional ability and structure, human development, social relationships and local values and aspirations. The infinitely complex set of issues determines sustainable development and the recognition that these issues are interconnected and interdependent, identifies sustainability as a systemic concept, that requires a systems approach to solving and planning. The most suitable assessment framework proved to be an expanded version of the Pressure-State-Response (PSR) developed by the Organisation of Economic Co-operation and Development.

The Pressure-State Response framework is probably the most widely accepted causal framework for sustainability assessment, largely for its simplicity but also for the fact that it can be applied at any scale. The United Nations Commission on Sustainable Development expanded this framework to include the driving forces causing pressures and the impacts of these pressures, resulting in the Drivers-Pressures-State-Impact-Response (DPSIR) model. Within the DPSIR framework human activities and external forces (the drivers) are seen as producing pressures that can induce changes (impacts) in the state of biophysical and socio-economic environment, and thus on the state of human settlements. Society then responds to changes in pressure or state within policies and programmes intended to prevent, reduce or mitigate pressures and their impacts.

These procedures in turn produce new pressures. Additional to the simple causal flow from drivers to responses are the dynamic relationships between all five aspects. However, to determine the current state of settlements an additional framework of indicators had to be developed that could be used to gauge the compliance of the settlement under investigation with certain internationally accepted criteria for sustainability.

The Brundtland report (WCED, 1987) described sustainable development in terms of an integrative and holistic procedure of maintaining a balance between the need and the demands of people for equity, prosperity and quality of life and what is ecologically possible. The ideals of sustainable development had expanded from the very simple meeting of basic needs, to embrace the meeting of the entire hierarchy of human need and provide an acceptable quality of life for all.

Determinants for an acceptable quality of life are very difficult to define and depend on the context, the prevailing culture and the synergies between different determinants. For instance, while few would disagree with a determinant such as clean air, there are millions who believe cities, with their high pollution levels, provide a far better quality of life than life in rural areas where they will have clean air. Quality of life is therefore more dependent on the combined effect of a range of factors, rather than the presence or absence of specific factors. The absence of one or more of the factors does not necessarily mean that the settlement does not provide an acceptable quality of life (CSIR, 2004:5).

Certain key quality of life determinants specifically linked to human settlements have been identified by the Habitat Agenda, the United Nations Commission on Human Settlements Indicators Programme, as well as other indicator programmes such as the CSD Indicators, the CEROI initiative (Cities Environmental Reporting on the Internet and particularly the South African CEROI partners as well as the National Core Set of Environmental Indicators for South Africa. For the purpose of the study the key quality of life issues specifically linked to human settlements were identified under the heading of health, safety, and the ability to live a productive life, self-determination and the quality of life of the built environment. Under each of these issues a number of key determinants with their corresponding indicators were identified.

Human development activity further has certain well-documented negative impacts on the biophysical environment, which in turn impacts on the quality of life experienced, and the ability of the settlements to support sustainable livelihoods. The type of impact a human settlement has on the biophysical environment depends on the scale of the settlement, the level of infrastructure delivery, and the levels of resource consumption and the types of developmental activity pursued.

The biophysical environment in turn places limitations on human development, especially where there is lack of critical resources such as water or arable land. A dysfunctional biophysical environment would severely

reduce the quality of life and even the survival options of its inhabitants, posing potential threats through the manual and man-made disasters and internal hazards to houses, settlements or residents (CSIR, 2004:4).

The CSIR (2004:5) states South Africa has an established body of environmental indicators found in the National Core asset of environmental indicators developed by the Department of Environmental Affairs and Tourism, as well as from the Cities State of the Environment Reporting. These indicator sets have been developed for analysing the sustainability of the biophysical environment and focuses on resource use, pollution and degradation as well as measures taken for the protection of the environment. Apart from the pollution and health indicators, few indicators have been developed for measuring raw impacts of a deteriorating biophysical environment on human settlements and their inhabitants. Central to the achievement of sustainable human settlements, is the ability of local and national government to provide and maintain an acceptable quality of life within the economic and biophysical constraints imposed on them.

There are very few indicators or other methods to determine institutional sustainability. The CSIR (2004:5) focused on the following key issues and determinants to gauge the institutional ability to create, operate and maintain sustainable human settlements:

- Supporting policy and effective regulatory measures
- Available institutional resources
- The political will to implement policies that support sustainable settlements
- Operational efficiency
- Technical capacity to develop and implement programmes and projects that support sustainable development

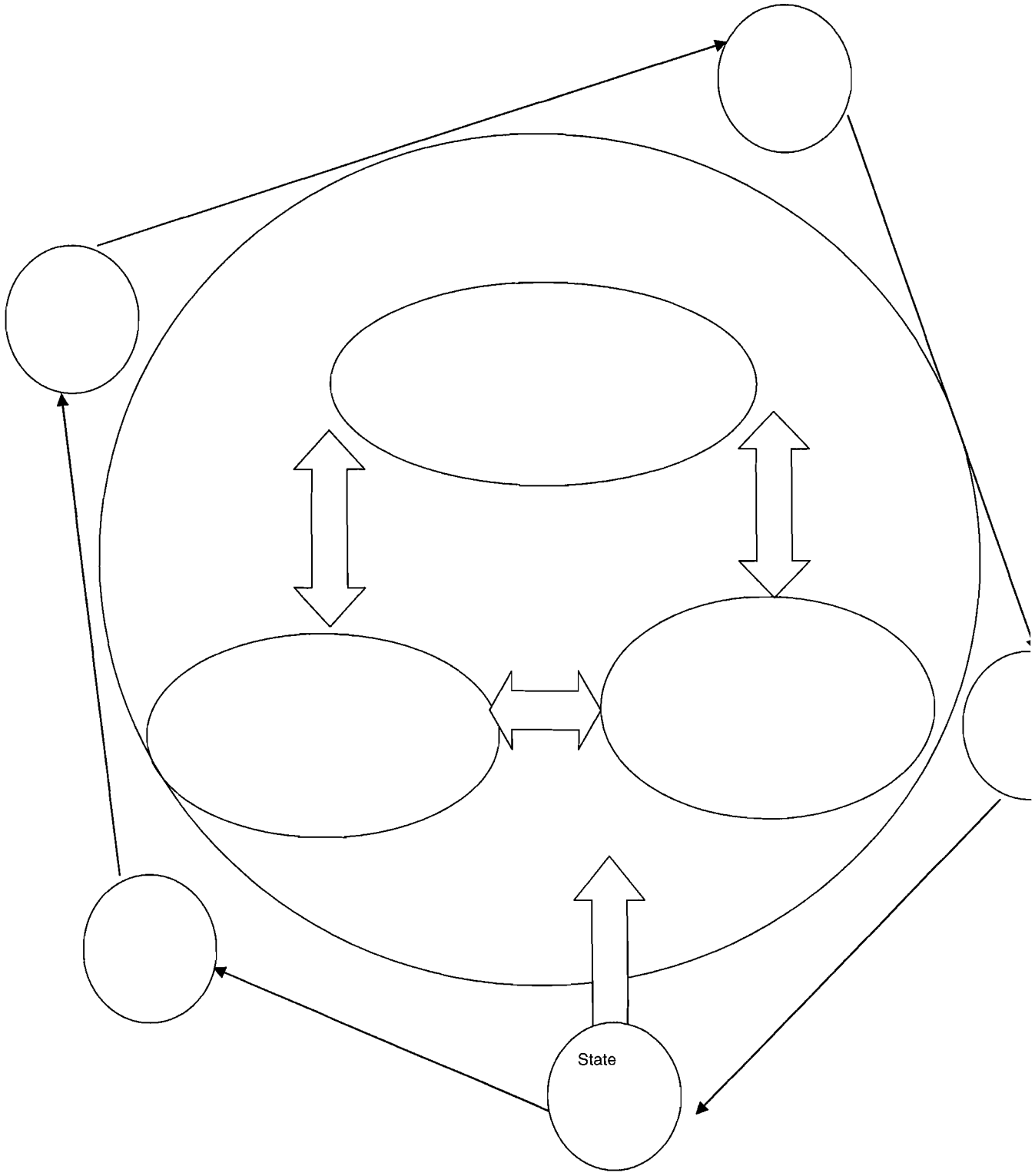
The sustainability of human settlements is determined by three points of departure:

- The quality of life that is offered to each member of society.
- The interaction between the settlement and its biophysical environment and whether this interaction will continue to support an adequate quality of life.

- The ability of the institutional systems responsible for creating, operating and maintaining the settlement to continue providing an adequate quality of life and to do this in a manner supporting sustainability.

The relationship between the DPSIR model framework, the settlement typologies and framework for assessing the state of settlement is described in figure 4-1. It becomes possible to identify specific tensions, threats and successes that contribute to current sustainability profiles, and that will determine the future sustainability of South Africa's settlements.

Figure 4-1: The relationship between the DPSIR model framework, the settlement typologies and framework for assessing the state of settlement (CSIR)



Source: CSIR (2004)

It can therefore be concluded that indicators of urban sustainability include environmental, economic and social, physical and institutional/governance indicators. Every indicator and its key issues will be discussed in the remainder of the section.

Economic Sustainability

The size shape and character of a city population is closely entwined with the local economic prospects, in other words, there are several forces that shape urban form. There are a number of dimensions to this relationship (South African Cities Network, 2004:13; Harrison, 1994; 83; Tomlinson, 1993:329). Big cities tend to support wealth-creating ventures as they facilitate generative interactions between an even larger number of people. Market demand is deepened and new productive activity is stimulated. City economies affect population size.

Cities performing well have population increases higher than the natural growth rate, as migrants are attracted by what they perceive as economic opportunities or "*lottery syndrome*" (Gugler, 1968:486). This is seen in a positive light by a country as it creates conditions for higher economic growth and as the cost to benefit of having more children increases in urban areas, it drives down fertility rates. This positive relationship assumes that the city can provide viable opportunities for those wanting to make a living. If a city is unable to provide viable opportunities, populations will "*float, disinvesting from the city psychologically, materially and physically with the young, mobile and wealthy and highly skilled leaving first* "(South African Cities Network, 2004:13).

Urban Economic Challenges

Bundy (1992:26) describes the historical overview of economic development in South Africa as follows: "*In South Africa, pre-capitalist societies were drawn slowly into an expanding world economy, with commodities produced under slavery, peasant farming and commercial agriculture. The mining-industrial revolution of the last quarter of the nineteenth century transformed the pace and direction of economic development. The social and economic structures of modern South Africa are largely derived from the mineral discoveries and the particular kind of industrialisation that these stimulated. The twentieth century capitalist economy grew*

with, and was partly premised upon, particular forms of inequality that permitted rapid accumulation and afforded protection to an elite minority against competition from the black majority."

Cities were left with a very weak base after "*Apartheid*" (Kleynhans & Naudé, 2001:41). Growth has historically been driven in most countries by the expansion of a middle-class and the gradual deepening of its pool of wealth. This strata usually produces the future entrepreneurs and business risk takers (Harrison, 1993:81). "*Apartheid*" economy was based on the notion that a rich racial minority would drive demand for goods and services and a large surplus labour force, whose costs of social reproduction barely needed to be covered, would be a sustainable basis for industry efficiency. This approach worked well for South Africa in the 1950s and 1960s. Before the end of "*Apartheid*", it was obvious that the urban economy was in crisis.

Government and industry did not invest enough in other economic drivers and depended largely on cheap labour. "*Apartheid*" policies artificially limited growth of the middle-class. This invariably meant that domestic demand eventually reached its natural growth limits. In addition the potential productive capacity of a large section of the population went undervalued and un-harnessed.

Economic Trends

It is noted than the primary and secondary industry in South Africa declined over time (Tomlinson, 1993:338). The tertiary sector has grown in importance (Castells & Hall, 1994:3; SACN, 2004:14). There are several other trends merging. The South African economy has been shaped significantly by the following economic sectors:

- Government, social and community services
- Manufacturing
- Wholesale and retail trade
- Transport and communications

These sectors have continued to add significant value to the South African economy over the last thirty years. There has not been enough job growth in the various sectors. Manufacturing has seen a significant decline in employment as production processes became increasingly capital intensive and high-tech. Ekhuruleni, South Africa's manufacturing heartland, lost significant industry between 1970 and 2001, but

this trend could have been reversed. It created 30 265 new manufacturing jobs between 1996 and 2001, an increase of 26.1%. The general exception to this picture of "*jobless growth*" may seem to be the financial and business sector. Since the latest census data there has been evidence that the financial service sector has also been losing jobs.

A long-term trend is the shift from primary and secondary industry into services. There has been a marked decline in employment against machine operators and trade workers. This is to be expected. Less expected is a decline in employment amongst professionals, *i.e.* 8.3 % between 1996 and 2001. This may be driven by trends in some occupational sub-groups for example teachers. It may also be that cities are losing some of those residents that they consider to be their primary economic asset, e.g. people working in high value-adding knowledge industries. An exodus of professional skills from the country may be driving this trend. At the other end of the spectrum there has been a total loss of 91 145 jobs in private households between 1996 and 2001.

Of particular concern is the number of employment opportunities in the city and those available in other parts of the country in cities and in-urban areas. The South African Cities Network (2004:11) suggests that employment in the nine cities used for the study, is approximately 3.31% lower than in the country as a whole.

Some of the cities have unemployment rates far higher than even most rural areas. The implications for residents in these particular cities is that it might make more sense to seek employment in rural areas. A similar picture emerges when levels of monthly income are compared. On average, according to the South African Cities Network, city workers earn R 5 297.22 a month. This is R 2 508,16 better than that earned across the country outside the nine cities. To a varying extent the pattern holds for all nine cities. When the average monthly income earned is compared to the national average, including the nine cities, it emerges that three cities are unable to offer their employed people remuneration better than they might find in another city studied in the State of the South African Cities Report (South African Cities Network, 2004:11).

The lack of skills is a major concern as, according to the South African City Networks, only 26, 9% of the city residents had a matric certificate in 2001 and only 11.9% had any form of post-school higher education (South African Cities Network, 2004:11). Crime is affecting businesses, e.g. burglars and fraud. Crime has declined significantly since the mid-to-late 1990s and the levels remain relatively static.

Urban economic challenges are being coped with in similar ways by all South African cities. Domestic economic demands are not seen to be the solution to economic recovery. South African cities are going global (Giddens 1990:117; Harrison, 1994:74; Castells & Hall, 1994:3). Giddens (1990:117) wrote of the "*lifting out of social relations from local contexts of interaction and restructuring across indefinite spans of time-space*". It is possible for an individual in New York or Johannesburg to be well linked within social and economic networks that extend globally, but to have no real connection within the immediate vicinity. Foreign consumer goods and services allow them to capture sufficient foreign-earned income to slowly drive up local income and demand. This growth path is viable but the global export economy remains structurally unbalanced and very fragile, as it is dependent on the United States consumer.

The recent shift towards and export –economy has not had a significant impact on economic performance. Some indicators suggest that labour markets have suffered at the same time that economic returns from export industries have improved. There have been capricious results in some sectors. Some sectors are shedding labour. The need for a more diverse approach, which includes support for domestic demand and latent local productive capacity, should be considered.

Social Development

Cities are not only concerned with whether they can provide their residents with some means of earning a living. Populations "*float*", even if jobs are available, as a result of circumstances or choice. People may live in poor service settlements and poor social environments where they do not enjoy the benefits of urban life resulting from poor income or deprivation traps (Chambers, 1983:112; Swanepoel & De Beer, 2000:11).

People may also perceive hat it is better to avoid the high costs associated with living in a city to accumulate money to invest in the future somewhere else. Urban economic development and social development are inter-dependent.

Social challenges in cities have to be considered as well as urban economic development (Department of Housing, 1997). The Urban Development Framework (1997) states that one of the objectives of promoting an economic developmental city, is that the city not only has to provide job opportunities but also opportunities and capacities, both material and psychological to equitably enjoy the benefits of city living.

Due to the legacy of "*Apartheid*" many people were excluded from benefits of life in the country's largest cities. Black residents were marginalised into "*ghettos*" that were under-serviced and located on the periphery, which was geographically and psychologically separate from opportunities and advantages ordinarily associated with city life. By the end of ""*Apartheid*"" social inequality was one of the major features of the city.

Many efforts have been put into rectifying imbalanced causes in the past. In many aspects, significant progress has been made in ensuring more equitable access to benefits of city living. In some aspects, inequality is even more significant so than ten years ago and many social and human development issues have been compounded (Harrison *et al.*, 2003:40). The evidence of worsening class "*Apartheid*", is even acknowledged in official government. StatsSA released a report in October 2002, confirming that in real terms, average Black household income had declined with 19% from 1995 to 2000, while White household income was up 15%. The average Black household earned a sixth as much as the average White household in 2000, down with a quarter when compared with 1995 earnings.

Households with less than R 670 per month income, mainly of Black, Coloured and Indian/Asian descent, increased from 20% of the population in 1995 to 28% in 2000. Across the racial divides the poorest half of all South Africans earn only 9.7% of national income, down from 11.4% in 1995. The richest 20% earn 65% of all income. The official measure of unemployment rose from 15% in 1995 to 30 % in 2000. Adding frustrated job seekers to this figure, brings the percentage of unemployed people to forty-three per cent.

Harrison *et al.* (2003:40) state that poverty is worsening and mentions that proof of this lies in the fact that ten million people have reported having had their water cut off in one National Government Survey and ten million were also victims of electricity disconnection due to an inability to afford payments. In addition, two million people have been evicted from their homes or land since liberation in 1994.

The census data of 1996 and 2001 suggest that the number of households receiving an acceptable level of service has increased dramatically. The provision of waste management services is a good example. Between 1996 and 2001, the number of households receiving municipal waste collection service at least weekly increased by 1 048 593. Even while the number of households forced to use their own dumping facilities increased slightly by 18 671, the proportion of households with inadequate waste services (less often than once a week), decreased from 19.4% to 14.6%.

While the absolute number of households served has increased noticeably, increasing size of populations and other dynamics means the proportions of households receiving these services have remained static in many instances, or improved marginally. An example of this is the number of households receiving running water on site in yards, or directly in dwellings, which has increased between 1996 and 2001. This growth was made up almost entirely of new yard connections. The South African Cities Network (2004:13) suggests that in two of the cities studied the number of water connections to dwellings decreased between 1996 and 2001. The causes and the consequences of this trend need to be considered. A cause could be a decrease in the number of people living in backyard dwellings. The number of formal backyard dwellings declined by 16 073 between 1996 and 2001 (5.1%). The number of informal dwellings declined by a huge 462 849 which is 65.7%.

The average household income increased from R 48 291 per annum to R 71 835 per annum between 1996 and 2001. This could indicate that there has been an increase in some cities, and growing inequality between cities. There is also proof that increased income across the population and urban asset formation is being counteracted, by deepening wealth divisions and social exclusion.

Between 1996 and 2001 there was an increase of 179.6% in the number of households claiming to have no income. Increases in household income have been noted for the group claiming to earn between R 4 800 and R 9600 per month. Substantial declines in the number earning in the middle range income categories above this have been noted.

Inequality is not only felt in the distribution of income. Spatial analysis shows that increasing numbers of residents are taking up occupancy in informal settlements on the margins of cities, far from work opportunities. In 2001, 36.8% of South African Cities Network city populations who were going to work or school, made the journey on foot. By contrast, only 25.4% of the population made use of a bus or minibus taxi (SACN, 2004:13).

Human development indicators, e.g. health and education, show an alarming rate of HIV/AIDS calculated at 37%. Levels of education remain low, although there has been a significant decline in the percentage of residents with no schooling in cities between 1996 and 2001 (South African Cities Network, 2004:13). Eight per cent of residents were noted without schooling (South African Cities Network, 2004:14). An alarming

statistic noted by SACN (2004:13) shows that 61.3% of the population do not have a matriculation or school leaving certificate.

The Quality of Life survey done in eThekwini in July 2004 shows that Black residents perceived the quality of life as declining while the White population perceived it as increasing. Infrastructure provision and poverty reduction strategies, for example Local Economic Development, are seen as the key to addressing social issues.

Sustainability Of The Built And Natural Environments

City populations, the urban economic activities they are involved in, and the social goods and services they accessed, can be organised in space. This organisation in space gives rise to the built environment or urban form. Population growth, urban economic development and social aspirations of communities all impact on urban form.

The size and shape of a city affects quality of life, economic growth, and population stability (SACN, 2004:13). This is because the built environment impacts on the envelope of natural resources that sustain any settlement and make it liveable (Hardoy and Satterthwaite, 1992:201). Various impacts are important, including the impact of water- and air pollution on the habitability of the spaces that people use and in turn public health; the size of cities and the intensity of movement on the time it takes for people to travel and for goods to be moved. The extent of usage on the integrity of key infrastructures, such as road networks and sewer systems, and the impact of the form of housing on energy usage, are important impacts that should be analysed to determine the state of urban sustainability (Department of Housing, 2000:3).

The built environment is either conducive or not tolerable to urban living. A city where the built environment overburdens the store of naturally available resources namely space, energy, air, water, time and heritage will not be a sustainable city as the costs of diseconomies of scale will begin to exceed the benefits of urban life (Starfinger & Sukopp, 1994:115).

"*Apartheid*" policies meant that historically South African cities had a form that was not resource efficient. An example of this is the deliberate segregation of residential neighbourhoods into distinct cultural or racial segments, which spread cities out into a low-density sprawl. South African cities have a high impact of

available land relative to the population size of forty million. Travel is costly and takes up much time. High-energy usage and pollution effects are associated with travel to and from cities.

Urban environmental challenges often result from poorly designed city form, which is exacerbated through population growth (Kleynhans & Naudé, 2001:271; Ghatak, 1995:459). Some cities have become almost unliveable. South African cities are far from being large enough to have reached this stage but long-term sustainability has come into question. "*Apartheid*" cities have had a significant impact on the environment. Impacts include poorly serviced township areas resulting in high natural resource input costs, poor waste and sewerage management and very high energy use and travel time in an urban road network, sometimes built to impede movement (Fuggle & Rabies, 1996:493-522).

Attempts to amend inequalities of the past have re-enforced the high impact of the built environment on natural resources. Incentives have resulted in the development of new housing settlements on the peripheries of cities extending the ecological footprint of the city. There was a net increase of 735 627 informal dwellings from 1996 to 2001. There was a further increase of 743 843 formal self-standing houses in this period. A part of the new household formation was driven by net movement of 468 922 households out of backyards and into formal self-standing houses or informal dwellings. This de-densification of cities creates capacity problems for the existing, available infrastructure and increases marginal costs of new service connections, possibly beyond the point where this can be carried by operating cost transfers and cross-subsidisation within a service account (South African Cities Network .2004:13).

Water is a very scarce resource in South Africa and other Developing Countries (Hardoy & Satterthwaite, 1990:189). The National Spatial Development Perspectives shows that many of the major cities will place enormous pressure on available water in the next two decades, which could lead to an enormous crisis. South Africa has limited arable land (Kleynhans & Naude, 2001:272), and much of this is located close to urban growth centres of Gauteng. Sensitivity and impact analysis of what the ecological footprint of expanding cities could do to this land, raise concerns. (Wackernagel & Rees, 1999:47-51).

Many of the cities' sewerage networks are now running at full capacity and much of the infrastructure provided previously is in need of replacement. Unanticipated growth and low-cost housing settlements, many with forms of flush toilets, are placing increased pressure on the available capacity. Some South African cities have to spend huge resources every year to manage the quantity of illegally dumped waste. The City of

Johannesburg has to deal with 266 139 tons of illegally dumped waste every year compared to Tshwane's 115 080 (SACN, 2004:15). Many recycling initiatives do not reach their full potential in cities, in spite of their potential for job creation.

Transport congestion is a major concern in South African cities. This has pollution effects but also impacts on the efficiency of the urban system that makes life in cities bearable. The average travel-time for a home to work trip in Johannesburg is fifty minutes (South African Cities Network, 2004:15).

This increases to 91.7 minutes for passengers needing to catch two buses to get to work, and increases to 120 minutes for passengers having to take a train, bus and taxi. (South African Cities Network, 2004:15). The ecological impact of the built environment is currently being analysed in the major cities through the State of the Environment Reports that conduct full ecological footprint analyses. Various mitigation measures to prevent or protect environmental impacts are being introduced. The State of the Cities Report (2004:16) does state that the cities do not fully recognise the importance of systematically managing the built environment to contain its impact on a limited store of natural resources.

Institutional Sustainability

Cities are contested in space. Even if the South African city does perform well in the future, it is impossible that every resident will feel that the city is sustainable. This gives rise to the challenge of residents to have their voices heard or their needs and concerns addressed. It is defined as civil society. Friedmann (1998:21) states the following with regard to civil society: *"This term was first used in its modern sense by Hegel in the Philosophy of Right (1821) and in less philosophical manner, by Alexis De Tocqueville in his classic study Democracy in America published a decade later. Civil society claims to refer to something we claim to perceive in the observable world that serves us as a lens through which to view and interpret phenomena that otherwise would appear too disconnected from each other."*

Civil society, in other words, designates those social organisations, associations and institutions that exist beyond the sphere of supervision and control by the state. Critics see civil society as essentially composed of institutions, namely neighbourhoods, family, church and voluntary organisations that "*mediate*" between the individual and the state. This is a healthy phenomenon. Where contestation is vocal and vigorous and formally organised, the local democratic state is strengthened. It alerts authorities to social grievances that would otherwise simmer beneath the surface, manifesting as destructive street-level competitive politics,

community disintegration, public violence and lawlessness. It also structures the social body by creating formal challenges for people to properly identify and express any lack of satisfaction (De Coning, 1995:217-218; Swanepoel, 1992:11-14; Swanepoel & De Beer, 1998:23).

This assumes that the population believes the public sector is able to regulate social and political disorder by effectively anticipating and dealing with possible reasons for disharmony. If city government is inefficient, the local population may disengage from the local state and will not participate with public institutions to sort out concerns. This will increase government inefficiency and politics.

The local authorities should strive for excellence in their administrative tasks and in reaching their goals otherwise the population will become increasingly disappointed with the government of the day (Hilliard & Wissink, 2000:105)

The effectiveness and efficiency of local government on its own account and in partnership with powerful urban actors has become very important. A city where the political and institutional context is stable and dynamic enough to give everyone the security that varied interest can be formally expressed, accommodated and managed, is a sign of sustainable governance (White Paper on Local Government, 1998; Hilliard & Wissink, 1996:26).

The Local Government White Paper states " *skewed settlement patterns and extreme concentrations of taxable economic resource, huge backlogs in service infrastructure...great spatial separations and disparities between towns and townships and urban sprawl...new municipal institutions which recognise links between urban and rural settlements...entrenched mode of decision-making, administration and delivery...inability to leverage private sector resources for development.... Substantial variations in capacity...need to rebuild relations between municipalities and communities.*"

It becomes clear that the challenge left by "*Apartheid*" includes weak polity seen in conflicting relations between communities and municipalities, paternal planning with little public participation, discord within communities and inequality. Institutions of government were weak and municipalities were poorly structured, under-capacitated and inefficient with a weak basis for future financial sustainability.

South African cities experienced a state of transition in the early years after 1994. Foundations for stable local democracies have been laid. Local governments are posed with new challenges resulting from rapid settlement and institutional restructuring (Harrison *et al.*, 2003:59) Local governments are concerned with integrating the physical structure of the entire city and to build a common tax base for all citizens (Harrison *et al.*, 2003:59).

The eThekwini Quality of Life reports generally high levels of satisfaction of residents with the municipality across key sectors. The satisfaction level differs considerably across cultural groups and settlement types. Only 22% of residents living in formal settlements in eThekwini express satisfaction with regard to municipal delivery and governance and 60% of residents living in wealthier, predominantly White suburbs expressed that the municipality was doing a good job.

Public crime and violence increased in the mid-1990s, but is perceived to be slowly stabilising. Crime rates are still very high. These crime levels erode community confidence and harmony. The quality of life survey for eThekwini indicates that severe capacity constraints exist among some municipalities especially with regard to long-term financial sustainability. The root causes of future crises remain to be addressed. The South African Cities Network (2004:17) reports that between 78% and 91% of municipal debt in the cities, stands at over ninety days outstanding, the cut-off after which debt has historically been understood and unrecoverable. Msunduzi is the only exception.

The city also remains multiply divided. The contemporary city has clearly multiple, intersecting dimensions of indemnity and inequality including, amongst others, race, class, ethnicity, gender, sexuality and immigrant status. There are many processes producing social differentiation and urban heterogeneity, apart from labour segmentation, such as the increasing global movement of people within large cities, acting as receptors for a diverse array of immigrants, exiles, refugees, urban-rural migrants and tourists.

Castells (1993:249) writes that the new world is made up at the same time of the global village and the incommunicability of those communities that are switched off from the global network. The South African Cities Network (2004:17) states that municipalities are doing their best to gear up the necessary capacity to ensure well-governed cities. Many government programmes and institutional innovations are being implemented providing municipal services but also aligning all efforts form the different spheres and

institutions. This strategic role remains the most challenging aspect of service delivery and creating sustainable governance systems.

4.5 CONCLUSION

Klaassen (2001) states that the city is complex, as it consists of complex networks and interactions between the global, national and local trends impacting on the economical, natural, built environment and institutional environment. This necessitates an integrated approach for long-term urban sustainability. It is necessary to analyse global trends to be able to understand the impacts at local level and to plan accordingly to ensure sustainability.

The world has experienced tremendous economic shifts and changes the past fifteen years. The fall of the Berlin Wall is used as a symbolic metaphor marking the end of communism and the opening up of the entire world to global economic influence. Globalisation has changed the constellation of national and global powers, and cities know that they must draw on the ingenuity and creative energies of their populations. Leaders are able to exercise greater independence in planning and spending, but they must do so with the fiscal responsibility and integrity that is imperative for successful and sustainable competition. The most significant global trends impacting on the South African city are discussed below.

The world is generally urbanising. The Developed World is already 75% urban and slowly increasing (South African Cities Network, 2004). The Developing World, by contrast, is seeing the demographic event that the Developed World saw in the mid-to-late 1800s, resulting from the industrial revolution, which in many cases can be seen as "*premature*" where people move to cities or towns looking for employment without having sufficient skills to be employed by the formal economy (Geyer, 1989). The current era is described as the "*age of migration*" (Castles & Miller, 1993), as international migration has increased dramatically worldwide, impacting significantly on urban development.

Urbanisation and urban deconcentration took place in many Developed Countries (Fielding; 1982). Urban growth rates in the Developed World lost momentum, (Cochrane & Vining, 1988), but the Developing Countries began to urbanise rapidly. The South African Cities Network (2004) states that urban growth in the Developing World is accelerating. Geyer (1989) describes urbanisation in the Developing World as being the result of "*premature urbanisation*", a term which means that people migrate to urban areas without

sufficient skills to be absorbed and employed in the formal economy. Castells (1993:257) also states that Developing countries, especially those in Africa, are being left behind by the fast economic development happening in the Developed World. Global population growth is currently levelling out (Geyer, 2001:1) resulting from the second demographic transition in Developed Countries and in Developing Countries as a result of continuous economic, political and health crises increasing mortality rates in these countries. Premature urbanisation can lead to diseconomies of scale as people move to the cities, leaving the cities unable to provide sufficient services to cope with the increasing population.

Migration trends in Africa and South Africa impacting on the city include rural-urban migration and city-to-city migration.

Census data of 1996 and 2001 both indicate density increases in typically rural areas and small towns (sub stream migration). "*Apartheid*"'s migrant-labour pattern of rural youth moving to urban areas, only to return whenever urban opportunities are closed off, or when capital has been built up to invest in rural homesteads, seems to be continuing. This supports the explanation of "*one-family-two-households*" principles, as it is possible that even though there is rapid urbanisation, there is "*under-urbanisation,*" which refers to a lack of full investment by rural in-migrants in their new urban lives.

People are migrating at younger ages. The large increases in population in the 15 to 19 age groups in all cities, confirms that (South African Cities Network, 2004:41). This could be the result of disintegrating rural families or youths sent to find schooling in better urban-based institutions to give them a better education, as migrants may have to invest in formal education, in-service training and experience first, before risk factors diminish (Sjaastad, 1962). It could also be that the rural families confronted with survival risk try to diversify their income portfolios by "*placing*" family members in the urban sector and ties are retained to send remittances to the migrants in the urban areas when they do not find employment, or remittances back to the rural areas when they do (Gugler, 1968). The younger age profile could also be the result of productionism described by Prothero (1988) and Hart (1983), which refers to the phase in people's lives where improved job opportunities, education, income and upward social mobility are a priority. In the case of unskilled migrants people are often willing to bear poor living conditions in order to find employment in the formal urban sector.

Migration from city-to-city may be increasing as census data show that in cities where employment is on the increase the number of jobless migrants is also increasing. In cities where there is weak employment growth the cities are losing population both relatively and in absolute terms, especially in the 20 to 24 and 25 to 29 age cohorts.

Living standards have risen dramatically over the last decades but there still remains a high percentage of people living in absolute poverty. The proportion of the Developing World's population living in extreme economic poverty, defined as living on less than 1 United States dollar per day ($1.08 in 1993 dollars, adjusted to account for differences in purchasing power across countries) has fallen from 28% in 1990, to 21% in 2001 (World Bank, 2004).

Substantial improvements in social indicators have accompanied growth in average incomes. Infant mortality rates in low- and middle-income countries have fallen from 86 per 1,000 live births in 1980 to 60 in 2002. Life expectancy in these countries has risen from 60 to 65 between 1980 and 2002. Adult literacy has also improved, though serious gender disparities remain. Male adult literacy rose from 78% to 83% in low- and middle-income countries between 1990 and 2002. Female literacy rates rose from 62% to 70%, but wide regional disparities persist.

While there has been great progress in reducing poverty, it has been far from even, and the global picture masks large regional differences. Global trends in poverty reduction have been dominated by rapid growth in China and the East Asia and Pacific region. Poverty also fell in South Asia over the past 20 years. But in Sub-Saharan Africa, where GDP per capita shrank with 14 per cent, poverty rose from 41 percent in 1981 to 46 per cent in 2001, and an additional 150 million people were living in extreme poverty. Other regions have seen little or no change. In the early 1990s the transition economies of Europe and Central Asia experienced a sharp drop in income. Poverty rates rose to 6 per cent at the end of the decade before beginning to recede(World Development Indicators, 2004).

Information on how the HIV and AIDS epidemic is, or will be, affecting the economy of South Africa'scities is currently sketchy. I am almost certain that there will very soon be a stabilisation or decline in the population of those age groups that were sexually active some 10 years ago. Cities are unlikely to escape this demographic event. In fact they may be more seriously affected as late-stage AIDS sufferers, unable to secure meaningful care in over-crowded urban health centres, return to rural homesteads to be cared for by extended family. A close study of population curves does already show relative declines in the young, potential workforce namely the population in the age groups 20-24, 24-29 and 30-34 between 1996 and2001. There is also a steep decline in the numbers in the 0 to4 age group, suggesting the drop in fertility that accompanies the epidemic. However, these declines are most notable in what this report has called 'weak-growth' cities.

Competitiveness of the city plays a major role in ensuring its sustainability. In the 21st century strong, viable cities are essential for a national economy, the health of the regions in which they are located and the quality of life of world citizens, wherever they may live or work. Nations often fail to take full advantage of the potential of cities. The lost productivity, increased traffic, pollution, loss of open space and overcrowded schools are problems associated with sprawl. Inner- ring suburbs suffer serious decline without a vibrant core. Rural areas face pressures from development and loss of space and farmland. At the same time, cities themselves have to bear the burdens of a nation's prosperity and even the costs of the region's infrastructure (World Bank, 2004).

In the global economy, where information, technology and innovation are keys to success, cities stand at the heart of progress and competitiveness. The knowledge economy depends on the constant sharing of information, development of ideas and experimentation. Cities provide the dense population centres, close-knit infrastructure and inter-modal transportation, universities, new immigration and diversity that foster such innovation. High-technology entrepreneurs, firms and their employees demand proximity to each other, to universities, teaching hospitals and other research institutions pushing the technology and biomedical frontiers and to a rich and varied cultural life essential to attracting young workers in the knowledge economy. With these assets, vibrant cities can help to continue to fuel the knowledge-based and high-tech economy, which has driven most of the nation's growth over the last decade (World Bank, 2004).

Cities have increased their ability to harness their competitive advantages for economic growth by re-engineering core services, reducing taxation and regulation to better the enabling environment for business growth, improving quality of life and developing creative public-private initiatives to solve long-standing problems. In many cities, businesses are thriving and jobs are coming back. Community-based private sector-led initiatives are helping to transform neighbourhoods block-by-block, building housing, creating jobs and growing businesses (World Bank, 2004).

The average household size is shrinking. This is a worldwide trend that is fuelling an international housing boom, which threatens the survival of plants and animals in dozens of countries (Shwartz, 2002). Housing units throughout the world are being built at a rate that outpaces population growth, resulting in a loss of habitat, natural resources and biodiversity. Urban and suburban sprawl are accelerating faster than population growth is decelerating.

The housing boom is largely being driven by a global trend toward smaller households. Throughout the world, the average number of people living together in a household is shrinking, primarily because of lower

fertility rates, higher divorce rates, higher per capita income, aging populations and a decline in multi-generational family units (Shwartz, 2002).

Reduction in average household size takes a double toll on resource use and biodiversity. More households indicate more housing units thereby increasing the amount of land and materials (for example, wood, concrete and steel) needed for housing construction.

The phenomenon of fewer people per household leads to higher per-capita consumption of water, fuel, land and other natural resources -even when population size declines. This easily overlooked trend presents a particularly serious threat to biodiversity - the plants, animals, and microbes underpinning life-support systems. The threat is particularly acute in so-called biodiversity 'hotspot' countries, where extraordinarily rich stocks of native species are threatened by human activities.

Cities are influenced by changes in the global economy and the merging Information Communications Sector. The world is characterised by increasing globalisation affecting traditional economic patterns. Inventories are kept to a minimum and "just in time" production has replaced "just in case" storage. Knowledge and skills are often the key to corporate success instead of monopoly control over hard assets or scale efficiencies on long production lines (McCarthy, 2004). New markets in distant locations are being established. Knowledge economies and global trade are key features of the globalisation trends. Global systems have their origin in the industrial mass production. Large urban agglomerations in Developed Countries were focused on industrialising and this led to urbanisation as people moved to cities to look for employment. There was an over-accumulation of capital and functional inefficiency that resulted from efficiency due to locational advantages, agglomeration economies and industrial integration at all levels (Geyer, 2001, Scott, 1983).

These changes impact significantly on large cities based on the fact that the ICT brings about new combinations of concentration of central, financial, institutional, social, information and infrastructure industries. The trans-national companies dominate the economy and the engineers; financial experts are advantaged at the expense of the workers. A new global division of labour is occurring and a widening of urban dualism globally impacts on every person's everyday life, economically and socially but only the intellectual capacity of those with access to ICT is increased dramatically (Douglass & Friedmann, 1998:10, Graham, 1999).

Information technology is important but will not replace manufacturing or commercial industries. The ICT will benefit a small minority and may lead to increasing urban dualism in cities. This will cause a divide

between the poor and the rich in the postmodern societies (Sandercock, 1998). The urban elite function well in a cosmopolitan environment while the unskilled component resort to informal ways to survives a situation conducive to enclosurism. Bohning's gap filling will increase the likelihood of enclavism in developed cities (Castells, 1993). Enclosurism may increase with the lenient immigration policies.

South African history has had a significant effect on the South African city. The most significant event, is the end of the ""Apartheid"" era and the birth of democracy in 1994, which brought about new policies with regard to economic growth, namely the Reconstruction and Development Programme and the growth-oriented policy namely the Growth Employment and Reconstruction Policy (GEAR). South Africa has also entered into an export-led economy (McCarthy 2004).

The post-1994 government was faced with the challenge of incorporating dormitory townships created by "Apartheid" into the cities. Incorporation entails creating one tax base for all to ensure that all residents share in the profits and benefits of city living and have access to services, as Mayekiso (Harrison *et al.*, 2003) points out that, although public policy has changed, the dormitory townships of the past have remained as present "economic *ghettos,*" based on the uneven nature of development.

The SACN (2003) states that dormitory townships were created during the ""Apartheid"" era because relatively wealthy local authorities could easily raise the majority of their own income from service charges and property taxes in order to kick-start a virtuous development cycle, as they could control and defend their own borders and budgets. Black authorities could only attract very little business to their areas and were responsible for a large poor population. The areas have limited commercial activities and the tax base was further weakened due to the commuting and expenditure in white local authority areas. The black authorities had very little capital available for service provision and infrastructure. This led to the emergence of urban anti-""Apartheid"" movements, e.g. "one-city-one-tax-base " etc. (South African Cities Network, 2004:25).

Policies introduced included the Reconstruction and Development Programme and the Urban Development Strategy. Market-led urban development reached greater heights with the Growth, Employment and Redistribution (GEAR) policy.

Primary and secondary industry in South Africa has declined over the last two decades while the tertiary sector has grown in importance. There are several other trends emerging. The South African economy has

been shaped significantly by four economic sectors namely government, social and community services; manufacturing wholesale and retail, trade, transport and communications have continued to add significant value to the South African economy over the last 30 years (McCarthy, 2004).

There has not been enough job growth in the various sectors. Manufacturing has seen a significant decline in employment as production processes became increasingly capital intensive and high-tech. The general exception to this picture of jobless growth may seem to be the financial and business sector. Since the latest census data there is evidence that the financial service sector is also losing jobs (McCarthy, 2004).

The long-term trend from primary and secondary industry into services is marked decline in employment. Less expected is a decline in employment amongst professionals by 8.3 % between 1996 and 2001. This may be driven by trends in some occupational sub-groups for example teachers. It may also be that cities are losing some of those residents that they consider being their primary economic asset, e.g. people working in high value-adding knowledge industries. An exodus of professional skills from the country may be driving this trend. At the other end of the spectrum there was a total loss of 91 145 jobs in private households between 1996 and 2001 (SACN, 2004:11). It is crucial to the development of small businesses and for promoting entrepreneurship.

The recent shift towards an export-led economy has not yet had a significant impact on economic performance of the city. Some indicators suggest that labour markets have suffered at the same time that economic returns from export industries have improved. There have been capricious results in some sectors. Some sectors are shedding labour. The need for more diverse approaches, which includes support for domestic demand and latent local productive capacity, should be considered. Cities face difficult choices over what kind of economic future to promote, and how to best allocate limited capacity and resources in support of this. The choices are all the more difficult where an export-orientated strategy is being led, because in an unforgiving global economy decisions may carry costly unintended consequences (SACN, 2004). New opportunities for growth and wealth-creation are certainly available in a globalising economy. Cities that can position themselves as key nodes in international business circuits will almost certainly grow from strength to strength. But choosing an economic strategy that helps city industry to 'go global' also has large risks, namely that subsidisation may be necessary in some cases, the public sector may end up being counter-productive, the local economy may be exposed to global risks and there may be a hyper concentration of high-value commercial organisations at the edges of the city, limiting access for the poor (SACN, 2004:70).

Crime affecting businesses, e.g. burglaries and fraud, has declined significantly since the mid-to-late 1990s and the levels remain relatively static. Crime is a very important indicator of governance as it is an indicator of premature urbanisation where people cannot find employment or engage in misemployment (Geyer, 2001). This leads to increasing pressures on the municipality, which could lead to diseconomies of scale (McNamara 1984:1107).

Crime is an important indicator of governance. It is also a sign of premature urbanism (Geyer, 2001) and shows disengagements, as there is a rise in diseconomies of scale (McNamara, 1984:1107). Levels of crime speak of whether residents are willing or unwilling to trust that the local state can continue to ensure their well-being. High crime levels signify a psychological disengagement ,an opting out, by larger numbers of residents who are no longer prepared to invest their faith in the order and stability supposedly represented by government (Douglass & Friedmann, 1998:12). Crime also has a potential knock-on effect on governance. The threat is that victims of and witnesses to crime, not only the perpetrators, may disengage when they see the local state as unable to guarantee their security. Furthermore, crime may have serious consequences for community coherence. Johannesburg's May 2003 Resident Satisfaction Survey, noted that crime was the number one development challenge identified by residents. It was judged as more serious than employment, health care, HIV and AIDS and housing, the next four priorities in sequence, and well ahead of access to basic services as the ninth most important development priority. The prioritisation of crime held across all settlement types except informal settlements, which saw unemployment as the most serious challenge.

The preceding conclusions highlight a number of global and national trends that have a direct or indirect impact on the South African city and its economy. This section concludes that the city does not exist in isolation but forms an integrated component of metropolitan area and national and international economies.

The sustainability of the South African city needs to be considered in the context of the integrated environment in which it functions, and some solutions to the problems of the sustainability of South African cities need to be found at national and metropolitan level. Of particular importance in this respect are the following:

- The national trend of rural to urban migration
- The increase in poverty and the growing differentiation between the have and have-nots
- The impact of HIV/AIDS and the dynamic interactions that exist between the urban and rural areas

- The growing importance of establishing effective and efficient competitive cities and the role of the ICT sector in this regard
- The increasing demand for housing and decreasing household size
- The national focus on micro-economic reform and entrepreneurship including skills and capacity development
- The national problem of unemployment and the impact of crime on the national and local economics.

CHAPTER FIVE

URBAN ECONOMY TRENDS AND ECONOMIC DEVELOPMENT





CHAPTER FIVE: URBAN ECONOMY TRENDS AND ECONOMIC DEVELOPMENT

5.1 INTRODUCTION

The economy is directly related to the demographic trajectories of the South African city. City population is positively related to city economic activity. The higher the concentration of people in a certain area, the larger the resources available and the more dynamic and generative interactions. Big cities are crucibles for new wealth-generating activities as they simultaneously concentrate market demand and stir new productive capacity (Dewar & Todeschini, 1999:3).

The city's economy has an impact on the city's population size. In places where there is dynamic growth, there is an increase in migrants, which increases the population size over the short and medium term (Dewar & Todeschini, 1999:3).

Cities are also associated with higher costs of living. Over time, the relatively higher expense of living in cities, and the promise of a "*middle-class*" quality of life, increases the cost-to-benefit calculation of having too many children. City living is associated with higher costs leading to a significant decrease in the high fertility rates (Birg, 1995). This often keeps poor families from accumulating capital and traps them in poverty (Chambers, 1983:112). The concentration of people in urban areas makes planning less complicated from a national perspective (Dewar & Todeschini, 1999:3).

The positive relationship that exists between population growth and economic development is threatened if migrants move to cities quicker than they can be absorbed by the formal economy. Migrants become disillusioned by the fact that they cannot find formal employment in the formal economy and enjoy the benefits of city living as they had originally hoped (Gugler, 1968:84). Some of them receive remittances from their families in the rural areas and some resort to misemployment such as prostitution or crime (Gugler, 1990).

The Constitution of South Africa states in Chapter Two of the Bill of Rights that everyone has the right to safety, security, housing and freedom of trade. This can only be provided if the local government provides their residents with the means to earn a living. This entails that residents must be given opportunities to use

their skills and abilities to add value, and must be adequately remunerated for their contribution (Douglass & Friedmann, 1998:25-29).

When cities cannot provide their residents with a better quality life and chance to earn a living, residents will not be committed to city life and will not be participating citizens. The Parliament of the Commonwealth of Australia stated in 1995:69: "*The ethical context of citizenship, the idea of civic duty is crucial. Without individuals and organisations prepared to participate and take responsibility, without a concept of the public interest, without the values of tolerance and compassion, and some sense of solidarity and belonging, citizenship would be impossible an democracies become difficult to govern, unstable.*"

In the event of cities not being able to provide their residents with a means to earn a living, relative economic performance may quickly turn into relative economic "*failure*", as residents then abdicate from responsibility of citizenship (Douglass & Friedmann, 1998:27). The South African Cities Network (2004:48) states that new migrant populations and old settled populations may disinvest from the city. They may try to save money to look for better future prospects somewhere else in rural or other urban areas. Harrison *et al.* (2003:247) mention that economic sustainability of cities is of utmost importance.

Sustainability arises out of the need to ensure sustained functioning of the economic system, which sustains the flow of goods and services essential for human consumption and further production of wealth. Employment and job creation are seen as the key goals of economic sustainability. The key sustainability challenge is the equitable distribution of benefits generated through economic activities as well as the mitigation of externalities generated by such activities, and their effect on the poor who do not benefit from the respective activities. Poverty alleviation is therefore a major component of economic sustainability.

The major issues that will be researched in this section, *i.e.* providing residents with a means to earn a living sufficient enough to secure their ongoing commitment, include the following:

- Gross Geographic Product and GGP per capita changes in cities in general, and recent GGP trends for each economic sector.
- Trends in employment and unemployment over the last 30 years, and more recently; disparities in income earned by those employed, in particular the still highly skewed distribution of incomes across racial groups.

- Different employment and income earning opportunities available in cities relative to what can be achieved elsewhere in the country.
- Possible explanations for slow economic growth, specifically demand limitations and supply-side micro-economic efficiency constraints.
- Efforts by the cities to compensate for a lack of domestic demand by accessing global markets, and to gear their local economies to global competitiveness by addressing micro-economic constraints.
- Possible limitations to these efforts, given current trends in the global economy and the low employment and income generating effects this growth path has offered thus far.
- Poverty alleviation, local economic development and job creation principles and efforts.

5.2 HISTORY OF ECONOMIC DEVELOPMENT TRENDS BETWEEN 1950 -1995

The South African economy is characterised by a high unemployment rate, poverty and inequality. The Reconstruction and Development Programme (RDP) created the first post-1994 policy framework for economic development in the country. The introduction of the RDP White Paper (1994: 7) states the following: *"Our history has been a bitter one dominated by colonialism, racism, apartheid, sexism and repressive labour practices. The result is that poverty and degradation exist side by side, with modern cities and a developed mining, industrial and commercial infrastructure. Our income distribution is racially distorted and ranks as one of the most unequal in the world. Women are still subject to innumerable forms of discrimination and bias, rural people and youth are marginalised. A combination of lavish wealth and abject poverty characterises our society."*

The RDP together with the "Growth, Employment and Redistribution" Paper (GEAR), were attempts to address the problems. These strategies and programmes will best be understood within the context of development in South Africa.

The presence serious inequality and poverty that exists within the South African context cannot be regarded as "normal", when seeking solutions for underdevelopment in South Africa. Bundy (1992:26) summarises the most prominent historical events that led to economic development in South Africa, for example small-scale farming, the creation of commercial farming and slave trade, after South Africa had been claimed by European countries in the 17th century. Mine industries led to the building of roads, railways and harbours and played a major role in the creation of extended infrastructure. Industries closely related to the mine

industry, were created. Another important factor that led to economic growth was domination by the British Empire, which led to strong Afrikaner nationalism in the 1950s. Bundy (1992:26) states that government has been seeking solutions to historical problems (inward industrialisation, dependence on mining industries, decentralisation) that have caused underdevelopment in the past. The Reconstruction and Development Programme and Growth Employment and Redistribution strategies, are important examples of attempts by government to promote economic development.

The Structure Of The South African Economy Between 1960-2000

The level of development of a country is most often reflected in the structure of the economy and historical patterns of economic growth (Robstown, 1970). Chenery (1979) identified five structural changes, which he identified as identical to economic development, after an empirical study had been performed. The study entailed, studying Less Developed Countries after the Second World War. These changes included the following:

- The shift of an agricultural production based economy to an industrial production economy.
- Physical and human capital accumulation.
- Changes in consumption patterns from shopping for basic, necessary items to shopping for luxurious, diverse articles.
- The growth of urban areas and rural-urban migration.
- Decreases in the sizes of families and lower population growth rates.

The most important trends showing economic development include economic growth and industrial development, population growth and labour force and indicators of macro-economic stability. Economic growth is necessary to be able to alleviate poverty and to promote development. Industrialisation was the basis of economic growth in many high-income and Developing Countries (Chenery, 1979).

ABSA undertook a study on the structure of the South African economy in 1993 and the South African Reserve Bank reported the following:

Table: 5-1: Economic growth in South Africa 1960-1995

Era	Average yearly GGP growth rate (%)
1960-1969	5.7%
1970-1979	3,3%
1980-1989	2.2%
1990-1993	-0.002%
1994-1995	2.9%
1995-1000	1.2%

Source: Quarterly journal of the South African Reserve Bank (1993)

When South Africa's economic growth percentage is considered it becomes clear that the 1960s was seen as the golden decade with an average yearly growth in real Bruto International Product of 5, 7 %. Economic growth has decreased since then and at times there has even been negative growth (the early 1990s). The negative real growth rates experienced in the late 1980s have been positive since 1994. The following table shows the sectoral growth rates for the same period (ABSA, 1993:2).

Table –5-2: The sectoral growth rates in South Africa from 1960-1992

Sector	1960-1969 (%)	1970-1979(%)	1980-1989(%)	1990-1992(%)
Agriculture	3.2	3.2	4.2	-9.8
Mining	4.2	-0.6	-0.5	-0.6
Manufacturing	8.5	5.1	1.4	-2.3
Electricity	6.2	7.1	5.3	1.0
Construction	8.6	3.4	-0.1	-3.6
Trade	6.7	3.4	3.4	-0.7

Sector	1960-1969 (%)	1970-1979(%)	1980-1989(%)	1990-1992(%)
Logistics	5.1	6.1	2.1	-0.3
Financial services	5.8	3.5	3.3	0.8
Community services	3.5	3.8	4.3	1.4
Public administration	4.8	4.0	3.2	1.1
Other	1.3	3.1	3.1	0.4
TOTAL	5.4	3.2	2.1	-1.2

Source: ABSA (1993:3)

Economic growth in South Africa took place in sectors such as agriculture, mining, production and service industries. Growth in the secondary and tertiary sectors is a sign of economic growth. This happened in South Africa in the late 1960s. Factories and trade industries experienced the best growth. The secondary and tertiary sectors experienced the best growth during the 1960s to the 1990s. The growth rates that resulted from an inward-industrialisation policy, a relatively strong gold price, a strong international economy, did not continue in the 1980s and 1990s (Kleynhans & Naudé, 2001:43). In 1992 the South African economy experienced an economic crisis, the most serious ever, except for the Great Depression. The main reasons that contributed to this are described by ABSA (1993:4):

- An inward-oriented industrialisation strategy focusing on import replacement, began to reach its limits. It managed to change the composition of South-African imports from consumer goods to capital goods, but the level of import dependency remained unchanged.
- Sanctions against South Africa increased from 1985.
- Increasing worker union militancy and a decrease in productivity as a result of strikes.
- Political unrest and crime, and the decrease in investments.
- The state departments became too big and they maintained a bad financial position. Their debt grew (750% of the Gross International Product), and this led to double-number inflation in 1973. This sector experienced positive growth in the 1990s, while most of the other sectors experienced negative growth. This shows that employment within the state services increased while employment opportunities in other

sectors decreased. This led to overpopulated state departments of more than one million people in 1994. This led to large amounts of state expenditures.

The result of economic growth patterns is that factories' contribution to the economy, grew from 22,6 % in 1960 to 1969, to 25% in 1990. Agriculture's contribution decreased from 22, 2 % in 1960, to 14% in1969, to 8% in 1990. The most important factories in South Africa are the chemical industries, basic metal production and food processing (Kleynhans & Naudé, 2001:43). Table 5-3 shows the output and employment numbers of the 21 main sectors in the factory industry. It also shows data on the capital-intensity in the factory industry's various sectors. The capital intensity of production is usually measured by the capital: labour ratio. Kleynhans & Naudé (2001: 43) state that a characteristic of a Less Developed Country is the fact that capital is rare and this results in a low capital: labour ratio. Many theories on the development process see capital extension as imperative in promoting economic growth and higher per capita income, since it encourages higher productivity rates (Kleynhans & Naudé, 2001: 43).

Table 5-3: Manufacturing in South Africa: Output, job creation and capital intensity

Sector	Real output	Employment	Capital: Labour ratio
Food processing	46485	197050	63000
Alcohol	13200	36400	267000
Tobacco	1723	3230	61000
Textiles	6825	86490	33000
Clothing	7085	115300	4000
Leather	1115	900	13000
Cement	3283	25470	12000
Wood	3428	60860	18000
Furniture	3217	42120	6000
Pulp & paper	14222	50520	85000
Printing	8047	54390	22000
Chemical products	47136	122360	383000
Rubber	3456	16480	68000

Sector	Real output	Employment	Capital: Labour ratio
Plastic products	6775	48690	39000
Pottery & glass	3325	16050	25000
Iron & Steel	15615	68300	344000
Non- iron products	21457	141000	194000
Machinery	14810	642150	41000
Electrical machinery	12206	96030	28000
Transport implements	22102	83280	84000
Other production	3841	32810	35000

Source: Industrial Development Corporation (1993)

Population growth and urbanisation

The World Bank (1987:2) states that an increase in Gross Domestic Product will only lead to economic growth if it is bigger than the population growth rate. The compositions of a country's population in terms of the following, will have a long-term effect on the country's development:

- The age profile (this determines the dependency –burden namely people of old age and children).
- The urbanisation rate (this determines the burden of public facilities and government services).

South Africa's growth rate since 1960 and predictions up to 2006 is given in the table below

Table 5-4: Growth rate forecasts

Year	Population	Population growth rate
1960	17402730	-
1970	22768300	3,08%
1980	29226910	2,83%
1985	33202780	2,72%

Year	Population	Population growth rate
1991	38011720	2,41%
1996	42051850	2,13%
2001	46256350	1,99%
2006	50332890	1.76%

Source: Kleynhans & Naudé (2001:45)

The main sources of population data in South Africa are censuses held by the Central Statistical Services (Kleynhans & Naudé, 2001: 45). There are many limitations that a census has to adhere to. It is estimated that the South African population is 38 million. The population growth rate is 2, 6 per cent and it is estimated that by 2020 the population will be 70 million. More than 80 % will be living in urban areas. Sixty-four per cent of the population are currently living in urban areas. More than a million people will be added to the number of urbanised people in the country.

The high migration rate, which is a characteristic of Less Developed Countries, are posing new challenges to the municipalities to provide services like sanitation, water provision, safety and security as well as social infrastructure like hospitals, schools and recreational facilities. These demands are creating many challenges and opportunities for the economist, the urban and regional planner as well as government officials in South Africa (Kleynhans & Naudé, 2001:45).

The Labour Force And Unemployment

A fast growing population indicates that the labour force (people with ages ranging from 16-64) is also growing. If they cannot be absorbed into the economy, unemployment will be at the order of the day, as well as a growing informal economy (Kleynhans & Naudé, 2001: 46). The World Bank (1995:2) estimates that there is a strong relationship between absolute poverty and unemployment in South Africa. The Statistic South Africa October Household Survey indicates that approximately 32.6% of the poorest people, who constitute 20% of the South African population, were unemployed in 1995. South Africa's total unemployment rate was estimated at 32.6 % in 1995. One of the biggest objectives of development programmes is therefore to create job opportunities to eradicate poverty.

Macro - Economic Indicators

Macro-economic stability is necessary for economic growth. Macro-economic stability is reached by means of external equilibrium (exchange rate stability and a sustainable payment balance shortage) and internal equilibrium (price stability, economic growth and full employment). From 1960 to 1994 the macro-economic situation in South Africa was characterised by increasing imbalance in both internal and external environments. ABSA (1993:6) describes the macro-economic environment as having been largely influenced by the following factors:

- High inflation (average of 15,7% per year between 1985-1989) that resulted from overspending by state departments, to low interest rates in the 1970s, large increases in the budget (on average 17% per year during the 1970s, and depreciation in the nominal effective exchange rate of more than a 100 % since 1971).
- Increasing unemployment and increases in real per unit labour costs.
- State debt, which made up approximately 57% of the GDP, and a fiscal shortage that was 9 % of the GDP in 1992/93.
- An outflow of capital (42,3 milliard) between 1985-1992.
- A debt standstill agreement whereby South Africa became the net exporter of capital and had to maintain a surplus on its payment balance's current account. This payment rate forced high interest rates and deflation policies like high income tax.
- Decreases in domestic investments. In the 1960s the growth rate in average domestic investment was 7,9%. This decreased to 4,7% in the 1970s, 0,5% in the 1980s and 6,6% during 1983 to 1992. Local investment is seen as a key element to economic development.
- The macro - economic position of South Africa was extremely unstable in 1994 when the elections took place. GEAR, the normative economic model stressed the following to obtain stability, namely greater fiscal discipline, decreasing the income tax burden, lowering of interest rates (positive in real terms) and finding more foreign investments (Kleynhans & Naudé, 2001: 46).

In 1994 the South African economy was very unstable .The Normative Economic Model and the GEAR-policy document aimed to contribute to economic stability by applying strict fiscal discipline, decreasing taxation, decreasing interest rates that remain positive in real terms, and attracting international investment (GEAR, 1998).

Poverty And Inequality In South Africa

The Employment Equity Bill (1998) states that South Africa has the most unequal distribution of income in the world. The bottom twenty per cent of income earners receive 1,5 percent of normal income, while the wealthiest ten per cent earn fifty per cent. Poverty is overwhelmingly concentrated in the African-Coloured population. Ninety-five per cent of Africans are poor and 33 percent of the Coloured population live in poverty.

Kromberg (1996:17) suggests that sixty per cent of the total African population in South Africa live below the poverty line and in rural areas the number rises to eighty per cent. The extent of poverty in South Africa can be described in terms of absolute and relative poverty (Swanepoel & De Beer, 2000:2).

The following economic measurements of poverty researched by the Human Science Resource Council (1995) are also largely limited to measurements of income distribution, due to the data available. Other economic factors, for example the extent of inequality in the ownership of assets or a detailed account of different household relationships, are not reflected in these statistics. Poverty rates in South Africa, meant to measure the extent of absolute poverty, are very high. The poverty rates increase in rural regions, in provinces containing one of the former homelands and in areas whose economies have been underdeveloped by "*Apartheid*"-era policies. In most provinces the level of poverty is shockingly high, with poverty rates for individuals near or exceeding 50 per cent. Table 5-5 gives the estimated poverty rates by province in South Africa.

Table 5-5: Poverty head count and ratio per province

Province	Number of poor household	% Household living in poverty	Number of poor individuals	% Individuals living in poverty
Western Cape	125208	14.1%	635557	17.9%
Northern Cape	51466	38.2%	267992	48.0%
Eastern Cape	710257	56.8%	4115332	64.0%
KwaZulu-Natal	626889	40.4%	4216184	50.0%

Province	Number of poor household	% Household living in poverty	Number of poor individuals	% Individuals living in poverty
Free State	263112	36.1%	1331649	47.1%
Mpumalanga	208419	33.8%	1275517	45.1%
Northern Province	602528	61.9%	3565492	69.3%
North West	2332947	29.7%	1248724	41.3%
Gauteng	299821	15.4%	1443204	21.1%
Total	3126647	35.2%	18099651	

Source: HSRC (1995)

The following table illustrates the difference in income distribution among the cultural groupings in South Africa.

Table 5-6: Poverty rates in South Africa

Cultural group	Proportion of households living in poverty	Proportion of individuals living in poverty
African	47.2%	57.2%
Asian	6.2%	6.8%
Coloured	18.5%	19.8%
White	2.1%	2.1%
Total	**35.2%**	**45.7%**

Source: HSRC (1995)

Measurements of relative poverty can be more complex than those that try to gauge absolute poverty, as relative poverty refers to the extent of economic distance, or inequalities in society. One indication of income distribution is the Gini coefficient (World Bank: 1996). The Gini coefficient is simply a number between 0 and 1, which indicates the level of income inequality between 0 and 1, which indicates the level of income inequality within a population. A value of 0 indicates perfect equality in other words everyone has the same

income. A value of 1 indicates perfect inequality (one person or household has all the income). As the Gini coefficient becomes larger and closer to 1, the extent of inequality increases. The table below shows the Gini coefficients for different countries whose economies are roughly at the same level of development in South Africa. When compared to the 64 countries in the world, South Africa has one of the most unequal distributions of wealth.

Table 5-7: Gini coefficients and Income Inequality

Country	Gini coefficient
Slovak Republic	0,195
Czech Republic	0,266
Hungary	0,270
Poland	0,272
Estonia	0,395
Peru	0,449
Thailand	0,462
Malaysia	0,484
Russian Federation	0,496
Mexico	0,503
Venezuela	0,538
Chile	0,565
South Africa	0,584
Brazil	0,634

Source: World Bank (1996)

Gini coefficients can also be applied to different populations within a particular country. Table 5-7 shows the estimated Gini coefficients for different population groups in South Africa. There is a high degree of inequality in all the population groups.

Table 5-8: Gini coefficients of different types of South African households

Type of household	Gini coefficient
All households	0,59
Race of head of household	
African	0.52
Coloured	0.50
Indian	0.44
White	0.49
Gender of head of household:	
Male	0.75
Female	0.55
Type of area:	
Urban	0.57
Non – urban	0.55

Source: Central Statistical Services (1995)

According to the Central Statistical Services' Income and Expenditure survey (1995) the unequal distribution of wealth in South Africa occurs across many dimensions, e.g. gender, geography and race. The following distribution was noted:

- Among African - headed households, the average annual household income is R23000.
- Among Coloured - headed households, it is R32000.
- Among Indian - headed households, it is R 71000.
- Among White - headed households, it is R103 000, 4.5. Times the average for African families.
- Average annual household income varies depending on whether the household is urban or a non - urban area. Households living in urban areas have more than double the average income (R55 000) of those living in non - urban areas (R23000).
- Average annual household income also varies according to the type of dwelling, with those living in informal (R 15 000) and traditional dwellings (R14 000).
- The table below shows the average household income by province and historical racial classification.

Table 5-9: Average Household Income (Thousands of Rand)

Province	Average household income				
	African R000	Coloured R000	Indian R000	White R000	Total R000
1. Eastern Cape	17	24	58	90	24
2. Free State	14	16	*	72	25
3. Mpumalanga	20	30	78	82	30
4. North West	21	25	*	93	30
5. Northern Province	26	43	*	140	31
6. Northern Cape	13	18	34	79	31
7. KwaZulu-Natal	24	41	61	98	37
8. Western Cape	22	33	54	98	53
9. Gauteng	37	53	111	118	71

Source: Central Statistical Services (1997)

5.3 GROSS GEOGRAPHIC PRODUCT 1970 TO 2002

A fast-growing population means that the labour force (people with ages ranging from 16 to 64) is also increasing. If they cannot be absorbed into the economic growth, unemployment will be at the order of the day as well as a growing informal economy (Kleynhans & Naudé, 2001: 46). The World Bank estimates that there is a strong relationship between absolute poverty and unemployment in South Africa. Fifty-three per cent of the poorest people, who constitute 20% of the South African population, are unemployed. South Africa's total unemployment rate is 32,6% (Kleynhans & Naudé, 2001: 46). One of the biggest objectives of development programmes is to create job opportunities to eradicate poverty.

Using different data sets rough pictures can be drawn of changing city economic product for the period 1970 to 2002. A single integrated Gross Geographic Product (GGP) dataset for the nine South African Cities Network cities, covering the entire period, is not available. GGP data were sourced from StatsSA for the period 1970 to 1994. The last time StatsSA published reliable, official estimates of GGP was in 1991, with 1994 figures being a reasonably accurate forward projection of the 1991 survey data. Gross Value Add

(GVA) data were procured from the firm "*Global Insight*" for the period 1996 to 2002. GVA is similar to GGP, but it differs in that it excludes taxes and subsidies on products. It is derived from a variety of sources, including StatsSA census data unlaboured remuneration, Reserve Bank national income and production accounts data for each economic sector and Regional Services Council levy growth trends. It is disaggregated to Magisterial Districts matching the boundaries of the nine cities. The two sets of figures do not line up, in that the GVA data for 1996 show an aggregate economic product for all nine cities much higher than the GGP data for just two years before. However, each data set is accurate on its own terms (South African Cities Network, 2004:49).

The Gross Geographic Product (GGP) and GGP per capita of each city studied for the South African Cities Network report (2004:48) practically doubled between 1970 and the mid-1990s. The GGP for the sample of all nine cities practically doubled, from R88,3 billion to R161,4 billion. In 1994, Johannesburg was the largest economy in the country, followed by Cape Town, Ekurhuleni, Tshwane and eThekwini, all jostling for second place. In growth terms some cities performed much better than others. Tshwane's economy grew with 142,57% during this period and Buffalo City's a remarkable 315%.

Johannesburg's economy by contrast grew only 43,36%. The GGP data suggests that total economic product per person declined in all but one city over the period. The general picture presented by the South African Cities Network (2004:48) is one of economic growth not keeping pace with population growth. Accelerated decline between 1991 and 1994 is due to the influx of people into the cities in the post-apartheid period. In Tshwane and Buffalo City, the very steep downward curve is at least partly due to the anomaly in data resulting from the historical exclusion of the "*homelands*" from South African census data.

An analysis of 1995 and 2002 census data gives an indication of the GVA growth and GVA per capita growth across all cities between 1996 and 2002. A number of the cities have seen strong growth in total economic value during this period, with Johannesburg and Tshwane showing the greatest increase.

The share of wealth per person has not kept pace in this period either. Across the nine cities it grew with only 1,15%, from R21 986 to R22 239 per capita. GVA per capita declined in five of the nine cities and showed minimal growth in two others. GVA per capita grew the mostly in Nelson Mandela, from R15 020 to R17 817, reflecting both relatively strong economic growth and the slight increase in population in this city over the period. Between 1996 and 2001 Tshwane grew the fastest of all the cities at 5, 07% per annum on average. Johannesburg and eThekwini were close behind. Msunduzi's economy declined at -0,22% per

annum in the 1996 to 2001 period, but it has seen a recent surge of new growth. The strongest economic growth has been seen in the transport, storage and communications sector, reflecting the communications revolution of the second half of the 1990s. Strong growth has also been seen in the financial, insurance, real estate and business services sector, although this growth now seems to be flagging. Growth in the manufacturing sector has been significant and appeared to accelerate in 2001 to 2002 (South African Cities Network, 2004:49)

5.4 EMPLOYMENT TRENDS IN SOUTH AFRICA

A historical perspective on the nature and origin of unemployment

The 1994 Statistics South Africa October Household Survey shows that the rate of unemployment stands at 32.6%. Growth in job creation, shown by means of employment generation, is shown below:

Table 5-10: Growth in hiring of male employees, 1950-1990 (%)

Sector	Average yearly growth rate
Primary Sector	0.1%
Secondary sector	2.0%
Tertiary sector	2.1%
TOTAL	1.5%

Source: ABSA (1993:15)

ABSA (1993:16) states that South Africa's ability to absorb increases in the labour force has declined significantly (with an average of approximately 2.8% per year) between the 1950 to 1990 period. Most economic growth during this period can be ascribed to growth in the secondary and tertiary sectors (McCarthy 2004:4). This led to the most jobs being created in these sectors (McCarthy, 2004:4). The table above shows the differences in employment generation between the various sectors between 1950-1990. There has been a shift from the majority people being employed in the primary sector to the secondary and tertiary sectors. Kleynhans & Naudé (2001:56) state that the tertiary sector is the sector in which most people in South Africa are employed, with 53.8% of the workforce accommodated by this sector in 1990. This is still increasing as confirmed by the Monitor Group (2000:1), Robbins (2004:2) and McCarthy (2004:2).

The sectoral employment generation between 1950 and 1990 is shown below:

Table 5-11: Sectoral employment generation in South Africa between 1950 – 1990 (%)

Sector	**1950 (%)**	**1990 (%)**
Agriculture	26.9	11
Mining	12.9	9.4
Manufacturing	13.5	18.
Electricity	0.6	1.1
Construction	2.5	5.8
Trade	9.6	12.6
Logistics	6.6	5.4
Financial services	1.5	5.6
Community services	2.0	4.0
Public administration	7.1	16.4
Other	16.9	9.8

Source: (ABSA, 1993:16)

This table shows that manufacturing was the single most important sector in terms of employment generation accommodating approximately 20% of the workforce. The importance of government as employer can also be derived from the above table that shows stricter fiscal discipline if the growth in the private sector does not increase (ABSA, 1993:16).

GEAR (1998) indicated a growth rate of 6% by the year 2000. This was based on studies done, which showed that employment generation flexibility of economic growth equalled 0.46. This refers to the percentage increase in employment generation based on economic growth of one per cent (Kleynhans & Naudé; 2001:56). The studies found that a growth rate of 6% was necessary to accommodate an increase in labour force of 2.8%. Kleynhans & Naudé (2001:56) noted that the employment generation flexibility, could decrease resulting from the nature of unemployment

The South African Labour and Development Research Unit's Household Survey created the following profile in 1995 with regard to unemployment in South Africa:

Table 5-12: Profile of unemployment in South Africa

Race	**Total % unemployment**
African	38.3
Coloured	20.8
Indian	11.3
White	4,3
Gender	
Female	35.1
Male	25.5
Place	
Rural	39.7
Urban	25.6
Metropolitan	21.3
Total	**29.9**

Source: World Bank (1995:14)

The table confirms May's findings (2000:3) that unemployment has had a significant impact on the various cultural groups, race and persons living and working conditions. The World Bank (1995:14) indicates that rural women are the most vulnerable to unemployment. Poverty in rural areas is approximately twice as high as in urban areas. Employment generation is dependent on the fact that skill training has to be done. Whiteford *et al.* (1995:8) indicate that poverty is positively associated with lack of education. The following table adapted from Whiteford *et al.,* shows that 70% of households, where the head of the household is unskilled, live in absolute poverty. They are unemployable. This phenomenon is known as structural unemployment.

Table 5-13: Education and poverty in South Africa

Level of education	% Poverty
None	68.3
Sub A- Std 1	67.0
Std 8-Std 9	23.0
Std 10	8.8
Std 10 + diploma	1.8
Std + other	4.7
Tertiary qualification	2.2

Source: Whiteford *et al.* **(1995:8)**

Gnu (1998) stresses the importance of education and training to be implemented as a poverty alleviation strategy. It is clear that the post Apartheid government has a big task at hand to deal with the economic problems inherited form the previous regime. Intervention strategies have to be focused around job creation, poverty alleviation and income inequality. The major policy documents developed after 1994 include, the Reconstruction and Development Programme and the Growth, Employment and Redistribution (1994) document. The Normative Equity Model developed in 1992 by Minister of Finance, Derek Keys, influences policy formulation (ABSA, 1993:9)

The model was developed for the Central Economic Advisory Service to identify important issues in the South African economy (ABSA, 1993:9). The Normative Equity Model divided economic development into three major categories, namely functional imbalances, structural deficiencies and system deficiencies. The reform strategy suggested greater fiscal discipline, decreasing taxation, decreasing state intervention in the economy and promoting a free market system (ABSA, 1993:9). This is summarised in the table below:

Table 5-14: Limitation and strategies proposed by the Normative Equity Model of 1992

Existing Limitations	Strategies
Functional imbalances	
Fiscal shortages	• Fiscal discipline • Decreasing taxation
Loss of capital	
Increase in unit labour costs	
Increased taxation	
Structural deficiencies	
Climate of inflation	• Decreased state intervention • Reforming industrial sector • Improved market structures
Too large government sector	
Too much state intervention	
Dual exchange rate system	
Negative industrial relations	
Non – competitive price structures	
System deficiencies	
Limited access to education	• Social reconstruction and • Development • Urban renewal • Introducing social safety nets
Friction of distance between people	
Inefficient financial mediating	
Lack of entrepreneurship	

Source: ABSA (1993:9)

ABSA (1993:9) states that it was expected that implementation of the Normative Equity Model strategy would increase investment form 15.9% to 23.10% in 1997. The GDP growth rate would increase from two percent in 1992 to 4.5% in 1997. Employment generation would be approximately 3% in 1997.

Another programme or strategy that was followed was the National Strategic Vision. This vision aimed to create the following:

- Strong and stable democratic institutions
- Representation and participation in the political and economic processes
- A changed South Africa focused on a democratic, non-racial, non-sexist community
- Sustainable economic development according to promoted criteria or standards

This Vision is based on six pillars, namely expanding the economy and in the process assuring higher growth, creating infrastructure and delivery of services, delivering community services, e.g. housing and health services, developing human resources by increasing access to education, housing and security, to decrease the crime rate and optimal governance to decrease corruption.

The Reconstruction and Development Programme (RDP) was first developed as a propaganda document of the African National Congress (ANC) before the 1994 elections (Kleynhans & Naudé, 2001:60) It later became the White Paper that was submitted on the 15th of November 1994. The documents differ in that the original RDP was adapted following public participation meetings and comments from organisations. Some organisations, namely the "*National Institute for Economic Policy* "of the African National Congress, were in favour of a demand-driven economy. The Central Economic Advisory Committee pleaded for a more supply-side economy as growth comes before redistribution. They also argued that the reconstruction process would have to be driven by private sector to ensure that investor confidence would increase by means of political stability, fiscal policy and social stability (Kleynhans & Naudé, 2001:61).

The RDP is based upon six important principles, namely that it aims to be sustainable and integrated, to realise a human-driven programme which places the needs of people first, to enhance safety and security for all, to launch nation-building with one country and one economy, to provide basic needs and develop infrastructure, to reform governance to fit in with the principles of the RDP (RDP, 1994). The RDP document and White Paper identified five programmes to implement the National Vision Programmes, namely providing basic needs by providing electricity to 72 % of all households by the year 2000, developing human resources, economic growth, democratising the community, implementing and financing the RDP.

De Wet (1994:307-332) and Munson & Fitzgerald (1995:41-62) provide a critical review of the RDP document. It is argued that the RDP document does not implicate clearly how it is going to implement

programmes. The institutional structure was blamed for being inefficient, and this led to the breaking up of it in 1996. The document does not consider the fact that effective service delivery is dependent on consulting the various communities. The basic document relies too heavily on the ideologies of socialism. De Wet (1994:328-329) states: " *All through the Base Document, one is subconsciously aware of the fact that the RDP wishes to have structures and processes in place to direct all pole, all resources and all activity towards achieving the goals set out in the RDP. It seems to want to influence and redirect every detail of life in South Afric . Although heavily tuned down; the same sentiments are encountered in the White Paper. There is implicitly very little trust in the market system."* The criticism indicated that the RDP was unrealistic in terms of its objectives. This is an indication of the complex nature of policy formulation.

The GEAR policy document is a macro-economic strategy introduced in 1996 by Trevor Manuel. GEAR is based on a production strategy to promote economic growth. It wanted to create 400 000 new employment opportunities by the year 2000. The main elements of this production strategy are as follows (Gear, 1996):

- An accelerated fiscal reform and decrease in budget shortage from 5,1 % of BIP in 1996 to 3,0 % by the year 2000.
- A decrease in the state's role in the economy as measured by state expenditure.
- Reform of the trade and industrial policies by means of more privatisation, lowering of tariff protection.
- Larger investments by the state.
- More flexibility of loans (especially in the lower level of the labour market).
- The promotion of foreign investment.
- Incentives for investment in the private sector, for example low income tax.

The GEAR South African community, the International Monetary Fund and the World Bank, welcomed the strategy. The GEAR strategy was evaluated in 1997 and it was mentioned that there were different opinions as to the relevancy of the policy (Kleynhans & Naudé, 2001:62). It is aligned with good international practice. The NIEP and Cosatu criticised the GEAR policy based on the fact that it promotes fiscal discipline and liberation of trade (Kleynhans & Naudé, 2001: 63).

Post 1994: Generating Employment

McCarthy (2004:2) states that primary and secondary industry in South Africa declined over the last two decades while the tertiary sector increased in importance. There are several other trends emerging. The South African economy has been shaped significantly by specific economic sectors namely government, social and community services; manufacturing wholesale and retail, trade, transport and communications. These sectors have continued to add significant value to the South African economy over the last 30 years.

There has not been enough job growth in the various sectors. Manufacturing has seen a significant decline in employment as production processes became increasingly capital intensive and high-tech. The general exception to this picture of jobless growth may seem to be the financial and business sector. Since the latest census data there is evidence that the financial service sector is also losing jobs (South African Cities Network, 2004:11).

A long-term trend showing the shift from primary and secondary industry into services, shows the decline in employment against machine operators and trade workers. This is to be expected. Less expected is a decline in employment amongst professionals by 8.3 % between 1996 and 2001 (StatsSA). This may be driven by trends in some occupational sub-groups for example teachers, but it may also be that cities are losing some of those residents that they consider being their primary economic asset, e.g. people working in high value-adding knowledge industries. An exodus of professional skills from the country may also be driving this trend. At the other end of the spectrum there was a total loss of 91 145 jobs in private households between 1996 and 2001.

The lack of skills is a major concern as 26, 9% of major city residents had a metric certificate in 2001 and 11.9% had any form of post school higher education (South African Cities Network, 2004:11). Crime affecting businesses, e.g. burglaries and fraud have declined significantly since the mid-to-late 1990s and the levels remain relatively static.

The recent shift towards an export led economy has not yet had a significant impact on economic performance (Robbins, 2004:3). Some indicators suggest that labour markets have suffered at the same time that economic returns from export industries have improved. There have been capricious results in some sectors. Some sectors are shedding labour. The need for more diverse approaches, which would include support for domestic demand and latent local productive capacity, should be considered (Robbins, 2004:3).

It is suggested that industries, e.g. enhancement of the construction industry be accessed to promote employment, promote competitive advantage and access global markets in South African products. This sector has potential to create leverage, as spending of one million rand yields twenty jobs. Government is building infrastructure to alleviate poverty and increase competitiveness of private industry. Diversification is needed to create success. This can be seen in changes in global trade patterns, e.g. China is becoming one of the world's leaders in low labour-cost manufacturing for export. It is predicted that some countries will overtake the State in terms of Gross Domestic Product, e.g. Brazil, India, Russia and China. Trading relations will differ from past logistical assumption that informed the port of Durban or the airport in years gone by (McCarthy, 2004:7).

Job creation within major cities is of utmost importance for the economy as a whole. The Monitor Report (2002:3) investigated the economic position of Durban (eThekwini). The Monitor Group (2002:3) stated that Durban is located on the eastern seaboard of South Africa and is strategically located in terms of trade routes. Key logistical assets of the port and airport are located close to the Central Business District and coast. The Durban Metropolitan Area (DMA) is the second largest metropolitan area in South Africa.

The Monitor Report (2002:3) has shown that Durban is experiencing decreasing economic competitiveness. This was also shown in the report "Durban at the Crossroads" written in 2000. Durban lacks infrastructure investment; it lacks leverage of advantages as many head offices have relocated to Johannesburg. Durban has to re-establish competitive global markets and must deepen the advantage as a port, transport and logistics hub. Durban must grow in parts of the economy that create many multiplier effects. The signs of underperformance have not been caused by recent economic factors, but rather by KwaZulu-Natal being seen as a "*branch economy*", where the business landscape consists of uncompetitive industrial sub-sectors e.g.

the number of top companies in Durban fell from 15 % in 1970 to 9% in 1980 and is currently 5% (Centre for Development and Enterprise, 2002:20).

A joint World Bank and eThekwini council study on manufacturing industries done in 2002 suggested that the biggest constraint to expansion of existing firms was their aversion of crime in many older areas and that a sustained increase in market demand for their products had to be promoted. Many manufacturing firms are looking for modern operational environments where the neighbourhood effects of crime in particular can be reduced and new international markets can be established (World Bank, 2002: 4).

Tourism in eThekwini has to focus on drawing more international tourists. During the 1990s Durban lost market share to the Western Cape. The international tourists are "*high spenders*" of approximately R1300 per day and could contribute significantly to the local economy (McCarthy, 2004:9). In 2002 as many as 272 000 of the local population were employed by the tourism industry, but there has been a significant decline of 3% International air arrival tourism from 29% to 26% and this has been exacerbated by the disappearance of direct international flights to Durban International Airport, an issue that will be addressed by the building of the King Shaka International Airport in 2006 (The Mercury, November 8, 2004). Major investments have been made in providing new tourism developments, e.g. the ICC, U Shaka Marine World, Sun Coast Casino, Sibiya and others. These were all built with the assumption of the availability of a globally competitive international airport with direct links to core international tourism (McCarthy, 2004:10).

The Dube Trade Port (DTP) will be built adjacent to the King Shaka International Airport (KSIA). This is a necessary development and the KSIA and DTP are accurately located within close proximity of the province's comparative and competitive advantages and can create many social and economic returns through the creation of infrastructure investment in the Province. The DTP will be located well in terms of addressing the areas of significant job losses. The DTP will promote increased linkages in enhancing logistics and connectivity (McCarthy, 2002:9).

A very important aspect for the South Durban Basin is that the creation of the KSIA and DTP linked to the possible industrialisation of the DIA or residential development, of the DIA grounds as put forward in the

new Strategic Framework prepared by the Iyer Rotthaug Collaborative. Developments, will likely yield hundreds of new job opportunities that will lead to formal jobs in the market.

Leverage will be created if these developments are accompanied by the modernisation of the harbour, as shipping will of course remain an important implement for air cargo in the future. The upgrading of the port is primarily concerned with widening of the harbour mouth to accommodate post-pannamax vessels as well as the occasioning of continued handling operations to the private sector. The airport will provide an additional line in the province's logistic platform in an increasing "global village' where comparative advantage is determined by shorter transport periods. This is confirmed by Arjunan (2003) and the CSIR (2002) who both reported on the extension of the Port.

The South African Cities Network, (2004: 49) states that that South Africa as a whole created 469 927 new jobs between 1996 and 2001.More than half of these were generated in the nine South African Cities Network cities. Employment across the nine cities increased from 4 619 136 to 4 866 808 in 1996-2001, an increase of 247 672 or 5, 7%. By contrast, only 222 255 jobs were formed in the rest of South Africa outside the nine cities. Despite their aggregate contribution to employment, the creation of new jobs in the cities is nowhere near fast enough to keep pace with the increase in the numbers of people needing employment. The working population grew with 16, 8% across the country between 1996 and 2001. Reflecting the impact of migration, it increased by 20, 94% (from 6 519 544 to 7 884 691) in the nine cities. As a result, South African Cities Network cities' total unemployment increased by 58,80%, while growing at a rate of 43,90% in the country as a whole.

In 1996, the census showed unemployment (on the expanded definition of those people who could work but are not working, regardless of whether they are currently looking for work or not) averaging 29,2% in the nine South African Cities Network cities. This compared to 38.1% in the country as a whole outside the nine cities. Tomlinson (1993: 247) points out that jobs can be lost while jobs are being produced. This confirms structural change where manufacturing jobs are lost and growth in service sector takes place.

Five years later, the gap had narrowed considerably. Unemployment had jumped to 38, 3% in the cities and to 44%, and 7% in the rest of the country. Labour Force Survey data from February 2002 were disaggregated to the nine South African Cities Network cities for this report. This gives a slightly different picture. On the strict definition, 27, 8% of the cities' labour force was unemployed at the start of 2002. Slightly better than

the picture presented by the October 2001 census, the Labour Force Survey measures expanded unemployment at a rate of 35, 7%. This big picture needs to be nuanced with a number of trends.

Trends By Sector

South Africa has undergone gradual economic restructuring in recent years based on changes in the global business environment which entail globalisation of economic relations and transactions, technological change and shift in the organisation of production (Harrison, 1994:73). It has often been noted that primary as well as secondary industry has declined over time, and the tertiary sector increased in importance in recent years. This is true, but other trends are important (South African Cities Network, 2004:49).

The major role-players in the current global and South African economy are government, social, community, services; manufacturing; wholesale and retail trade; and transport and communications, continuing to add significant value to the South African and global economy (South African Cities Network, 2004:50). This confirms the work of Boddy (1999) and Graham (1999) who emphasise the emerging importance of the CCIT as a new sector of the economy and the continued importance of economies of scale and agglomeration economies. The sectors on average are failing to contribute comparable increases in jobs, as is a characteristic of many Third World Countries (Todaro, 1994:231).

This general picture of jobless growth is much nuanced. Each sector shows slightly different trends. Value growth in the government, social and community services sector, which includes such sub-sectors as public administration, health and social work, education, community organisations and, most notably, private households, was matched by employment growth until the early 1990s (ABSA, 1993:9). The same was the case for the wholesale and retail trade sector (ABSA, 1993).

Job creation then stagnated in both between 1996 and 2001 (StatsSA, 1995; StatsSA2001). Although the 1995 census results show a slight increase in jobs, the 2001 census suggests a loss of more than 100 000 between 1991 and 1996. The pattern in each sector then changed in the mid-1990s.

The South African Cities Network (2004:52) shows that the government, social and community services sector contributed only a few new jobs between 1996 and 2001. This small increase hides two divergent trends. On the one hand there was a massive fall of employment in private households: 91 145 household-service jobs disappeared in the five-year period between the censuses. On the other hand the government

community sub-sectors saw 111 323 new jobs to make for a net sector gain of some 20 000 jobs. The wholesale and retail trade sector made up these employment losses of 1991-1996. It contributed 192 710 new jobs across the cities between 1996 and 2001 to see employment return to 1991 levels and above (South African cities network, 2004:52).

This growth was relatively evenly spread throughout South Africa. The most significant long-term employment trend has been in manufacturing (McCarthy, 2004:7). This sector has seen a substantial long-term decline in employment as production processes were increasingly going capital-intensive, utilising advanced technology (Tomlinson, 1993:247). ABSA (1993:2) indicates that between the mid-1940s and 1980 manufacturing added some 700 000 jobs as the country's economy diversified from primary industries, notably gold mining and agriculture (Bundy, 1992:41). Manufacturing as employment generator went into decline from 1980 onwards. Driven by productivity gains from mechanisation, the sector continued to add value, at a slower pace than before (Robbins, 2004:3).

Between 1980 and 1996 it lost some 200 000 jobs to return to 1970 employment levels (South African Cities Network, 2004:49). In the mid-1980s the manufacturing industries peaked in terms of employment. Sustained processes of economic restructuring, that have shifted the economy from its protected base dominated by primary commodity production to one of export oriented manufacturing, left in its wake a considerable number of lost jobs and closed firms. Erratic local government attention and poor regulation of some activities by firms contributed to a general sense of decline that has characterised the economic trends of the major urban industrial areas, for example the South Durban Basin, in the past few years (Robbins, 2004:3).

The South African Cities Network (2004:49) states that different cities have been differently affected by this general trend. Historical manufacturing centres, notably Johannesburg, Ekurhuleni and Nelson Mandela, all lost a sizeable portion of industry employment between 1970 and 2001. However, other cities, notably eThekwini, Cape Town and Tshwane, all saw respectable manufacturing job growth in the same period. Remarkably, the pendulum now seems to have swung back again. Whereas eThekwini and Cape Town saw manufacturing job losses between 1996 and 2001, Johannesburg, Ekurhuleni and Nelson Mandela all saw job growth. For example, although it is 30-year picture it is one of emerging manufacturing employment, industry in the Ekurhuleni Metropolitan Municipality created 30 235 new manufacturing jobs between 1996 and 2001, and experienced an increase of 26,1%. Half of the 30-year manufacturing job growth in Tshwane also occurred in this five-year period.

Manufacturing industry today is characterised by a much greater diversity of economic activity, than it was in the past. It is also characterised by a much greater diversity in the needs of the firms (Smith & Jafta, 1995:19). Today the average manufacturing firm is involved in major export activity, it is highly capital intensive and is part of global supply chains and as such, the firms are very closely related to logistics industries (McCarthy, 2004:2).

Harrison (1994:73) describes the global trends which organisations had to adapt to, namely globalisation of relations and transaction, technological change, shifts in the organisation of production, changes in the role and organisation of labour and changes in the nature of competition. McCarthy (2004:1) describes these changes by mentioning that the world is characterised by increasing globalisation affecting traditional economic patterns. Inventories are kept to a minimum and "just-in-time" production has replaced "just-in-case" storage. Knowledge and skill is often the key to corporate success instead of monopoly control over hard assets, or scale efficiencies, on long production lines and new markets in distant locations, are being established. Knowledge economies and global trade are key features of the globalisation trends. Many manufacturing firms did not survive this period of adjustment and today have left thousands of square metres of industrial space vacant in places like the South Durban Basin (Robbins, 2004:3).

Many manufacturing firms have relocated, resulting from changing economies of space, and have seen the opportunity to invest in more centralised locations. Many firms have also relocated to places with better infrastructure and newer facilities to service customers throughout the specific city and even beyond (Dewar & Todeschini, 2000:3). All of them have had to make significant adjustments to their business models, which require much greater flexibility, global awareness and improved quality, for example a firm providing stress testing services for metal working machinery today needs extensive computer software and hardware and highly skilled technicians, whilst 15 years ago technology platforms were far simpler and far cheaper (Harrison, 1993:77; Robbins, 2004:3).

For today's firms, requirements include the following (Shearmur & Doloreux, 2000, 1):

- Quality operating environments (low pollution, mix of facilities, limited congestion) which attract skilled employees and managers.
- Sites/stands offering the potential of expansion and configuration/use flexibility.

- Infrastructure enabling performance at the highest standards (e.g. zero defect electrical supply).
- Connectivity in infrastructure and communications terms to other locations.
- A ready supply of skilled employees living in close proximity or served by public transport to enable multi-shift operations.
- An environment in which businesses can access a variety of services and supplies from closely networked firms.

South Africa is still characterised by a large number of industries that that are deemed to be the bedrock of traditional manufacturing economies. These include: food processing and beverages, textiles, clothing, pulp and paper, metals fabrication, automotive components and chemicals and petrol-chemicals. A handful of large firms dominate within this context with large-scale investments in plant and equipment (Freund & Padayachee; 242-248).

Robbins (2004:5) shows the example of the importance of manufacturing in the South Durban Basin and states that medium and large manufacturing firms employ the majority of the employees in the area and that wages in these firms are generally higher than in smaller operations. The employment generating capabilities of the manufacturing sector in South Africa is heavily dependent on the following expected impact in the future as derived from work done by Short *et al.* (1993:207), which states that for industries to attract investment, it is necessary to market an new image, constructing a new environment where infrastructure and technological changes are considered, as well as reorienting a city's relationship with its physical environment by determining the following:

- How issues of logistics will be handled (with increasing congestion from road transport unlikely to ease)
- The role of air-freight services
- New technology requirements
- Increasing integration between different types of businesses
- Escalating land-use pressures as urban populations grow
- Growing skills needs

Firms making long-term investment choices need the confidence that a framework exists to respond to these issues, not only in the present but also in the future. In other areas, institutional interventions have been seen as particularly important with regard to long term planning (Robbins, 2004:5). For example, at the most

simple level the development of a wireless networking environment as a collective project between a number of firms would require a new form of co-operation and partnership. A regeneration project will come and go, but it is important to have the institutional arrangement in place (Robbins, 2004:5).

Robbins (2004:4) summarises sustainability of the manufacturing sector as follows:

Table 5-15: Firms yesterday, today and tomorrow: a summary

The traditional manufacturing firm in a traditional location	The new manufacturing firm in a competitive location	The future firm in a globally connected location
1. Standardised mass production 2. Large inventories – large and irregular deliveries or dispatches 3. Vertically and horizontally integrated 4. Disconnected from suppliers 5. Input intensiveness influenced location 6. Unresponsive to customers 7. Hierarchical employment 8. Management and senior technicians drive in to plant from upmarket residential suburbs, labour arrive via public transport from neighbouring communities 9. Simple, but often volume-based, infrastructure requirements 10. Price driven	1. Flexible production 2. Networked production 3. Service and knowledge intensive activities 4. Logistics intensive 5. Just-in-time 6. Quality intensive 7. Globally connected 8. Integrated head office functions 9. Design intensive process and products 10. Triple bottom line accounting (finance, social, environment)	1. Customer preferences rule 2. Seamless flows of information 3. The location as a creator of new knowledge and technology 4. Virtual HQ 5. Production made secondary to design, marketing, customer service and logistics issues

Source: Robbins, (2004:3)

Many authors debate the importance of the persistence of concentration of manufacturing and the continued importance of economies of scale and agglomeration economies (Krugman, 1991). Robbins (2004:1) and McCarthy (2004:4) concede that manufacturing is still important for the future of the South African city. It should be important to note that the analysis is not suggesting that manufacturing be pushed to the side in favour of service related activities. It is merely pointing out that the nature of the manufacturing process has changed and its context has changed.

To quote Lall (1999): "*There are several reasons to expect this. Manufacturing remains the main agent for structural transformation for economies emerging from low-productivity agricultural and simple service activities. It allows for a much greater, broader and more rapid application of science and technology than traditional activities. It creates new skills, not just in the productive process but also in management, organisation and supporting activities. It becomes a major source of employment and seedbed for entrepreneurship. It changes attitudes and perceptions, particularly if activities are export-oriented and attract Foreign Direct Investment.*

It provides new, more dynamic and diverse, sources of comparative advantage in international trade; if manufacturing is upgraded, these sources are compatible with rising incomes and wages. While high value added services will certainly play an increasing role, few of them will provide sources of export earnings (few countries can hope to replicate the success of Indian software exports but many more can hope to grow on the basis of manufactured exports). More important is the fact that many new services are linked intimately to manufacturing, serving its needs, growing directly out of manufacturing or using the skills first developed under manufacturing. Without a phase of intense industrial development, it is difficult to envisage typical developing countries leapfrogging in terms of capability development to the frontiers of modern exportable services."

Lall (1999) argues that in a setting of rapid technical change, free trade and liberal movements of capital and technology, the priorities, and means of achieving them, have to change. Manufacturing now has to meet the needs of economic competitiveness in an open globalising world, where flexibility, rapid response and competence in using state-of-the-art technologies and logistics, are the determinants of growth and survival. It is by enhancing competitiveness, directly within industrial activities and indirectly by making the economic structure more flexible, progressive and outward-oriented, that industrial activity can contribute most to growth and well-being.

Unlike the old paradigm of industrial development, where competitiveness and constant upgrading were not important in comparison to just building industrial capacity, today it is capability rather than capacity that matters. This provides the *"bread and butter"* to fund all other economic and social objectives.

In Lall's (1999) analysis the implications for policy of this are: *"In sum, the thrust of future industry has to be competitiveness based on open and transparent policy regimes, participation in globalising activity, advanced technological capabilities and skills, and interaction with new state-of-the-art services and infrastructure. These define the thrust of future industrial development."*

It is also important to note that despite almost a decade of poor performance by resource processing-oriented businesses, such as those in pulp and paper or food processing, the cyclical nature of global markets has seen conditions in these firms improve. Improved access to major markets for agricultural goods and market demand in developing countries such as China for primary inputs (such as coal and steel) to drive its economic growth could see demands for investment in new capacity in a sector, many have often suggested offers little advantage in future. However, market pressures are likely to see demands for improved processing and product technology, as well as a greater role for biotechnology. So as with manufacturing sectors and technology, so will primary processing activity and its future be closely bound in, with the development of new technology products and with biotechnology. For example the growth of carbohydrate production and research is closely connected with sugar processing, and offers downstream biotechnology development opportunities (Robbins, 2004:7).

The exception to the general picture of jobless growth may seem to be the financial and business sector (Beaverstock *et al*, 1999). Between 1970 and 2001 it added considerable value to the South African economy, and was the most important driver of job growth in the country's major cities (ABSA, 1993:8). This sector was the smallest sector by employment in the 1960s. Mining, construction, transport and even agriculture created more employment opportunities. In 1970 it contributed a mere 5% of total employment across the cities. Over the next 30 years it grew more than 1 600%, easily overtaking other sectors to now stand as the fourth largest by employment (ABSA, 1993:7; South African Cities Network, 2004:49).

Employment profiles differ from one city to the next in South Africa (South African Cities Network, 2004:50). Some cities are still predominantly manufacturing centres. Other cities have large proportions of their employed population working in the financial and business sectors. Depending on their profile the nine

cities each carry a different measure of risk in the face of a general ongoing trend of jobless growth. This risk is not easy to read. In the past, it may have seemed obvious that those cities with the highest numbers of manufacturing jobs were most at risk of continued employment decline. This may no longer be the case. It is not impossible that cities with a remaining manufacturing base may now start to see sustained employment increases in this area, as new manufacturing activities seek cheap industrial property or locations with historically better-skilled factory labour (South African Cities Network, 2004:51).

The Reserve Bank Annual Economic report of 2003 states the following: " *Employment losses occurred in the financial intermediation and insurance services sector during 2002. Bank takeover and rationalisation activities caused the banking sector to shed nearly 9 000 jobs over the past year. According to a Price Waterhouse Coopers survey, major banks anticipate further cuts of up to 10% in their personnel complements by 2006, implying that employment in the banking sector is likely to fall from the current level of around 112000 jobs to just more than 100 000 over three years.*" Growth in the finance and business sector is therefore not guaranteed.

Employment By Occupations

The differences in the census data between 1996 and 2001 give a picture of employment growth between sectors. The accuracy of the census data is debated regularly. Employment of professionals and administrative workers grew by over 300% between 1970 and 1995, and the demand for production workers and agricultural workers fell by 54% over the same period. It is not clear whether this trend is continuing. The demand for clerks and technicians/associate professionals remains high, but employment of professionals actually declined between 1996 and 2001 (StatsSA, 1996; StatsSA, 2001; South African Cities Network, 2004:53). The South African Cities Network (2004:53) states that it is uncertain what is driving this trend.

The Report states that the most likely reason is that the cities have seen a significant decline in the employment of teachers, a sub-category of this occupation. UNESCO (1995:142) stated that South Africa differed from other African countries in the sense that the available teachers far exceeded the pupil: teacher ratio the state regarded as ideal. In 1992 the pupil-teacher ratio at primary level was 25:1, and at secondary level it was 26:1. These figures compare very well with other African states, but are substantially lower than the 38:1 the state was hoping to achieve over a five-year period. The retrenchment of many teachers enabled the state to cut down on the salary component of the education budget and to increase the funding of other

educational items, namely the Outcome Based syllabus known as Curriculum 2005. The teachers' morale was lowered by various factors after this decision had been made (Swanepoel & De Beer, 2000:175). Examples of the various factors include the timing and nature of retrenchment, the implementation of the new syllabus and the lack of textbooks for the new syllabus.

The decline in employment of professionals could also be ascribed to increasing migration of professionals to other countries where they are better paid (Champion, 1994). The professionals end up as " *invisibles*",aspeople that mash in with the local people or "*gap-fillers*", *i.e.* people filling vacancies that cannot be filled by locals, or as political refugees and privileged foreigners, *i.e.* people that are treated as locals by virtue of the blood lineage. This is confirmed by the South African Cities Network (2004:53), which states that doctors, lawyers and scientific specialists immigrate to places where their skills are highly paid. There is still a need for these jobs, but the departing professionals cannot be replaced quickly enough by the education system. However, it is also feasible that the decline indicates deteriorating employment opportunities for knowledge economies. If this trend is further investigated and is seen to carry on declining, it is not promising for cities that have put a great amount of faith in the economic growth potential of new knowledge industries.

The South African Cities Network (2004:54) states that another major concern is the decline in the numbers of people employed in private households. This decline is hidden in the fairly robust growth of service workers. Between 1996 and 2001 the cities saw 91 145 domestic staff lose their jobs, a tenth of all jobs in private households across the country. This loss has serious spatial implications for the cities, since at least some of these staff would have been housed in domestic worker accommodation in suburbs. Harrison *et al.* (2003:102) state that many people return to their rural homes if they cannot find employment. This could partially attribute to the significant decrease in the number of people living in backyard dwellings.

The greatest increase in employment can be seen amongst clerks and service workers, reflecting the corresponding growth in the wholesale/retail trade and financial/business sectors. Despite the more recent concern, that some of this employment growth has dried up, this may be generally good news for cities trying to build the next generation of "*middle-class*". It is amongst clerks, managers and technicians that one may expect to see growth of future domestic demand (South African Cities Network, 2004:54).

Income Distribution And Access To Employment

Economic development and growth are largely dependent on the ability to provide citizens with access to work opportunities. It is further dependent on whether residents are adequately remunerated for the skills and abilities that they do apply, as explained by means of the efficiency–wage theory that stipulates that employee-productivity will increase if wages increase. Reasons include the fact that better paid workers are healthier and more stable, will work harder and will therefore **decrease** a firm's turnover (Kleynhans & Naudé, 2001:111).

The eThekwini Municipality Development Strategy (2004:14) suggests that residents must be able to benefit from the economic product they help create and programmes created for residents must enable them to share in the wealth created in our cities. The Local Economic Development Implementation Framework (2003:1) states that the most critical success factor is the ability of governance systems and instruments to spend efficiently and to institute innovative practices and systems to enable citizens to enhance their own development. Spreading and expanding economic opportunism and choice, is paramount in dealing with poverty eradication.

Income distribution

The 2003 Annual Report of the Reserve Bank indicates that the GGP per capita hides the more important picture of how income from economic opportunity is distributed across the population. The data in this report show that over the last thirty years, economic growth has had little discernable impact on household spending power. The percentage of economic value generated that ends up in the pockets of workers, has declined gradually over the last 30 years. In 1990, the percentage compensation of employees to Gross Domestic Product at factor cost was 57,2%. In 2002 it fell to 51,4%.

The South African Cities Network (2004:54) indicates that an analysis of RSC levy growth between 2001 and 2002 in the six metros suggests that whereas assessed company turnover increased in all cities except Johannesburg, total payroll did not increase to the same extent or actually declined.. Whereas company turnover increased from R170 billion to R185 billion, assessed total remuneration fell from R27 billion to R23 billion. In 2001, the ratio of staff remuneration to total turnover was 14:86 in this city. In 2002 it was 11:89.

The eThekwini Economic Development Strategy (2004) stresses the importance of the fact that the city population as a whole, must benefit adequately from economic activity. In the South African context the more pertinent issue is whether all sections of the population share equitably in the economic value generated, in particular whether any progress has been made into correcting the extremely skewed distribution of incomes between different racial groups noted earlier in the historical overview of the origin and trends in South Africa.

Crankshaw (1997:3) investigated income distribution in the inner city of Johannesburg. He states that the mean annual per capita income was R 6 832 in 1996, compared with a national annual per capita income of R 6 570 in 1994. Unemployment rates in the inner city were lower than the national figures. National estimates for unemployment varied from 32.6 % (Department of Welfare and Population Development, 1995) of the economically active population to around 20% (International Labour Organisations, 1996), and unemployment among residents was estimated at 27.8% (Department of Welfare and Population Development, 1995). In the inner city the figure was substantially lower, at 16 % of all household members. Sixty-five per cent were in full employment, 9% were employed part time and 9% were self-employed.

Harrison *et al.* (2003:95) comment on the decoupling of employment opportunities for unskilled workers from cyclical fluctuations in the national economy.

Harrison *et al* (2003:95) state that lower income households have positioned themselves in the inner city of Johannesburg where extreme poverty is obvious. Poverty cuts across all cultural groups. Data for the inner city indicated that many households of all races claimed to have no income at all, including 40% Indian households (over 780), 32% of Black households (over 6880), 28.8% Coloured Households (around 690), 31 % of White Households (around 1900) and 49% of "other" households. Around 10 500 households made up of all race groups are therefore among the poorest. Harrison *et al.* (2003:96) state that a high percentage of Black households are among the poorest, accompanied by an emerging group of Indian households with no income. These findings confirm that poverty in these times is no longer purely related to a specific cultural group.

The State of the Cities Report (2004:53) presents the scale of monthly income earned by employed residents from the White, African, Coloured and Indian 'population groups' in Tshwane. The number of households, from each racial group, falling within certain income brackets, illustrates that the vast majority of Black employed residents earn between R801 and R1 600 per month. The majority of White employees earn in the

R3 201 to R6 400 and R6 401 to R12 800 ranges. Just as important as the amount of income different sections of the population take home, is the issue of the relative value of that "*take home*" in the light of the differential costs of urban living borne by these population groups.

One key cost is the expense, in time and money, of actually getting to places where work can be found and a living earned. A person who is forced to live on the edge of the city, far from places where employment opportunities are concentrated, may officially have the same salary as another person living closer to such places. Higher travelling costs will mean that the value of income he/she is able to retain at the end of the day is far less (South African Cities Network, 2004:53).

This is confirmed by the findings of the Gauteng Spatial Development Framework that stresses the fact that people living on the periphery have to pay increasing amounts of money to commute to work. The issue of '*locational disadvantage*" and "*spatial mismatch between the poor and jobs*", is confirmed by the Department of Transport (1998:630) which states: "*Current land use planning and development initiatives are exacerbating the spatial legacy by locating new housing far from major businesses and, in most cases, far from primary rail and road networks. Currently, this sort of spatial planning occurs because of a lack of co-ordination or integration at the institutional level. Each individual institution plans the location of its fixed assets in a relative vacuum, maximizing only according to individual departmental constraints or missions, without respect to larger systems costs of individual decisions.*"

Relative differences

The relative difference between employment opportunities and remuneration available in cities and that available in other parts of the country, either in other cities or even in non-urban areas, is important. The South African Cities Network (2004:54) reports that census data suggest the surprising finding that while unemployment in the nine cities is on average 3,3% lower than that in the country as a whole, some of the cities have unemployment rates far higher than even that in most rural areas.

The February 2002 Labour Force Survey supports the census findings and suggests that several cities have high unemployment rates. This leaves their residents little incentive to stay (Friedmann & Douglass, 1998). People migrate to other areas to improve their quality of life explaining the principle of "*productionism*" which refers to the phase in people's lives when improved job opportunities, education, income, and upward social mobility are a priority (Geyer, 2001:5). Except for Tshwane, which has improved further in relative

attractiveness, all the cities have seen erosion in their position between 1996 and 2001 (South African Cities Network, 2001: 55).

The South African Cities Network (2004:55) states that as would be expected, the "*quality of work opportunity*" in the nine South African Cities Network cities is better than elsewhere. When the total employed population in 2001 divides total income earned by individuals, it would appear that South African Cities Network city workers earn R5 297, 22 a month on average. This is R2 508, 16 better than that earned across the country outside the nine cities. The pattern holds for all nine cities. But when the average monthly income earned is compared to the national average, including the nine cities, it would seem that at least three cities are unable to offer their employed people a better deal than they might be able to find in another South African Cities Network city. Two others have only a marginal advantage over the national average.

5.5 EXPLAINING THE STRENGTH OF THE URBAN ECONOMY

Short *et al.* (2003:221) point out that economic restructuring sets the context for the attempts of civic leaders to change a city's image and structure and for promoting social and economic integration. This in turn influences the capacity of cities to provide their residents with a means to earn a living better than they may find elsewhere. The eThekwini Economic Development Strategy (2004) implicates that the capacity of a city to provide its residents with a means to earn a living is a reflection of the strength of the urban economy.

The post-1994 policy documents namely GEAR and the RDP, as discussed in the historical overview, were developed to change the structure of the economy. Harrison *et al.* (2003:81) state, however, that racial and spatial separation is being accentuated by government policies for economic growth. The economic growth policies concern the Government's Growth Employment and Redistribution Strategy. Policy for housing and services is to be found in the grant framework arising from the RDP. Both policies constitute urban policies as they dramatically shape the urban landscape, but in different directions.

Harrison *et al.* (2003:81) state that investment has shifted to low-skill, low-wage services (e.g. McDonalds) where some new jobs are being created mainly for the Black population and into high-kill, high-wage business and financial services mainly for Whites. This is in contrast with the findings of the South African

Cities Network report that reports a significant decline in the business and financial sector (South African Cities Network, 2004:13).

The jobs lost have led to high levels of unemployment heading north from Pretoria and between Johannesburg and Tshwane's Central Business Districts (COD). The jobs have been gained between Johannesburg and Pretoria, which shows concentration of business and financial service, retail and high value-added manufacturing within a specific corridor. The trend of concentration is accentuated in GEAR (1996), and is affirmed by McCarthy (2004:1) and Geyer (2001:6) as a global phenomenon. GEAR's (1996) focus on an export economy boosts these economic activities.

GEAR has been given effect though the Gauteng government's Blue IQ strategy (Blue IQ, 2005):" *Blue IQ is a R 1.7 billion rand initiative of the Gauteng Provincial Government to invest in 10 mega projects in the areas of tourism, technology, transport and high value-added manufacturing to create a truly "smart" province. Through Blue IQ, Gauteng will invigorate its economic trajectory by attracting some 100 billion in foreign direct investment in the next 10 years – creating an environment in which local and foreign business can prosper and boost job creation opportunities for all South Africa. The smart growth entails creating skills development programmes and the R 7 billion rand Gautrain is especially illustrative as one of the mega projects described as part of the Blue IQ programme. It is to run between the two CBDs, with stops at Rosebank, Sandton, Marlboro and Johannesburg International Airport. It will not continue to the majority of Johannesburg's population living south of the CBD."*

Harrison *et al.* (2003:81) comment by saying that this reinforces spatial separation as well as social separation and these are not addressed in the economic development strategy for Johannesburg. The Igoli vision (2003) states, "*Mining, primary good production and much of the manufacturing sector will no longer be the key contributors to the City's economy. Financial and business services, transport, communication, trade, accommodation and catering and the utilities will the main providers of employment and GGP value added Productive activities in the City, will have a strong export focus.*" (City of Johannesburg, 2005.)

The majority of the labour force is not taken into consideration in the vision re-enforcing patterns of unemployment, and not promoting policies, which enable the residents to earn a living. The strength of the urban economy is in turn also a reflection of the demand for goods and services, a matching of this, and

growing productive capacity to meet these demands. The data shown in the State of the Cities report is an indication of poor performance on various indicators of employment and income which brings the demand for goods and services and productive capacity into question.

Demand Limitations

National level data

It is estimated that 50% of the national GDP is made up by the three major South African cities namely eThekwini, Johannesburg and Cape Town (South African Cities Network, 2004:54). The core findings derived from national and metropolitan level data on demand issues is described by Robbins (2004:10) as follows:

- Manufacturing is still a critical element towards South Africa's growth.
- The legacy of Apartheid planning stands to be corrected in economic terms and in relationship building with the residents.
- Flexibility, accessibility, connectivity and knowledge are requirements prescribed by new global processes which economic locations have to adhere to.
- The majority of the business areas are characterised by progressive urban decay resulting from poor maintenance and enforcement and also obsolescence of infrastructure based on changes in global business patterns on how firms and markets interact.
- The environmental impact of large primary plants and the effects on the local residential communities remains a contentious issue in different regions.
- Changing patterns of firm and residential location have also decreased the proximity and density of the range of skills and services that help firms to engage in income –increasing activities.
- There is a lack of investor confidence in South Africa resulting from rapidly decreasing property values and a decline in image and brand value of old industrial stock reducing the capital stock and sentiment benefits associated with stable or improving districts.
- The social and economic spin-offs are often dormant resulting from failure to utilise land, infrastructure and services to yield ongoing opportunities and services.
- Social exclusion and social problems, e.g. HIV/AIDS are relevant in this regard but there are also opportunities such as more school leavers with improved qualifications.

- An increase in the informal sector has also brought about a considerable amount of informal economic activity, which will remain a growing phenomenon that will ensure subsistence of poorer households.
- Opportunities identified include positive returns from small public and private interventions to rehabilitate the physical fabric of cities.

The demand for goods, according to data obtained by StatsSA on surveys done, has stagnated. StatsSA (2002) show that current manufacturing capacity is some 20% under-utilised, and approximately 75% of the reason for this is insufficient demand. Demand weaknesses vary between sectors. An example of this is under-deployment of manufacturing capacity for various kinds of telecommunications apparatus, which reached almost 40% in May of 2003. Almost 90% of the reasons for this under-utilisation could be attributed to insufficient demand. For the furniture industry, under-utilisation was half this at 20, 7%, and reasons other than insufficient demand, such as a shortage of raw materials, played a bigger role in this instance. Regardless of these differences the general trend suggests that demand is not strengthening and in most sectors is becoming more and more severe (South African Cities Network, 2004:58).

The 2003 Annual Report of the Reserve Bank discusses data on key economic indicators for the last 30 years. On various indicators the figures suggest that value from exports has increased over the last decade, albeit not as dramatically as one would have expected. This implies that international demand for South Africa's goods and services has sustained some industry growth over the last period (McCarthy 2004:2).

Although it would be too crude to argue that the lure of returns from international competitiveness has given South African industry a reason to continue with a tried and tested growth formula, it is noteworthy that growth in export value has gone hand in hand with the deterioration of other possible foundations for economic growth. The decline in compensation for employees is also shown by the Reserve Bank Data. Domestic consumers often have limited ability and capacity to sustain expansion of industry at a rate required to absorb larger numbers of job-seekers (Kleynhans & Naudé, 2001:113). This is a regular characteristic of Less Developed Countries (Kleynhans & Naudé. 2001:13).

Household growth

The African National Congress, in a discussion document of Gauteng, mentioned the high incidence of household splitting (African National Congress; 2003). They state that household splitting can take place for

a number of reasons. In some cases people are moving out of backyard shacks and into new houses. In others, women are taking advantage of the expanded welfare net to establish new homes for themselves and their children. This is reflected in the growing demographic importance of female-headed households.

Household splitting also takes place in the context of economic and social hardship. For the poorest, the household has become a place to retreat to. It is the major site for sharing economic resources such as housing and income through state grants such as old-age pensions, child, and disability grants and grants to those living with AIDS.

The State of the Cities report (2004) notes that all The South African Cities Network cities have seen household growth far in excess of population growth. This suggests that people are not simply moving into South African Cities Network cities from rural areas and small towns, but that households, already resident within the cities, are splitting. In Johannesburg and Ekurhuleni household growth was a phenomenal annual 6, 88% and 6, 84% respectively (2004:58). The Ten Year Review highlights household growth as one of the key challenges for development. Indeed, from the point of view of meeting targets for addressing infrastructure backlogs, household growth in excess of population growth is a problem.

Household splitting is normally considered as a major economic opportunity. Generally speaking, families cluster together into large household structures in times of extreme poverty. The rise in nuclear households speaks to the growing capacity of younger and older members of families to live separately from primary breadwinners (Prothero, 1998). In South Africa incentives other than new capacity to separately bear living costs are likely to be driving household growth. These may include the availability of housing subsidies (Department of Housing, 2004:20). More important, however, is that household splitting creates positive conditions for deepening domestic demand, since splitting multiplies the base number of separate units needing household white-goods, foodstuffs and other consumables and, in the long run, building materials for home upgrading.

If the presence of a liquid residential property market is assumed, it also expands the total asset base of residents as described by Prothero (1988) and Harris & Todaro (1970), where it is described that people living in rural areas with family members in urban areas, generally have higher incomes. This increase in income expands the property rates base of municipalities and the lending base of banking institutions (South African Cities Network, 2004:59).

Growth of the informal economy

Geyer (2001:7) states that relocation of large businesses in cities is always accompanied by lower-skilled migrants. This is also based on the concept of "*productionism*", as people tend to move into areas where they hope to improve their living conditions. According to Gugler (1968) these lower-skilled migrants are often not absorbed into the formal economy. The opportunity exists for them to enter into the informal economy.

Sandercock (1998) describes the emergence of informal economies, together with growth in upper sector economies. Alongside household growth is anecdotal evidence of a rise in the number of people engaged in informal sector activities. Like household growth, informal economies are often viewed as a challenge. Informal sector businesses are regarded as symptomatic of the failure of the formal sector to provide sustainable jobs, and since they are generally untaxed, as a drain on public sector resources rather than a contributor to it. For these reasons, the informal sector is often seen as something to be discouraged.

The informal sectors are not simply a temporary safety net for people who cannot find formal employment. It is a major generator of economic value, and a primary provider of livelihoods. As such, it not only feeds domestic demand for goods and services, but as it expands, also creates demand for goods and services. The informal sector is to connect to the formal business sector in ever more intricate ways (Kleynhans & Naudé, 2001:111).

The informal economy is the largest component and often the most neglected element of what is officially termed the small, medium and micro-enterprise (SMME) economy of South Africa (South African Cities Network, 2004:59). Since 1994, the development and promotion of the SMME economy has been one of the national government's core policy objectives (RSA, 1995). This is confirmed by the Local Economic Development Manual series, developed by the Department of Provincial and Local government. The SMME economy has been viewed as a critical element for achieving several of the goals for post-apartheid reconstruction and development. In particular, the promotion and support of the SMME economy has been a critically important vehicle for job creation and poverty alleviation in cities, particularly in the context of the slow growth of new employment opportunities taking place in large formal enterprises (eThekwini Economic Development Strategy, 2004).

Structurally, the SMME economy is highly diverse, and encompasses an array of different enterprises and ownership types, across a range of sectors. A major distinction is drawn between, on the one hand, a small

segment of more established formal small and medium-sized enterprises (primarily under white ownership), and on the other hand, of the so-called emerging SMME economy comprising micro-enterprises and informal enterprises, which are mainly operated by historically disadvantaged communities. This latter group of micro and informal enterprises is currently the fastest growing component of the SMME economy. For South African women, the country's youth and rural communities, in particular, the economic (and social) importance of these enterprises is especially critical as an access route to economic opportunities (Kleynhans & Naudé, 2001:11).

Ntsika (2002) acknowledges the role played by SMMEs. This includes informal enterprise. SMMEs are included in the national economy and recorded by the Annual Review of the State of Small Business in South Africa. This shows that SMMEs, as a whole, represent 97,5% of the total number of business firms in South Africa, contribute 34,8% to Gross Domestic Product, employ 55% of the national labour force and contribute 42% to total remuneration. Ntsika's (2002) figures suggest a national total of approximately 1,1 to 1,2 million SMMEs. StatsSA estimates (Lehola, 2002:4) conclude that approximately 2, 3 million people were owners of at least one non-VAT-registered business in March 2001, which differs significantly from Ntsika's figures.

Rogerson (1998) provides city statistics on the informal sector. He argues that Gauteng has the highest density and concentration of enterprise. He admits that there is little official certainty on the precise sizing and changing dynamics of the informal economy as part of the wider SMME economy.

The South African Cities Network (2004:59) comments that the confusing state of data concerning the small enterprise economy is illustrated by two official estimates for the total asset base of residents, the property rates base of municipalities, and the lender base of banking institutions.

Rogerson (1998) confirms that several research investigations concede that a rapid rate of expansion of informal enterprise activity is taking place across many economic sectors in Johannesburg. Employment growth in the SMME sector is based upon new enterprise births, especially in the informal and micro-enterprise economy (Chandra *et al.*, 2001).

Although the strongest growth is evident across retailing enterprise, the importance of new growth that is taking place in production-based micro-enterprise, informal urban agriculture and even small tourism

enterprises should not be overlooked (Rogerson, 2000). Indeed, one of the most striking new developments is the growth of a segment of informal tourism enterprises linked to new initiatives for township tourism.

Cachalia *et al.* (2004) comments that informal enterprises play a significant role in the restructuring of the urban economic landscape of urban South Africa. Dhliwayo (2002:1) demonstrates this phenomenon by reporting on the emergence of a cluster of almost 1 000 clothing micro-enterprises, which constitute the basis of what is now to be planned as inner-city Johannesburg's new garment or fashion district.

Peberdy and Rogerson (2003) state that the emerging SMME economy is dominated by African-owned micro-enterprise and informal enterprise. Another increasingly important element in the mix of this emergent economy is enterprises established since 1994, which are operated by non-South African entrepreneurs. This is confirmed by Robbins (2004:5) who comments on the international ownership of SMME development in the South Durban Basin. Immigrant entrepreneurs, especially from Sub-Saharan Africa, represent a significant component in Johannesburg's changing small enterprise and informal economy with a special concentration of these entrepreneurs in cross-border and informal street trading, the manufacturers of clothing and in motor vehicle repairs (Peberdy & Rogerson, 2003).

Across this emerging micro-enterprise and informal enterprise economy there are a number of constraints that impact on business expansion and retention, which prevent the guaranteed success of small enterprise (Kamahi, 2004). From a range of empirical investigations into the workings and business development trajectories of such enterprises, several key groups of problems are observed. The first set of issues relates to the question of education and training for entrepreneurship. Small entrepreneurs operating in a globalised market have been "*smart*" and have the capacity to adapt to changing market conditions for "*learning-led competitiveness*" (King *et al.*, 2002).

Several differences are observed in the human capital strengths of groups of South African and immigrant entrepreneurs with the immigrants usually showing much higher levels of education and skills training. Access to training opportunities is thus a key element inclosing this gap (Smith & Jafta, 1995:23). Another concerning factor concerns entrepreneurs' limited awareness of, and access to, existing government programmes for financial support, especially for access to micro-credit (IDC, 2003). The market power enjoyed by larger enterprises, has to be investigated (South African Cities Network, 2004:60).

Tomlinson (1993:251) suggests that entrepreneurship training for emerging businessmen should be promoted. Rogerson (2002) states that the problem of shortage of entrepreneurs is being addressed by interventions such as affirmative government procurement, including local government procurement, for targeted emerging entrepreneurs and through the expansion of outsourcing and private sector subcontracting from larger, more established enterprises, to smaller and informal enterprise (Rogerson, 2000). The position of the small enterprise and informal enterprise economy within the broader restructuring that is taking place in Johannesburg is ambiguous (Rogerson, 2000). The key explanatory factor behind the establishment of most informal economic enterprises would be traceable to supply-push instead of demand-pull considerations (Rogerson, 2000).

The slow labour absorption of the formal economy associated with high unemployment levels, and pressures for basic survival, mean that the bulk of informal entrepreneurs operate out of necessity rather than choice (Chandra *et al.,* 2001). Stagnant economies often lead to the emergence of the informal economy in often already overtraded income niches, such as home-based *spaza* retailing, street trading or informal urban cultivation on vacant land. Most research suggests that the growth in the size of Johannesburg's emergent SMME economy, has been led by the replication of informal businesses instead of the creation of new enterprise that could possibly increase the number of jobs.

Rogerson (2000) emphasises the importance of development and intensification of business linkages between larger formal enterprise and micro-enterprise (Rogerson, 2000). Many formal businesses are affected by global trends of informal businesses. This phenomenon creates a set of potential new opportunities through subcontracted work for the expansion of growing micro-enterprises (especially in the industrial and construction sphere). There are also a number of threats involved namely high levels of exploitation and poverty-level working environments for (informal) employees.

Rogerson (1999) states that a critical factor for determining the positive contribution that might be made to cities by the SMME economy, especially of micro and informal enterprise, is the policy and support environment offered by local as well as national governments. Regrettably, national programmes post-1994, have delivered little in the way of positive support for most informal enterprises (Harrison *et al.*, 2003:80-84). Informal trade eyes are affected in a greater manner by local level policy for expansion and growth, instead of national level policy.

Dhlitwayo (2002:1) discusses a good example of local level interventions and planning to support the informal economy provided by Johannesburg's inner-city garment district. The making of the Johannesburg garment district is a classic example of a pro-poor local economic development initiative and is supported by the Johannesburg Development Agency, which views the fashion district as a project in line with the city's long-term economic development strategy.

Within this initiative there are a number of sub-projects, which are designed to enhance the overall performance of this cluster, consisting of almost one thousand clothing micro-enterprises. Dhlitwayo (2002:1) reports initiatives which include skills improvement to link the emerging entrepreneurs to more established businesses outside of the cluster, to promote joint action or cooperation among South African clothing entrepreneurs and to seek to promote synergistic networks of opportunity, which also begin to tap the strengths of immigrant entrepreneurs (Cachalia *et al.*, 2004).

Presentation of structural changes at a global level and impacting on national and local economies makes the implementation of local economic development planning and principles imperative for promoting economic development (Tomlinson, 1993:247). The creation of an economic base through the implementation of an effective Economic Development Programme is deemed critical, since the economy is largely dependent on a select few sectors in terms of production and employment. The urban economy is very vulnerable with respect to any shock (contraction or change) in these sectors, which can have a devastating effect on the local communities in terms of job losses (Tomlinson, 1993:247).

Local Economic Development is required not only to generate sustainable tools but also to retain what is already existing (Smith & Jafta, 1995:24). Unemployment levels are relatively high and this translates into extreme poverty levels and job seeking. Economic activities are spatially concentrated in nodes within the larger metropolitan area (South African Cities Network, 2004:56). A dire need exists to re-develop and renew value-adding activities such as manufacturing or services, to strategically promote integrated rural and urban development, to stimulate local economic development and to correct regional disparities as described in Harrison *et al.* (2003:80).

Local, economic and development are important terms that define LED programmes and are described by the eThekwini Economic Development Strategy (2004:52). Local and economic can be explained in terms of "*flagship*" and "*regeneration*" projects. A regeneration project includes local projects which refer to "*local*"

in the context of the eThekwini, for example, and relates to the specific Local Economic Development initiatives and projects that would be necessary to optimise the national, provincial and metropolitan role of the area. The definition would attend to both the economy and community to benefit from particular actions.

Flagship projects explain the concept of "*economic*". The concept of economic implies that efforts and actions would be effective and efficient in dealing with the diversity of existing and potential economic sectors and industries in the area. Concepts such as useful and not wasteful, best practice, competitive, productive and fulfilling real needs, are important.

Development does not equate to only growing the economy but incorporates the expansion, diversification and distribution of economic benefits within the greater context of holistic development. Development, in the context of local economic development, has more to do with the impact that activities and products would have on the well-being of the local populace (Tomlinson, 1993:249).

Local economic development emphasises the importance of agglomeration economies (Krugman, 1991). Agglomeration advantages refer to the advantages that emanate from the concentration of activities in a geographic location and the development of backward and forward linkages with other activities, both within and outside a certain geographic location.

Linkages refer to the flow of goods and services between at least two agents or producers. The input-output technique can be utilised as a tool of analysis. The input-output model represents a technical transaction system of the economy, accounting for all inter-industrial linkages. As such it is an ideal means of identifying sectoral clusters in the economy (Krugman, 1991).

Agglomeration is described by Bos (1987:67-102) as a mechanism to stimulate and develop the growth pole (Perroux, 1995) from inside. It is described as the economics of promoting clustering between people and activities. Agglomeration factors mentioned by Bos include economies of scale, organisation of labour, marketing forces and advantages resulting from geographical proximity of certain industries.

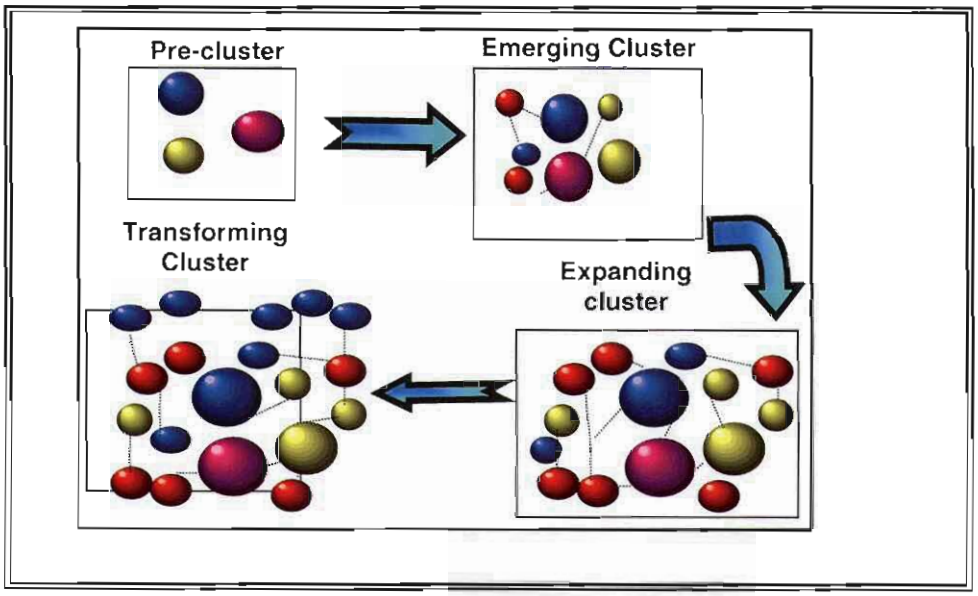
Bos (1987:67-102) also mentions clustering as a method of stimulating growth. A critical aspect of implementing local economic development programmes therefore is to determine the potential for clustering

of identified niche markets. The cluster concept is an internationally acclaimed approach to industrial development. Porter (1998:8) argues that clusters increase competition and determine prices, but profits in cluster economies tend to be higher. It also increases innovation and productivity (Porter, 1998:8). De Beer (2004:26) states that a cluster has at its core sector, identified in some cases as a material, but what is drawn into the cluster is everything that could impact on the competitiveness of the cluster.

The cluster concept can be defined as the optimal development of the forward and backward linkages of a major sector to integrate the total value chain, also taking into consideration all external factors which impact on the competitiveness of the sector. The definition suggests that the concept consists of the following three main elements, namely a core sector, linkages and external factors.

The potential of a catalyst industry to have a cluster formed around it, depends on the number of potential forward and backward linkages of that industry, as well as the viability of the businesses with which it can form linkages. As far as backward linkages are concerned, the availability of raw materials or industries which beneficiate raw materials is an important consideration. As far as forward linkages are concerned, the general viability of the industry with which the catalyst has a forward linkage should be considered (Urban-Econ, 2004:26). A particular challenge is to attract investment and promote development in the cluster to pre-pack into a mature cluster.

Figure 5-1: Cluster development



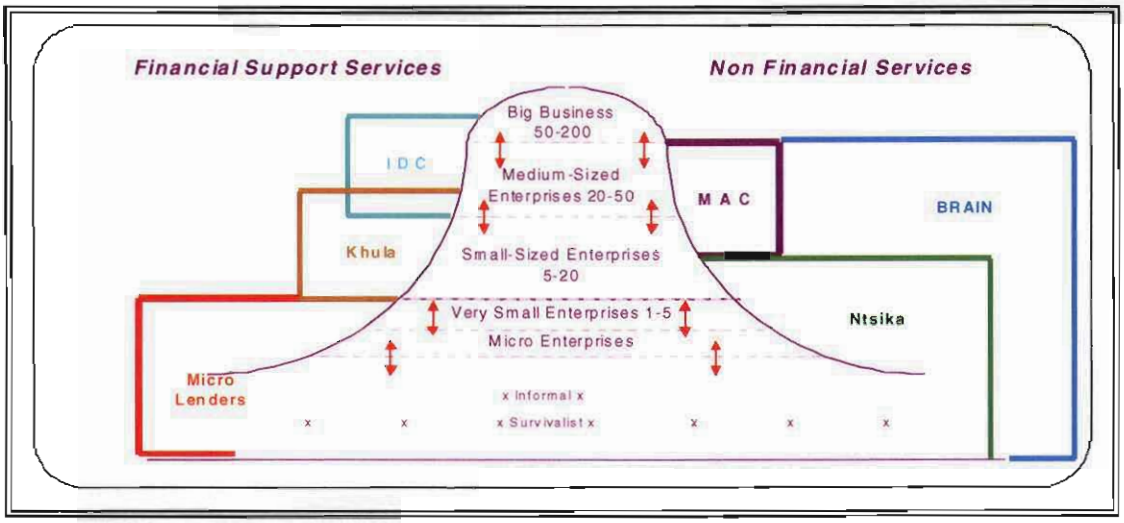
Source: Urban-Econ (2004: 26)

Smith and Jafta (1995:19) promote SMME and technological innovation in various sectors as imperative for local economic development. The following elements represent the reference framework for technological innovation in an area (Urban Econ, 2004:27):

- Defining and determining the SMME sector in the area
- Economic potential as underlying rationale for SMME opportunities
- Technology intensity parameters
- Database development for survey results packaging
- Existing initiatives offering opportunities for SMME development

The delineation of the technology sub-sector of SMMEs is regarded as a critical element for economic growth (Urban-Econ, 2004:26). Since the sector as a whole is rather ambiguous and difficult to fully delineate, a generally accepted classification framework will be employed as illustrated in Figure 5-2:

Figure 5-2: Technology sub-sector



Source: Urban – Econ (2004:27)

Figure 5-2 indicates that all enterprises with a size smaller than 50 employees can be classified as SMMEs. Distinction is made between different sizes by means of number of employees. Also indicated are informal and survivalist enterprises. The most important categories in figure 5-2 can be described as follows:

- **Micro-businesses** are very small, often involving only the owner, some family members and at the most one or two paid employees. They usually lack "*formality*" in terms of business licenses, tax, and registration, formal business premises, operating permits and accounting procedures. Most of them have a limited capital base and only rudimentary technical or business skills among their operators. However, many of these operations advance into viable small businesses. Earning levels differ widely, depending on the particular sector, the growth phase of the business, and access to relevant support.
- **Small Business** constitute the bulk of the established businesses, with employment ranging between 1to5 people for a very small enterprise, and up to 20 people for a small enterprise. The enterprises will usually be owner-managed or directly controlled by the owner-community. They are likely to operate from business or industrial premises, be tax-registered and meet other formal registration requirements.
- **Medium Enterprises** are still viewed as owner or manager controlled, though the shareholding or community control base could be more complex. The employment of 50 people and capital assets of about R60 million are often seen as the upper limit.

Kleynhans & Naudé (2001:111) confirm the above-mentioned components as part of the informal market sector. Figure 5-2 furthermore indicates the key role-players in providing financial support and non-financial services to the SMME sector. These stakeholders are primary and secondary role-players on implementation of local economic development programmes.

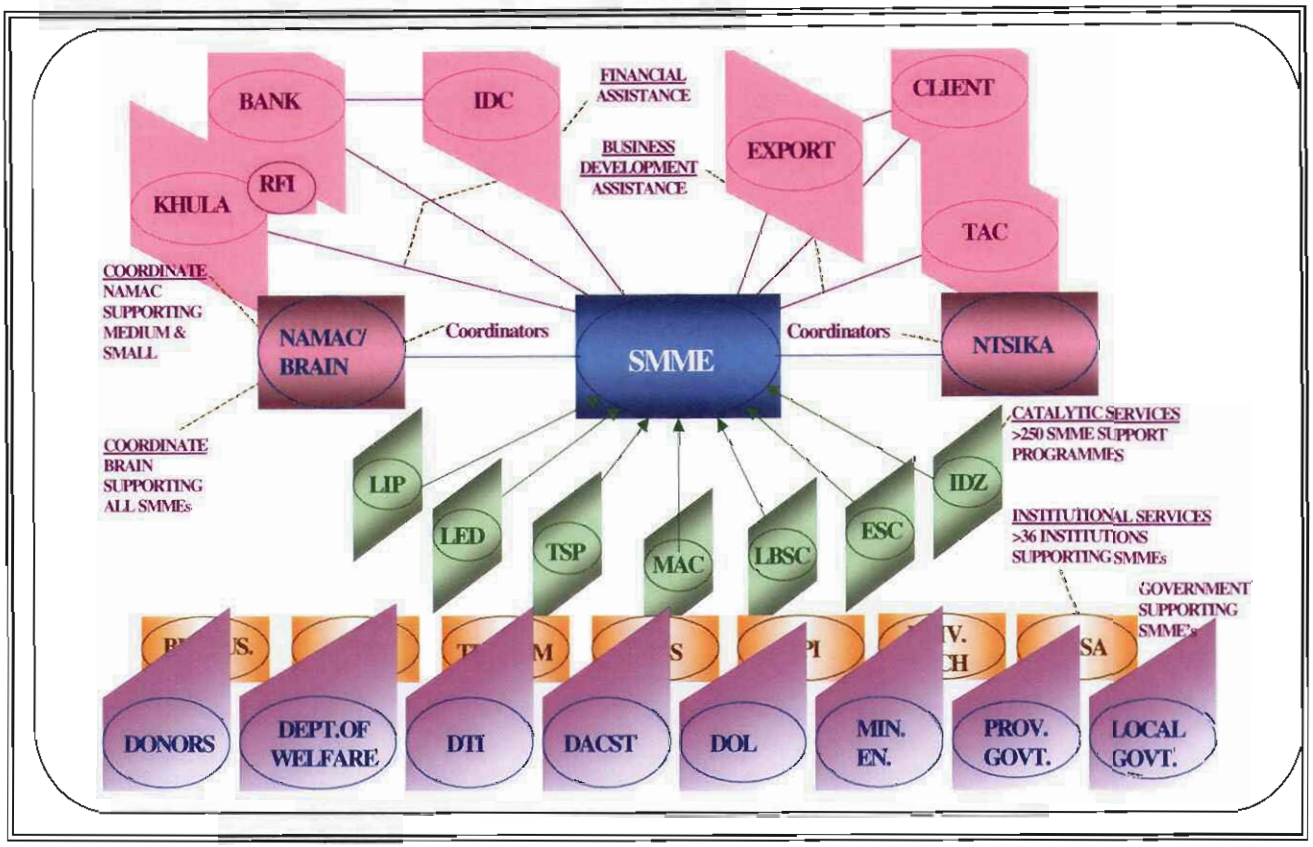
The economic base must be broadened to provide increased technology opportunities for SMMEs, an important development principle underlying economic development (Robbins, 2004:7). Apart from a general higher level of output, broadening the economic base also implies the following (Smith & Jafta, 1995:19):

- Introducing new activities, which are not currently operational in the area. This means an extension of the production capacity in terms of new products and services.
- Application of new technologies that are not being applied in production processes. This should make the region more competitive.
- Development of SMMEs to have a broader representation base on the size of establishments.

SMMEs can capitalise on the economic base profile, consequently the economic sub-sector SMMEs are involved in needs to be identified. The Standard Industrial Classification System of Economic Activities (SIC) can be utilised (Louw, 1998:5). The SIC is a classification of economic activities in terms of sectors and sub-sectors. A sector consists of establishments engaged in the same or a closely related economic activity based mainly on the principal class of goods produced or services rendered. The term "*sector*" is used to cover all economic activity from the primary industries of agriculture, forestry, fishing and mining to the rendering of social, recreational, cultural and personal services.

The value of utilising the SIC as economic classification system is that generally, economic databases are adhering to the SIC and can therefore be utilised as common denominator in the secondary research process. This means that the SIC will be used as point of reference when linking different SMME databases to establish the profile of technology SMME sub-sectors in South Africa (Louw, 1998:3). A National industry code system is to be applied, where appropriate, as it is also often used as a classification (Namac, 2004).

Figure 5-3: National Industry Code



Source: NAMAC

Technological intensity plays a role in identifying technological intensive SMMEs imperative for LED implementation. The concept of "technology intensity" needs to be understood. Technology is interpreted as the effective and efficient application of accumulated know-how, skills and experience, that will result in the output of value-added products, processes and services to satisfy social or economic needs. The level of technology depends on the level of scientific results applied, while technology intensity suggests a science, engineering or technology base, including *inter alia* software, advanced materials, biotechnologies, embedded systems, and renewable energies (Urban-Econ, 2004:28).

South African companies operate in a fiercely competitive environment as a result of the liberalisation of trade and accelerated technological advances (McCarthy, 2004:1). These challenges can be turned to the advantage of companies by combining product, process and management technology in a holistic approach matched to each unique business situation. For local manufacturers to compete, ongoing product development and shortened production time are therefore essential (McCarthy, 2004:1).

Technology with improved business processes and the necessary skills and capabilities will produce tangible results for SMMEs (Cheshire & Carbonaro, 1996; Graham, 1999; Gillespie & Williams, 1988). The type of technology required by SMMEs is significant and was investigated by NAMAC in a study. The results from a sample of 2400 SMMEs are shown indicated that clothing and textiles technology, followed by chemicals technologies, are the most significant needs of SMMEs. The value of this study is that it provides significant insight into technology needs (NAMAC, 2003).

Robbins (2004) suggests that economic development is positively associated with job creation and economic development. Poverty and lack of economic development are two indicators of the sub-optimal functioning and operation of a development system, creating a poverty trap with a range of developmental and social problems (Chambers, 1983:12). The poverty trap is exacerbated by rapid population growth, lack of relevant technical and business skills, social stagnation, insufficient capital formation (Chambers, 1983:12).

These elements contribute to already high unemployment levels, exacerbating the detrimental spin-offs such as poverty and crime. Such a situation provides an unhealthy environment for investment, which in turn leads to a stagnating local economy with lack of investment and beneficiaries. Many places that are characterised by a lack of focus on pro-poor economic development have experienced limited use of important economic levers which could have served to reduce poverty in sustainable ways.

The cycle of poverty and economic stagnation disturbs the development system. The interactions and linkages between different components and situations need to be thoroughly understood. Once the poverty cycle is fully comprehended, specific development strategies can be implemented to improve the functioning of each system to eventually lead to sustainable local development and improved living conditions. Similarly, the ongoing management of the necessary interventions in the overall system will be essential to sustainability over time and for attracting the necessary investment (Tomlinson, 1993:250).

The Development Paradigm elements are categorised into four systems by NAMAC, which can be addressed/approached with LED programmes. They are as follows:

- System 1: Human Resource Development and Labour Market Transformation
- System 2: Local Business Capacity
- System 3: Socio-Economic Development Levels
- System 4: Formal Economic Base

Sustainable local economic and employment development does not necessarily result from any fast track procedures. Focusing on the retention, expansion and attraction of businesses and industries is one of the most productive ways of stimulating the local economy and creating new employment opportunities (Robbins, 2004). It is therefore important that these three elements of economic development are addressed within an integrated approach and appropriately facilitated (Swanepoel & De Beer, 2000:138).

Prioritised commercial projects need to be packaged as investment opportunities for marketing and implementation. Specific emphasis should be placed on addressing the vital issues characterising the investment environment relating to the projects (Robbins, 2004).

In order to attract and promote new economic development to an area, local authorities should seek to promote and maximise the area's competitive advantages in the above-mentioned factors (DPLG, 2000). Possible actions that may be followed to address the influencing factors with respect to the location decision process can include the following (Robbins, 2004:15):

- Creation of a package of local/regional incentives and concessions to attract and support business activities.
- Maintenance of a lobbying capacity for specific programmes, projects, offices, facilities and other services that can locate in the area.
- Maintenance of a database of local resources, e.g. skill base, public owned land, commercial sites, etc.

- Provision of relevant and up-to-date information and analysis on the local business environment.
- Creation of a "*fast tract process unit*" in local Government for handling planning, information and regulatory activities.
- Promotion of the area as a centre of excellence in certain economic sectors.

The eThekwini Development Strategy 2005-2010 (2004) recognises that an economic development strategy should either include elements of, or be linked to, a human resource development strategy. A key objective of the proposed Economic Development Strategy is to increase economic growth, job creation and the national and global competitiveness of the region. This can only be achieved through the better utilisation of all available resources, including human resources, which is currently a key constraint in efforts to achieve growth and prosperity.

A key objective of economic development is the employment opportunities created and thus the need for suitably trained labour to utilise and optimise such opportunities. It is evident that employment creation, the availability of human resources to meet the demand for labour and the establishment of a training infrastructure capable of developing skills to requirements, will be important issues to be considered and addressed towards the implementation of the Economic Development Plan.

Optimum development originates in sound and sustainable economic performance. Central to this principle is the need to identify and optimally utilise the comparative advantages of the economy (Robbins, 2004:7). Based on comparative advantages, economic investment opportunities can be identified. Furthermore, sustainable development requires specific institutional capacity (CSIR, 2003:3). For the development process to be successful, communities must ultimately have capabilities to manage and maintain their own development programmes. This capacity must be structured and channelled into robust community institutions (CSIR, 2003:3). Key factors that have to be addressed in promoting sustainable local and rural development include the following (Swanepoel & De Beer, 2000:83-85):

- The concept of need (in particular, the essential needs of the poor to which overriding priority should be given, and the reality of limitations, imposed by the state of technology and social organisation).

- The reality of limitations, imposed by the state of technology and social organisation.
- The environment's ability to meet present and future needs in terms of resource requirements.
- The resource base setting the developmental frontiers.
- External stimuli challenging and augmenting the latent production capacity.

Competitiveness in the world economy is such that pro-active measures must be taken to intervene in the location decision of concerns or the attraction of new establishments (Harrison, 1993:75). Such intervention depends to a degree on the local situation, especially the resource endowment, but innovative thinking plays an important role in this respect. Swanepoel & De Beer (2000:103) emphasise the importance of identifying the elements that successful Development Agencies have that could be utilised or applied.

The application of incentive packages and utilisation of donor funds are important. The focus will be on attracting investment and development, thus "selling" the area as a viable investment environment. The challenge in selling and marketing the area as a feasible investment opportunity is to interpret the information for the stakeholder or investor in terms of the potential for market penetration. A development agency focused on facilitating economic development can do this most effectively as part of its operational mandate. The information should be focused and targeting a very specific audience to be able to attract a developer or investor to an opportunity or a project (Swanepoel & De Beer, 2000:103).

Prioritised commercial projects need to be packaged as investment opportunities for marketing and implementation. Specific emphasis should be placed on addressing the vital issues characterising the investment environment relating to the projects. This can most effectively be done by an organisation focused on promoting development and investment opportunities in the area of LED operation (Urban–Econ, 2004:28).

A critical element of this action is to initiate the process of Investment Brokerage, by a development agency including the interpretation and the translation of marketable projects in implementable action plans. The process of project brokerage can be described as business plans being prioritised for implementation on an ongoing basis, therefore ensuring a continuous flow of investment information on bankable opportunities in the area (Urban-Econ, 2004:29).

The International Development Corporation has recently developed a funding programme aimed at the establishment of Development Agencies in South Africa. This programme is based on the following establishment costs (IDC, 2003):

- ***Pre-establishment Agency Setup:*** Depending on the size of the agency, its operating area and the complexity of the mandate assigned to it. These costs include those associated with establishment facilitation, legal matters, etc. (R800, 000 grant).
- ***Initial Operating Expenses:*** The agency will not be self-sufficient during the first two to three years of operations. These include normal operating expenses such as salaries, travel, training, audits, computers, office rental, etc. (R1, 5 million grant).
- ***IDC Investment Facilitation Costs:*** These are costs associated with scoping projects and attracting appropriate partners for investments and will be determined on an *ad hoc* basis, informed by the scope of operations of the entity in question (R4, 5 million grant).

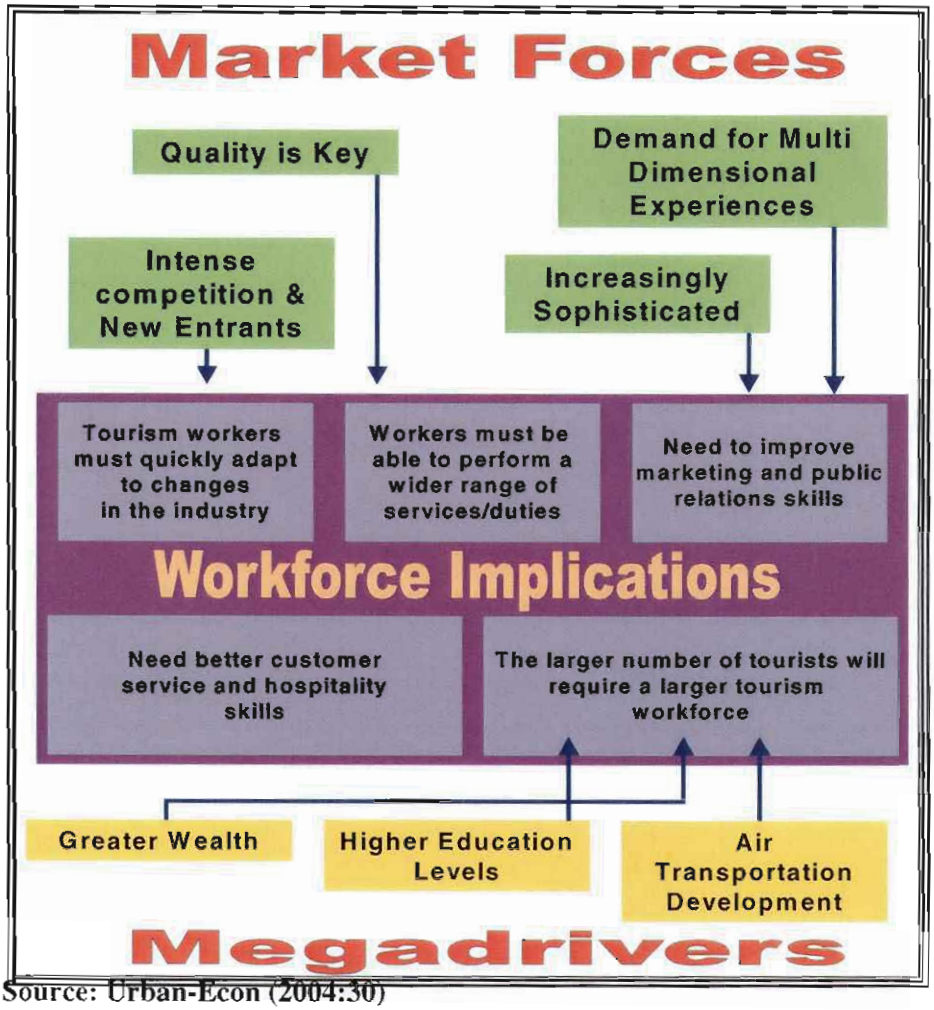
The Constitution of South Africa stipulates that tourism is a function of local government. The underlying challenge with regard to tourism in South Africa today, is to determine, by means of a tourism potential analysis, what steps would be appropriate for launching a successful programme. McCarthy (2004) suggested the following for utilisation and implementation in a tourism programme:

- The identification of so-called Unique Selling Points
- A permanent standing with large tour agencies, especially foreign agencies
- Broadening of the tourist base to make provision for the latent but growing HDI demand
- Involvement of Human Development Indicators in all facets of tourism

The tourism industry should be classified into different categories to ensure that the unique selling features (USF) and comparative advantages of each type of tourism activity in the area of implementation is analysed (McCarthy 2004:34). The market potential analysis will address aspects such as identification of growth activities and potential, market share, target markets and projections, comparative advantages and niche markets.

Market forces are defined as the demand for and supply of products and services (Samuelson, 1980:53). External elements are described as factors not directly related to tourism, but which would or could influence the extent of demand for such activity. It is also assumed that mega drivers will ensure that tourism continues to expand and grow in the world economy while market forces determine the future trends of the industry (Urban -Econ, 2004:38). The industry mega drivers and market forces and their workforce implications are illustrated in the figure below:

Figure 5-4: Tourism Cluster



Source: Urban-Econ (2004:30)

The local governments are provided with instruments enabling them to fulfil their role of developmental local government as put forward in the White Paper on Local Government of 1998.

Micro-Economic Foundations For And Constraints On Economic Growth Potential

Urban economic growth is dampened not only by weak domestic demand but also by supply-side constraints (Kleynhans & Naudé, 2001).

The South African Cities Network (2004:61) indicates that national data show substantial declines in the rates of savings and investments over the long term. This limits the country's ability to invest in future productive capacity. There is little that can be done about this at city level. More important, from the point of view of the cities, are various weaknesses in efficient economic production because of what are called "*micro-economic constraints*". These refer to factors that impact on the ability to produce innovative new economic offerings, the costs of production at the firm level, and the ability to efficiently move or exchange products and services. This in turn has a negative effect on the capacity of the economy to construct demand, both locally and abroad. City constraints on expansion of existing business are mentioned in a few instances.

The "*Durban at the Crossroads Report of 2000*" as well as McCarthy (2004), shows that in eThekwini the biggest constraint of expansion of existing businesses is the increasing crime rate in areas where the industries have long been established and as a result of which many industries are motivated to relocate. The South African Cities Network (2004:61) further reports that it is moderately difficult to recruit either technicians/associate professionals or senior officials/managers with the necessary skills. Professionals are slightly easier to recruit, perhaps reflecting the loss of jobs in this occupation group noted above. Businesses assessment of some of the major constraints to growth, shows sensitivity to a complex amalgamation of factors. Johannesburg findings are similar in that crime and theft, and the general uncertainties associated with it, are major growth inhibitors. This factor has everything to do with the way cities work. Businesses also indicate that their expansion is limited due to its sensitivity to changes in international currency fluctuations, over which cities have very little control (Tomlinson, 1993:247).

Logistics pathways

Something often identified as a major constraint on efficient business activity, is the ability to move products quickly, easily and cost-effectively both within the city and through cities en route elsewhere (McCarthy, 2004:3). Where transport networks for goods and people are inadequate or over-stretched this may severely impact on the ability of industry to reliably supply customers (Zimmerman, 2004:2). Where the costs of utilising transport networks are prohibitive, or where firms have to make special transport arrangements to compensate for inadequacies in the system as a whole, these costs are invariably factored into the price (South African Cities Network, 2004:63). This has an effect on demand.

Growth in the total tonnage of goods handled by South African ports was unspectacular between 1996 and 2001, and the total number of vessels handled, dropped significantly in three of South Africa's major port cities (South African Cities Network, 2004:61). The South African Cities Network (2004:61) states that this could be a reflection on the poor quality of port infrastructure in these cities, forcing shipping lines to reroute through other ports such as Maputo or Richards Bay, or it could be a reflection of persistently weak connection of the national economy within the global economy. A major issue includes the fact that the Port of Durban is experiencing immense congestion due to an increase in the cost of handling goods, resulting in loss of competitive advantage (McCarthy, 2004; Arjunan; 2003).

Approximately 70 to 75% of total port traffic (either as a source of exported cargo, a destination of cargo loaded or handling cargo) is associated with the Durban Port. The association is very strong in the case of petroleum products, chemicals and other bulk liquids, vehicle components and paper products (Peart & Van Coller, 1997). The trajectory of growth in Durban is notably centred on the location and role of major logistical installations in relation to the hinterland.

The Durban Port, while designed to handle 800 0000 containers a year, handles close to 2 million. Of these, more than 1 million are SA exports to Europe under the South African and European Union trade agreement, and the harbour operates as an African hub port. While Durban provides an important regional container facility, Richards Bay is favoured for bulk cargo in terms of ease of access and storage space. The airport is currently handling an estimated 1.2 million PAX departing and 20 000 PAX arriving.

In terms of passenger numbers and cargo handling facilities the Johannesburg Internal Airport dominates, followed by Cape Town International and then Durban airport. The linkages between major logistics are primarily by road, despite existing rail infrastructure, and the ability to deliver services within scheduled times are unreliable. The Port has to be modernised and specialisation of Ports has to be emphasised to ensure the comparative advantage created by these Ports in the global and national economy (McCarthy, 2004:7). The main areas served by the Port are Gauteng and KwaZulu-Natal. Durban is interdependent on the Port for growth as it sustains some 350 commercial entities and 23 000 jobs within Durban (eThekwini Municipality; 2004). The upgrading of the Durban port is primarily concerned with widening of the harbour mouth to accommodate post-panama vessels as well as the occasioning of continued handling operations to the private sector. The airport will provide an additional line in the province's logistic platform in an increasing "*global village*", where comparative advantage is determined by shorter transport periods. The Richards Bay port will specialise in bulk services (McCarthy, 2003; Arjunan, 2003).

The South African Cities Network (2004:62) states that there has been considerable growth in the number of international and local passengers passing through airports in the nine cities. This suggests a tourist industry and more densely networked city-to-city business linkages. It speaks well to the ability of the cities to connect to the rest of the national economy, and the world. This is positive for economic activities such as finance, where the movement of manufactured goods is not a major consideration. The international tourists are "*high spenders*" of approximately R1300 per day, and could contribute significantly to the local economy (McCarthy, 2004:9).

Of the local population of Durban 272 000 were employed by the tourism industry in 2002, but there has been a significant decline of 3% International air arrival tourism, decreasing from 29% to 26%, and this has been exacerbated by the disappearance of direct international flights to Durban International Airport, an issue that will be addressed by the building of the King Shaka International Airport in 2006 (The Mercury, 2004). Major investments have been made in providing new tourism developments, e.g. the ICC, uShaka Marine World, Sun Coast Casino, Sibiya and others. These were all built with the assumption of the availability of a globally competitive international airport with direct links to core international tourism.

Knowledge concentration

Knowledge and skills exercise a large impact on economic structures (Graham, 1998). The knowledge and skills base of cities is seen as a major factor impacting on growth and development (Swanepoel & De Beer,

2000:160). The South African Cities Network (2004:63) suggests that this is a key weakness of South African cities. There is a relatively poor education base in the cities generally. Only 26, 9% of South African Cities Network city residents had a matric certificate in 2001, and only 11, 9% had any form of post-school higher education. There is also an increasing tendency for skills supply to be mismatched to demand for key competencies in formal sector employment. Middle-level scientific and technical skills are in increasingly short supply.

Local government institutional efficiency

Some economic activity is extremely sensitive to the broader functionality or efficiency of the urban environment. For example, much "*just-in-time*" production depends on consistently reliable supplies of water and electricity, and on a transport infrastructure that enables the smooth mobility of inputs and outputs across the city (McCarthy, 2004:1). A key indicator of urban efficiency, described by Short *et al.* (1993:223) is how efficient local government is in enabling businesses to operate.

Safety and security

According to a survey conducted by the World Bank for Johannesburg in 2001, perceptions, and the associated real costs, of crime seriously undermine confidence as far as established businesses in South African cities are concerned. It therefore undermines their propensity to invest. Furthermore, crime impacts seriously on the costs of doing business locally, both directly through stock and finance loss, and indirectly through higher insurance premiums and the costs of securing buildings and goods in transit (McCarthy, 2004:8).

Lastly, crime diminishes the quality of life of residents, and throws them into a perpetual state of insecurity. This limits their development and creative application of latent productive capacity (eThekwini Municipality, 2004). The South African Cities Network (2004:63) indicates that levels of crime that increased in the late 1990s have now stabilised. Some crimes such as burglaries at non-residential properties have reduced fairly substantially. Statistics remain high, with car theft being the most frequent recorded statistic.

Investments in property

Hernando De Soto (2002) and Burnstein (2004:512) in the "*Birth of Plenty*" indicate that shifts in the property market give some clues as to the strength of the urban economy. A flourishing industrial and commercial property market reflects positively on the number of firms operating and the expansion of business activities (South African Cities Network, 2004:320). In turn, property is an important factor in production. Renewal of commercial and industrial property obviously facilitates more efficient business operations (Short *et al.*, 1993:223; Shearmur & Doloreux, 2000).

Municipalities may facilitate industrial and commercial property renewal through urban renewal initiatives. Urban renewal typically involves the use of targeted interventions by government to resuscitate declining urban areas. However, much depends on the clarity of purpose with which these interventions are made. A recent study into urban renewal programmes in South Africa found that a coherent understanding of the policy objectives of urban renewal is lacking, with officials in different sectoral departments of cities defining urban renewal narrowly in terms of their sector. For example, officials located in economic development units tend to perceive urban renewal as their development of economic nodes while officials in housing departments most often understand urban renewal as an inner-city housing intervention. (South African Cities Network, 2004:63).

Some of the levels of new investment are unsurprising. The South African Cities Network (2004:63) states that Ekurhuleni has the second highest investment in new industrial space after Johannesburg, and that Tshwane is seeing quite strong growth in its commercial sector. Most interesting is 159 million rands worth of new industrial investment, in a city that has never been a strong manufacturing centre namely Msunduzi.

5.6 INDUSTRIAL AND COMMERCIAL PROPERTY TRENDS IN SOUTH AFRICAN CITIES

Many people define the city in terms of its built environment. Office blocks, shopping centres and factories are visible and tangible, and often symbolic of a particular place (Nieuwoudt, 2001:3). The wider urban economy as well as the property market shifts and changes (Burnstein, 2004:51). South African cities have been no exception to this rule (South African Cities Network, 2004: 64). In 2004, there will be a sharper focus on residential investment (ABS Group Economic Research; 2004:1). The office sector remains quieter after several years of excess supply (South African Cities Network, 2004:64). A few new regional shopping centres are on the cards, like the Clearwater Mall in western Johannesburg.

Industrial developments move closer in type to the low-bulk office parks that have emerged in the past decade (Shearmur and Doloreaux (2000:1066). To a greater or a lesser extent, the trends and dynamics of the commercial and industrial property market are repeated throughout South Africa's urban areas (South African Cities Network, 2004:63).

There is a point about the property market that is often misunderstood. The demand for property is a derived demand, driven by activity in different sectors of the urban economy, combined with the significant change in expectations of space.

The heavy, old industrial factories of a decade ago have been replaced with the clean, landscaped industrial estates of today as advocated by Rosenthal *et al* (1999:1). Examples of these include Linbro Park Business Estate in north-eastern Johannesburg (South African Cities Network; 2004:63). Business Day (2004) indicates that a "*new urbanism*" approach to planning has been followed in the case of Melrose Arch, a development in Illovo, Johannesburg,

"*New urbanism*" is a town planning approach according to which a crucial objective is to create a better, healthier and more appealing space for work and leisure. There are even cases of industrial parks with clubhouses, jogging tracks and trout fishing dams. As demand for high-rise office buildings has declined, for a plethora of different reasons, companies have opted increasingly for low-density office complexes with gyms, restaurants and crèches. In fact, the popularity of the so-called home, work and play model is on the rise. The Business Day report (2004) indicates that "*new urbanism*" goes beyond the scope of traditional property management, and requires a holistic and innovative approach. The first phase consists of 44000 square metres of office space, and 8 000 square metres, supporting retail, restaurant and entertainment space. Another example includes Century City outside Cape Town (South African Cities Network, 2004:63).

The South African Cities Network (2004:63) states that retailing remains a specialised field in its own right, but as a sector it has outperformed the overall market during the last eight years. A report by Pauline Larson in the Financial Mail, 23 April 2004, indicates that regional centres and convenience centres remain the most successful investments, pointing to the attractive force of critical mass, and "*quick shopping*", respectively.

The South African Cities Network (2004:64) states that another trend emerging is that of redeveloping and re-positioning centres, but in a far more dramatic way than the straightforward "*seven-year*" refurbishment.

The transformation of the Randburg Waterfront into the Brightwaters Commons is one such example. The Financial Mail report on the national property market (Larsen 2004:4), confirms the rapid drop in office returns in the late nineties, underpinned by a strong suburbanisation trends in corporate headquarters, and the consistent success of the retail sector overall.

The Investment Property Databank report in 1998 was created to ensure accurate investment information, of which there is a large shortage in this sector (Larsen, 2004:4). The reason for this is that many fund managers value the properties themselves. This leads to over-exaggerated prices to make the fund's figures look better than they are.

The creation of the United Kingdom based Investment Property Databank indicates that there is furthermore an urgent need for scenario planning and forecasting for the industry as a whole, in other words, a benchmark through which fund managers can measure the performance of the funds owned.

There is the more cyclical problem of over-supply, which has been particularly noticeable in the office market since 1999. Ongoing decentralisation and urban decay have played a role, but so have over-enthusiastic lending and development, perhaps related to insufficient research (Larsen, 2004:3). Over-supply spins off into lower rentals, shorter leases, tougher tenant negotiations and higher vacancies (Larsen, 2004:3). The South African Cities Network, (2004:3) states that in Johannesburg's decentralised office sector, typical vacancies have steadily increased from around 5% in the mid-nineties, to a prevailing average of about 15%. Third, although lower interest rates could signal new development, lower inflation often means lower net lease and operating cost escalation rates. Low economic growth may put a damper on demand levels. International experience shows that, over time, property does adjust to a lower-inflation environment.

The legal environment surrounding property has seen some significant changes over the past year, with certain pieces of legislation creating upheaval in the sector (South African Cities Network, 2004:64). Monitoring of legal considerations has become all the more critical, with landlords citing the prevention of Illegal Eviction from and Unlawful Occupation of Land Act (Van Der Walt & Pienaar, 1999:361), the Rental Housing Act of 1999, and the proposed Property Rates Bill.

There is the changing nature of demand. Traditionally, large property owners have looked for blue-chip tenants on a long-term lease of at least five years. Today, lease terms are coming down and three-years is

more typical, although there is demand for twelve-month, or even month-by-month leases. The need to accommodate smaller, entrepreneurial and start-up businesses has become more acute, and successful landlords are those that can offer flexibility and personal attention to their tenants (South African Cities Network, 2004: 65).

Larsen (2004:1) states that the residential marketplace has, for the first time in many years, attracted a significant amount of attention from investors and developers over the past three years. What may have started as a reaction to commercial property saturation seems to have developed a momentum of its own, with even some institutional investors shifting into the residential sector.

Many developers have changed gear and moved from the office sector, into residential development, focusing on the popular golf estates, apartment blocks in prime areas like central Sandton, and even the conversion of downtown office buildings into upmarket residential spaces, in both Cape Town and Johannesburg city centres. It seems that 2004 will see this trend continue almost unchecked, although there is a growing view that the "*buy-to-let*" market has peaked, and that some sense will return to house prices in the next twelve months. (South African Cities Network, 2004:64).

The 2001 White Paper on Spatial Planning and Land Use Management stresses the importance of management of land use and the built environment. It also emphasises the long-term nature of the property market, for investors and developers to invest in cities with clear economic and town planning, competent metropolitan officials and consistent application of policy (Swanepoel & De Beer, 2000:103).

The role of catalytic government initiatives like the provincial government precinct in downtown Johannesburg, and the Blue IQ mega-projects in Gauteng, or the impact of the Cape Town Central City partnership, has become more evident (Blue IQ, 2004). The focus provided by the thirty-year economic strategy for Johannesburg, Joburg 2030, has been invaluable. The Mercury of 8 October also shows government initiatives of Msunduzi Municipality for the development of two major sites in Hayfields and Edendale. The Mercury of 7 October 2004 also describes the formulation of the Point Development Company, a government initiative to renew the Point area, in partnership with Moreland. The first phase of development entails the building of a luxury block of flats worth seventy million.

Larsen (2001:6) states that property activity is certainly created by benchmarking, using the Investment Property Databank, combined with an increasing need for space in the specific sectors of the built

environment, e.g. residential. Perhaps most importantly, the market will guard against "*bricks and mortar*" projects that do not address demand or the needs of end-users; an empty, derelict building makes no positive contribution to the urban economy (South African Cities Network, 2004:65).

5.7 ECONOMIC TRENDS IN THE SOUTH AFRICAN CITY

The South African Cities Network cities have embarked on a number of economic development strategies. Although varied, many implicitly assume that the key to unlocking urban economic growth is to address those factors that constrain businesses from expanding (ideally to international markets) or that discourage international investors from putting their capital here. Current trends suggest that these approaches may hold risks for cities whose primary concern must always remain the ability of its residents to earn a living.

The Response of South African Cities To Weak Demand and Micro-Economic Constraints On Productive Capacity

The South African Cities Network (2004:65) states that no city in the world has quite enough demand or productive capacity, or both these in perfect balance. However, there is a growing recognition that if South African cities are to expand their economies so as to enable all their residents with the means to earn a living, productive capacity and demand will have to increase exponentially (South African Cities Network, 2004:65). This is confirmed by Friedman & Douglass (1998: 20-25) where the responsibility of civil life and the responsibility of the local government, are discussed.

The Export-Oriented Economy And Fixing Micro-Economic Constraints On Competitive Engagement With The Global Economy

Ghatak (1995: 349-351) describes international trade liberation in the late 1980s by stating that most countries accepted industrialisation as a growth strategy. The acceptance of the General Agreement on Tariffs and Trade (GATT) and the development of the World Trade Organization (WTO) led to the acceptance of trade liberation as a philosophy, by most countries. The Export Growth Strategy (EGS) states that exports should increase in sectors where the country has a comparative advantage (Ghatak, 1995:349-351). Prices must represent the world price and give an indication of the scarcity of inputs, and exchange rates must be free enough to take of international market clearance.

Less Developed Countries need to devaluate their local trade units, to ensure that equilibrium rates are reached, export is promoted, and under-utilised resources are managed effectively. Trade policy, e.g. lower tariffs, will promote export as the production of the product becomes more attractive to the domestic market.

Lower tariffs promote effective production and innovation. The favoured export substitution decreases. Historically, tariffs promoted growth considerably. The protection of new industries is often debated. The optimal tariff argument does not favour Less Developed Countries. This is a cover for enjoying more advantages. Tariffs cannot correct local production and payment balance problems. Selective subsidies and tax and other forms of protectionism are better than tariffs, but is not aligned with the philosophy of trade liberation, and may decrease wealth. The establishment of Less Developed Countries as trade partners of Developed Countries is growing in importance. Twenty-five per cent of the world's exports are produced by Less Developed Countries (Ghatak, 1995:349-351).

Increase in protection of Less Developed Countries will have a negative effect on both Developed Countries and Less Developed Countries in terms of backward linkages. World markets have been liberated since the 1990s and capital markets have become increasingly integrated. This minimises the impact of shock-effects, e.g. the oil shock-effects created in the 1970s and the sharp interest rate increases in the 1980s.

The majority of Less Developed Countries only export a limited number of products and import all capital goods, for example machinery for production. There is an increasing gap on the comparison of one currency with another, and on savings, thereby necessitating international assistance as it decreases the limitations placed on the import of capital goods. It increases potential savings, and changes it into an investment, thereby increasing the country's productive capacity. (Ghatak, 1995:349-351).

Cities should go about deepening demand, and thereby spurring the growth of productive capacity and economic development (McCarthy, 2004:1). The South African Cities Network (2004:65) states that consensus exists among cities on the means to do so.

McCarthy (2004:2) states that weak local demand needed, is not necessarily a major problem. Kleynhans & Naudé (2001:2929) state that the domestic market is limited when compared to America, for example. Distance of friction and political factors limited South Africa's access to export markets in the past. Many South African firms were affiliated with large international corporations or produced goods with international patents. The sale of goods is limited due to the control by international stakeholders.

The limited domestic and export markets of South African goods led to the fact that many manufactured goods are not produced competitively, resulting from an inability to generate savings. The most industries are located in metropolitan areas and there is little opportunity for new companies, for additional access to markets. This impacts on regional spatial economy policy.

Kleynhans & Naudé (2001:292) also emphasise the role that large multi-national companies, e.g. Anglo-American, play in controlling the economy. This is confirmed by Friedmann & Douglas (1998:10) who discuss the powerful role that transnational companies play in controlling the global economy. It is impossible to compensate for a lack of domestic demand in today's nationally and globally networked economy, by growing off the demand of others elsewhere (McCarthy, 2004:3).

Cities that serve as national economic hubs, or that have emerging export-driven economies, can depend on incomes being earned in other parts of the country or the world, by exporting goods and services. This is confirmed by Arjunan (2003), McCarthy (2004) and Robbins (2004:3).

Capturing shares of national or global markets can drive up earnings across the local population. This in turn boosts local demand for other city products and services, and kick-starts a virtuous upward cycle of investment (both domestic and foreign), increasing demand and further investment, for example.

The new consensus also states that the key to this economic growth path is promoting productive capacity that is suited to export economies. This means addressing those factors that limit the capacity of local economies to feed, and feed off, global demand. South Africa has done just about as much as it can over the last decade to stabilise its macro-economic environment. It has controlled money supply well, bringing public sector debt under control and driving inflation down from double figures to an acceptable band around 6%. Interest rates have been high compared to those in other parts of the world, but these were necessary to encourage capital inflows. Capital flows are coming down. This stable macro-economic environment is a necessary condition for economic growth, but not necessarily efficient (Kleynhans & Naudé, 2001:46).

The added ingredient must be micro-economic reforms to make local economies more competitive. A number of interventions can be implemented on a micro-economic scale to ensure a range of interventions to ensure increased capacity of the local economy (Tomlinson, 1993:252). One example is the importance of knowledge generation and retention. It creates a basis for entrepreneurial behaviour that underpins the export of high-value added soft products such as business services and systems.

Cities may intervene to widen and deepen the pool of skills, or encourage the agglomeration of knowledge-based industries that may benefit from sector collaboration. There are, of course, other possible growth paths that do not rely on the motor of foreign demand. For example, a deliberate policy of promoting domestic demand by boosting household buying power may stimulate certain kinds of industry. As profits begin to accumulate and circulate, this may in turn lead to a sustainable increase in market depth and sophistication across a wider range of economic sectors. Scandinavian economies are today among the world's most competitive, through the application of this approach. It is also possible to use new productive capacity itself, as the basis for an economic growth path.

Massive investments in public infrastructure, coupled with a corporate spending increase, both carrying the risk of debts incurred today being repayable tomorrow, may create enough jobs and new-generation products and services to, in effect, construct new demand. The American information technology and telecommunications revolution of the 1990s was essentially this.

Both growth paths are constrained in the South African context. The first relies on a large-scale *"wealth distribution"* through taxation and welfare. It may stimulate a local economy, but it could cause hyperinflation and capital flight. The second relies on the evaporation of both national government fiscal prudence and business uncertainty. This is unlikely in the short term. In the long run the approach may also collapse local economies under the combined weight of inflation, high interest rates, unproductive spending on "white-elephant" capacity.

Both of these growth paths also look risky in the face of the AIDS epidemic's likely impact on household spending patterns. And, in any event, cities have very little influence over the national economic policy-making processes required to shift gear into these approaches. There is growing agreement that export-led economic growth, driven by global demand, and facilitated by addressing those micro-economic constraints incapacitating production of high-value adding goods and services, is the strategy to adopt. Many of the South African Cities Network cities are consciously or unconsciously following this economic growth path.

Export-Orientated Strategies And Sector Support

The economic development plans, IDPs or broader restructuring plans of the municipalities in a number of South African cities, indicate a new focus on positioning the city in the global economy (eThekwini Economic Development Strategy, 2004). This usually involves picking a number of winning sectors or sub-

sectors that the municipality believes, through targeted support, may become its city's competitive advantage in the global economy (Robbins, 2004).

The Joburg Foundation Report (2030) mentions the fact that Johannesburg's economic activity, being in line with international trends, is extremely significant, as it has been demonstrated that local demand, which has all but stagnated, is unable to provide sufficient local demand to enable the City to grow at a required rate per annum. As such, Johannesburg's economy will need to rely strongly on external demand from foreign countries (Joburg 2030 Foundation Report, February 2002).

Durban has a profile of economic activity that remains outdated in terms of global trends for more mature economic environments to shift to service and knowledge-based activities. It is critical for Durban to extend its profile in these areas, as they will offer the foundation for future growth and are already highly sought after in terms of existing economic sectors (eThekwini IDP, 2003-2007).

Micro-economic support in providing appropriate infrastructure, granting liberal incentives to investors and donors, maximising tourist potential, capitalising on physical surroundings and building capacity would seem to be necessary (Swanepoel & De Beer, 2004:1104).

Cape Town's future growth as explained in South African Cities Network (2004:69) will depend on factors such as the following:

- Global economic growth of the main trade partners.
- National and local policy implementation to address competitiveness factors, for example, investor perceptions, crime levels and skills constraints.
- Cape Town's ability to market and build on its numerous strengths, e.g. its natural environment, trade infrastructure, relatively skilled labour forces and world class tertiary institutions, and strengthening of globally competitive sectors.
- Private and public sector prioritisation of investments in human resource development, information technologies, and the exploration of new global market opportunities. The city economy can be strengthened through the development of and promotion of global and regional competitiveness, in niche clusters and sectors present. This is confirmed in the City of Tshwane 's Restructuring Grant Application compiled in July 2003.

Examples of cities' export-orientated thinking

A look at city economic development strategies and IDPs, gives some idea of what cities have in mind. The City of Johannesburg has introduced a 30-year economic development strategy called Joburg 2030. This identifies a number of *"preferred economic sectors"*, financial and business services, transport and communications, manufacturing of professional equipment and other chemicals, for example, targeted support for which may improve the position of the city as a node in the global economy and economic development of the urban system (Geyer & Kontuly; 1996:1).

Harrison *et al.* (2001:81) debate the effectiveness of the programmes envisioned for Gauteng and state that some programmes, e.g. Blue IQ's Gautrain, will reinforce economic, social and spatial separation as it only travels between the two Central Business Districts and does not extend to cater for the majority of Johannesburg's population, living south of the Central Business District.

Harrison *et al.* (2003:82) also comment by saying that the Gauteng Economic Development prioritises the fighting of crime and the development of skills. It does nothing to reverse the economic and social separation. The Igoli emphasises the fact that the economy will focus on development of financial and business services, transport, communication, trade, accommodation and catering as the main providers of employment and value added to the Gross Geographic Product. Mining, primary goods production and the manufacturing sector are left out of the equation as the main contributors. This vision ignores the majority of the labour force of Gauteng who are employed by the primary sectors.

Graphing economic sectors on the axes of attractiveness (contribution to Gross Domestic Product growth, contribution to employment creation, multiplier effects, etc.) and competitiveness (export potential and productivity), represent Joburg 2030 particular hope for financial and business services: Opportunities exist for the sector not only to become more productive, but also to reach across the border and export its services to a greater degree. As for transport and communications the South African Cities Network (2004:69) states: *'While this sector contributes less than financial services and business services in terms of GGP growth and employment, it is more export-oriented and hence has the potential to migrate further up the attractiveness scale'.*

The eThekwini IDP (2002) has a balanced set of objectives. But amongst other initiatives it emphasises the importance of an *"accelerated programme to deliver on medium term growth opportunities"*, specifically to *"reinforce its position as a key location in global manufacturing processes"*. It also stresses the need to *"realign its competitiveness platform"* by *"facilitating the emergence and development of new growth sectors'* and the *'development of new logistics and trade platforms"*.

Key actions in support of these goals include efforts to seek funding and facilitate partnership initiatives with educational institutions and other stakeholders with an emphasis on co-operative ventures to extend and deepen Information Technologies, financial services, biotechnology, organic and indigenous medicine capabilities'; to work with government and private sector partners to secure next generation port facilities and to invest in enhancement of local technological and skills development capabilities. Harrison *et al.* (2003:275) comment by pointing out that the eThekwini IDP is fairly generic and unspecific (eThekwini, 2002). Harrison *et al.* state that its contribution to coordinated planning, delivery and institutional integration is still to be tested.

The South African Cities Network (2004:65) states that the City of Tshwane recently submitted a Restructuring Grant Application to the National Treasury. A component of this is an outline City Development Strategy. One of its key focus areas is *"strengthening key economic clusters to gain leverage from growth trends in manufacturing, government and business services"*.

Actions include city support for the automotive, defense and metal industry clusters, all of which have the potential for further growth and increased global competitiveness, including potentially forming a *"super cluster"* with mutually reinforcing initiatives.

Investment attraction and local investment promotion

Swanepoel and De Beer (2000:103) indicate that investors primarily seek stability in their investment destinations, in terms of broad variables, such as taxation rates that secure the certainty of returns. This entails that investment decision making is more sensitive to macro-economic policy, political stability and the security provided by aspects of operating environments such as reliable power supply and an established body of contract law, than to special local incentives such as tax holidays or rebates. The IOL (2004:1) states that those fiscal incentives may risk attracting *"footloose"* investors who leave investment destinations as soon as a better offer arises. The IOL (2004:1) mentions the fact that Buffalo City recently lost the interest of

Malaysian investor Ramatex after Namibia provided a more attractive rates rebate package, for example. The IOL (2004:10) suggests that "*footloose*" investors cost the rates base more than they benefit it.

Nevertheless, it is a victory for a city to lure major new investment. It signals the increased connection between the city and the world economy, and includes the promise of a thickening of these connections over time. So investment attraction still holds appeal. South African Cities Network cities have started to use more sophisticated strategies to attract industries to the city (South African Cities Network, 2004:4). For example, Cape Town has given special attention to locking investment into its growing film industry, and both Cape Town and Johannesburg have targeted the attraction of high employment generating call-centres. Johannesburg, eThekwini and Cape Town have started to use their conferencing facilities to host major events that may bring spillover investments (Robbins, 2004).

The Department of Trade and Industry and the Department of Transport accepted the idea of Spatial Development Initiatives in 1996, with the idea of developing unexploited potential in Southern Africa. An example of this is the Spatial Development Initiative (SDI) developed in the North West Province. It is located adjacent to the N4, and was developed in collaboration with the private sector. SDIs are developed by means of providing research and information, promotion of investment and development of infrastructure and support of the private sector. Viable projects are first identified. SDI projects include industrial-, mining-, tourism-, agriculture- and agri-industrial projects and clusters.

The Maputo Development corridor between Pretoria and Maputo and the Lebombo SDI are some popular SDIs. In 2000 the development of corridors became the responsibility of the local authorities. Based on the success of SDIs in South Africa, other African countries have also started implementing the initiative, e.g. the Kalahari corridor in Botswana that forms part of the transcontinental Coast to Coast, an SDI stretching across Africa form Maputo to Walvis Bay. Other SDI projects include the Congo, Mozambique and Angola. National SDIs include the Western Cape Investment Imitative, the Wild Coast and Fish River Sun. The ten SDIs in South Africa also include industrial parks, "clusters" and four industrial development zones, e.g. Richards Bay and the Conga Project. The SDIs provide great investment opportunities.

Buffalo City's West Bank is the site of one of South Africa's first Industrial Development Zones (IDZs), as a focused local response to investor demands with national trade and industrial policy. Unlike conventional Export Processing Zones (EPZs), pioneered in countries like Mauritius and Taiwan, IDZs do not seek to compete on fiscal incentive but rather on the efficiency of a locality, based on existing or upgraded

infrastructure, cluster projects, sector training and streamlined bureaucratic processes, with a focus on export-led growth.

The East London IDZ is intended to further develop the manufacturing and agro-industries of the Eastern Cape, leveraging of the regional automotive industry, and access to a dedicated motor export terminal at Buffalo City's port (which is tube expanded), as well as the airport.

Spatial frameworks developed as part of the IDP for a specific areas, also provide a strategic plans to cope with forecast impacts.

Intervening to improve skills bases and knowledge concentrations

Krugman (1991) states that closely tied to interventions to facilitate clustering, are efforts to promote the knowledge base that underpins so-called agglomeration economies. Smith and Jafta (1995:19) state the importance of skills development in the labour force to promote economic development. This has to be accompanied by policy formulation in relation between state and market, development of skills, sources of technology and other non-economic factors. Some South African cities network cities have seen the development of intellectual capital as one of the key strategies to build urban economies well networked into a global economy on terms that benefit South Africa (Igoli Vision, 2030). Short *et al.* (1994:221) regard the skills base, concentrations of knowledge-based industries, and clustered centres of innovation and research and development, as fundamental pillars of a productive city.

Hall & Castells (1994:4) state that the concentration of knowledge-based industries and clustered centres of innovation and research are interlinked processes. They are seen as critical for the processes and form of the new economy as they provide the material basis for the integration of economic processes worldwide. Industrial producers of new technologies have been the fastest growing sectors in the world economy. The more countries are able to generate the development of these new, technologically advanced industries, the greater their economic potential in the global competition.

The South African Cities Network (2004:69) stresses the fact that most of the cities in the study have seen the development of intellectual capital as imperative for building the urban economy.

Education and Training is not a local government competence, but Chapter 2 of the Constitution of the Republic of South Africa states that social needs of people should be taken care of and everyone has the right to education. The local government is mandated to promote development in their areas of jurisdiction (White Paper on Local Government.1998). This is to be implemented by integrating service providers who do carry skill development responsibilities (Swanepoel & De Beer, 2001:105). Some municipalities have initiated certain relevant commitments and contributions. The Johannesburg City Skills Project, for example, has tried to address the perceived mismatch between the city's demand and supply of key technical and professional skills. This can be considered a worthy attempt to gaincommitment and contributions from a wide range of city stakeholders who do carry skills development responsibilities.

The Joburg 2030 report identified a 40% annual demand growth for skills in "*super-growth*" occupations, namely computer scientists, computer systems analysts, chartered accountants and computer programmers. It also identified 15 to 40% growth in demand for skills in various economic and financial occupations, for accountants, actuaries, engineers (electrical and chemical) and mathematicians. They have entered into local partnerships with various education service providers to concentrate on the production of these sorely lacking skills sets (South African Cities Network, 2004:69).

Institutional efficiency and the efficient urban form

Isobar (1994:248) shows that the increase in urban population in Less Developed Countries has increased significantly from 38% in 1950 to 60% in 1990. Urbanisation in Less Developed Countries will continue. Todaro describes growth of almost two per cent per year in populations of Less Developed Countries. More than half of the South African population live in urban areas, and more than 80% of the Gross Geographic Product is produced in cities.

Todaro describes the 20 biggest cities in the world as they were during 1990 and 2000:

Table 5-16: Largest cities in the world

City	Population 1990 (Million)	Population 2000 (Million)
Mexico City	19.4	24.4
Sao Paolo	18.4	23.6

City	Population 1990 (Million)	Population 2000 (Million)
Tokyo	20.5	21.3
New York	15.7	16.1
Calcutta	11.8	15.9
Bombay	11.1	15.4
Shanghai	12.6	14.7
Tehran	9.2	13.7
Jakarta	9.4	13.2
Buenos Aires	11.6	13.1

Source: Todaro (1994:250)

The growth of cities is both the result of "*push and pull*" factors (Kleynhans & Naudé, 2001:103). "*Push*" factors cause people to migrate form rural to urban areas based on factors like limited available resources, wars and poor facilities. "*Pull*" factors include higher wages and facilities in urban areas. Migration can have a positive effect, namely agglomeration economies, economies of scale or cheaper transport, skilled labourers and cultural facilities that increase the wealth of countries. McNamara (1984:1107) mentions that there are several costs involved, namely pressure on housing and social services, increases in crime, pollution and congestion. McNamara suggests that the process should be managed effectively. McNamara (1984:1107) states the following: "*These sizes are such that any economies of location are dwarfed by the costs of congestion. The rapid population growth that has produced them will have far outpaced the growth of human and physical infrastructure needed for even moderately efficient economical life and orderly political and social relationships, let alone amenities for residents.*"

McNamara feared that migration would take place at a faster tempo than authorities could plan and provide effective service delivery. This fear of McNamara's has manifested itself in squatter camps and peripheral sites (Harrison *et al.*, 2003). The tendency is also accompanied by progressive decay of the Central Business District. Todaro (1994:250) estimated that approximately 60% of all urban inhabitants were housed in squatter camps. This was confirmed by Hardoy & Satterthwaite (1992).

Hardoy and Satterthwaite (1992) discuss the limited access of the poor to clean water, sanitation and electricity. It is the responsibility of local government to manage these processes (Swanepoel & De Beer, 2000: 104). This is agreed to by the South African Cities Network (2004:70) that emphasises the role of local government in managing the costs associated with economies of urbanisation. This specifically entails the following:

- Reducing the costs of doing business in a city by mitigating and managing the impact of pollution and development on productivity; reducing business costs by improving utility infrastructure in order to ensure minimal disruptions in water and electricity supply and streamlining planning approval.
- Strengthening the relationship between infrastructure investment and economic growth by improving a city's logistical pathway so that goods can be moved efficiently, especially in the instance of major ports that act as gateways. eThekwini spatial planning is a useful example of this. The municipality has tried to help improve the port infrastructure through various spatial interventions that better link the port with lagging industrial and employment nodes.

Esman (1995:47-53) discusses the challenge to policy makers and legal government planners to deal with increased costs of urban living. He suggests strategies to cope with the costs, namely integration of physical, social and economic aspects, improvement in service delivery and basic infrastructure, introduction of local economic development policies to improve the general business climate and institutional restructuring where the quality of decision making is improved.

Attention has to be paid to reducing the costs of living in a city so that residents can allocate income to savings and investment. This requires integration between economic and social objectives, with planning priorities and infrastructure spending, specifically devoted to reducing urban living costs on consumers and small businesses.

The Harrison-Todaro model describes that people migrate due to the inequality between urban and rural wages. The Harrison-Todaro model suggests continued movement form rural to urban areas in spite of unemployment in the urban areas. This leads to serious policy considerations for dealing with increased urban costs generated, namely integrated rural development in Less Developed Countries, to ensure that there is no urban bias and that a reduction in inequality takes place.

Safety and security

According to surveys such as those conducted by the World Bank for Johannesburg, perceptions as well as the associated real costs of crime seriously undermine established businesses' confidence in South African cities. It therefore undermines their propensity to invest. In addition, crime diminishes the quality of life of residents and throws them into a perpetual state of insecurity. This limits their development and creative application of latent productive capacity.

Cities have tackled crime in various ways, ranging from innovative city-based initiatives such as the installation of closed circuit television (CCTV) in city centres, to closer collaboration with national police services in executing strategies. Most South African cities are, for example, presently engaged in the rollout of this infrastructure, and integrating CCTV infrastructure with private and public response systems.

Urban renewal trends

Kihato (1999:1) states that progressive urban decay of city centres in South Africa, e.g. in Johannesburg,began more than two decades ago in the late 1980s and 1990s. Kihato (1999:1) suggests that many municipalities are undertaking urban renewal interventions as part of city economic development strategies. This is confirmed by the South African Cities Network (2004:70) which states that many of these interventions continue to focus on property development and the upgrading of the physical environment in inner city areas. Business Improvement Districts (BIDs), often linked with such interventions as CCTV, are typical. Limited attention is being given to renewal of areas of the city where small and large industries are located (South African Cities Network, 2004:70).

Management of current trends

The South African Cities Network (2004:70) cities have embarked on a number of economic development strategies. Although varied, many implicitly assume that the key to unlocking urban economic growth is to address those factors that constrain businesses from expanding (ideally to international markets) or that discourage international investors from putting their capital here as described in eThekwini Development Strategy 2005 to 2010. Current trends suggest that these approaches may hold risks for cities whose primary concern must always remain the ability of its residents to earn a living.

Managing risks in export orientated growth paths

Arjunan (2003:1) states that globalisation of the world economy has created several challenges for the South African city. Accordingly, globalisation has placed enormous pressure on city economies by forcing businesses to become globally competitive.

The performance of a local economy is largely determined by the competitiveness of the city's export clusters. It can be argued that an expanding export-based approach is one of the keys to economic prosperity since the multiplier effects of increased activity generate new wealth and income.

The quality, diversity and vitality of local businesses play a major role in overall economic and social well-being. City strategies focus attention on the role played by export-oriented industry, in a way that supports local businesses and strengthens the region's economic foundation, to build a critical succession of economic growth. Limited growth from export-orientated strategies has been experienced (South African Cities Network, 2004: 70).

There has been some growth in the export-economy over the last decade, but nowhere near as large as one might have expected. Cities saw significant jumps in the volume of exports in 1994 to 1995, what economists sometimes call the *"democracy dividend"*, and again in 1999 to 2000. These volumes are certainly not racing up and in fact saw a decline in 2001 to 2002. The value of exported services has understandably tracked currency fluctuations. It increased significantly in 1996 when the Rand dropped sharply against the United States Dollar, and again in 2001 to 2002. However, as the recent appreciation of the Rand against the dollar has proved once again, it is easy to mistake short-term export gains, from an undervalued currency as a real improvement in the performance of export sectors. Value added in this sector between 1997 and 2000, when the Rand was declining but at a slower pace than in 1996 and 2001 to 2002, was fairly negligible (South African Cities Network, 2004:70).

Difficult choices

Cities face difficult choices over what kind of economic future to promote, and how to best allocate limited capacity and resources in support of this. The choices are all the more difficult where an export-orientated strategy is being led, because in an unforgiving global economy decisions may carry costly unintended consequences (South African Cities Network, 2004:70). New opportunities for growth and wealth-creation

are certainly available in a globalising economy. Cities that can position themselves as key nodes in international business circuits will almost certainly grow from strength to strength. But choosing an economic strategy that helps city industry *'go global'* also has large risks. The risks described by the South African Cities Network (2004:70) are as follows:

- First, it is quite possible that a city's export-oriented industry does not really need any help to thrive. Public sector support may end up simply subsidising existing lucrative business that already adds considerable value under its own steam.
- Second, public-sector support may sometimes be counter-productive. It may help firms enter global markets in the short term, but excuse them from making the investments and hard decisions needed to stay competitive over time. If support is eventually withdrawn or diverted, firms that seemed competitive may suddenly be exposed, as too costly or not sufficiently flexible and dynamic. In many parts of the world this has trapped governments politically into having to continue to subsidise unviable enterprises.
- Third, supporting those industries geared towards global market access may just expose the local economy more to the whims of a global economy, worsening poverty and inequality (Tomlinson, 1993:347). For instance, cities may want to use local comparative advantages to lure international investors. This strategy may very easily squeeze new local market-entrants, trying to get access to emerging opportunities, out of lucrative niche-market shares and see locally earned profits exported. Similarly, cities may want to promote the *"export competitiveness"* of local business, but this may depend on many firms pruning back jobs or labour benefits to increase relative *"productivity"*.
- Fourth, promotion of globally competitive industry may result in undesirable consequences in the urban form. For example it may lead to the *"hyper-concentration"* of high-value commercial activity in certain parts of the city, such as new *"edge city"* developments. These are usually close to the residential neighbourhoods of wealthier, more highly skilled residents, and far from working class areas.

  As opportunities in traditional manufacturing decline, a mass of unemployed people may grow on the periphery of the city. Here they end up with the additional burden of needing to travel further to find any network opportunities the city has to offer, and working harder to get into circuits where viable new business ventures can be put together. Their poor location exacerbates their lack of economic access. Ironically, this increasing spatial and economic disparity may be detrimental to the economic prospects of a globally oriented city. Large and obvious divides between wealth and poverty suggest to any astute international business partner, the possibility of future social and political instability.

Reliability is such a vital component in today's fast paced, often "*just-in-time*", international trade system, and the mere possibility of disruption may be enough to see international investors and foreign consumers look elsewhere.

Diversification

The global economy's future is uncertain. Recent uneven global economic performance, and the lack of positive impact that even a surging global economy of a few years ago had, as well as the ability of cities to provide residents with a means to earn a living, do raise the issue of whether cities should put all their eggs in one basket (South African Cities Network, 2004:6). Krugman (1991) stresses the continued importance of economies of scale and agglomeration economies.

The appropriateness of more balanced approaches, that aim to harness global economic growth where appropriate, which also takes note of the value of supporting higher domestic demand and the unlocking of latent local productive capacity, warrants more discussion. Flexibility, accessibility, connectivity and knowledge are requirements that prescribe new global processes, which economic locations have to adhere to if they wish to promote economic growth. (Tomlinson, 1993; Harrison, 1994; Castells & Hall, 1994; Jafta & Smith, 1995).

5.8 CONCLUSION

South Africa has experienced steady economic growth since 1994. The macro-economic policy of the country has placed it in a relatively strong position to address poverty eradication and increased economic growth. Compared to other Developing Countries, South Africa has an advanced financial sector and a leading national tax collection system.

Despite the financial situation and the fact that the South African economy is creating new jobs, the extent of job creation is far form absorbing the full number of job seeking South Africans and the skill levels are inadequate to meet the demand of the new economy that is service and knowledge driven. Poverty levels and unemployment rates remain high. The income and skills gap between specific groups remains extremely high.

Fast-tracking poverty eradication and skills development is a key challenge. A combination of responses is required. These include further enhancing macro-economic stability and economic development. A number of key thrusts emerge from the issues mentioned in the chapter. Economic sustainability of a city should be based on increasing entrepreneurial activity, especially small and micro businesses, building on industries with a competitive edge and increasing the competitiveness in an export-led economy.

Strategies have to be formulated to increase incomes, provide jobs, stimulate growth, improve living standards of the poor and increase strength of small and micro businesses. There is a need for efficient education and training mechanisms for improvement of quality of life and also for empowering previously disadvantaged groups to increase their share of assets. The specific sectors of the economy must be developed and linkages between sectors strengthened. Transport and communications, construction, retail and business services will grow on their own and in conjunction with other sectors.

Specific issues to be implemented that will promote urban sustainability include skills training, implementing programmes to decrease crime, planning for the economic impact of HIV/AIDS and providing mechanisms for redistribution.

Conditions for action need to be developed through leadership and participation. The main economic sectors are to be developed in the area.

Sector studies should be completed. Each study should consider the global conditions and opportunities in the industries, potential for value adding within these industries, the potential to grow SMMEs within specific sectors and in what parts the value chain linkages can be built to develop SMMEs. The South African market potential, position for growth and competitors need to be taken into consideration. Clustering requirements and opportunities in terms of the linkages between different parts of the value chains and activities within a city need to be identified.

Market analysis has to be done, as well as strategies to create world-class competitive advantage for specific industries. The city has to organise itself to link global opportunity to key sectors and the business sector has to be analysed to investigate the potential linkages it brings to other clusters.

Service delivery and quality of life issues have to be integrated with economic strategies.

CHAPTER SIX

URBAN SUSTAINABILITY OF THE BUILT AND NATURAL ENVIRONMENT



CHAPTER SIX: URBAN SUSTAINABILITY OF THE BUILT AND NATURAL ENVIRONMENT

6.1 INTRODUCTION

Approximately 60% of all urban dwellers reside in squatter camps (Hardoy & Satterthwaite, 1989).The conditions and risks of such settlements are discussed by Hardoy & Satterthwaite (1989). Their observations confirm Dorado's (1992) findings that the majority do not have access to adequate potable water, sanitation and electricity. This is basically caused by the fact that the population rates of Less Developed Countries grow at a faster pace than the city can provide for. The cities within these Less Developed Countries cannot provide services at a fast enough rate to deal with the concentration of business activity or the way people choose to live. The cities are characterised by congestion, caused by movement of people and goods, waste and pollution. By-products from industry, household consumption and the unhealthy conditions caused by slums and poorly serviced areas, e.g. insufficient waste removal collection, poor sewerage removal and wastewater draining, further exacerbates congestion (Hardoy & Satterthwaite, 1998:9).

The planet is affected severely by densely populated areas with increased sprawl.. Climate has changed dramatically all over the globe and this is being ascribed to human consumption (Durning, 1990:151-161).The changes in consumption patterns are being driven by the middle-class, who live predominantly in the northern, industrialised countries and make up twenty per cent of the world's population (Swanepoel & De Beer, 2000:5).

The impact of the built environment on natural resources has to be investigated (Meadows *et al*, 1972). The built environment impacts on city form (Harrison *et al.*, 2003:248-250). Martinussen (1997:149) warns that if resources are not used sparingly and optimally and population growth continues at the current rate, cities may become unsustainable.

Martinussen (1997:149) investigated the interconnected trends of global concern, namely industrialisation, population growth, widespread malnutrition, depletion of non-renewable resources and ecological damage, which, if unchecked, would lead to a catastrophe. Managing the ecological footprint of a society has become very important (Wackernagel & Rees, 1999)

The SACN (2004:110) mentions that the costs of urban living and business costs, generated by the increase in the size and shape of a city may cause "*diseconomies of scale*". This means that the costs of concentration of people exceed the advantages of agglomeration economies, and clustering of people. This point can be

extended severely with effective urban management (Van Der Waldt, 2000:1). Urban management is obtained through efficient public administration, a process of managing and executing policy with specific reference to the environmental context.

The eThekwini Urban Development Strategy 2005 to 2010 (2004) states that if cities do not manage their environmental impact, regardless of the size of it, a point will be reached soon where the available resources needed to sustain urban life and economic activity, become insufficient.

City life can become intolerable and businesses can lose efficiency causing them to disinvest in city life. This confirms Douglass and Friedmann's (1998:12) description that if citizens perceive that their needs are not being met, they disinvest in the city and do not participate actively in civil society. Urban management is crucial in assisting business development (World Bank, 1998).

When compared to large cities like Mexico, New York, Cairo, Mumbai (Kleynhans & Naudé, 2001:103), for example, the South African city may be far from a point where diseconomies of scale will be reached and the benefits of social living will be exceeded. The sustainability of cities is an important long-term concern that has to be addressed.

Features in the current cities left by the legacy of "*Apartheid*", may have had a negative impact on the built environment (Harrison *et al.*, 2003:246) and the natural environment. Current growth patterns indicate the necessity of planning for sustainability (Department of Housing, 2000:1). Pickett *et al.* (1997:190) describethe human eco-system model, and emphasise the importance of interaction between the natural environment and the human social system.

Humans, the natural environment and the built environment have to be considered when planning for sustainability. It is therefore of utmost importance, that people have access to adequate housing and facilities to ensure that the environment is protected. The legacy of "*Apartheid*" in South Africa is seen in dormitory townships located on the periphery of cities, far from access to decent infrastructure and economic opportunities. The housing challenge is to integrate these areas with the city to ensure sustainability (South African Cities Network, 2004:4).

The Bill of Rights in the Constitution of South Africa stipulates that everyone has the right to a clean and healthy environment and housing. This entails the access that people have to infrastructure and services. Infrastructure entails access to adequate housing, which is a Constitutional right of every person. The Constitution (Chapter 2, section 26(2) also state that "the *state must take reasonable legislative and other*

measures, within its available resources, to achieve the progressive realisation of this right". This stresses the interdependence between good governance, economic and social development, physical development and environmental protection to achieve adequate access to housing to ensure that urban sustainability is brought about.

Urban sustainability in the built and natural environment will be discussed in terms of the following through the chapter:

- Sustainable cities and human settlements
- Urban sustainability and urban form
- An assessment of sustainable low-cost housing and urban sustainability
- The housing framework as described in current housing literature
- Housing planning and delivery according to the National Housing Act principles
- An assessment of the components ensuring sustainability of the natural environment

6.2 SUSTAINABLE DEVELOPMENTS AND SUSTAINABLE URBAN FORM

Sustainable development as a concept, is derived from a paradigm on growth and development that stresses the importance of economic growth, based on the economic output of an economy, as measured by Gross Domestic Product (GDP)(Harrison *et al.*, 2003:244). All stakeholders of development aimed to implement methods that would improve the quality of life by increasing the Gross Domestic Product of respective economies (Webster, 1990:21).

Little consideration was given to environmental impacts. In cases where the technocentric management view was followed, it was stressed that the environmental resources should be used optimally to ensure high economic growth (Carley & Christie, 1992:77-78).

The environment is an important resource, which should be well managed and preserved. Carley & Christie (1992:77-78) state that the protagonists of this view did not pay enough attention to ethical issues for preserving the environment, and the protagonists are blamed for being naïeve about the long-term effect of increased economic growth on eco-systems.

The environmental movement gained momentum in the 1950s to the 1970s resulting from increases in population that in turn, increased production and consumption levels (Harrison *et al.* 2003:244). Marthinussen (1997:149) as well as Meadows *et al* in 1972, raise questions about the growth philosophy and the assumption that growth can continue indefinitely. This controversial study explored five interconnected trends of global concern, namely industrialisation, population growth, widespread malnutrition, depletion of non-renewable resources and ecological damage, which if unchecked, would lead the world to a crisis of catastrophic proportion, within a century.

International debate focusing on development and environment issues, was stimulated through the introduction of the "*Report of the World Commission on Environment and Development*", also referred to as the Brundtland commission. This ensured that environmental issues no longer remained on the margins of development theory. The Brundtland commission developed the generally accepted concept of sustainable development, defined as "*meeting the needs of the present without compromising the ability of future generations to meet their own needs*" (Rapley, 1996:173; WCED, 1987:43).

The development vision is retained with a condition that it should not be pursued at the expense of future generations (Wackernagel & Rees, 1999:9). Mawhinney (2002:2-24) reviews all the definitions of sustainable development and all definitions concede that sustainable development entails reaching economic, social, cultural and ecological goals. This is agreed upon by Hardoy *et al.* (1992:21).

Many debates have been held at global conferences, e.g. the Earth Summit in Rio de Janeiro and the World Summit for Sustainable Development held in Johannesburg in 2002 (Harrison *et al.*, 2003:245). There are key implications for both Developed and poorer Developing Countries.

Durning (1990:159-161) describes the over-production and over-consumption of wealthy Developed Countries. He states that the natural resources of the earth are being shared by three socio-ecological classes of people namely the over consumers, marginal and sustainers. The over consumers consist of people living in Developed Countries. According to a description by Korten (1991:24-25) "*most official aid programmes and institutions... are actively engaged in strengthening and extending this unbalanced, unaccountable and extractive system of economic relationships...The agenda for the South...is to regain control of their remaining ecological resources to meet domestic needs –beginning with food, clothing, shelter and basic social services*".

It is clear that the challenge faced by Developing Countries is the stabilisation of economic growth through a shift away from over-production and over-consumption, as well as towards the redistribution of resources to the many poor people within these countries.

The poorer Developing Countries are challenged with stabilising population growth and fast-tracking growth responsibility. This will assist in meeting the basic needs of the majority now living in squalor, and to stabilise over-consumption by the wealthy elite (Harrison *et al.*, 2003:245).

Much research and work has gone into the redistribution of resources. The financing of development programmes has gained momentum by the fact that an opportunity for both public- and private sector resources to be channelled to development programmes in Developing Countries has been created (Harrison *et al.*, 2003:245).

Sustainable development is a relatively new concept for human civilisation and entails a re-assessment of all facets of human activities, cultures and lifestyles (Swanepoel & De Beer, 2000:63). Sustainable development is explained in terms of sustainable cities and the creation of habitable human settlements, with the main focus placed on sustainable low-cost housing in South Africa in terms of policy and practice.

6.3. SUSTAINABLE CITIES AND HUMAN SETTLEMENTS

Human civilisation consists of various components (Harrison *et al.*, 2003:246). One of the major components includes cities and human settlements. Lozano (299:5) states that cities are centres of civilisation. The word "*civilisation*" is related to the Latin "*civilities*", civics and civets, which refers to culture of cities, places where a mixture of people are concentrated in clusters of meaningful size, and exchanges of goods, services and ideas take place continuously.

Benghazi (1995:244) states that " *Where we are today globally in a situation in which every " we " discovers that it is part of a " they", that the lines between "us" and "them" are continuously redefined through the global realities of immigration, travel, communication, the world economy and ecological disasters."*

Douglass & Friedmann (1998: 164) described cities as being multi-ethnic, multiracial and multiple. Cities are systems of habitation, production and consumption and form macro-scale systems that need inputs for their growth. Inputs and by-products of urban growth translate into major impact on resources and the environment. Ecological footprint analysis of a city or settlement, as described by Wackernagel & Rees (1999:247) has been applied to measure ecological impact. This is an accounting tool that estimates resource

consumption and waste assimilation requirements of a defined human population or economy in terms of corresponding productive land area. This form of analysis focuses on capturing network flows of key resources, and waste of subsystems through networks of channels (Harrison *et al.*, 2003:247). This form of analysis focuses mainly on environmental analysis (Wackernagel & Rees, 1999:247). Urban sustainability is, however, determined through the presence of three additional pillars namely economic growth, socio-cultural responsiveness and institutional capacity (Irurah *et al.*, 2002: 6-16).

Colliers (2001: 3) states that urban environments are characterised by a large concentration of people and buildings in a restricted area. This leads to many changes in the biosphere, which in turn influences humans. The energy balance in urban eco-systems is disturbed, due to the preponderance of man as a consumer, little primary production, as plants no longer form the energy basis and a low presence of decomposers.

Production and consumption of secondary energy is, however, quite high reaching 25% to 50% of the irradiated solar energy (Sukopp & Werner, 1983:1). Gilbert (1989:1) states that the amount of available water in the urban environment is relatively low. All rainwater does not flow into the soil, but is taken out of the city by means of storm water drains, as soils in the urban environment are to a large extent sealed in and built over. The ground water level is therefore lowered. Urban soils are also characterised by low fertility levels due to loss of organic material or disturbance of the soil profile, except for areas where various organic wastes are deposited, which have a high nutrient status. Soils are also characterised by the absence of a structure of compaction, high alkalinity because of the release of calcium from building debris, as well as the presence of a variety of pollution substances.

Van Der Merwe (1975:151) states that the climate of urban environments develops into typical urban heat islands. Research in South Africa has shown that the urban environment can be three to four degrees warmer than the adjacent natural environment. Heat island formation can be attributed to many facets such as lack of enough trees and other vegetation in comparison with the natural environment. The presence of heat-absorbing surfaces such as roads, buildings, pavements and other structures, contributes to the excessive warming of urban areas. Urban areas comprise the space in which air, water and soil is most heavily polluted.

Air-pollution results in the development of the "greenhouse effect", while the pollution of water and soil leads to eutrophication, where ph-values of five to eight, can be measured. Large amounts of unnatural, household waste contribute to the pollution problem (Sukopp & Werner, 1983).

There is a strong decline in native plants and animals in urban areas, and an increase in adapted weedy species, which can be found in cities in general. Urban landscapes represent new forms or modifications of previous forms and landscape patterns. This is determined by physical, historical and social conditions.

Gilbert (1989:1) describes the relationship between urban landscapes and urban ecology. Three landscape types in the built-up environment are described. Technological landscapes in which the biological elements have been substantially replaced by artificial substitutes, gardenesque landscapes in which the biological elements can only function under continuous managements and ecological landscapes in which the biological elements are allowed to function in a general manner. Gilbert states that ecological landscapes may arise in three ways namely:

- Inclusion of natural areas inside the urban environment (encapsulated countryside for example hills, ridges and wetlands, which are used commonly towards the urban fringe).
- The development of parks and other open spaces on the basis of ecological principles..
- Unofficial, informal wild spaces where nature has gained a foothold and which varies in size from a crack in a pavement to a railway embankment.

The ecological landscapes have to be retained to ensure urban sustainability. Environmental conservation entails building cities that are responsive to the limited resources of the planet. Resources are defined as sink limits and resource limits. The resource limits are based on the finite resource base, especially for the key inputs in sustenance of cities and buildings (Harrison *et al*, 2003:247). These are mentioned above and include land for development, energy and water, for example. The sink limits focus on the finite capacity of air-, land and water systems to cope with human production and consumption patterns. Examples include greenhouse gases, like CO2 and solid waste, which are examples of sink limits.

Economic sustainability is reached by flow of goods and services, essential for human consumption to produce wealth. Kleynhans and Naudé (2001:58) suggest that economic sustainability is obtained by means of poverty alleviation, combating unemployment and addressing inequality in income distribution. The National Vision and the Reconstruction and Development Programme, and Growth, Equality and Reconstruction policy documents support this.

Socio-cultural sustainability is defined by Irurah *et al.* (2002:14) as the impacts of buildings and settlements on the social system and the related cultural values of households, communities and nations. The word "*culture*" is derived from the Latin word "*colere*" which indicates building, labouring and developing the earth in such a way that it can be utilised by humans. Rapport (1997:14) describes the nature of culture as " *it*

is about a group of people who share a set of values, beliefs, a world view and symbol system which is learned and transmitted. These create a system of rules and habits which reflect ideals and create a lifestyle, guiding behaviour, roles, manners, the food eaten, as well as the built form". Thailand (1993:29) also defines culture as follows: *"Culture consists of abstract values, beliefs and preconceptions of the world that lie behind people's behaviour and which are reflected in their behaviour".* Harrison *et al* (2003:247) stresses the importance of providing an enabling, equitable, non-discriminatory and just social system. Vulnerable groups have to be catered for, especially women, children and the aged (Landsman, 2001).

Institutional sustainability is a major priority and is put forward in the Urban Development Framework of 1997. Douglass and Friedmann, (1998: 26) stress active participation in a political community that is just as mutually supportive and embraces all sorts of rights and responsibilities, including cultural- and environmental issues. The citizen needs to function in an environment with appropriate policy, legislation and implementation structures in the public, private and civic sectors of society. Rowland (1995:102) stresses the role of participation in decision making, democratic and transparent governance, and public accountability in the development of sustainable processes.

The four pillars of sustainability namely environmental, socio-cultural and institutional are prerequisites for sustainability. This ensures an integrated approach when planning for resource utilisation and for creating *"habitable communities"* discussed in the Habitat Agenda (1996:1).

6.4 URBAN SUSTAINABILITY AND URBAN FORM

Harrison *et al* (2003) describe urban form as a characterisation of the built environment based on its constituent attributes and its mutual relations. At first glance, urban form refers to physical-spatial characteristics of a geographical area, for instance, building density, type and design, and its spatial variance.

These characteristics determine the observable appearance of an area's morphology. Besides this morphological interpretation, urban form can also be interpreted by a functional arrangement. Functional characteristics of a geographical area denote the differences in land use, referring to the spatial zoning or land allocation. Morphological and functional characteristics of urban form are not isolated from each other. A certain synthesis between morphology and function takes place for an optimally satisfying fit. Sustainability can be applied as a measurement for the judgement of planning alternatives regarding urban form, considering the undesirable and harmful environmental effects that take place, partly due to the morphology and functionality of the built environment.

Regarding sustainable urban form, the occurrence of these environmental effects during the eventual material realisation of the plan can be taken into account, for example, the physical construction of, for instance, a residential neighbourhood, as well as the effects that arise during the eventual occupation of the realised plan, i.e. the residential and travel behaviour of its inhabitants.

In both cases, one is dealing with alleged environmental effects that might occur, a judgement based on earlier observations and evaluation. Regarding the physical construction, the possible effects are surrounded by a high level of certainty with reference to the practice of construction. Procedures about how to work, and what precautionary measures for environmental care should be taken, can be stated in contracts. Regarding the utilisation, behavioural practices are surrounded by many uncertainties. Procedures about how to live and how to act are "*not done*". By means of urban form, certain behavioural practices that are desirable from a sustainable point of view, may be encouraged, and those behavioural practices that are undesirable may be mitigated.

Types of urban form that are accompanied by more sustainable practices are usually labelled as sustainable urban forms (Banister *et al.*, 1997). Sustainable urban form then points at the extent of sustainability of behavioural effects that correspond to the morphology and functionality of the built environment.

Sustainability objectives are developed from certain spatial characteristics and urban forms. The Gauteng Spatial Development Framework compiled in 1998 describes the fragmented urban forms of towns and cities throughout Gauteng. This is prominent throughout South Africa. It is the product of two factors namely economic activity and past policies. Economic activity has caused urban fragmentation, as pockets of development have been created. Past policies inducing racial segregation has created an artificial fragmentation in urban form and has produced what is termed the "*Apartheid*" city.

The problems of this phenomenon include the direct and indirect cost of peripheral development, the creation of inefficient and ineffective cities or towns, and the likelihood of continued urban sprawl. The Gauteng Spatial Development Framework (1998) also states that housing delivery is a prominent factor currently influencing the settlement pattern, as a vast range of projects and programmes are in motion to address the existing and growing housing backlog. The projects, based on principles of infill and densification, appear not to be achieving their goals and are perpetuating the old urban system, by locating the poor on the periphery in high-density urban environments. This exacerbates the dysfunctionality of the existing urban form and escalates the indirect costs of housing delivery.

The remnants of primate cities described by Harrison (1980:109) still remain. Harrison (1980:109) described the primate city as: "*The Third World city is a dual city - an island of wealth surrounded by a Black belt of misery. Outside the bright, shining modern city of skyscrapers, flyovers and desirable residences, the poor are camped in squalor, disease and neglect in shacks and hutments of plywood, cardboard, mud or straw, usually without clean water, sewers, health centres, schools, paved roads or paying jobs*". These conditions are confirmed by Hardoy, Mitlin & Satterthwaite (1992:171-201).

The proposed interventions for these cities are described by the Gauteng Spatial Development Framework (1998). The proposed interventions are aimed at compacting the city by determining an urban edge as an intervention strategy and by planning for high levels of mixed use in different zones or neighbourhoods. Interventions also aim to achieve socio-cultural cohesion, enhancement of the quality of urban space and increased safety and security (Harrison *et al.*, 2003: 249).

These types of cities have a low ecological footprint and are the direct opposite of the old urban forms characterised by low densities and the typical "*suburban approach*" as described by Lozano (1990:6). The compact city offers a cheaper alternative. It does not cost as much to provide infrastructure with cheaper service provision per property. Costs of commuting between functional zones of the city are kept to a minimum.

Other contrasts in city form include the integrated versus the segregated city, the non-ecological versus the ecological city. The Integrated city as described by the Development Facilitation Act promotes integration and mixed land use. The realisation of an integrated city can be based on work done by Klaassen (1981) that described urban evolution in terms of urbanisation, suburbanisation and disurbanisation. The compact or integrated city may be hard to achieve to address fragmentation and inequality, based on the fact that people in high –income groups tend to move to the suburbs away from integrated areas.

Another urban form that aims to achieve objectives on urban sustainability includes an ecological city. Friedmann (1973:108) explains the "*eco-city*" as an urban habitat, which is also an ecological field of interdependencies and consists of open space and landscape. This urban form is assigned to cities that make an effort to take responsibility for promoting sustainable development in their use of resources and in their efforts to minimise waste (Wackernagel & Rees, 1999:1-77). Another urban form of importance includes the "*just city*" versus the "*unjust*" city. Harrison *et al.* (2003: 250) describe a "*just city*" as a city that exhibits interventions in response to threats to human rights and marginalisation of certain population groups. The reduction of poverty and narrowing of the income differentials, are major challenges for South African living environments seen within the context of the "*just*" city.

Sustainable development, including a sustainable city, is influenced by housing development, a major feature of the built environment in South Africa.

6.5 LOW COST HOUSING IN SOUTH AFRICA

The report "*Agenda 21 for Sustainable Construction in Developing Countries*" (CSIR, 2001:4) stipulates that sustainability should be seen as an integrative and holistic concept, striving for harmony and balance between the three spheres seen as integrated components of development, namely the biophysical environment, society and culture, and the economy. It stresses the fact that development takes place within human settlements, and the processes of creating and operating these settlements have a major role to play in sustainable development. Human settlements or housing can therefore be seen as important factors in achieving sustainability. The Istanbul Declaration and Habitat Agenda (United Nations, 1996:1) confirms the global importance of creating adequate shelter for all, and creating sustainable settlements in an urbanising world.

The aim is therefore to provide an adequate housing supply that meets housing demand (Public Service Commission, 2003:8). Housing demand should meet the needs of persons of all income levels, age groups and special needs. Housing has several definitions and can be seen as a process, a product and minimum norms and standards. Housing also has a definite effect on the environment (Department of Housing 2000:1; Hardoy *et al.,* 1989:147). Low-cost housing must be managed effectively to ensure sustainability.

Housing as a Process

The Department of Housing (2000:1) emphasises the fact that housing is defined as a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities. The building of a house is a culmination of many planning processes and legislative requirements, which need to be adhered to before the actual housing units, are constructed (Department of Housing 2000:1). Land development and the spatial planning system are crucial to the housing process and are the responsibility of the Department of Land Affairs and the various provincial and local authorities (Department of Housing, 2000:1). Planning processes and principles to which all development and planning processes need to adhere to, include the principles of the Development Facilitation act and the Land Development Objectives, the Integrated Development Planning Process and the

shortened planning approval as noted in the Less Formal Township Establishment Act. For housing projects to be approved at provincial level, a developer must adhere to the prescribed township establishment process (Department of Housing 2000:1).

Housing As A Product And Minimum Norms and Standard

Since its introduction in 1994, the Housing Subsidy Scheme is the primary assistance measure of the National Housing Programme. Households with an income of R 3500 or less per month who have not owned property, and who satisfy a range of other criteria can apply for a subsidy and use it to get housing, either to own or to rent. The Housing Subsidy (up to a maximum of R 16 000) is used to acquire land and the provision of basic municipal service (in accordance with the minimum norms and standards) whilst the remainder is to be utilised for the permanent residential structure (Department of Housing 2000:1).

Housing And Its Impact On The Environment

The Environmental Implementation Plan of the Department of Housing (2000:2) states that the Housing Programme impacts on the environment through being the single largest public investment in land development to contribute to the inefficient use of energy and water resources and the loss of topsoil during construction. It is also pointed out that pollution ofthe environment takes place through the inappropriate provision of associated services.

Informal settlements have a major impact on the environment (Hardoy & Satterthwaite. 1989:148). Unplanned, these settlements are often situated on marginal land (steep slopes and floor planes of rivers and streams) and impact heavily on sensitive eco-systems (Harrison *et al.*, 2003:117). The settlements are notsubjected to proper planning, evaluation and environmental impact assessment. Informal housing projects do not have to comply with standards and their negative impacts on the environment are usually significantly more than formal housing development. The National Department of Housing has no control over informal settlements with the onus being on private landowners or the local authority to legally evict people who have settled on privately owned or state land (Van Der Walt & Pienaar, 2001:67). Solutions to reduce the impact of the Housing Programme on the environment lie in the range of policies and programmes, administered by a range of government departments, the political will and the administrative and financial capacity to implement them.

The Mandate Of The Department Of Housing

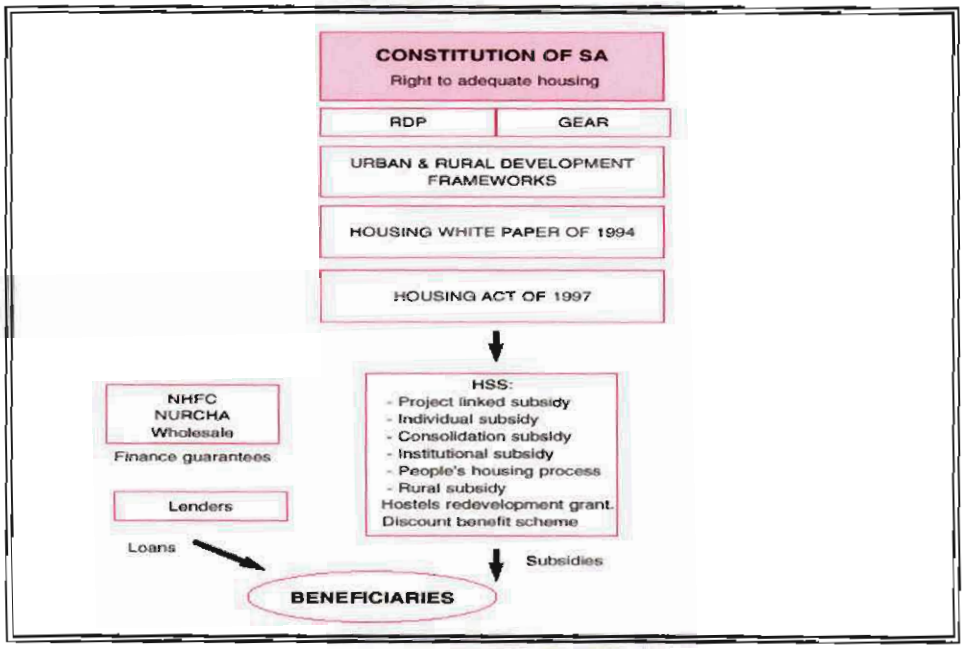
Habitat Agenda

In 1996, at the United Nations Habitat II conference on Sustainable Human Settlements in Instanbul, the South African Government committed itself to the Habitat Agenda for sustainable human settlement. The National Department of Housing is responsible for implementing the Habitat Agenda (Department of Housing, 2000:2).

The Urban Development Framework (UDF), 1997

The Urban Development Framework was produced by the Department of Housing and approved by the cabinet in 1997. It confirms South Africa's commitment to develop sustainable human settlements according to the goals and commitments of Habitat Agenda and Agenda 21 (Department of Housing, 1997:1). The Framework provides a consistent urban development policy for sustainable human settlement development and effective reconstruction and development guidelines, thus guiding the development policies, strategies and actions of all stakeholders in the urban development process. The National Housing Context is shown in figure 6-1 below.

Figure 6-1: The National Housing Context



Source: Public Service Commission (2004:12)

Legislation and policies

The provincial legal framework is derived from the Public Service Commission, (2003:12-16). KwaZulu-Natal legislation is discussed as an example of provincial legislation, as Clairwood is located in this province. National, provincial and local legislation applicable in KwaZulu Natal is as follows:

- ***The National Legislative Framework:*** The Constitution of the Republic of South Africa (Act No. 108 of 1996) stipulates in Section Four that housing is an area of concurrent competence for National and Provincial government. The primary function of provinces with regard to housing is described in the National Housing Act of 1997, and it is stipulated that every provincial government must, after consultation with the provincial organistions representing the municipalities as contemplated in the Constitution, do everything in its power to promote and facilitate the provision of adequate housing in its province within the framework of national housing policy. Provincial governments are encouraged to formulate their own legislation and policies in respect of housing, provided that such legislation does not undermine national legislation. Every provincial government must determine provincial policy in respect of housing development and promote the adoption of provincial housing legislation to ensure effective housing delivery.

The function has been ascribed to provincial governments to create their own policies that further strengthen and support national policy. There is also a need to customise policies to the unique housing needs within each province, which can be very different.

- ***Provincial Legislation and Policies***: The main provincial housing-related legislation includes the KwaZulu-Natal Housing Act of 1998 and the KwaZulu-Natal Housing Amendment Act of 2000. The main elements of the provincial Housing Act establishes the KwaZulu-Natal Housing Development Board and defines its work and powers, establishes the KwaZulu-Natal Housing Fund; describes the role of the provincial housing department, sets out powers and functions of municipalities, provides provisions for grants to occupiers of land in tribal authority areas and includes provision for the publishing of a Provincial Housing Code.
- ***Amendments to KwaZulu-Natal Legislation***: Main amendments were made to the KwaZulu-Natal Housing Amendment Act. The Act, as amended, sets out in greater detail the powers and responsibilities of the provincial housing department as well as the MEC and Housing. It abolishes the KwaZulu-Natal Provincial Housing Board Development, and makes provision for the transfer of assets from the PUB to the KwaZulu-Natal Department of Housing. It makes provision for the enhancement of public participation and provides for the determination of procurement policy in respect of housing development. It allows scope for the regulation of state funded housing, including an eight year pre-emptive clause that provides for the expropriation of land for housing development. The most significant amendment is the eight-year pre-emptive clause, which prohibits a subsidy beneficiary from selling a house within eight years if acquiring the house. This is seen to be an important step in curbing the incidence of beneficiaries selling their houses to buyers far below market price. Another change is the provision for expropriation of land needed for housing. This will reduce the problem of private landowners dramatically inflating the price of land that the provincial housing department has identified for housing development. The amendments have allowed the KwaZulu-Natal Department of Housing to be proactive and cater for the unique needs in the province.
- ***Policies:*** There are several KwaZulu-Natal policies, namely the policy on missing beneficiaries, policy on the breakdown of co-habitation relationship in 2000, policy on municipalities using funds from their housing operating account for community facilities, policy and procedure for material supply, policy directive on individual subsidies, supplementary norms and standards in respect of double residential structures developed on site, policies on disposal of religious sites, decreased beneficiaries and procedures on payment of residual.
- ***Variations on subsidy policy:*** There are two main areas in which provinces are permitted some discretion in the application of the national policy regarding subsidies, namely variations in the subsidy amounts and the proportion of subsidies allocated to municipal services and top-structure; and variations regarding minimum sizes of top-structures. The proportion of the housing subsidy that can be allocated

to municipal services and to the top-structure is set by national policy. At the maximum subsidy amount of R16 0000 that has been applicable up to April 2002, the breakdown is a maximum of R7 500 for municipal services, and R8 500 for top-structures. In conditions where topographical and geo-technical factors increase the costs of construction, or where projects are particularly well located, an additional maximum 15% of the subsidy amount can be added on to the subsidy. In areas with severely adverse geophysical conditions, where the 15% addition to the subsidy is insufficient, MECs have the discretion to approve a variation in the proportion of the subsidy allocated to municipal services and top-structures to accommodate more investment in infrastructure and services. Specific amounts that can be added for services within the subsidy are set for areas with excessive slopes, sandy soil and medium dolomite. The increased amount for services means, however, that the subsidy amount remaining for the top-structure is reduced.

A variation regarding minimum size of top-structures' power is given to MECs to either decrease or increase the minimum size of top-structures. The minimum size of top-structures set by the National Norms and Standards is $30m^2$. In cases where variations have had to be made in the proportion of the subsidy allocated to services and top-structure to accommodate higher infrastructure and services costs, MECs have the power to approve decreases to the national minimum standard of $30m^2$ for top-structures. In such cases the minimum sizes of top-structures can either be reduced to a minimum of $27m^2$ where the variation relates to excessive slopes or sandy soil, or 24^2 where the variation relates to medium dolomite. MECs may also allow an increase in the minimum size of the top-structure in provinces where lower construction costs make it possible to cap the subsidy for services at a lower amount than R7 500,64.

The ability to deliver larger top-structures than the national $30m^2$ minimum can be explained by a number of factors, such as more favourable geo-technical and topographical conditions for construction, lower prices for land, for on-site services and for materials, sharing of structure parts (e.g. walls in high density housing), the option of a more simplified structure (e.g. walls not plastered, no ceiling, fewer internal rooms) in favour of a larger floor space. Some reservations were expressed during interviews with provincial housing departments about the ability of provinces to meet the minimum unit sizes where they had been set above the national norm.

Within the framework set by national housing legislation and policy, provinces thus have a fair degree of scope to formulate their own policy priorities, and determine variations to national policies. The following sub-sections review the extent to which the nine provinces have formulated their own housing legislation and policies, the extent to which provincial legislation is aligned with national legislation and policy, and what policy priorities and gaps have been identified.

- ***Provincial policy priorities and gaps:*** HIV/AIDS has become a key issue and in KwaZulu-Natal two projects have been approved specifically for HIV/AIDS projects, consistuting 183 houses with a value of R 2 360 700. The KwaZulu-Natal Department of Housing is attempting to make policies more proactive. In terms of the new procurement policy it, for example, recognises that many municipalities struggle to find suitable land. A policy response will be developed to counteract this project.

Roles and responsibilities

Housing delivery since 1994 up to July 2002 has been as follows: 273 802 subsidies have been approved, 226 065 top-structures have been completed and there are 289 projects in progress. KwaZulu-Natal uses a subsidy database system which differs from those of other provinces. It utilises the Inform system as it was felt to be better than the CSIR system. The CSIR database system has been unable to accommodate certain management tools such as payment swabs. The national system is good for statistics but inadequate for project management. KwaZulu-Natal will eventually go onto the national system, once it is updated. KwaZulu-Natal also utilises its own subsidy administration system (Public Service Commission, 2003: 14)

The KwaZulu-Natal Department of Housing states that the number of subsidies approved is as follows: 1378 consolidation (R 11 021 437), 327 individual (R 4 379 500), 3318 institutional (R 52 656 036), 27 921 project-linked subsidies (R 460 282 034) and relocation assistance was given to 53 at a value of R 848 000. The total number approved is 32 996 and the total value is R 529 187 007. Project-linked subsidies constitute the majority and individual subsidies the minority.

Most subsidies in KwaZulu-Natal were allocated to beneficiaries in the lowest income band of R 0 to R 1500 per month (Public Service Commission, 2003: 18).

The National Housing Act describes the roles and responsibilities of the various spheres of government in the implementation of housing as discussed below:

- The ***National Department of Housing*** is responsible for determining policy, needs and requirements, legal and funding frameworks and future policy. The role of National Government, acting through the Minister of Housing, also includes designing of the HSS and the allocation of money for other support systems, developing national norms and standards, which will be systematised into a National Housing Code, setting national delivery goals through a multi-year plan which determines allocation of funds from the South African Housing Fund, monitoring performance related to the delivery goals and funding allocations, assisting and developing capacity of provincial and local government to meet goals. The

main actors at national level are the National Housing Minister responsible for National Housing Policy, in consultation with the Housing MinMEC, which consists of the Provincial Members of the Executive Councils (MECs) responsible for housing and a representative of the South African Local Government Association (SALGA). National Department of Housing manages national strategy and programmes, and facilitates and monitors national programmes.

- ***Provincial government** is* responsible for housing policies, determining housing need and drawing up procedures in terms of national guidelines according to the National Housing Code. Provincial Government is also responsible for subsidy allocation from the National Housing Fund and allocates it according to need and performance. Provincial Government is also responsible for calling for tenders, evaluating proposals, allocating funds to developers and entering into agreements with contractors and controlling subsidy payouts on a milestone-based progress payment scheme. The detailed role of Provincial Government is to formulate provincial policy within the framework of National Housing Policy. The policy must facilitate the provision of adequate housing in the province. Provincial Government must promote provincial legislation that ensures effective housing delivery.

  Provincial Government must strengthen and support municipalities to exercise their role and intervene where municipalities cannot or do not perform their duties as defined by the Act. Provincial Government must also prepare and maintain a multi-year provincial housing plan. This plan must outline the execution of housing programmes in the province. These programmes must be in line with the National Housing Policy.

  The main actors at the provincial level are as follows: the MEC for Housing who is responsible for the provincial housing policy and implementation, the Provincial Housing Department who manages provincial strategy, facilitates project applications, evaluates and recommends projects, and monitors projects.

  Until 2001 Provincial Housing Development Boards (PHDB) approved allocation of housing subsidies. PHDBs have now generally been disbanded. The Housing Amendment Act has given the Board's powers to the MEC. The Provincial Housing Department now allocates subsidies to local authorities for projects.
- The ***municipalities and local government*** were mandated by the Local Government Transitions Act of 1993 and the Municipal Systems Act of 1998 to develop their areas of jurisdiction and to take all reasonable and necessary steps within the framework of national and provincial housing legislation to ensure that the inhabitants of its area of jurisdiction have access to adequate housing on a progressive basis. Removal of conditions not conducive to the health and safety of the inhabitants of its area of

jurisdiction is required, and services in respect of water, sanitation, electricity, roads, storm water drainage and transport are to be provided in a manner, which is economically efficient. Local government is also responsible for prioritising housing needs, identifying projects, providing land, facilitating participation, providing database with beneficiaries, providing bulk services, receiving and approval of township establishment applications from developers (if Provincial Ordinance route is followed, otherwise it goes to Province, e.g. Less Formal Township Establishment or DFA depending on province). Local government is also responsible for approving building plans, providing service connections, occupation certificates and service connections. Local governments have also received the mandate to promote development within their areas and to act as developers in the implementation of housing projects.

Approval of projects is now done by means of public participation meetings conducted during the IDP planning process whereby core needs are identified and Community Forums are held.

Housing programmes

Since 1994 the "new" government has introduced three national housing programmes described in the National Housing Code: a User -Friendly Guide Part 3:

- The Housing Subsidy Scheme
- The Discount Benefit Scheme is a programme in terms of which long-term tenants of houses built by pre-1994 governments could obtain a state grant to help finance the purchase of the houses at discounted prices (in most cases covering the complete purchase price).

Public Sector Hostels Redevelopment Programme, which is a programme for creating better living conditions in single-sex hostels built previously for house migrant workers coming to the cities without their families.

All the programmes are aimed at creating habitable communities and promoting sustainable development envisioned by the Habitat Agenda (1996:1) and will be discussed in the section to follow.

The bulk infrastructures grant provided was meant to prevent the "abuse" of the housing subsidy to pay for infrastructure services that should be paid out of capital budgets of local authorities. In practice, however, this "abuse" did sometimes take place, thus influencing the sustainability of housing programmes.

Housing delivery is mainly done through the Housing Subsidy Scheme. It is one of the National Government's housing programmes that have been in place since 1994. It is a once-off capital subsidy or grant to a qualifying beneficiary and is intended to be used either by poor people as equity to obtain first-time home-ownership, or by institutions specially set up to provide affordable alternative tenure options such as rental to people on low income (Harrison *et al.*, 2003:155-156).

It is a capital subsidy (sometimes called a "*brick-and-mortar*" subsidy), which means it can only be used to pay for the initial capital cost of building or purchasing a dwelling unit, and not for interest rate subsidies, income allowances, and so on.

Harrison *et al.* (2003:156-157) indicate that the idea is to use government funds to help people who are usually unable to satisfy their housing needs through the normal construction or property "markets" (houses too expensive, no access to loans, etc.) to obtain a dwelling unit of a reasonable standard and with some basic services to own or to rent.

Funding for this programme is allocated from the National Housing Fund (part of treasury's budget for National Government expenditure) to the provinces according to their need and past performance. The amount allocated to a province is in turn divided up by the provincial government and allocated to municipal areas, types of subsidy, etc. Provincial Housing Development Boards or PHDBs (Provincial Housing Boards in the past) receive and approve subsidy applications and administer the spending of subsidies in accordance with procedures contained in successive Implementation Manuals issued by the National Department of Housing (DoH) from 1994 onward (Kayamandi, 2004:3).

Kayamandi (2004:4) indicates that the subsidy must be used to give a citizen or permanent resident access,on a progressive or incremental basis, to the following:

- A permanent residential structure with secure tenure, ensuring internal and external privacy and providing adequate protection against the elements.
- Potable water, adequate sanitary facilities and domestic energy supply.

A portion of the subsidy may, therefore, be used to provide land and certain basic (internal) municipal services (remember BCIG/CMIP for bulk services, etc.) while the balance must be used to provide a permanent residential structure.

The National Housing Code is a user-friendly guide and it describes that a permanent residential structure can be any one of the following:

- A newly constructed single house
- A housing unit in a newly constructed multiple unit complex (e.g. townhouse, flat, etc.)
- Housing unit in a refurbished or converted building
- Existing housing of any type
- Upgrading of existing in-service or minimally serviced settlements
- A starter unit in an incremental housing scheme where a serviced site is provided in the first stage, and the residual of the subsidy to build a housing unit later

The subsidy may not be used where the total product price exceeds R65 000.00. The subsidy may only be used where the beneficiary will acquire secure tenure (the right to occupy, use or own property) that can be registered with a competent authority such as the Deeds Registrar. Generally this means registered title, leasehold, 99-year leasehold or Deed of Grant (Department of Housing, 1998).

In the case of Institutional Subsidy the subsidy goes to the Institution (company, etc.) that develops and manages the stock (e.g. for rental) and who must acquire secure tenure of the land. In this case the beneficiary gets security of tenure in the form of the right to occupy the dwelling for as long as they abide by the rules and pay their dues (Department of Housing, 1998).

In case of Rural Subsidy the beneficiaries must have undisputed informal land rights in terms of the Protection of Informal Land Rights Act, 1996. Rural Subsidy could also be used in certain "urban" or "peri-urban" areas where no formal land rights are yet possible as in some parts of former homelands. Rural Subsidy is seen as a subsidy of last resort in other words, all other types must first be considered as an alternative and only once it is clear that the project will not qualify in terms of the rules for the other types of subsidy may an application for Rural Subsidy be considered (Department of Housing, 1998).

The National Housing Code Guide (1998) prescribes the following with regard to who qualifies for subsidies, namely that any subsidy is linked to a qualifying beneficiary. Subsidies may be physically paid out to private developers (in project-linked applications for instance), or to Social Housing Institutions who own and manage housing stock (e.g. for rental), but ultimately the subsidy acquires ownership of or the right to occupy a dwelling unit for an individual qualifying beneficiary.

A beneficiary is a person who qualifies for a particular state subsidy or housing assistance measured in terms of certain qualifying criteria. According to these criteria a person qualifies for the housing subsidy if the person is:

- Married (Civil Law or Customary Union) or habitually cohabits with another person, or has proved financial dependents (no singles therefore, unless with dependents).
- Lawfully resident in SA (citizenship or permanent resident permit).
- Competent to contract.
- Gross monthly house hold income less than R3500
- Not previously benefited from government funding (exceptions are persons who qualify for relocation assistance, or are disabled, or have previously received a serviced site and now qualify for consolidation or "top-up" subsidies). In case of divorce the divorce order will determine eligibility.
- First-time property owner (except in cases of relocation assistance, consolidation subsidy and disabled persons).

All applications for subsidy must be accompanied by documented proof of the above (marriage certificates, pay slips, copies of an identity book or sworn affidavits where no documents exist).

A person qualifies only once in his/her lifetime (certain exceptions will be dealt with later). The Department maintains a national database against which the above can be checked. Once a person's name appears on the database as having received subsidy or owned property before, all future applications will be rejected (Kayamandi, 2004:7).

The housing subsidy scheme is not a programme that should be seen in isolation. There is a wide range of policy initiatives, Acts and institutions that have been created and are being implemented in terms of the housing subsidy scheme. The housing subsidy scheme is located within a broader set of policies and frameworks (described in Figure 5-1) such as the Constitution of the Republic of South Africa (1996), the Reconstruction and development programme (1996), the Growth, Employment and Redistribution (GEAR) strategy of 1996, the Urban and Rural Development Frameworks (1996), the Housing White Paper of 1994, the Housing Act of 1997, the Housing Subsidy Programme, the Subsidy Implementation Manual, the Housing Norms and Standards document, and others. However, housing policy and procedures are collected together into a National Housing Code.

The housing subsidy scheme consists of the following housing programmes (Calamander, 2004:4):

- Project-linked subsidies
- Individual subsidies
- Consolidation subsidies
- Institutional subsidies
- Relocation assistance
- Peoples housing process
- Rural subsidy

The different subsidies are summarised as follows (Calamander, 2004:6):

- ***Project – linked subsidy***: All individuals may benefit from a subsidy but must do it by means of applying as beneficiaries to a housing development project. The individual must be a first time home-owner and obtain ownership in new development. Fixed amounts are given according to household income with a

maximum of R 16 000. The municipality donates the land. The subsidy may be utilised for internal services and to build the house. Norms and standards with regard to the minimum requirements were first published in 1999. There were cases where the available lands were too little and the properties had to be reduced to 120m². The minimum level of services is also described, e.g. access to every erf is a prerequisite, a functioning sanitation system, a graded or gravelled road and other stipulations.

Standards may not be reduced but can be increased if the municipalities decide to add value and contribute financially. The size of the housing structure is determined at 50m². Design requirements are given. Inflation and building cost escalation are taken into consideration when the subsidy amounts are agreed upon.

The estimated building costs in 1994 were R333/m². An amount of R 8500 could be spent on services but the rest had to be spent on the housing structure. Where services cost more due to geophysical variation, the provincial MEC can increase the amount allocated. In summary, project-linked and individual subsidies are intended to enable beneficiaries to acquire ownership of a housing unit for the first time. These subsidies cover the cost of the land, internal infrastructure and the actual housing unit (or top-structure). Most subsidies have been project-linked subsidies, where a large number of subsidies are applied for in order to be able to implement a specific housing project. Individual households apply for individual subsidies. In the case of credit-linked subsidies, people apply for a subsidy via a bank when they apply for a housing loan. Individual subsidies have generally been discontinued, due to a combination of problems of corruption with non-credit–linked subsidies and due to lack of availability of mortgage credit for subsidy beneficiaries.

- ***Individual subsidy***: An individual subsidy allows individuals to acquire ownership of a unit according to an existing residential policy or one in a project not approved by the Provincial Housing Development Board (PHDB) as a project in terms of the project-linked subsidy. The subsidy is not used often and is difficult to administer. The amounts are the same as for the project-linked subsidies. The subsidy is paid out to developer /seller upon certified completion and transfer to the beneficiary.
- ***Consolidation subsidy***: This subsidy provides a "top-up" amount to beneficiaries for providing or upgrading a dwelling on a site that was previously serviced with state funds and is already "owned" by the beneficiary. It is only available to households earning less than R1500 per month. There are several conditions that apply, e.g. applications are done on a project basis, sites are serviced to a certain standard, applicants have registered properties, a Community Based Organisation must be involved, and a body responsible for implementation must be available. In some circumstances under the previous dispensation a parastatal, IDT (Independent Development Trust) provided R 7500 for the provision of sites and services. These beneficiaries are not excluded from the current criteria and may apply for

subsidy and are compensated by means of consolidation top-up where, for example, R 8500 is given. If a subsidy of R 16 000 is usually given, R 7500 is subtracted, an amount of R 8 500 remains. The subsidy depends on the combined household income. Application for consolidated houses must be done if there is already an existing house on a property but the person has never received a subsidy. A subsidy may not be passed on to someone else.

Where consolidated subsidies are used it is determined that a community- based organisation must be the developer (with technical assistance from consultants, contractor or local authorities) or a municipality or a company. The subsidy can be used for building materials, starter houses, complete houses or extensions to houses built by any arrangement. Subsidies are paid into a specified account where individual progress payouts are administered. The developer/private contractor appoints administrators, auditors and sets up a project database to track payments and progress. Payments can be made against an acceptable form of delivery and adequate internal controls or once the project has beencompleted. In summary, consolidation subsidies are intended to allow households who received ownership of only a serviced site prior to the new subsidy scheme, to be able to receive a top-up subsidy to build a new house or improve their existing house. Consolidation subsidies are limited to households with incomes below R1500 per month.

- ***Institutional subsidy***: This subsidy is paid to an institution set up according to rules to provide beneficiaries earning less than R 3500 per month with forms of tenure other than immediate individual ownership (rental, installment sale, share –block or cooperative scheme). This type of subsidy is used as equity by the institution to offset part of the capital cost of development. The subsidy is pro-poor. A subsidy is used as part of development costs and only the balance per unit needs to be borrowed to complete the development. This reduces the cost of capital, meaning smaller loan repayments that can then translate into lower rental than those charged by private commercial developers who must pay for their capital at market rates. Housing institutions are independent from government legal entities, e.g. a closed corporation, a Section 21 company, a cooperative, an association and a share block company. All these are incorporated in terms of certain Acts.

  The main aim is acquisition, development and holding of immovable property stock for occupation by both qualifying and non-qualifying beneficiaries for a minimum period of four years before transferring ownership. Most institutions provide and manage rental stock to beneficiaries without the option of installment sales. Subsidies are not to be used for setting up costs and running costs of the institution. The costs should be covered by grants and loans and should be funded out of the operating income of the institution. Current regulations require housing to be held by an institution for a minimum of 4 years before transfer to individual ownership or Sectional Title. The monthly costs for institutional housing are

usually higher than for individual ownership, because all residents need to contribute to the operational costs of the social housing institution. Actual operating costs for institutional housing, including water and electricity, but excluding loan repayments, have typically been at least R450 per month for high rise flats (with lifts) and R350 p.m. for low-rise flats. The capital costs of institutional housing units are usually more expensive than the subsidy amount. This additional amount is recovered from beneficiaries through a monthly loan repayment.

Most institutional housing schemes are therefore aimed at households earning R1500 to R3500 per month. The housing institution owns the housing and is responsible for managing it and collecting rents or levies, and usually takes the form of a housing association or housing co-operative. Because institutional subsidies are the only subsidies that can be used for tenure other than individual ownership, they are the only subsidies that can be used for building or converting blocks of flats. The Social Housing Foundation (SHF), established in 1997, provides training, advice, and technical support to social housing institutions.

- ***Rural subsidy***: Most subsidies can only be used to finance housing, which leads to secure, registered property rights. It is problematic, as several areas have no formal land rights as yet. This led to the development of the rural subsidy to provide for people who have undisputed informal land rights in terms of legislation developed in 1996. The subsidy is project –based and the provincial government is given discretion to allow for a wide variety of applications. A developer needs to implement project as well as a financial agents to administer the payment of subsidies.

  In summary, rural housing subsidies are available within the context of approved projects but are not based on individual ownership as they are intended for beneficiaries who enjoy only functional tenure rights. The subsidies can be allocated on uncontested informal land rights as per the Interim Protection of Informal Land Rights Act of 1996, as long as there is proof of the right.

- ***Relocation assistance***: Mechanism introduced in 1994. It was set up in accordance with a record of Understanding between government and certain mortgage lenders via the Banking Council of SA. It takes the form of financial assistance and enables owners of property, earning less than R 3500 per month, and who have defaulted on previous home loans and who can no longer afford to stay on to acquire alternative accommodation. Houses in townships were built and bonds were given by places like PERM, Khayalethu, Barclays Bank.

After 1994 no bonds were approved in certain township areas as risks were too high. An association of mortgage lenders was set up whereby terms of understanding were reached to minimise risk of investment in certain areas. A government commitment was undertaken in the form of the Mortgage Indemnity Fund. Banks were not going to repossess property and SERVCON was appointed to facilitate public participation processes to promote payment of bonds.

- ***People's housing process***: The PHP is not a separate subsidy instrument but an alternative process. It is aimed at supporting households who wish to enhance their subsidies by building or organising building of their own houses. The process can apply to different categories of potential beneficiaries (Department of Housing, 1998):

1. Owners with previous-services stands without top-structures (Consolidation)
2. Non –owners and first time owners (Project-linked or Institutional)
3. Occupants without any rights (Project-linked or Institutional Subsidy)
4. Landless people occupying back yards, shacks, hostels, rooms, etc.

Kayamandi (2004:6) points out that a condition is that a Housing Support Organisation must be established. The HSO must be a Section 21 company, a trust, a voluntary organisation, a cooperative.

Any of the following could act as a Support Organisation: a provincial government, a municipality, a community grouping, an NGO, a parastatal, a development corporation or a private sector institution or developer.

An NGO, CBO or municipality must establish the HSO. It must have an accessible office known as a Housing Support Centre. It must open an interest bearing account, appoint a certifier who inspects works carried out by beneficiaries and certifies completion of works, and appoint an Account Administrator to administer subsidy payouts in conjunction with the certification process. The People's Housing Process (PHP) policy facilitates beneficiary involvement in housing delivery projects.

This policy provides for PHP establishment grants of up to R570 per subsidy to be used in assisting communities who are responsible for managing their own housing delivery, either by actually building houses for themselves or by managing the building of their own houses. The establishment grant can be used to cover the costs of support mechanisms such as housing support centres and community staff to manage the project. The People's Housing Partnership Trust (PHPT) was established in order to promote and support the People's Housing Process approach.

Norms and standards

Principles applying to all housing development are as follows (Housing Act, 1997):

- Prioritise the needs of the poor.
- Provide as wide a choice as possible of housing and tenure options.
- Be economically, fiscally, socially and financially affordable and sustainable.
- Be based on integrated development planning.
- Consider impact on the environment.
- Lead to the establishment of socially and economically viable communities.
- Empower local communities and build capacity for self-management through skills transfer.
- Promote social, economic and physical integration in urban and rural areas.
- Provide gender equality and address the housing needs of marginalised and special needs groups.
- Involve stakeholders and beneficiaries through active participation in the process.
- Be administered in a fair, transparent and accountable manner.
- Be implemented in conformity with national policy across the provinces, but with due consideration for special needs and circumstances within each province.

Implementation Process

Kayamandi (2004:15) states that subsidies are paid out to developers for the construction of dwelling units for immediate individual ownership by a qualifying beneficiary. Developers can be private developers who submit design and build proposals to the PHDB, or a municipality acting as developer who uses contractors for the actual building work. The process is usually more or less as follows:

- PHDB calls for project proposals (say for 1500 units in a certain area).
- Developer identifies suitable available land (or it would be identified by the municipality).

- Developer prepares and submits project proposal in accordance with guidelines and procedures of PHDB which are based on national guidelines as contained in Implementation Manuals.
- PHDB evaluates proposals and awards contract.
- PHDB and developer enter into standard subsidy agreement.
- Developer purchases the land (or more commonly enters into a land availability agreement with the owner – usually a municipality).
- Developer applies for township establishment if required, enters into a bulk services availability agreement with the municipality, and installs internal services.
- Developer builds the top-structures.
- Developer identifies required number of qualifying beneficiaries (usually from provincial or municipal waiting lists on a first come-first serve basis), collects required information and documentation from each individual beneficiary, prepares and submits individual applications to PHDB for approval.
- PHDB checks individual applications for procedural correctness and against national database to avoid situations where people benefit from subsidy twice.
- Developer enters into sale agreements with beneficiaries and starts conveyancing process (transfer of properties to beneficiaries). (Sale agreement usually based on principle of consecutive transfers.)

The milestones for progress payments to the developer are described by Kayamandi (2004:15):

- Municipal approval of engineering service specifications
- Approval of General Plan
- Issuing of Services Completion Certificate
- Transfer of property to beneficiary
- At three different stages of top-structure construction

Before November 1995 there were only two milestone payments. Projects started on this basis but continuing after November 1995 were allowed to be converted to the 5-stage payment system.

6.6 SUSTAINABILITY ISSUES IN LOW-COST HOUSING BETWEEN 1994 AND 2004

There are several issues that determine sustainability of the built environment discussed in this section. These issues include South African citizens' right to adequate housing, the implementation of the housing

subsidy scheme and the success of its delivery, emerging contractors, lessons that can be learnt from the history of past policies, progress, beneficiary satisfaction, for example.

The Right To Adequate Housing

In 2000 the Department of Housing published "*Housing for all in South Africa: a Review of the meaning and the right to adequate housing*". The key findings of the report paint a generally negative picture of the performance of the subsidy scheme up to 1999. Key issues eminent from this report are:

- Beneficiaries generally have a poor understanding of the Housing Subsidy Scheme. Many beneficiaries did not know they were only to receive small 'starter' houses, and not four-roomed houses. In addition, many had not even been informed of the housing subsidy scheme and those who did know about it, were usually informed by some kind of civic or political organisation.
- The eligibility criteria of the scheme exclude many people, especially young adults between 18 and 21, and single people.
- Social compacts have often failed.
- There is generally a low level of community consultation and participation in all aspects of projects, i.e. location, layout and design, provision and financing of services, accessibility of facilities, for example. Part of the reason for this has been inadequate funds made available for capacity building,
- Projects are being implemented in isolation, with a lack of integrated service delivery by different government departments.
- Community consultation and participation is limited.
- A lack of choice is provided to beneficiaries.

Reference has often been made to the housing process or housing processes, and various reports that have been published, have recommended that the management of these processes should improve. This has led to questions on what processes and what management processes would be applicable. The report, " *Housing for all in South Africa: a Review of the meaning and the right to adequate housing* includes a study of twelve "*models*" that contribute to the clarification of best housing management processes. This is indicated to be

generic for all housing management aspects including the management of the implementation process of the housing subsidy scheme.

Housing and construction is viewed as a sector of comprehensive development and an illustration of housing from a systems viewpoint. Furthermore, the integration and interpretation of the various 'models' reviewed in the report have culminated in an integrated framework that clarifies processes, key role players and their primary responsibilities within each of nine processes. It is concluded that process management is the most appropriate approach to housing management.

Furthermore the report indicates that housing management should be practised at three distinct levels: policy and strategy, programme, and project levels. Successful management of housing processes should result in human, social, institutional and physical development. This would be a step towards achieving the goal of empowered communities and improved living environments.

Some important characteristics of the process monitoring function in development programmes and projects, as supplied in the report, are as follows:

- Process-oriented work involves continuous information gathering over a period of programme work.
- Rather than a 'snap-shot' view, it is concerned with the dynamics of the development process.
- Process monitoring is oriented towards planning, revision and evaluation, although it is also concerned with implementation (which is emphasised more in a "*project cycle*" approach).
- Process monitoring focuses on strategic and tactical action as a methodology and it considers possible reactions of other role-players, in other words, it is interpretative in nature and not only concerned with data and information gathering.
- The process approach is inductive and open-ended. Instead of being only narrowed down to expected outputs or impacts, it includes an account of events, relationships and impacts. Thus, it moves away from closed, static, predictable and controllable techno-rational systems and it also considers areas beyond management control, which influence project successes. It also allows for contextual critical reflection on the definition, problems and solutions of the project.
- Process monitoring is usually external to project structures and routine flow of programme activities and information systems. There is, however, in some instances, rejection of the idea of 'access to uncensored field experience'. In practice, information boundaries are often maintained.

- Explicit recognition is given to the different perspectives and judgements of "*monitors*", the inter-subjectivity of the monitoring process.

The Housing Subsidy Scheme

A paper undertaken by Mary Tomlinson, "*From principle to practice: Implementers' views on the new housing subsidy scheme*" (1995) reports and analyses the results of a housing project. The investigation was conducted to determine the degree of commitment to the new policy, demonstrated at the provincial level, where it, at that time, was meant to be implemented. It sought to test whether provincial Minister of the Executive Councils (MECs) and the previous Provincial Housing Boards were committed to the new policy, and were implementing it in a manner consistent with the guidelines established by the national department. It also investigated whether provinces believed the policy needed to be scraped, or, if not, which obstacles they identified during its implementation, and how they believedthese should be addressed.

The report indicates that from the time of its launch at the end of March 1994 until the Housing Arrangements Act was amended in July, the four Rural Housing Boards (RHB) administered the subsidy scheme. Even after they had been replaced by PHBs, the four original boards continued to administer the scheme while the new structures were establishing themselves. For example, the Transvaal RHB found itself responsible for allocating subsidies for Gauteng, North West, Mpumulanga and Northern Province during the scheme's fist year. In short, most provinces endorsed the policy in principle, but practice suggested otherwise. More specifically the provinces indicated that the subsidy scheme was regularly being modified, through the addition of additional resources.

The following relevant comments are provided with regard to the standards of housing approved in the Provinces:

- ***Free State*:** This is the only Province with a formal minimum standard, set out in its own White Paper on housing. The Province indicated that the provision of sites and services were not enough to ensure the enhancement of living standards in the province. The minimum standard recommended is $40m^2$, divided into rooms. The Free State's PHB responded to this position by adopting a set of principles to govern subsidy allocations. First the subsidy must be viewed as a contribution to meeting beneficiaries' housing needs. Everyone, including the unemployed, are expected to contribute something to his/her own

housing. Secondly, there must be separate living, sleeping and bathing areas. Thirdly, allocations to projects are only finalised once discussions have been held with consumers to determine acceptability of the product on offer. Using guidelines in the White Paper along with its own, it still practices certain flexibilities on standards. Low incomes may necessitate a lower standard than the $40m^2$, for example. In short, the product must be matched to the affordability level of the consumer.

- ***North West***: No minimum standards are dictated. The affordability level of the household and the amount of the subsidy set the limits. The PHB does, however, have guidelines to test the acceptability of products offered by developers. The structure must protect the household from the elements, it must have four walls and a roof. The Province also ensures that no more than half of the subsidy amount (for the lowest income beneficiaries) is spent on pipes in the ground, so that the other half is left for the top-structure. It also allows the community to decide on the standards of services.

- ***Mpumalanga***: This province asserts that R15 000 subsidy is not enough to adequately house people. Houses of $40m^2$ are not promised, because it is realised that the poorest of the poor would not be able to access them. The subsidy is rather viewed as a way of getting households started on a housing opportunity. The subsidy is an incentive and not an end in itself. Consumers must accept incremental housing, but must be educated to do so. The PHB has not taken formal policy decision on standards, but tries not to approve stands smaller than $250m^2$ and top-structures smaller than $22m^2$. Standards generally reflect the cost of land and infrastructure throughout the province, with the board attempting to deliver as much as possible, depending on where the project is located and what the community will accept. It just ensures that apartheid planning is not perpetuated by any of its decisions. There has been controversy over claims that Mpumulanga is providing hidden subsidies to its recipients, because local authorities donate serviced land to housing projects.

- ***Northern Cape***: This is the largest province, with the smallest population and it receives the smallest allocation from the housing budget, namely 3%. This Province encourages people to view the subsidy as an incentive. Due to the size of the province, transporting building materials is very expensive. What the subsidy will provide depends on the location – a site with a slab, roof and bathroom outside Kimberley, or a two-room structure without waterborne sewerage, for example, in the Kalahari. The Northern Cape admits to modifying the policy by not disbursing funds on a first-come first-served basis, as specified in the policy, but rather by spreading money equitably across the province, with every community receiving something. But within a project, subsidies are allocated on the prescribed basis.

- ***KwaZulu Natal***: The Province indicates that the subsidy schemes guidelines are followed to the letter, although there is pressure from the provincial legislature for a higher standard than the subsidy can deliver. The MEC, PHB and secretariat all agree that the subsidy's aim is to provide access to housing

opportunity. The province has not applied guidelines on standards, leaving those to local authorities. But expensive land servicing costs generally mean that the subsidy can only provide a serviced site with possibly a small amount for a top-structure. Communities are therefore allowed to choose whether they want an expensively serviced site with little or no top-structure, or a more basic level of servicing with more money left for the top-structure.

- ***Gauteng***: The MEC indicates that developers claim that he has set a standard of a four-roomed house for the province, and that they are unhappy because he does not encourage communities to accept that offer. But the MEC denies that he is the problem, and notes that it is a misconception that he wants to build mansions. Rather, he claims it is the people themselves who reject some of the products developers offer. Gauteng's PHB has set some minimum standards to govern which applications it will approve of. For example, sites must be at least 250m^2 and it frowns on any structure less than 22m^2. While the board says it is implementing the policy in terms of national guidelines, it admits that, similar to Mpumulanga, it seeks to enhance the amount available to the household wherever it can to push up the standard, hence it has also been accused of providing a double or hidden subsidy.
- ***Northern Province***: This province indicated that it follows national policy to the letter, and does not set minimum standards beyond those that the subsidy provides. However, it does encourage local authorities to offer land and loans, both viewed at the national level as a double or hidden subsidy, to recipients.
- ***Western Cape:*** Because of the high water table in the Cape, indications are that a need for a higher level of services than elsewhere in the country is required. The subsidy amount barely covers servicing a site. When coupled with the high cost of urban land, the size of a serviced site becomes unusually small, for example, 120m^2. Where the land price and cost of servicing the site is somewhat lower, the average size of serviced sites is 180m^2 to 200m^2. To address these obstacles, the Western Cape is allowing its beneficiaries to subtract the capital cost of trading, service (water, electricity and sewerage) from the price of the stand. The costs of these are then recovered through tariffs. A variety of options are offered, such as 20m^2 and 24 m^2 units with the toilet outside; core houses with a toilet inside; and simply a roof with a toilet.
- ***Eastern Cape***: When the costs are added together, such as developers' profit (R1000), VAT (R2000) and consulting fees (R1000), they are left with R11 000 to service the land and erect a toilet. They are unhappy with this and would like to set their own standards, such as serviced sites between 350m^2 and 500m^2 and starter houses from 37m^2 to 40m^2.

Developers' Perspectives On The Government Housing Subsidy Scheme 1995

Mary Tomlinson (1995:2) undertook another study in 1995 focusing specifically on determining problems faced by developers in completing projects funded by the housing subsidies as determined through the evaluation of sixty-one projects. In an attempt to establish the speed of the process and the sources of delay, indications on the key stages in the process were evaluated.

However, the main part of this report focuses on technical difficulties experienced during the planning process and not on the top-structures.

Relevant technical hindrances that were mentioned with regard to developers are as follows:

- Problems experienced in establishing the level of contribution that the developer should make toward the bulk service and connector fees.
- Access to end-user finance is a definite problem experienced by beneficiaries.
- Problems are experienced in identifying local builders with appropriate skills.
- Problems are experienced in securing agreements with local builders, for example disagreements over remuneration, quality disputes, control over the building process.

The Role Played By Emerging Contractors In The Government's Low-Cost Housing Programme

A key survey finding in reports undertaken by the Department of Housing in 2000, titled "*The Role played by Emerging Contractors in the Government 's Low-Cost Housing Programme*", revealed that emerging contractors are extensively involved in the delivery process of government's, subsidised low-cost housing. However, it is also indicated that unfortunately the type of employment provided by these projects is not sustainable due to artificial barriers to movement of labour from one locality to the other. Local residents and their leadership insist on the employment of local residents and as long as this practice persists, the report indicates that it will not be possible to sustain any job creation flowing out of housing projects (Department of Housing, 2000:4).

The report indicates the following additional problems experienced by emerging contractors in the delivery process:

- Access to credit as emerging contractors continue to depend on project leaders for capital.

- Material management skills have to be developed as contractors lack necessary skills to negotiate good deals with suppliers of building materials, with resultant higher prices for materials and higher prices demanded from project leaders.
- Cash flow management must be taught, as cash flow problems manifested in shortage of materials and inability to pay labourers periodically, which in turn led to disputes and even work stoppages.
- Quality control has to be introduced as low skill levels of emerging contractors only improve later on in the project with provision of training. During the initial stages of projects, quality is sacrificed to provide the necessary skills.
- Project management skills have to be taught as contractors lack project management skills and lack work schedule planning skills. The lack of management skills and proper planning result in severe problems such as shortage of materials, contractors not observing time frames, contractors not fulfilling contracts with labourers, disputes between contractors and labourers over the agreed wage and delay in payment of labour due to cash flow problems.
- Training must be provided. To some extent training is obtained by exposure during a project's life cycle, and skills are transferred mainly where semi-skilled labour is placed next to skilled labour. No structured formal training, suitable for accreditation, is taking place.
- Contractors experience restraints of trade due to the activities of local committees, the political discrimination and nepotism.

The following positive effects of utilising emerging contractors are also noted:

- Employment creation is possible as emerging sub-contracting sectors create a number of employment opportunities for local unskilled labour.
- Skills transfer is possible as the employment of unskilled and semi-skilled labour alongside skilled labour provides an opportunity for the locals to informally learn the craft they become exposed to.

Promotion of emerging contractors will lead to an increase in their skill, which will impact on the quality of the work they provide. A good quality product will be developed and sustainability of the built environment will be ensured. Promotion of emerging contracts is done as follows:

- ***Provision of training:*** To succeed in redressing skewed business ownership in the construction sub sectors, it is proposed that entrepreneur training and development programmes be put in place to train emerging contractors on aspects such as project management, financial management, materials management and other relevant aspects. An education campaign to inform emerging contractors of available contracting entrepreneurial training programmes that will lead to accreditation in line with South African Qualifications Authority, is required. The establishment of a Construction Industry Development Board (CIDB) is suggested.
- ***Access to finance***: Most emerging contractors are not aware of services provided by NURCHA or avoid taking risks. It is proposed that an educational programme be put in place to encourage emerging contractors to utilise this facility.
- ***Joint ventures***: Joint ventures between emerging and established contractors could go a long way in building management skills and professionalism and should be promoted.
- ***Removal of artificial barriers to trade***: The use of local committees as employment agencies should be discouraged and free movement of labour be encouraged.
- ***Promotion of employment equity***: Low percentages of women are employed in low cost housing projects. An enabling environment for women entrepreneurs should be created. Some Provincial departments such as Free State have started such initiatives to address this problem.
- ***Regulation of home building industry***: The entry of developers and contractors need to be regulated through registration with NHBRC. This will ensure that home building standards are promoted and maintained, that the home building industry can get rid of unprofessional contractors and lastly that growth and development will be enhanced..
- ***Affirmative procurement policy***. Awarding of housing projects should take cognisance of Affirmative Procurement Policy guidelines, if promotion of emerging contractors is to succeed.

Economic Impact of HIV/AIDS On The Construction Sector And Implications For The Housing Policy

Development Works (2003:2) states that it is difficult to determine what the impact of HIV/AIDS will be on the different housing supply systems. This research indicates where the different supply systems are vulnerable and what the likely economic and demographic impacts will be on them and how these will affect policy and implementation. This research also helps raise awareness of the impacts on the construction sector.

It is indicated that the delivery of a house is a process that involves a number of inputs, and each needs to be understood in order to obtain a broader picture of the impact of the disease on it.

The inputs or key components identified in this study are:

1. The bridging finance component. Financial institutions usually provide financial assistance to developers to provide up-front starting capital until the subsidy money flows into the project. It is generally expensive, provided selectively and adds to the cost of housing.
2. The end user finance component. This is only needed where the cost of the subsidy house is greater than the subsidy. It is taken out by the beneficiary who must meet qualifying conditions for the financial institution who lends the money except in institutional housing where the institution secures finance and beneficiaries contribute to this through their rent.
3. The planning of the development and assembly of land. This is a lengthy process that involves developers and government institutions where delays can contribute significantly to holding costs.
4. The delivery of services is a lengthy process involving the site preparation and installation of roads, water, sanitation and electricity. It requires considerable co-ordination of contractors, engineers and government officials and delays here also contribute to costs. This usually accounts for the largest cost components of low-income housing delivery.
5. The construction of the actual house (top-structure). This varies across the three supply systems resulting in variable relative costs.
6. Materials supply sub-components. This cuts across many of the components but impacts largely on the top-structure construction. It is vulnerable to the cost of transport and inflation.
7. Housing management component. This is most evident in institutional housing as it relates to the administration of the housing after occupation.

The study undertaken by Development Works, (2003) investigates the role of the developer/contractors supply system, the institutional housing supply system and the people's housing supply system. Different overall impacts of the disease are taken into account. Furthermore, in order to understand the demographic and economic impact of HIV/AIDS in the housing supply systems, the main actors that form part of the components listed above are identified as the following:

- Private sector developers
- Housing support NGOs
- Bridging finance and end-user finance institutions
- Professionals, such as planners, engineers, land surveyors
- Contractors and sub-contractors
- Regular labourers and local labourers
- Government officials
- Housing management institutions
- Beneficiaries

It was interesting to note that based on demographic models, the study indicated that likely susceptibility can be determined for the different categories of the workforce (e.g. semi-skilled, local labourers and professionals). The incidence of the disease is increasing in the higher skilled contractors and young professionals and their status of having higher education and skills is not protecting them from infection. Other important structural trends are also influenced by possible future levels of disease susceptibility, for example that the construction sector could be downsizing, that low-income housing developers could be withdrawing, that semi-skilled artisans could be prevented from entering the market. The government procurement policy of favouring women and affirmative employment could as well exercise an impact on structural trends (Development Works, 2003).

The implications that the demographic and economic impacts will have on the three housing supply systems are identified. The developer/contractors supply system is premised on profit maximisation and attempts at all times to avoid risk, thus focusing on an increase of efficiencies. Delays in the development process impact negatively on profit margins (cost of bridging finance, holding costs of land, escalation in price of materials, labour). An expected response would be to pass these costs onto the final cost of the product. However, this supply system is highly dependent on the housing subsidy, which is fixed and offers little opportunity for this. The target market is unable to contribute much in the way of end-user finance. Other responses therefore are to leave the low-income housing market altogether or to try to lower specifications. Current national norms and standards make the latter almost impossible (Development Works, 2003).

The people's housing process supply system relies on beneficiary contribution to housing developments (social capital) in order to maximise the product. It is therefore less exposed to the negative financial impacts of delays. Because beneficiaries contribute to development, their demographic susceptibility to the disease (i.e. demand side impacts) will also impact on supply.

The internal logic of the Institutional Housing Supply System is to maximise the product and to rely on beneficiary contributions (deposit and rental) as the subsidy does not cover the higher cost of supplying this type of housing (up to four times the amount of subsidy). It therefore relies on loan finance. There are indications that increasing default rates, arising from household HIV/AIDS economic impacts may impact on the future viability of this system.

The report concludes that the housing supply system is a system comprising a plethora from principle to practice: Implementers' views on the new housing subsidy scheme (1995) according to which all must interact efficiently to produce a subsidised house. While there are some inherent weaknesses in the system, even before one begins to single out the impact of HIV/AIDS, it is clear that these weaknesses will be further exposed once the effects of the disease really 'kick-in'. Secondly the financial limits of the housing subsidy make it difficult to absorb financial impacts, which, unless the subsidy is increased, will force end users to pay more, or cause standards to drop or will chase the limited number of developers out of the market. Thirdly, the short-term risk avoidance and cost reduction strategies being adopted, such as casualisation of staff, will have long-term implications as fewer trained personnel will enter this market, further hastening its demise (Development Works, 2003).

Policy and Programme History

The Department of Housing of the Gauteng Provincial Government appointed the Human Sciences Research Council to undertake a review of Gauteng's housing policy and programmes as developed and implemented from 1994 to the present, especially as valuable lessons can be learnt from urban sustainability in order to plan efficiently for future sustainability.

The review involved three distinct briefs:

- An evaluation of Gauteng's housing policy and its alignment with national policy and principles, and coherence with provincial policy imperatives.
- An evaluation of Gauteng's housing programmes, and specifically their efficiency, effectiveness, economy, relevance, impact and sustainability.
- An evaluation of the extent to which the activities of the Department of Housing have succeeded in overcoming certain key aspects of the apartheid legacy.

In the completion of the brief, 12 reports were prepared. The reports are:

- Programme Review Methodology, Criteria and Indicators
- Policy Evaluation
- Incremental/New Wave Consolidation Programmes
- Social and Rental Housing Programmes
- Formal Housing
- Asset Management and Related Programmes
- Special Needs Programme
- Gauteng Housing Policy and Programme Review
- Policy Recommendations
- Hostels Upgrading Programme
- An evaluation of women and housing policy.
- An evaluation of housing delivery, sustainable settlements and the consequences of "*Apartheid*".

These reports have been critically reviewed and the key outcomes and recommendations taken into consideration. Key aspects that transcended from these reports, which deal with the delivery of top-structures, that have been taken into consideration are provided below.

With regards to incremental housing, the reports reveal that the "*Mayibuye/Upgrading Programme*" is stage one in the three-stage incremental housing process. A key constraint facing the "*Mayibuye Programme*" has

been the availability of land for development. Since 1999, when the rate of delivery peaked, no new projects have been established on new land. Informal Settlement Upgrading projects, which are now also included in the "*Mayibuye Programme*", often face problems (such as overflow, where there are too many residents for the number of formal stands that can be developed) related to the beneficiary community involved. The reports indicate that a policy review within the "*Mayibuye Programme*" is needed to deal with specific risk areas hat are currently thwarting the sub-directorate's efforts to run smoothly. The review should especially address beneficiary administration systems and conflict resolution skills. In addition the problem with the displacement of residents for whom there is insufficient space or who do not qualify for subsidy, needs policy attention.

The "*Essential Services Programme*", is the second stage in the three-staged incremental housing process. The services provided have all been according to provincial services levels, providing a full water-borne service to all households. Unfortunately, while meeting provincial standards, the services levels run the risk of being unaffordable for the beneficiaries. This results in non-payment and financial problems for municipalities. Most problems identified with the programme arise from the lack of appropriate data, the absence of a formal, written policy to guide the implementation of the programme and, again, no framework for dealing with community-based conflict arising from land invasions, vandalism and beneficiary administration problems.

The "*People's Housing Process" (PHP)* Programme is the third stage in the three-stage incremental housing process. The PHP is an innovative response to the affordability constraints facing low-income households and the need to support their aspirations for improved quality through their participation in the building process. While its delivery success has been limited to date, this may simply be a result of the short time span in which the programme has been implemented, as well as the evolving nature of its role within Gauteng's overall housing delivery programme.

The main issue is whether the PHP can be structured more broadly. It is presently oriented to deliver a product rather than to be the process it is defined to be. Secondly, the reports indicate that it relies on group-based housing consolidation rather than the more common individual approach. It is questioned whether there are ways to support individual delivery timeframes and construction choices without undermining the project structure of the PHP. Key difficulties facing the programme include the limited municipal capacity to participate in the programme, as the policy requires, as well as limited provincial capacity. Capacity constraints also arise in respect of beneficiaries. The programme is based on the beneficiaries constructing their houses, as opposed to hiring local builders to do this as generally occurs in practice.

Furthermore, general policy concerns, issues and recommendations raised by the reports have been taken into consideration. There are four sets of concerns: the fact that the policy focuses on the supply of products rather than meeting needs, the focus on quantity rather than quality, the failure to orient policy and programmes to building the housing sector, and the waste of information. Salient features of the policy reviews include the following:

- A shift in implementation approach from supply-driven to demand-driven processes.
- Greater involvement of beneficiaries and small contractors, in the construction process, away from developer-driven processes.
- A reduction in the scope of benefits to be accessed from subsidy amounts to prioritise access to land, secure tenure and services, and facilitate incremental construction of top-structures.
- Promoting medium density housing development, and institutional housing solutions for those households who are able to afford housing products and financial commitments associated therewith, to ensure more integrated settlement patterns.
- Promoting beneficiary contributions to the costs of development through equity participation (either sweat equity or savings).
- Investigating financing mechanisms that provide for a package of contributions by leveraging equity contributions, subsidies and lending finance, and suggesting the need to envisage support measures for housing development that fall beyond the ambit of subsidisation.

South Africa's Progress In Implementing Its Housing Policy.

Kecia Rust critically reviews South Africa's progress in implementing its housing policy from 1994 to 2002.

The key components related to delivery that are considered here are that, initially, the housing programme was dominated by the undertaking to build one million houses within five years. As delivery progressed, however, certain problems began to emerge that gradually challenged the original goal. As a result, the department took several steps aimed at protecting the integrity and quality of the housing product (Rust, 2003: 2).

The report indicates that the key performance indicator of delivery at the national and provincial level is – number budgeted, and number delivered. However, it is reported that the consequence of adopting the delivery of subsidies as a key performance indicator is threefold.

First, it implies that the government is the only agency delivering housing, which undermines the efforts of other agents.

Secondly, the emphasis on the housing subsidy limits the department's understanding of the delivery process to whatever happens in the course of delivering those subsidies. This limits housing to a product, rather than making it a broader process the department itself wants it to be. The problems raised relate to beneficiaries not being empowered, not viewing housing as an investment and the housing sector which is contracting rather than expanding as well as to the fact that sustainable communities are not being built.

Thirdly, the focus on the subsidy makes the policy unreflective. As long as a quality product (as defined by the national minimum norms and standards) is delivered, the Department of Housing can tell parliament that it is responding to its mandate.

As a result, the report reveals that the housing programme is unable to respond to diverse expressions of demand, a key criticism raised by respondents (Rust, 2003).

Citizen Satisfaction

The Public Service Commission (PSC) undertook a citizen satisfaction survey in 2001 to 2002. The PSC decided to develop tools and methodologies that would promote the incorporation of the view and concerns of citizens in the process of service delivery decision making. A citizen satisfaction survey tool was thus developed and tested in the departments of education, health, social development and housing across all of the provinces.

It is evident from this report that officials who work for municipalities, NGOs and CBO staff, contractors and developers, reported low levels of satisfaction with service delivery. They also perceived a large gap

between expectations and performance. The services were not customised in such a way that they met their requirements, and the reliability of service delivery was not trouble free (PSC, 2002).

Furthermore citizens receiving a subsidy from the municipality rated the value of the service as particularly low in comparison with the other groups, although they still recommended the services. Thus the municipalities were well aware of the need to work together with the Department and local government structures. Citizens felt that for the price to be what it is, the services could be better.

The citizens reported the following strengths of the Department of Housing in the process of top-structure delivery:

- Attitude and behaviour of staff regarded as being of high quality
- Informed about the cost
- Offices and facilities are clean
- The department communicates in language of citizens' choice

However, the attributes, which need attention, are as follows:

- Members of the community do not feel empowered by the Department
- Lack of reliable staff
- Beneficiaries mistrust the department
- Beneficiaries indicate that there is a misunderstanding of the application process and the time it would take for the application to be approved
- Poor quality houses are built
- Building deadlines not kept to

The beneficiaries' views contained in this report include important factors that need to be considered in improving the top-structures (PSC, 2002).

Evaluation Of The National Housing Subsidy Scheme

A survey was undertaken by the Public Service Commission to evaluate the National Housing Subsidy Scheme and a report was submitted to make recommendations on how it could be improved in 2003.

Salient features that were evident from this report regarding the delivery process are as follows:

- Slow processing of land transfer.
- Slowness in the process of accrediting the local authorities.
- Late finalisation of new contracts with developers because business plans had not been drawn up.
- New local government structures that have to take responsibility for approving projects and delays in decision-making processes.
- Allegations of corruption remain.
- Applications not completed correctly/fully.
- Agreements not completed to Department's requirements.
- Delays in signing of contracts.
- Delays in approval and escalation have rendered projects non-viable before approval was received.
- Housing projects approved without land availability agreements in place.
- Non-adherence to National Housing Code.
- Lack of actions against non-compliance from developers.
- Drive to maximise housing delivery resulting in unsustainable units.
- Relationship problems between departments and municipalities.
- Lack of monitoring and evaluation.
- Housing quality varies widely.
- Few projects located on land favourably located for economic opportunities.
- Poverty and service payments remain problems.

- Close correlations noted between beneficiary satisfaction and extent of beneficiary participation in projects.
- Successful innovations only noted in projects with additional funding and input beyond the housing subsidy.
- Housing delivery appears to be very effective when competent institutions and appropriate resources are in place.
- Delivery system vulnerable in face of weak municipal capacity, low beneficiary participation and limited resources.

The key findings and recommendations from this report are:

- The Housing Subsidy Scheme succeeded in delivery of houses, basic services and secure tenure, although there is much room for improvement.
- Many improvements cannot be effected by changes to the subsidy scheme of the Department of Housing (DOH) alone, all the government departments, levels of government and other role players require address.
- Housing delivery has not kept up with the growth in the housing backlog, especially in metropolitan areas, and the subsidy amount is inadequate.
- Inadequate funds, poor training and monitoring of contractors have affected housing quality standards. To improve this it is suggested training and monitoring should be improved, more support should be provided to municipalities and savings and credit schemes for beneficiaries should be promoted.
- The National Department of Housing should investigate setting up a land fund to support and speed up land acquisition and to promote rental in existing housing projects.
- Beneficiary participation is weak in most projects and this results in negative end results. Local authorities in the role of developers are recommended as key actors for this.
- Norms and standards for housing need to be flexible and appropriate and need to make housing more affordable for the poor.
- Municipalities have been unable to fund capital and maintenance of basic services and facilities. Aframework should be devised to assist them.

- Land legal issues result in major delays in implementing green fields projects and the slow issuing of title deeds. The land registration and transfer system needs to be reviewed.
- Inconsistencies in the way the housing subsidy scheme is applied in different provinces and some allegations of corruption persist. Monitoring and evaluation should be in place to identify bottlenecks.

Beneficiary Perceptions of Subsidised Housing

Zack & Charlton (2003:1) undertook a study in 2003 with the purpose of identifying beneficiary reactions and responses to the government's housing subsidy programme. The key issues, which proliferated from the beneficiary study are:

- There is a widespread dissatisfaction with the quality of housing received. Most respondents anticipate that their houses will not last.
- Indications are that beneficiaries perceive the poor quality of the housing product to be caused by contractors short-changing them. Contractors are perceived to have stolen materials or have skimped on the use of building materials.
- Authorities are blamed for not undertaking adequate inspection of property.
- Despite the vociferous responses towards poor quality building, most beneficiaries appear to have signed 'happy letters' indicating their acceptance of the completed units.
- There is little reported evidence of innovation with respect to the top-structure product, with few beneficiaries reporting any interesting variations, materials or designs.
- The stand size is generally considered adequate for beneficiary requirements. People indicate that the stand is 'big enough' and is able to support alterations and additions, and other stand uses such as planting.
- There are variable responses to the issue of the balance and trade-off that has, for financial reasons, to be made between stand and house size on the one hand, and level of infrastructure on the other hand. Respondents generally emphasise the need for 'good' services such as water-borne sanitation, with most people indicating that they could not have any lower level of service than that already provided to them (at the level of individual households this is generally water-borne sanitation and water to each site).

The report also focuses on the experience of beneficiaries in the process of receiving subsidised housing. It includes reference to the following:

- Application process.
- Processes of construction and housing allocation.
- The involvement of various stakeholders in the housing process, the impact of the delivery processes on economic empowerment, post-occupancy maintenance and the response of authorities to problems.

The following relevant key aspects were noted:

- There appears to have been relatively little beneficiary involvement in construction work on building sites.
- There is very little evidence of attempts to create partnerships with communities in the housing delivery process, with the intended spirit of social compacts largely absent.
- A strong contrast exists between beneficiaries' experience of interaction with contractors and authorities before housing occupation and their interaction post-occupancy.
- The experience with respect to "*after-care*" as repairs and maintenance of the completed project by the local authority is variable and mostly perceived to be inadequate.
- There is a prevailing sense that the council service beyond housing delivery is de-personalised and that communities have been abandoned by the authorities.
- It appears that in many projects people were informed that it is their responsibility to look after the housing post construction. There is a varying response to this. While many state that it is appropriate that they should be responsible for housing that is theirs, others indicate that the housing product they were handed is inadequate and that they are being called upon to pay for repairs to defective housing rather than for the wear and tear of good housing.
- Despite a number of people claiming otherwise, many people accept that the top-structure provided is a starter house and that they are responsible for extending this over time, and many more indicate a wish to extend their houses.
- It is clear that many beneficiaries cannot afford monthly service payments and the cost of ongoing household maintenance or extensions.

- Lack of employment opportunities and poverty are emphasised repeatedly as the key issues people think government should be intervening in. When asked whether beneficiaries were better off now than before, a respondent said, "I think it is the same because I am still unemployed".
- The affordability of basic services is raised as a critical issue in the research. A clear picture that is emerging is that of the inability of many respondents to pay for the services that they have received.
- While most respondents indicate that they obtained the housing product they anticipated, several indicate that they had expected 4-roomed houses. The 4-roomed house is also evidently the goal to which beneficiaries aspire as indicated by the extensions people plan.
- A significant anti-shack sentiment is evident in comments made in focus groups. This is often expressed in terms of people's current housing being 'at least' better than shacks. The overall aspiration appears to be for brick or block housing and extensions.
- There is little positive response to the notion of an up-front savings contribution, with the majority of respondents indicating that they would have had no money to contribute to such a requirement.

The report concluded that nine years have passed since the first study of beneficiary perceptions was undertaken. There have been gains in delivery. However, the crucial issues relating to the development of integrated, sustainable housing settlements have not been addressed and housing has not created a platform for the ongoing development of the persons housed. The question remains whether or not these will be addressed in nine years' time (Zack & Charlton, 2003).

Not many evaluations have been made of the delivery process for the implementation of top-structures. South Africa's subsidy mechanisms have many shortfalls and concerns raised by housing practitioners, beneficiaries and other government departments. General aspects that have to be investigated include the following:

- Problems are experienced in establishing the level of contribution that the developer should make toward the bulk service and connector fees.
- Access to end-user finance is a definite problem for beneficiaries.
- Problems are experienced in identifying local builders with appropriate skills.
- Problems are experienced in securing agreements with local builders.

- Emerging contractors have problems with accessing credit.
- Emerging contractors lack the necessary skills for efficient material management and project management.
- Cash flow management is problematic in the delivery process.
- Quality control problems do exist.
- Lack of choice is experienced as a limitation by the beneficiaries.
- Issuing of rates clearance certificates to enable houses to be transferred is delayed because of unpaid rates for certain properties.
- Lack of training causes problems.
- Delivery of services is a lengthy process.
- Misunderstanding of the process and of the time it takes to complete a unit can be detected.
- Building deadlines are not being kept to.
- Allegations of corruption remain.
- Housing projects are approved without land availability agreements in place.
- Non-adherence to National Housing Code and norms and standards has been reported.
- Lack of action against non-compliance results in dissatisfaction and mistrust.
- The drive to maximise housing delivery results in unsustainable units.
- Relationship problems between departments and municipalities have emerged.
- Lack of monitoring and evaluation affects the quality.
- Few projects located on land favourably are located for economic opportunities.
- Poverty and service payments remain problems.

There have been gains in housing delivery, but the subsidy schemes are still an in infancy stage and many key lessons learnt are being taken into consideration to improve impact on the envelope of natural resources.

6.7 KEY DEVELOPMENTS RESULTING FROM BUILT ENVIRONMENT AND URBAN FORM

Many writers are of the opinion that the South African city is continuously formed by the impact of "*Apartheid*" and by the impact of settlement patterns in the post-"*Apartheid*" city, whether it has been planned or unplanned. (Marcuse & Van Kempen, 2000:250-260). The built environment is characterised by urban sprawl, marginalisation and limited movement systems, housing driven settlement planning, de-densification and ongoing decentralisation.

Van Der Merwe (1983:47) mentions that South African cities, as well as townships, were designed to cater for a certain population size. Catenese (1984: 129) states: "A *planner's primary obligation is to serve the public interest. While the definition of the public interest is formulated through continuous debate the planner owes allegiance to a conscientiously attained concept of public interest.*"

This was not true in the "*Apartheid* "era as people were located in parts of the city far from infrastructure and naturally bounded by watercourses, major infrastructure lines or buffer zones not suitable for development (Dewar, 1984). Harrison *et al.* (2003:113) describe the expansion of African townships by stating that the areas alongside main access routes were reserved for Whites. There was rapid urbanisation in the 1970s to 1980s. Decompression of overcrowded Black Townships took place in the 1980s, as past control broke down. This led to massive growth of informal settlements and backyard dwellings in the city. The informal settlements sprang up on poor quality land.

The legacy of "*Apartheid*" shows unusual spatial contradictions. They are very spread out in one sense, with levels of density too low to sustain viable public transports systems (South African Cities Network, 2004:112). High levels of car use is required which further encourages urban sprawl. Low-density suburbs are built on the principle of one family, one plot of land (Marcuse & Van Kempen. 250-260).

This has recently led to the phenomenon described by Charlton (2000) as "*Nimbyism* " meaning "*not-in-my-backyard-ism*" - a perception among wealthy established residential areas that low-cost housing in close proximity will always be negative. He mentions the example where a housing project in KwaMashu, in KwaZulu-Natal, was initiated to relocate people from the Canaan informal settlement who had to be relocated based on safety concerns, as they were located on a landslide. This led to many unhappy high-income residents in adjacent areas. Charlton (2000) also mentions that it was not necessarily a positive move

for Canaan residents and the importance of their social networks were not taken into consideration on relocation. Many of the Canaan residents were scavengers at a local dumpsite and depended on the income raised for subsistence. Relocation cut them off from their networks that provided them with an income. Social networks are an important issue to be considered on integration.

Marcuse and Van Kempen (2000:250-260) comment on the fact that low-density suburbs are more difficult to manage with the viewpoint of managing networked energy, water, sanitation (bulk infrastructure) systems. Mention is also made of some areas that are very dense, inhabited by the poor. Marcuse and Van Kempen (2000:16) state the following with regard to the characteristics of the built environment namely "a *pattern of separate clusters of residential space, creating protective citadels and enclaves on the one side and constraining ghettos on the other in a hierarchical relationship to each other.*"

The city is therefore firstly, under-sized but sprawled. Secondly, the city was originally designed to marginalise through geographic separation. This is a classic feature defining the "*Apartheid*" city. Many people were relocated from economically active areas to the periphery. Long distances had to be travelled to employment centres, mostly by the poorest of the poor. Public transport systems to sufficiently cater for this need have never been developed (Gauteng Spatial Development Framework, 1998).

People on the margins of the city have been forced to compensate. The South African Cities Network (2004:112) remarks that the taxi industry is booming and that this has resulted in many more vehicles on the roads than they had originally been planned for. The Gauteng Spatial Development Framework confirms the direct and indirect costs caused by the fragmented nature of the city, the creation of inefficient and ineffective cities and likelihood of continued sprawl.

The proposed Blue IQ programme established by the Gauteng Provincial Government (BlueIQ, 2004) shows that substantial investment is being made in infrastructure. The Gautrain initiative is a major project which forms part of the Blue IQ programme, increasing the connectivity between cities. It intends to run between two CBDs with stops at Rosebank, Sandton and Marlboro, Midrand and Centurion, and a spur between Sandton and the Johannesburg International Airport. The Blue IQ is a R 1.7 billion rand initative of the government to invest in ten mega projects in various areas, e.g. tourism, manufacturing. The aim is to attract foreign direct investment.

Harrison *et al.* (2003:96) discuss spatial regeneration to improve on the current pattern of impeded movement caused by the "*Apartheid*" city. In an attempt to geographically separate classes within racial groups, apartheid planners often designed suburbs adjacent to each other on a different size of grid block. Lines in suburban areas often do not line up, forcing a time-consuming zig-zag route on any form of transport (South African Cities Network, 2004:112). This is in contrast with townships that were built with a locus of control with only one or two streets connecting the road inside the township to the rest of the city.

The South African Cities Network (2004:112) expresses the opinion that the rationale for doing this was, that if political unrest occurred within the township, public-order policing only had to seal off the one or two key access roads to stop the spreading of unrest. The post-"Apartheid" era is therefore faced with the fact that all traffic squeezes through one or two interchanges in many South African township areas. This leads to serious time constraints (SACN, 2004:112).

South Africa was originally designed for deconcentration. Decentralisation in the South African context referred to the problems associated with unbalanced growth of regions and deconcentraiton with the problems found in a metropolitan area (RSA, 1985:199). Kleynhans and Naudé (2001:285) define decentralisation as the method of creating or stimulating the creation of new centres on the periphery of metropolitan areas by means of incentive schemes to create new agglomeration economies or service centres for a specific region. Deconcentration is defined as stimulating and creating incentives for existing industries or the retention, expansion or redevelopment of existing industry or creation of new service centres adjacent to or in close proximity of metropolitan centres where the agglomeration of the metropolitan economies can be exploited and the pressure of overconcentration is relieved.

Industrial decentralisation refers to relocation of industry to smaller areas, expansion of main branches of big industries to other regions, a greater balance in the distribution of industries between regions and a decentralisation of industry for metropolitan areas to suburbs. The planners of the 1970s started to encourage decentralisation to cope with overconcentration in metropolitan areas (Van Der Merwe, 1983:152). Parking spaces were limited in the inner city, and failing to compensate with adequate public transport systems, this would create incentives for new office development in the suburbs (South African Cities Network, 2004:113).

Rates rebates were introduced in the 1980s as an incentive for relocation (South African Cities Network, 2004:113). Businesses were relocated to suburban areas based on increases in the number of low-skilled migrants and increased crime (Geyer, 2001:7). Decentralisation took on its own logic and fragmentation increased.Under-serviced cities are part of the legacy of "*Apartheid*".

The March 1998 Local Government White Paper (RSA, 1998) states that there are huge backlogs in terms of service delivery as many of the poor populations do not have access to an acceptable level of service, of which the effects are described in detail by Hardoy and Satterthwaite (1989). Harrison *et al.* (2003:58) refer to stagnant and impoverished townships without proper services. The breakdown of water and sewer systems as well as poor storm water drainage mark many of the township areas (Harrison *et al.* (2003:172).Williams (2000) describes the differences in capacity of municipalities that will further play a major role in service delivery. Charlton mentions that many housing subsidies utilised in social housing projects are not enough to provide an acceptable level of service to beneficiaries.

The post-"*Apartheid*" settlement planning has been focused at correcting imbalances and this has led to housing –driven settlement planning. The evaluation of National Housing Planning and Delivery, according to a study done for the National Department of Housing in August 2004 for KwaZulu-Natal, confirms several findings after studying a sample of 60 projects to evaluate housing planning and delivery for projects implemented between 1994 and 2004.

Main findings identified in connection with the planning process include the following:

- Approval of layout plans is a timely process, township registers being opened, registration of transfers takes too long.
- Social compacts have often failed.
- Community consultation or participation is limited.
- Subsidy fraud and maladministration have been reported.
- Poor levels of intergovernmental cooperation were noticed.
- There was no properly functioning coordinated approach at provincial level to ensure that integrated development would be achieved.
- Time delays with the old payment system, which could not accommodate interim milestones and upfront payments, hampered progress.
- There is a lack of conformity to norms and standards.
- Applications were not completed correctly and in full.
- Agreements were not being completed to Department's requirements.

- There is a lack of municipal capacity.
- Private sector resources in the low-income housing sector are decreasing.
- There is an absence of a competitive procurement process in which prospective developers tender for the development of housing projects.
- There is a lack of action by provincial departments against developers who did not adhere to contractual agreements.

Main findings identified in the delivery process include the following:

- Problems are experienced in establishing the level of contribution that the developer should make toward the bulk service and connector fees.
- Access to end-user finance is a definite problem for beneficiaries.
- Problems are experienced in identifying local builders with appropriate skills.
- Problems are experienced in securing agreements with local builders.
- Emerging contractors have problems with accessing credit.
- Emerging contractors lack material management and project management skills.
- Cash flow management is problematic in the delivery process.
- Quality control is problematic.
- Beneficiaries are deprived of the opportunity of making choices.
- Lack of training causes problems.
- Delivery of services is a lengthy process.
- There are misunderstandings as to the process and the time it takes to complete a unit.
- Building deadlines are not being kept to.
- Allegations of corruption remain.
- Housing projects are approved without land availability agreements in place.
- Non-adherence to National Housing code and norms and standards is evident.
- There is a lack of actions against non compliance.

- Drive to maximise housing delivery results in unsustainable units.
- There are relationship problems between departments and municipalities.
- There is a lack of monitoring and evaluation.
- Few projects located on land are favourably located for economic opportunities.
- Poverty and service payments remain problems.

The Reconstruction and Development Programme (RDP) promised that a million houses would be built in five years. De Wet (1994:307-332) as well as Munson and Fitzgerald (1995:41-62) confirm that the objective was unrealistic, as the RDP did not clearly stipulate how this was to be achieved. The RDP wanted to help those who had been forced to live in backyard dwellings or informal settlements to gain access to adequate housing. Housing delivery was driven by the provision of provincially administered housing subsidies. Harrison *et al.* (2003: 263-271) describe the backlogs that were faced in detail and describes the efforts of municipalities to providing top-up subsidies to complete the top-structure or improve the level of service.

It is confirmed by Harrison *et al.* (2003:263-271) that much was done to deliver housing. The delivery process improved in later years. This is confirmed by the KwaZulu-Natal report on the evaluation of Housing Planning and Delivery (National Housing, 2004:51). Harrison *et al.* (2003) confirm that in many cases subsidy amounts were limited to purchase better quality land for development close to city centres.

In some projects, e.g. God's Golden Acre, a project mentioned in the Housing Planning and Delivery study, the developer owned large tracts of land and targeted this regardless of suitability. Charlton (2001) states that the finding of suitable land for development was complicated by a growing incidence of "Nimbyism", where residents in well-established urban settlements nearby, objected to proposed housing developments, as they were concerned with impacts on their property values. Housing delivery was delayed in many instances. The developers tried to work around this by gaining access to isolated land, thereby re-enforcing the dormitory townships located on the periphery in 1994 (South African Cities Network, 2004:114).

Housing driven settlement planning is being consolidated by de-densification through the movement of people out of backyard shacks into formal housing. The South African Cities Network (2004:114) describes that many former backyard dwellers moved to where houses were to be built on the margins of cities and to areas where political sensitivity would be the greatest. The land invasions were well organised even though not formally planned. Land was demarcated before the invasions took place. The South African Cities Network (2004:114) states: "*This informal town planning almost invariably demarcated the new settlement*

on a grid pattern with large plots mirroring the layout of typically wealth suburbs, and echoing its aspirations for large and spacious self-standing homes, soon to be subsidised."

The de-densification has not necessarily eased the pressure of metropolitan councils as people are moving to new houses, which required new bulk infrastructure. De-densification is not in line with the goals of the compact city (Dewar, 1984). It requires the development of new networked infrastructure and increased costs for new service connections which will cost much more than can be afforded by cost transfers and cross subsidisation (Dewar, 1984). This is against the goals of compaction, but Tomlinson (1997) describes that there is growing acceptance for the argument of whatever the history was for townships and informal settlements, many are well established with established social networks, that play a major role in social and civic life. A key issue for planning is how these places can be transformed in terms of creating integrated development and through creating accessible economic opportunities for the inhabitants. This is confirmed in the KwaZulu Natal Housing Planning and Delivery study conducted in August 2004 where the original townships in close proximity of Pinetown and New England, have been upgraded and now consist of vibrant communities living in close proximity to places where they can find employment.

Dewar (1994) describes the compact city with the containment of suburban growth, increased development densities and spatial integration of diverse groups. Urban activities are seen as the key to obtaining sustainability. The National Spatial Development Perspective describes the need for well-located inner city space by stating that subsidy amounts in social housing projects are too small to cover the costs of well-located land in many of the major urban centres. This shows that there is a need for inner city housing resulting from repellent restriction on movement and residence. Harrison *et al.* (2003:92) stated that urbanisation to inner city areas began in the 1970s even prior to the dismantling of racial legislation.

Kihao (1999:1-6) confirms that this need drove a process of converting unfertilised commercial and retail space into small back office manufacturing and storage space, as well as residential accommodation. The increase in depopulation of cities led to decentralisation of many businesses from the established business areas (Robbins, 2004:6). New office developments were constructed near wealthy residential neighbourhoods, often bypassing new decentralised nodes (South African Cities Network, 2004:115), which may not be advantageous, as Johnston (1972:115) states that accessibility is important for many of the offices that are found in a city centre.

Some of these require have to be located where they can be reached by as many potential clients as possible, in the same way as shops need to tap into a reservoir of customers; others must be accessible to other agents who may be working in various parts of a city or its hinterlands. A central location also makes it easier for

offices to assemble their labour force which, in particular, is drawn from middle-class workers who usually travel daily from scattered localities around the periphery of the built-up area. For the head offices of very important businesses, the national and international links of the largest cities are of considerable significance.

Wackernagel & Rees (1999) also confirm that decentralisation adds to the ecological footprint of a city. There are also several traffic constraints involved (Harrison *et al.*, 2003:150).

Harrison *et al.* (2003:69) describe a low level of services provision in settlements. The South African Cities Network (2004:115) mentions that land could not be developed illegally for land invaders. People were accommodated in "*holding areas*" which were seen as a temporary solution before relocation. Not much money was spent on providing these areas with adequate services. The report confirms that many people have ended up settling in these "*holding areas*". This has several health implications.

6.8 IMPACTS ON NATURAL ENVIRONMENT

It is important to assess the impact of the post-"*Apartheid*" built environment on the envelope of natural resources, as they are interrelated components of urban sustainability.

A History Of Scarcity Up To 1994

The South African eco-system is characterised by low rainfall, water scarcity, and soils susceptible to erosion. Approximately 65 per cent of the country receives less than 500 millimeters (mm) of annual precipitation, a threshold that is widely regarded by experts as the minimum required for rain-fed cropping. About 60 per cent of South African cropland is characterised by low organic matter content. After repeated cultivation, organic matter is rapidly lost and the soil is easily eroded (Mackenzie, 1994:2). Other factors affecting erosion include climate, slope, plant cover, and land-use management. Plant cover is especially critical for controlling soil erosion. In one study in the Floozy catchments in northern area of KwaZulu-Natal, only 2% of the land receiving 900 to 1,000 mm of rain was eroded, compared with 13.5% of land receiving less than this amount. The reason for this curious differential was found to be the extensive plant cover within the former region.

Low rainfall and fragile soils limit agriculture potential. Only 16% (about 16 million hectares) of the total amount of land used for crops and pasture is considered suitable for crops, while the rest is used for pasture. About 4% is high-potential agricultural land. Of the total area of cropland, 13 million hectares fall within commercial farming areas, while only 2.5 million are in small-scale farming areas in the former homelands

(Mackenzie, 1994:2). This imbalance, combined with other natural resource limits, including weak soils and poor rains, has resulted in extensive environmental scarcities in the homelands.

The "*Apartheid*" system institutionalised the uneven social distribution of environmental resources in South Africa, which caused serious structural scarcity for the Black population. Land ownership of Black South Africans was tightly restricted in both rural and urban areas, curtailing economic advancement. Unequal access to land affected 15 million Blacks living in the homelands or as tenants and labourers on "*White*" land. In the 1980s, 95% of the Black population earned less than 1000 rand per month, whereas 89% of the White population earned more. With an average disposable income of only 150 dollars a year - one-sixteenth the White average - homeland farmers in particular could not make the long-term investments necessary to protect their land (Durning, 1995:14).

The following table uses differences in per capita availability of farmland to illustrate the structural land scarcities affecting Blacks in South Africa.

Table 6-1: Comparison of Population Densities Within Rural South Africa, 1991

	Population Density (Hectares/Person)				
	South Africa	**White Areas**	**Former Homelands**	**Natal**	**Kwazulu**
Cropland & Pastureland	4.70	16.22	0.92	5.36	0.68
Cropland	0.75	2.54	0.16	1.10	0.08

Source: Development Bank of South Africa (1994: 99)

Not only did the African population suffer from an imbalanced distribution of the quantity of land, but also often received the most marginally productive land. Moreover, under the Apartheid regime, structural scarcities of land were often reinforced by stark shortfalls in agricultural inputs, such as capital, fertilizer, veterinary services, and new agricultural technologies. Tables 2 and 3 compare statistics for crop yields and cattle performance in Natal and KwaZulu.

Table 6-2: Comparisons of Yields in Crop Agriculture, Natal and KwaZulu, 1983-84

Crop	Yield (Tons/Hectare)	
	Natal	KwaZulu
Cereals (maize)	2.088	0.826
Legumes (dry beans)	1.011	0.337
Roots (potatoes)	24.015	5.006
Sugarcane	53.814	28.795

Source: Bromberger & Antonie (2003)

Table 6-3: Comparison of Statistics of Cattle Performance, Natal and KwaZulu, 1987

	Performance (%)	
	Natal (Private Land Tenure)	KwaZulu (Communal Grazing)
Herd Mortality	3.9	7.4
Calving Rate	80.0	32.0
Slaughter and Export Rate	25.0	5.0

Source: Bromberger & Antonie (2003)

Structural scarcities of land also existed within the former homelands. Rights to communal land were unevenly distributed among homeland populations: up to 80 percent of production came from 20 percent of the farmers who controlled most of the land, and in some areas three or four landholders owned 80 percent of the livestock grazing on communal land. Widespread landlessness existed even in Transkei, the homeland with the best land, where fewer than 50 percent of villagers were allocated a field, and 60 percent had no cattle. In urban areas, Black townships were built on sites not useful to the White community. They were often overcrowded, short of housing, and located downwind from dirty industries. Infrastructure was inferior, with few services such as electricity and running water (Lawson, 1991:61).

Overcrowding and poverty meant that new residents built their houses from non-conventional materials scavenged from local dumps and public buildings; they used mud, grass, and straw from nearby streams, fields, and hillsides, which tended to increase local erosion and flooding damage. In sum, the Black population, with little political or economic power in South Africa, was forced to subsist on a severely restricted and eroded land base. This structural scarcity interacted with, and exacerbated demand- and supply-induced scarcities, based on the particular vulnerabilities of the South African eco-system.

Demand-Induced Scarcity

The estimated population of South Africa in 1995 was 42.6 million, with an annual increase of 970,000. About 28 million people, over 66 percent of the population, lived within towns and cities, while 15 million resided strictly within urban areas (Barnard, 1994:1) The following estimates were made by the Development Bank in 1995 namely the Black population was expected to grow at a 3 percent rate from its current 32 million to 37.2 million people by the year 2000, which would be 78.3 percent (up from 74.8 percent in 1991) of the anticipated total population of 47.5 million. Conversely, the White population would stay constant at approximately 5 million, and its proportion of the total population would drop from 14.1 to 11.4 percent (Development Bank, 1995:1)

The growth of the Black population results in more severe scarcity of land and exacerbates the differentials in land availability per capita. Under "*Apartheid*", the average population density of the former homelands was 10 times the density of rural "White" South Africa. When labour requirements in commercial agriculture declined, "*Apartheid*" ensured that Black South Africans could not move to cities when they were expelled from rural White areas. Police forcibly moved African people to the homelands; partly as a result of this forced migration, the population of the homelands grew from 4.5 million to 11 million between 1960 and 1980(Wilson, 1991:32), but the land area of the homelands did not increase.

In addition to this in-migration, the homelands experienced high natural population growth rates. The total fertility rate for Blacks from 1985 to 1990 was estimated at 5.12 children per woman (Simkins; 1991:22). In 1990, Alan Durning observed: "*Black couples have larger families because apartheid denies them access to education, health care, family planning, and secure sources of livelihood - the things that make small families possible and advantageous*". Durning (1990:13) states that gender discrimination contributed to these high fertility rates. Priya Deshingkar, (1995:1) described the responsibilities of women in informal settlements and rural regions:

"As opposed to men, the lives of a majority of women in rural and peri-urban areas of South Africa are linked intimately with their natural environment in the course of their daily activities. Women are responsible for providing food, water and fuel (survival tasks); preparing food and caring for children (household tasks) and income generating activities such as trading of forest products. At the same time they are poor and face many legal and cultural obstacles, which deny them the rights to own and control natural resources."

Dasgupta (1995:40-42) shows that women who lack paid employment have less decision-making authority in their families. Weak authority, combined with the usefulness of children for labour in subsistence conditions - for collecting fuel wood and water and for herding animals - leads to high fertility rates (Dasgupta, 1995:40-42). In South African rural areas, Black women's responsibilities are largely unpaid, and high fertility rates are to be expected. High infant and child mortality rates also raise fertility rates, as families have no guarantee that their children will survive to adolescence. The infant-mortality rate among Black children was estimated at 74 per 1,000 from 1985 to 1990 (Simkin, 1992).

Population size, growth rate, and geographical distribution in KwaZulu-Natal are shown in the tables below. These tables demonstrate that all areas in KwaZulu-Natal were experiencing population growth in 1995, with the most dramatic increases in informal settlements. In 1992, the population of informal settlements made up 26 percent of the total KwaZulu-Natal population, and the percentage was steadily increasing.

Table 6-4: Population size and Growth Rate, KwaZulu-Natal

Year	Size (Thousands) and Growth Rate (%)			
	Rural	Urban	Informal Settlements	Total
1985	4,281	2,592	1,143	8,019
1990	4,518 (1.1%)	2,936 (2.5%)	1,419 (4.4%)	8,874 (2.0%)
1995	4,747 (1.0%)	3,400 (3.0%)	1,733 (4.1%)	9,882 (2.2%)

Source: McCarthy (1994)

Table 6-5: Population Location, KwaZulu-Natal, 1992

	Population	
	Thousands	**% of Total**
Metropolitan	2,290	24.7
Towns	350	3.8
Total Urban Formal Settlement	**2,640**	**28.5**
Informal Metro	1,550	16.7
Informal Towns	470	5.1
Transitional (Rural/Urban)	400	4.3
Total Urban Informal	**2,420**	**26.1**
Total Urban	**5,060**	**54.6**
Total Rural	**4,210**	**45.4**
Grand Total	**9,270**	**100.0**

Source: Hindson & McCarthy (1995:20)

Supply-Induced Scarcity

The "*Apartheid*" regime situated the "*homelands*" in fragile environments with thin topsoil not suitable for supporting the level of agricultural production required by their populations The result has been severe erosion: "*Dongas [erosion gullies] have become small valleys which split the hillsides; soil has given way to a crumbling grey shale, stone-guilt huts squat in a scene which is almost lunar in its desolation.*" (Wilson, 1992:34). Per capita food production in the former homelands has fallen; these areas have become net importers of food, partly a result of land degradation and high population growth rates. South Africa's overall rate of topsoil loss is 20 times higher than the world's average. Experts estimate that South Africa has lost 25 percent of its topsoil since 1900 and that 55 percent of South Africa is threatened by desertification (Archer, 1994:5)

Deforestation is an important form of supply-induced environmental scarcity. By destabilising soils and changing local hydrological cycles, it disrupts key eco-system links (Gandar, 1991:98). This is confirmed by Kleynhans & Naudé (2001). Unfortunately, fuel wood remains the most accessible and inexpensive energy source for many rural Blacks, which encourages deforestation. Inadequate energy services force about 40 percent of the South African population to depend on fuel wood for cooking and heating. Estimates place the annual volume of fuel wood consumed at 11 million metric tons (Cooper & Fakir, 1994:1). In the past 50 years, 200 of KwaZulu's 250 forests have disappeared (Wilson & Ramphele, 1989:44). A comparison of forest consumption rates with noncommercial forest growth rates shows that all ten former homelands are in a fuel wood deficit, with supplies expected to be in short supply by the year 2020 .Wood for fuel is perceived as free, and collection costs are seen in terms of women's time, which is generally undervalued. "*Frequent fires, the high opportunity cost of land, the long time periods for tree growth, and the use of both arable and uncultivated land for grazing all discourage tree planting. Trees can be seen as a threat to crops if they compete for space, water, and labour, and if they are seen to harbor pests.*"(Pedem, 1993:7.)

The scarcity and degradation of water resources is also a problem. South Africa is a water scarce county: twelve to sixteen million people lack potable water supplies, and twenty-one million people - half the country's population - lack adequate sanitation (Brooks, 1995:17). Seventy percent of urban Blacks do not have access to running water and are forced to rely on severely contaminated river systems for their daily water needs (Dewar, 1991:92). The water used by residents in informal settlements tends to have the highest concentrations of suspended solids and the highest level of fecal bacterial contamination (Simpson, 1993:28). The wider health of the South African society is at risk as the probability rises in these settlements of epidemics of cholera, gastroenteritis, dysentery, parasitic infections, typhoid, and bilharzia. Pollution from industrial sources and seepage from coal, gold, and other mines threaten the quality of both river and ground water. The level of industrial pollution is particularly severe in the former homelands, where environmental controls were nonexistent.

Summary of Environmental Scarcity in the Former Homelands

"*Apartheid*" created homelands in areas with few natural resources. Resources were also inequitably distributed within the homelands themselves, as elites controlled access to productive agriculture and grazing land. Populations sustained themselves through subsistence agriculture with added remittances from family members working in industry and mines outside the homelands. Homeland agricultural producers suffered from a chronic lack of investment capital, were denied access to markets, and lacked knowledge of appropriate land-use management techniques - a product of discriminatory education and agricultural extension services. Opportunities to move into urban areas were restricted by influx control; these

restrictions combined with high fertility rates to increase population densities. Soils were fragile and susceptible to erosion. Inadequate supplies of electricity and fossil fuels forced people to use fuel wood, which became increasingly scarce. Rural poverty escalated as agricultural and grazing productivity declined from land degradation, and daily water and energy needs became ever more difficult to satisfy.

This rising scarcity of vital environmental resources boosted incentives for powerful groups within the homelands to secure access to remaining stocks - a process we call resource capture. Land rights were traded for political favours in the homelands' highly corrupt system of political rule. The combination of overpopulation, depleted resources, and unequal resource access resulted in ecological marginalisation: To survive, people migrated first to marginal lands within the homelands - hillsides, river valleys, and easily eroded sweet veld. Then, as the apartheid system began to show signs of limited reform in the early 1980s, people started moving to ecologically and infrastructurally marginal urban areas.

Environmental Scarcity in Urban Areas

Even before the collapse of "*Apartheid*", an estimated ten million people lived in informal housing in urban areas - corrugated shacks, outbuildings, and garages.

Urban growth has placed natural vegetation under constant attack, as the poor struggle to satisfy their basic needs. A growing population, concentrated in a limited area, coupled with the structural inequalities that deny them access to basic services, such as electricity, running water, refuse collection, and adequate sewage disposal facilities, results in environmental degradation. An estimated twenty five per cent of the population of informal settlements have no access to piped water, 46.5 per cent have no access to electricity, and 48 per cent lack adequate sanitation facilities (Barnard, 1995).

Trees are cut down for fuel, grasses are used for feeding livestock and thatching, and residents often burn the veld to promote rapid regrowth, which depletes the soil of its humus content. These processes increase soil erosion, which is particularly high during intense rainstorms (Beckedahl & Slade, 1995:12). Devegetation leads to floods, mud slides, and sinkholes, because informal settlements are frequently in water catchment areas (Lawson, 1995:54).

Table 6-6 provides statistics on water and electricity services in informal settlements in KwaZulu-Natal and shows the degree to which the population must rely on the local environment to provide its daily needs.

Table 6-6: Basic Services in Informal Settlements, KwaZulu-Natal, 1994

Service	Population	
	Number	% of Total
Water		
Only Springs And Streams	229,878	76.2
Taps in Homes	300	0.0
Standpipes	45,434	15.0
Reservoirs	4,800	1.6
None	21,205	7.1
Electricity		
Some Domestic Supply	108,816	36.2
No Supply	191,501	63.8

Source: Hindson & McCarthy (1995:20)

The historic picture gives a clear indication of the relationship between the impact of settlement on the natural environment. One of the most important is the impact on land.

Impact on space

King (2004: 20) stresses the importance of open space areas and the ecological, social and institutional function, which also contribute to an area's heritage. The South African Cities Network (2004:116) states that where open space is developed in the form of parks and botanical gardens, or semi-developed in the form of nature reserves, it can add significant value to quality of life and compensate for diseconomies of scale (e.g. pollution and traffic congestion that detracts from liveability).

Even if space is underdeveloped, it provides green lungs for cities (South African Cities Network, 2004:116). King (2004: 21) emphasises that mechanisms for protection and management of opens space areas, without Council ownership or formal protection, must be developed and applied. The Designated Metropolitan Open Space System must be considered in all spatial planning decisions.

Low-density and de-densifying urban forms impact negatively on open space and Charlton (2001:12) comments that land seen as important for inclusion in, for example, the Durban Metropolitan Open Space System, is the same land desired for housing development. The South African Cities Network (2001:116) states that the cities vary considerably in the amount of open space available. The following statistics are derived from the South African Cities Network (2001:116) to give an indication of open space systems in South Africa:

Mangaung reported that it had 119 developed parks compared with Tshwane's 546. This means that Tshwane had 4,5 times the number of parks as Mangaung, for three times its population. By contrast, eThekwini reported only 53 parks and Msunduzi five. Cities may be using different definitions of parks in their reporting here. A more appropriate indicator would be hectares of space. Hence the City of Joburg reports that it has 6 144 hectares of developed parks, 4 443 hectares of undeveloped parks, and 984 hectares of nature reserves. It manages approximately 1,2 million trees that make the northern suburbs of Johannesburg a natural forest. The extent of open space sometimes reflects geographic limitations, but it also speaks to the extent to which planning departments place value on these amenities. Various cities are now investing in the development of open space systems.

Recommendations by King (2004:26) for open space development includes defining natural areas to be conserved and finding a way of protecting and managing them, creating a "*green identity*" for open space areas, utilising road and rail reserves and rivers for ecological corridors and linkages. King (2004: 26) further suggests greening of areas by planting trees in neighbourhood gardens and verges of sidewalks. "*Brownfield*" sites for development must be identified and rehabilitated to open space. Green lungs must be developed. Zoning changes must be made to create buffers around existing industry to provide linkages for open space. Open space systems must be formalised into all planning processes and alien plants must be removed and controlled (King, 2004:26).

ArableLand

Research for the National Spatial Development Perspective shows the impact on arable land by stating that some of the most important arable land in the country is located to the east of Johannesburg, Ekurhuleni and Tshwane. Some of this land has already been intruded on by the displaced urbanisation around former Kwandebele. These settlements are still expanding today and are still sustained by expensive transport subsidies that allow a daily commute for workers from these areas into Tshwane. Although this also raises the positive prospect of development of urban agricultural economies, a rapid-growth scenario for Gauteng cities raises concern over whether its ecological footprint is sustainable in the long run. The land under threat

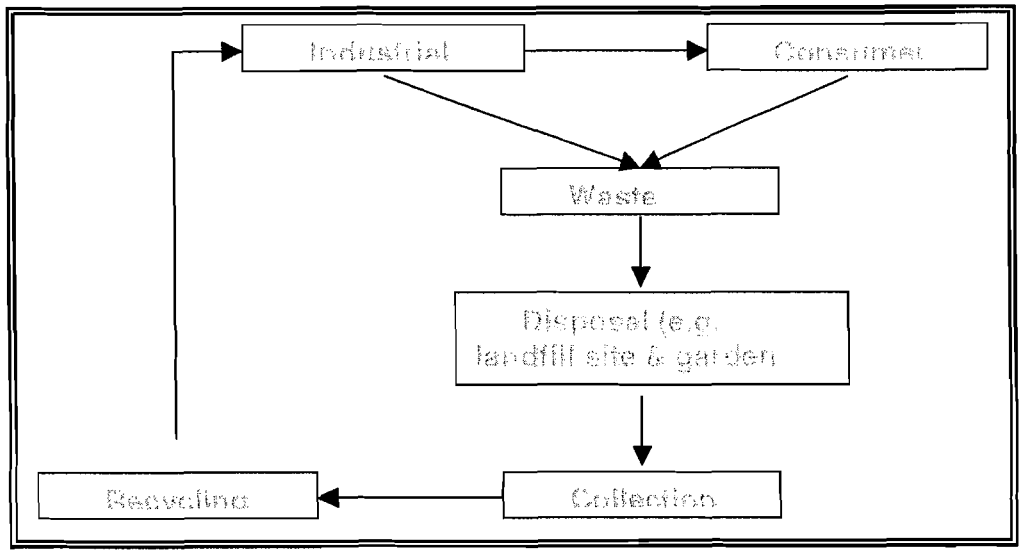
is extremely valuable. A fast-growing urban region that does not preserve it will have a lower level of food security in the future.

Some cities have a policy that new housing developments should happen far from the crowded areas of the city in areas usually categorised as peri-urban. This policy may make sense in the light of the habitability of land closer to the city centre. But the policy may be at the cost of viable specialist agriculture in the future.

Waste management

King (2004:26) points out that cities add significantly to the country's waste stream. Waste spoils land, whether it is illegally dumped or collected into ever-expanding landfills. The process of waste management described by Fuggle & Rabie (1996:493-513) describes an integrated waste management programme as consisting of the following components:

Figure 6-2:Waste management systems



Source: Glazewski *et al.*, (2000)

The waste recycling process takes place within a complex milieu of ever changing economic, social, political and biotic factors, all of which have been taken into account in the development of the waste management and recycling strategy.

All factors have to be considered when formulating the businesses' strategy for implementation, namely non-waste technology where the fundamental principle is to minimise waste through recycling and community clean-up programmes and awareness campaigns. Other factors include public relations to communicate regularly with all stakeholders, logistics that refers to diversity of options with respect to containers, vehicles and machines for the collection and transport of waste, as the most appropriate methods will be utilised.

Landfill is the method of disposal of all wastes and specific requirements have to be met in the selection of a site. Licensing requirements have to be adhered to as well as a code of ethics to minimise environmental impacts. Applied research and development and appropriate technology transfer have to be done to ensure that recycling is done in accordance with worldwide trends. Training of staff in management and handling of waste must take place to ensure competency.

The Environmental Conservation Act classifies all wastes. Fuggle and Rabie (1996) indicate that certain waste storage and processing systems factors have to be considered when developing a waste management strategy, namely the type of collection system, the economic radius of the operations, the on-site processing method to recover material, reduction of the volume and the treating of waste.

The collection systems should also, for example, consider the type of container and size, the transport and collection vehicle system, manpower, space constraints and internal logistics peculiar to the premises producing waste as well as aesthetics, public health by-laws and regulations. The collection system that is chosen has to be compatible with the waste to be handled, its classification, density and quantity.

A good choice for transport includes a rear-end loader, side loader or a front-end loader (Fuggle & Rabie, 1996: 493-513).

The types of transfer stations are dependent on capacity requirements, materials, handling system, vehicles, containers and the nature of waste. These factors are, *inter alia*, important in the design of a transfer station. The transport modes, e.g. rail, road, pneumatic, water and location of the transfer station have to be considered. In the transportation and transfer of waste, regionalisation has to be considered. The situation is made more complex through the influence of other logistic constraints on the selection of an appropriate strategy for the handling of waste.

The rear-end loaders to be utilised for waste management should be able to handle all operations within a 30km radius, as that is when they operate most efficiently. The rear-end loader mobile compaction vehicle, depending on body size, gives excellent compaction to the extent that special dispensation has to be sought

because these vehicles are always overloaded in relation to the bridge formula. The main reason for this state of affairs is the considerable overhang of the tailgate mechanism beyond the load-bearing axles.

The newer Rotors type machines can be utilised and they will not become overloaded because they have a much better mass distribution. These vehicles operate efficiently within a 30km radius. The side loader mobile compaction vehicle is somewhat less efficient as a compactor than a rear-end loader, but usually has a larger body which is lighter in relation to the payload carried and is legal in terms of roads ordinances. The maximum operating radius is 30km. The front-end loader mobile compaction vehicle is much the same as the side loader. The front-end loader mobile compaciton vehicle is very similar to the side loader and the productivity makes it highly competitive. These vehicles do not violate axle-loading constraints when correctly loaded and it is posisble for a good driver to operate this vehicle on his/her own, resulting in labour savings. Its operating radius is 30km (Fuggle & Rabie ; 1996: 498).

Sorting processing will have goals such as the recovery of usable material, volume reduction, treatment of waste to transform it so as to facilitate cheaper transport and disposal through processing and recovery to change the form.

The Environment Conservation Act necessitates the completion of an Environmental Impact Control Report (ERIC) to ensure that all the environmental impacts associated with the development of a plant are investigated in order to ensure that the proposed development is environmentally friendly. Pro-actively adopting and voluntarily enforcing regulations to ensure that the transition to the final application of the Environment Conservation Act is as smooth as possible, and that the local environment and communities are adequately protected, will demonstrate corporate social responsibility. The ERIC forms the basis of application of the integrated environmental management philosophy in waste recycling (Fuggle & Rabie, 1996508).

All waste management must be aligned with the Environmental Conservation Act and the principles of the National Environmental Management Act of 1998. A waste management strategy should allow for issues such as the following:

- Sustainability, so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.
- Disturbance of eco-systems should be avoided, minimised or remedied.
- Waste should be recycled where possible and otherwise disposed of in a responsible manner.

- The use and exploitation of non-renewable natural resources should occur in a responsible and equitable fashion and the consequences of depletion of the resources should be taken into account
- The development, use and exploitation of renewable resources and the eco-systems of which they are part, should not exceed the level beyond which their integrity would be jeopardised.
- A risk-averse and cautious approach should be applied, which would take into account the limits of current knowledge with regard to the consequences of decisions and actions.
- Negative impacts on the environment and on people's environmental rights should be anticipated and prevented.
- Environmental management should be integrated and should pursue the most practicable environmental options.
- Environmental justice should be pursued so that diverse environmental aspects would not be disturbed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged people.
- Equitable access to environmental justice to environmental resources benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access to them by categories of people disadvantaged by unfair discrimination.
- Responsibility for the environmental health and safety consequences of the recycling process, service or activity must exist throughout its life cycle.
- The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons should be ensured.
- Decisions taken should reflect the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.
- Community well-being and empowerment should be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.
- The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.
- The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers, must be respected and protected.
- Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.

- The environment must be held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.
- The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution; environmental damage or adverse health effects must be paid for if the environment has been harmed in any way.
- The vital role of women and youth in environmental management and development must be recognised and their full participation therein promoted.

The South African Cities Network (2004:14) shows that some cities clearly have a far larger burden of waste generation than others, even when they are not the largest. Although it is not clear how much additional waste is collected by private contractors in each city, the data suggest that the challenge of Tshwane's domestic waste is far larger than that of Johannesburg.

All wastes handled will be general waste classified as household or commercial waste, as classified by the Environmental Conservation Act. The following waste storage and processing systems factors have been considered, e.g. type of collection system, the economic radius of the operations, the on-site processing method to recover material, reduction of the volume and the treating of waste.

Collection System

Collection systems should consider the type of container and size, the transport and collection vehicle system, manpower, space constraints and internal logistics peculiar to the premises producing waste as well asaesthetics, public health by-laws and regulations. The collection system should be compatible with the waste to be handled, its classification, density and quantity. The type of waste that could be stored may be domestic, and this will be stored in a 90-litter bin to 240 l polecat. Transport that could be utilised includes a rear-end loader, side loader or a front-end loader.

Waste transfer/transportation

The types of transfer stations are dependent on capacity requirements, materials, handling systems, vehicles, containers and the nature of waste. These factors are important in the design of a transfer station. The transport modes, e.g. rail, road, pneumatic, water and location of the transfer station have to be considered. In the transportation and transfer of waste, regionalisation must be considered. The situation is made more complex through the influence of other logistic constraints on the selection of an appropriate strategy for the

handling of waste. The rear-end loaders that could be utilised will handle all operation within a 30km radius, as that is when they operate most efficiently. The rear-end loader mobile compaction vehicle, depending on body size, gives excellent compaction to the extent that special dispensation has been sought because these vehicles are always overloaded in relation to the bridge formula. The main reason for this the state of affairs is the considerable overhang of the tailgate mechanism beyond the load-bearing axles. The newer Rotors type machines could be utilised and they are not easily overloaded because they have a much better mass distribution. These vehicles operate efficiently within a 30km radius. The side loader mobile compaction vehicle is somewhat less efficient as a compactor than a rear-end loader, but usually has a larger body which is lighter in relation to the payload carried and is legal in terms of roads ordinances. The maximum operating radius is 30km. The front-end loader mobile compaction vehicle is much the same as the side loader.

The front-end loader mobile compaciton vehicle is very similar to the side loader and the productivity makes it highly competitive. These vehicles do not violate axle-loading constraints when correctly loaded and it is posisble for a good driver to operate this vehicle on his/her own, resulting in labour savings. Its operating radius is 30km.

Reduction potential and disposal options

Sorting should have goals such as the recovery of usable material, volume reduction, treatment of waste to transform it so as to facilitate cheaper transport and disposal through processing and recovery to change the form.

A waste disposal facility must be licensed and designed to accept at least domestic, trade and general industrial waste. The unsaturated attenuation zone below the site has permeability of k< 10 cams and must be deep enough to effectively contain the degradation products of the wastes.

Specified design

The site design must, *inter alia,* take the geology, hydrogeology, topography, drainage axes and water courses, boundaries of the property, location of site facilities, site infrastructure, site preparation and storm water management into consideration.

Legal requirements

All waste management must be in line with the Environmental Conservation Act and the principles of the

National Environmental Management Act of 1998.

King (2004:27) points out that future planning for waste management should include detailed mapping of natural areas, defining of ownership, ecological status, threats and opportunities. All watercourse 100-year flood lines must be determined, wetlands must be mapped and threats and opportunities defined. The South African Cities Network (2004:119) describe a case study of implementation of a successful waste management strategy implemented in Ekhuruleni. Land use zones were key elements of the Ekhuruleni Framework. The proposed land use zones' purpose was not to fix specific land uses to specific areas of land, but rather to indicate which land uses can generally be allowed in which areas under which conditions.

Impact On Water, Air, Sound Quality and Energy

Water quality

The National Spatial Development Perspective modelling indicates that South Africa is severely stressed for water. While there is a current surplus in available water stores in key locations likely to see further urban expansion, future coverage cannot be guaranteed. Under a high-growth scenario the surplus will turn into a serious deficit by 2025. The South African Cities Network (2004:12) states that part of Gauteng and cities of eThekwini, Msunduzi and Cape Town, run the risk of severe water shortage in future times. Harrison *et al.* (2003:43) state that in August 2000, to reverse mainstream water pricing policy, it was necessary to recover and maintain costs in rural water schemes. Instead the government promised to provide all households with a free lifeline supply of water namely six kilolitres per household per month. Implementation was extremely uneven and many aspects of water poverty continued, due to residual mainstream approaches to water delivery and municipal financial management.

Severe water shortages will therefore result if social and economic policies are implemented. The South African Cities Network (2004:120) states that quantitative analysis shows shortages of approximately 40% in some areas. Seventy per cent of water in Cape Town is used for sanitation and silage, garden irrigation and leaks. The State of the Cities Report (2004) further encounters problems with the water quality when comparing the standards of water samples. The Department of Water Affairs and Forestry (DWAF) states that municipalities must be stricter on taking of samples.

King (2004:19) describes the effect of waste on hydrological issues, e.g. contamination of rivers due to sand winning, soil erosion, acidification, soil loss and salutation, runoff from informal housing and illegal discharges from industries. Sewage require treatment increases as population increases. In addition, higher

numbers of people are using water-borne sanitation as informal settlements are being upgraded. Many wastewater treatment plants discharge their final return flows in the main channel of the nearest river. King (2004:19) further discusses the effect of runoff from informal areas, which has had a significant impact on river quality. Growing industries result in increasing industrial effluent.

Trade effluent is ultimately disposed of in the sea with domestic sewerage. Some effluent ultimately finds its way into the sewer system in the form of leachate. Biodiversity has been negatively affected and loss of potential tourism opportunities is also mentioned by King, due to health risks faced in the practising of recreational activity, e.g. paddling. Bacterial contamination of estuaries is also a threat to residents living in specific areas (King, 2004:27).

Air quality

King (2004:18) comments that whatever the reason is for the spatial pattern of industrialised areas in South Africa, the resultant conflict is difficult to resolve without significant action either by the population, industry or government. Relocation of residents is not desirable from a community perspective. The relocation of industry is costly and logistically impractical in many instances. Industrial areas have to be managed effectively.

Gas emissions generated by industries in close proximity of residential areas have a negative impact on the health and quality of life of the residents living adjacent to, or in close proximity of a conflicting industry.

Much research has been done on these issues and no definite results have been obtained. Difficulties arise due to cumulative impacts of industries and the perceptions held by the communities with regard to pollution. There is currently a major initiative underway in the South Durban Basin, for example, with regard to air quality monitoring and health studies and this will clarify many issues and prove recommendation for improvement of air quality in the South Basin (King, 2004:18).

The Durban South Basin Strategic Environmental Assessment homepage states that the South Durban Basin is the economic heartland of the eThekwini Municipal Area. It contributes over 40% of Durban's gross geographic product and occupies over 50% of the industrial land in the city. It is also environmentally degraded, experiencing significant air pollution and waste disposal problems and the loss of important natural resources. This situation has undermined the quality of life of residential communities in the area. Pollution levels are very high and on 10 September 2000 a feature was done by Carte Blanche on the air pollution in the South Basin and detrimental effects of it to human health were discussed. The Mail and

Guardian of April 8, 2000 commented that South African petrochemical refineries produce approximately 82 tons of sulphur dioxide gas daily. Another incident was an article in Independent Media, which reported that Beverley View in Merebank was overcome by diesel fuels. This is being strictly attended to. The Durban Vortex states that the petrochemical industry has agreed to strictly monitor its pollution levels. The aim is therefore, from an economic point of view, to promote sustainable economic development. Sustainable development is focused on conservation of the environment When economic development is balanced with meeting basic needs and a human-centred approach to development is followed, humans cannot be separated from the natural environment. Economic growth impacts significantly on the natural environment.

Humans have become increasingly dependent on their natural environment and make great claims on their natural environment. A person's existence depends on how he uses the natural environment. This is demonstrated by the fact that the Spatial Framework has specifically planned for an open space system. In the South Basin there is a plan to implement an anti-pollution strategy (Iyer Rothaug Collaborative, 2004).

The close interface between residential and industrial activities in the area has also created tensions between residential communities, local government and industry. The environmental impact was commissioned for Durban in 1997 and the aim was to assess the problems and opportunities in the area. Sustainable development guidelines were developed and are guiding future development (State of the Environment, 2002).

Constructive engagement is being pursued, e.g. open days and public participation meetings and implementation of a Joint Operations Group. A formal communication and public participation plan is being negotiated, e.g. placing a newspaper article of the South Durban Basin Area Based Management activities in the newspaper on a two-weekly basis. The State of the Environment Report was accompanied by a schools education programme and a worker development programme. These steps confirm that environmental awareness is being promoted.

A summary of current air quality sources in the eThekwini Metro is as follows:

Table 6-7: Approximate emissions of air pollutant in the Durban Metropolitan Area

Total emissions	**Particulate matter (%)**	**Carbon Monoxide (%)**	**Sulphur Dioxide (%)**	**Oxides of Nitrogen (%)**	**Organic compounds (%)**
Agriculture	3.4	3.3	0	0	2

Total emissions	**Particulate matter (%)**	**Carbon Monoxide (%)**	**Sulphur Dioxide (%)**	**Oxides of Nitrogen (%)**	**Organic compounds (%)**
and Forestry					
Industrial processes	69.4	2	91.4	20.6	27.3
Motor vehicles	26.8	94.6	6.9	74.7	70.2
Other mobile sources	0.4	0,1	1.6	4.7	0.5

Source: King (2004)

It should be noted that the burning of coal accounts for 98.7% of particulate matter, 94.3% of carbon monoxide, 84.4% of sulphur dioxide, 89.9% of oxides of nitrogen and 78% of organic compounds are generated by fuel activities in the Metro area. Larger industries have been targeted to reduce their air emissions and as a result Sulphur Oxide emissions from larger industries have reduced significantly. However, air quality in the Basin remains a significant problem as larger industries continue to be put under pressure to further reduce emissions. Smaller industries are less easy to influence (by NGOs or Government) and continue to contribute to air pollution. (King, 2004: 29).

Spare (2000) notes that many industries calculate their emissions rather than measure them on an ongoing basis, and whilst this is an internationally accepted practice, it can nevertheless lead to errors if not verified regularly.

The South African Cities Network (2004: 120) reports on air pollution caused by high emissions from vehicles, due to the fact that development in South African cities has been car driven. The availability of good roads and poor standards of public transport have encouraged high levels of private car use. More people have located to quiet suburbs with large plots far from the city centre (Marcuse & Van Kempen, 2000:4).

Peripheral development has encouraged the use of more cars, which in turn has made public transport systems less financially viable. Cameron (2001) states that bus and rail services are directly subsidised by the state in two subsidy systems. The last two decades have seen rapidly increasing subsidy costs despite a

decline in rail and bus passengers. The emergence of the unsubsidised informal minibus taxi industry in the mid 1980s resulted in a steady decline in bus and rail commuters to the extent that by the mid 1990s the minibus taxis carried over half of the Black commuter market. The minibus-taxis have increased the number of vehicles on the road significantly. All the car emissions lead to acid rain, which in turn damages natural rain frost and fresh water lakes (Kleynhans & Naudé, 2001). The vehicle emissions have significant health impacts on townships located close to roads and near key transport interchanges.

The under-electrification of township areas, and the relatively high costs of electricity for cooking and heating have led to many households utilising coal and paraffin burners (Hardoy & Satterthwaite, 1989; SACN, 2004:121). Poor regulation of industry emissions exacerbates the problem as seen in the description of industrial emissions in the South Durban Basin.

Energy

Cities consume high amounts of energy and become *"heat islands"* due to a concentration of people and buildings in a restricted area. This impacts on the biosphere, which in turn influences humans. The energy balance in eco-systems is disturbed due to the preponderance of man as a consumer, little primary production as plants no longer form the energy basis and a lower presence of decomposers. Production and consumption of secondary energy is quite high (Cilliers, 2001:3). Energy is a natural resource and when it is processed in the form of food, or generated in the form of electricity, it is still reliant on an original store of natural resources. Cilliers (2001:3) states tat the burdens of urban environments may be too heavy for energy sources to bear, increasing the ecological footprint of the city (Wackernagel & Rees, 1999).

Widening ecological footprints

Wackernagel and Rees (1999:5-43) describe the ecological footprint as the ecological impact that human activities within cities have beyond their boundaries. An ecological footprint study is a way of forecasting the future of the South African city. Wackernagel and Rees (1999:42) describe that it measures the *"load"* imposed by a given population on nature. Analysis of the energy footprint is an important component. Wackernagel and Rees (1999:44) state that circular flows are sustained by the indirect throughput of ecological goods and services from and to the ecosphere, the natural income stream. All energy and much of the matter that pass through the economy is permanently dissipated in the environment, never to be used again. It is imperative to monitor the energy footprint.

A recently developed tool for measuring ecological sustainability is Ecological Footprint analysis. It is based on the fact that the earth is a closed system, in which all material inputs required by humanity (air and water, food and fibre, energy and minerals) are supplied by a finite area of productive land and water. Equally, all waste outputs have to be absorbed by natural systems. Nature, functioning as a system of sources and sinks, is therefore our ecological life-support system.

Ecological Footprint analysis calculates the total resource consumption and waste generation of a person, city, or nation (e.g. in tons) and, using productivity and absorption factors (e.g. output in tons/ha), converts this into the corresponding area needed to produce the resources and consume the wastes.

This '*areal*' figure, in ha/person, is the ecological footprint of the individual, city or nation. It can be compared with the 'fair Earthshare' in 1999 of 1,9 ha/person, the amount of productive land on the planet available to supply each person's inputs and absorb his or her outputs, to assess whether or not patterns of resource consumption and waste generation are sustainable and not overshooting the planet's carrying capacity (World Wildlife Foundation, 2002).

Cities, the flywheels of modern economies, now occupy a central position in the pattern of resource-waste flows. Globally they account for the consumption of over 75% of all materials and the emission of over 75% of all wastes. (Girardet, 1999). These percentages will rise in decades to come, tracking the rising levels of urbanisation (currently around 50%) and affluence, and technological change. It is evident that cities are one of the keys to the ecological sustainability of the planet. In this context, Ecological Footprint analysis of individual cities can provide an indication of their contribution to the problem and where action might be taken so that they become part of the solution.

Cape Town's ecological footprint has been derived, by converting the resource-waste flows (measured in tons) through its urban-industrial metabolism into related areal units using reputable conversion factors (Gasson 2002 & 2003). These are presented below with the energy component highlighted.

The calculation indicates that Cape Town depends upon an area of about 128 300km² for the supply of its resources and the absorption of its wastes. This is equal to about 10% of the total surface area of South Africa (1 225 815 square kilometres), or roughly the area of the Western Cape Province (129370 square kilometres). With a population of approximately three million, this translates into an Ecological Footprint of 4,28 ha/person, slightly larger than South Africa's per capita Ecological Footprint of 4,02 ha, which is the largest of any country in Africa. These figures mean that the average Capetonian and the average South African are consuming more than twice their "*fair Earthshare*".

This is not an ecologically sustainable situation. The energy footprint, in particular, is 10 920square kilometres, and constitutes 8,5% of Cape Town's overall ecological footprint. It includes the area needed to supply its fossil fuel inputs (8 440 square kilometres) and the area of forest needed to absorb its carbon dioxide emissions. The per capita energy footprint of 0,36 ha is quite small because the calculation assumes that Cape Town derives its electricity from the nearby nuclear power station, when this station, in fact, feeds its electricity into the coal-based national grid from which Cape Town draws its electricity.

Many studies on city Ecological Footprints are underway, mostly in Developed Countries, and the results show that all of them are exceeding the *"fair Earthshare"*. Some are exceptionally high, e.g. Hong Kong 7,1 ha/person, Kuwait 10,3 ha/person, Singapore 12,4 ha/person (World Wildlife Foundation, 2000).

A key factor behind the high Ecological Footprint is excessive consumption associated with the levels of affluence and energy-intensive types of technologies, e.g. the conversion of raw energy into electricity, motion and heat releases, gaseous by-products, particulate matter, and heat into the atmospheric sink.

The largest single contributor to atmospheric emissions is transportation (52,3%) of petrol and diesel vehicles. It is also the dominant contributor to oxides of nitrogen (NOx), volatile organic compounds (VOCs), and particulate matter (PM 10 and PM 2.5). Commerce and industry produce 25% of NOx, and 80% of sulphur dioxide (SO2), the chief sources of which are the Caltex refinery and a variety of industrial establishments burning coal and heavy fuel oil. Caltex also contributes significantly to VOCs. Vehicle numbers are expected to rise at a rate of 3-5% per year during the current decade and brown haze, a photochemical product of gaseous emissions combined with particulates, may increase by 48% and PM 2.5 health standards will probably be exceeded with increasing frequency (Wicking-Baird *et al.*, 1997).

The increasing quantity of high-level radioactive nuclear waste stored at Koeberg remains an unresolved problem for there is no disposal plan in place. The absence of a plan means that the issue of safe disposal is being passed on to future generations. This is in conflict with one of the principles of sustainable development and the Constitution of the Republic. By implication there is a lack of understanding and investment in stable and sustainable energy sources. Cape Town's industrial-urban metabolism depends on flows of exhaustible fossil energy (40%), and controversial nuclear-electrical energy (58%). The fossil fuel supply lines are exceptionally long and render the local economy vulnerable to disruptions in supply. For example, oil is shipped mainly from the Middle East 10 000 km away, while coal is railed from national sources 1 500km away in the Mpumalanga Province (Wicking-Baird et al., 1997).

Furthermore, global oil reserves are expected to run out some time during this century, though coal reserves could last for some centuries. Nuclear energy will remain an ecologically unsustainable option unless fail-safe ways can be found to deal with the high level of radioactive wastes, and no country has yet done so. Arguably, therefore, if the sustainability objectives of inexhaustibility, invulnerability, environmental quality, and self-reliance are to be realised then concerted steps must be taken now to harness and develop renewable energy sources. In the Cape the obvious possibilities are solar and wind energies, but these have been scarcely developed (Wicking-Baird *et al.*, 1997).

6.9 MANAGEMENT STRATEGIES

eThekwini's State of the Environment report mentions six major intervention strategies for environmental management. This includes the following:

- An environmental management system through which the city will develop environmental impact assessment indicators for metro services.
- A development and planning component which includes initiatives such as the Department of Housing focusing on greening new settlements, where there are initiatives to deal with solid waste minimisation. A human health and safety section with projects working on an air quality management strategies and a Durban solid-waste management strategy.
- A pollution and waste-management strategy working for an integrated pollution and waste policy, solid waste management strategy, reviewing effluent management system, air quality programmes, minimising noise.
- Pollution and toxic use reduction programme implementation.
- Environmental resource management including an integrated resource management programme, an integrated energy planning programme, the sustainable use of coastal resources, metropolitan open space systems, the protection and promotion of cultural resources.
- Education, training and awareness promotion focusing on building partnerships, building public awareness, building awareness amongst political decision makers.

Health Challenges

Unhealthy environments are unsustainable environments. The South African Cities Network (2004:127) reports that a geographic correlation does exist between air-pollution and diseases related to air-pollution. The report states that this is concentrated in the poorer sectors of the population.

Environments that impact negatively on the public health systems raise the costs of living in the city (Department of Health, 1997:11). The World Bank (1993:76) gives an indication of health challenges that have to be managed, namely protein-energy malnutrition, vitamin A deficiency; iodine deficiency and anaemia.

Impact On Time

The South African Cities Network Transport Networking Group stated that urban sprawl particularly affected lower income communities dependent on public transport. Nationally, average travel distance increased from 23km in 1979 to 37 km in 1990 (Department of Transport, 1999). The average public transport trip in the eThekwini Municipal Area is 20 km (Traffic and Transportation Department, 1999), compared to an international norm of 9km for Developing Countries (Department of Transport, 1999).

Urban sprawl leads to increases in costs, non-productive and time-consuming commuting, with less time for family and social activities. In the past there was limited planning of integration between land-use and movement systems with negative impacts, significant in urban areas. This is evident in transport corridors where ineffective land use management limits the efficiency of public transport operation.

6.10 CONCLUSION

There are clear links between the political history of South Africa and the built and natural environments. "*Apartheid*" policies which restricted the political rights of the majority of the population also limited their ability to improve their socio-economic status as they were located in dormitory townships on the periphery which resulted in the poorest of the poor paying high costs for public transportation

In the past most South Africans did not have adequate incomes and could not afford their own housing, or were denied access to land and housing. This led to household overcrowding and uncontrolled informal settlement with negative effects for water, vegetation and soil. Low incomes meant that people could not afford electricity and therefore used other fuels for heating which contributed to degradation of natural vegetation, and increased the risk of respiratory diseases through generation of atmospheric pollution.

Affordability also affected access to clean water and the incidence of water-related diseases. Since the change of government in 1994 all national policies have been redesigned to alleviate poverty and manage environmental sustainably.

The separate development policies and resulting inequality have caused severe environmental problems through wasteful resource use and pollution among the affluent minority. As income levels improve, people consume more and produce more waste.

Industrial manufacturing processes produce emissions that affect the atmosphere and contaminate water resources.

Until the employment rate increases to provide satisfactory incomes, the degradation of the natural habitat will continue through damage to the landscape by means of overgrazing and collection of building material and household fuel.

There is a heightened awareness about the possible negative effects of socio-economic development on the natural environment. Legislation requires that environmental impact assessments (including social impact assessments) be undertaken for all new developments that affect the natural environment.

This imposes additional costs on developers, which may have a detrimental effect on employment and retard the alleviation of poverty, but is a necessary requirement to ensure that development will be sustainable. There are also concerns about institutional capacity at all levels of government. It will be some time before all branches of government are effectively able to implement measures to mitigate negative impacts on the natural environment.

The South African city is less integrated today than ten years ago based on key development of decentralisations, housing development on peripheral areas, increases in cars and taxis on the roads and infrastructure constraints. I believe that many of the costs of city living are borne by poor people. Businesses tend to investigate short-term solutions, but problems are exacerbated when viewed in terms of the long-term impact.

Diseconomies of scale are increasing and it is imperative that this be managed. The increased costs of urban living are impacting on quality of life and needs to be managed effectively by the leaders trying to ensure the commitment of residents. Active citizenship and effective governance is needed to ensure sustainability.

CHAPTER SEVEN

URBAN GOVERNANCE AND CITIZENSHIP





CHAPTER SEVEN: GOVERNANCE AND CITIZENSHIP

7.1. INTRODUCTION

Cities are complex entities that cannot be reduced to the municipal entity, or even to the sum total of public sector interventions within a city. This necessitates good "*governance*", a term commonly used to describe the way in which cities are run and as Botes *et al.* (1997) describe clearly, it refers to the relationship between government and society.

The State of the World Cities Report of the UN-Habitat (2002) states clearly that governance is more than government. Botes *et al.* (1997) describe government as a body of persons and institutions that make and enforce law for a particular society. Governance is described as the sum of the ways by which individuals and institutions (public and private) plan and manage their common affairs. It is a continuous process that may either lead to conflict or a mutually beneficial cooperative action. It includes formal institutions and informal arrangements, as well as the social capital of citizens (South ACN, 2004:48).

According to Van Der Waldt and Du Toit (1999) governance operates by means of public administration which, within an open system, is the system of structures and processes operating within a particular society, as an environment with the objective of facilitating the formulation of appropriate governmental policy and the effective execution of it. It stresses the importance of the environmental context, politics and policy, policy execution and management. It therefore encompasses all the aspects of urban life.

The state of governance in South Africa is not easy to determine. The past ten years have been accompanied by massive local government transition and transformation processes, which included the devolution of powers and functions and consolidation of a number of local authorities (Burgmann, 2000). More recently, attention has focused on defining a system of intergovernmental relations (Burgmann, 2000; Oliver & Young, 1999). The United Nations Centre for Human Settlements, the United Nations Development Programme and the World Bank have been promoting urban management since the late 1980s, an initiative to improve the performance of local government (Post, 1997). This means that governance indicators are still in their infancy, particularly with regard to relationships at city level between the three spheres of government, state-owned enterprises, the private sector, civil society organisations, communities and citizens.

The legacy of "Apartheid" has left South Africa's urban areas dysfunctional. The urban form does not serve the needs of the majority of the population. South Africa will undergo many changes in the next 25 years. Clear common vision is crucial to ensure sustainability and to improve the city's role as a centre of economic and social development and opportunity (Department of Housing, 1997: 5). Government policies and programmes support the development of urban settlements. Governments are committed to creating the following type of urban areas (Department of Housing, 1997:5):

- Spatially, socio-economically integrated areas. These areas must be free of racial and gender discrimination and segregation, thereby enabling people to make residential and employment choices to pursue ideals.
- Centres of ecological and social support where people can work and live in safety and peace.
- Centres of vibrant urban governance managed by democratic, efficient, sustainable and accountable metropolitan and local governments, in close co-operation with civil society, geared towards innovative community-led development.
- Environmentally sustainable development, marked by a balance between built environmental open space and a balance between consumption needs and renewable and non-renewable resources.
- Centres planned for in a highly participative fashion that promotes the integration and sustainability of urban environments, marked by good housing, infrastructure and efficient services for households and business, as the basis for equitable standards of living.
- Integrated commercial and residential, as well as information and educational centres that provide easy access to a range of urban resources.
- Urban centres financed by government subsidies and mobilisation of additional resources through partnerships, thereby creating more forceful tapping of capital markets via off-budget methods (Department of Housing, 1997: 5).

These objectives are being considered by the different spheres of government as it addresses current issues, namely a large and growing urban population, persistence of inequality and poverty, financial pressures on municipalities, a vibrant and dynamic civil society and economic and financial potentials for urban revitalisation.

This chapter describes the local government transition process in some detail, and also attempts to evaluate some of its outcomes in the specific areas, which gives an indication of the level of sustainability and the factors needed to achieve sustainability. These specific areas include the following:

- Institutional capacity
- Service delivery performance
- Financial stability and spending efficacy
- Political efficacy
- Institutional experimentation
- Corruption and maladministration
- Citizen satisfaction
- Political participation and engagement and disengagement

The government of cities is assessed with reference to the internal performance of local government institutions and the wider network of co-operative arrangements that municipalities have been able to configure. Governance of cities is assessed with reference to the surveyed level of satisfaction in the municipality, degrees of meaningful participation in the municipal processes, evidence of community harmony or disintegration, levels of crime and violence and indications of movement towards private forms of government.

7.2 THE CONSTITUTIONAL CONTEXT

The efficacy of local government is a very important determinant of whether the relations between residents and government are positive and constructive. If municipalities are not efficient in how they utilise tax-resources, nor effective at addressing the concerns of residents, populations may be inclined to disengage (Douglas & Friedmann, 1998:12).

South Africa has an estimated 37.9 million people, stratified into racial and ethnic group-ingests as a result of decades of Apartheid policy (Central Statistical Services, 1996). The Apartheid system favoured the White population, awarding them a life of abundant wealth, while the majority of the non-white population lived in poverty. Non-white people were denied access to land, basic services and human rights. Inevitably, after peaceful transition to democracy, the country still holds the odious distinction of having one of the highest income disparities in the world, second only to Brazil (Morale, 2000:1).

Inequality between rich and poor has increased dramatically since 1975. The World Bank (1997) describes South Africa as one of the world's most unequal economies with 51.2% of annual income going to the richest 10% of the population, and less than 3.9% of income earned by the poorest 40%. South Africa's Gini coefficient is 0.68, which is worse than that of the Bahamas, Brazil or Jamaica (and 33 other Developing Countries), according to a study on income patterns by the Human Sciences Research Council and University of Natal economists performed in 2003.

The high level of unemployment, estimated at 40% of the economically active population, presently poses a threat to the South African economy. The 1998 Human Development Report places South Africa 89th in the Human Development Index (HDI) ranking and classifies it as a "*Medium Human Development Country*"(0.717 HDI) as well as a "*Middle Income Country*", with a real gross domestic product (GDP) of US$4332 per capita. However, while the poorest 20% of the population received a real GDP of US$516 per capita (1980–1994), the richest 20% received US$9897.

The present post-apartheid, democratically elected government in South Africa inherited a variety of administrative, financial, economic and political structures resulting from decades of Apartheid rule. The legal and administrative structures inherited were not intended to serve the broad population of the country, but rather small, divided ethnic or racial categories. The Apartheid system was not known for upholding participatory norms for decision-making. As a result, different sets of local government administrative structures for different racial groupings were imposed. Apartheid policies have fundamentally distorted and damaged the spatial, social and economic environment in which people live, work, raise families, and soulfully seek their aspirations (The White Paper on Local Government, 1998.).

Given this context, there is an urgent need to accelerate service delivery to local communities. It has become vital that strong, synergetic partnerships among central and local governments, civil organisations and private institution are formulated to rectify inefficiencies associated with the recent past. Local government in South Africa has undergone a process of transformation from Apartheid's highly unequal, racially classified, local administrative apparatus, to, ideally, an integrated, developmental, equitable and sustainable sphere of government. This transformation process involved three phases of transition namely the pre-interim phase, the interim phase and the final phase (Mogale, 2000:134).

Local government is pivotal to reshaping and strengthening local communities. This can be achieved by intensifying service delivery, especially to the poor, thereby deepening the foundation for democratic, integrated, prosperous and truly non-racial local communities. Generous assistance should be diverted towards building the capacity of provincial and local government. Attention should also be focused on the reflective institutionalisation of service delivery instruments within the jurisdiction of local governments (Mogale, 2000:134).

In 1993, the Local Government Transition Act (LATE) provided the legislative framework for the three-phase transitional process towards a new local government system. Under this Act, new forms and structures of local governments, including transitional councils and municipalities, were created to respond to the increasing demand for the amalgamation of former racially based structures. However, after the elections of 1994 and the creation of nine new provinces as mentioned in the Constitution, Section (41,1g) in the same year, the limitations and constraints of this new institutional framework became apparent during the interim transitional phase. The South African Cities Network (2004:135) states that originally the LGTA described a first phase lasting from the period of publication of the LGTA, to the election of transitional councils and the second phase as an interim phase defined as the period lasting from the date of election of transitional council up to the implementation of the final arrangements.

A final phase was not put forward in the LGTA, but it was implicitly envisaged that a further period of change, as municipalities were re-established and restructured in accordance with the final legislative arrangements, would be implemented (South African Cities Network, 2004:135).

The signing of the new constitution heralded for South Africa the adoption of the relatively new and innovative concept of government, manifesting itself through political and administrative systems. Adoption of this new concept marked the establishment of new relationships between public institutions, government structures and civil society. "*Government is constituted as national, provincial and local spheres of government which are distinctive, interdependent and interrelated*" (South Africa, 1996.).

All spheres of government must observe the principles of cooperative governance and intergovernmental relations. These principles require them "*to exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere*" and to "*cooperate with one another in mutual trust and good faith...*" (South Africa, 1996.).

Theoretically, innovations brought about by these principles in the South African system oblige all spheres of government to help authorities in other spheres build their legislative and executive capacities. This would include the capacity to empower civil society and to secure the well-being of residents. In the case of municipalities this approach is clearly indicated in Section 154 (1) of the constitution: "*The national government and provincial governments, by legislative and other measures, must support and strengthen the capacity of municipalities to manage their own affairs, to exercise their power and to perform their functions. Most importantly, the constitution regulates the transformation of the local government system, while providing it with a pivotal and distinctive role in the underpinning and promotion of social development and democracy at local level.*"

Chapter seven of the Constitution explains the role of municipalities in the developmental local government process. Mogale (2000:3) states that within the South African context; local government lacked the necessary capacity in 2000. This, in a sense, represented an Achilles heel in the implementation of the transformation ideals of the constitution. It has been widely documented that many local government structures suffer from a shortage of skills, particularly in financial and administrative areas. This compromises their ability to alter their approach from administrative to developmental and to deliver effective and efficient public services. It is therefore of extreme importance for the country that local governments, especially those in rural provinces, be capacitated and transformed so that they may play a developmental role (Mogale, 2000:3).

Intervention through sound governance and capacity building initiatives will create an environment conducive for local government to exercise its power and functions in a way that exerts maximum impact for the social development of communities. To give effect to this new local government system, the White Paper on Local Government was issued in March 1998. This paper provides the national policy framework for the strengthening of local government capacity. It guides government institutions, non-governmental organisations (NGOs), South African citizens and international development agencies towards the establishment and underpinning of the new local government system and ethos.

Seven major areas of intervention and five keys to transformation development objectives have subsequently been identified. Furthermore, this process has indicated the route to the final phase of political transition. This is occurring primarily through the adoption of optimal institutional arrangements and the call for redefining the demarcation process. It has also drawn attention to the need for capacity to be built within municipalities.

On the whole, the White Paper called on municipalities to build social conditions favourable to development. They were also required to consolidate local democracy through, among others, raising awareness of human rights issues and promoting constitutional values and principles among citizens. This strategy represented yet another step in the process of attaining the final local government system. Once elaborated upon, five areas were identified where intervention would be a priority. Each area would provide a catalyst for other processes that would strengthen local government. The areas discussed include developmental local government, political system, finance, services and administrative systems.

In addition, the strategy introduced two guiding principles for the implementation of the White Paper on Local Government in the above priority areas: Firstly, as the transformation involves three spheres of government, the implementation should be seen as a crucial exercise in cooperative governance. A forum representing the relevant stakeholders should therefore guide the transformation process. At the same time, it should build on the existing programmes and initiatives, thereby increasing interaction and coordination between national and provincial support programmes.

Secondly, the capacity of several national and provincial institutions should be established or reoriented. Organisations such as the Local Government Sector Education and Training Authority (LGSETA), local government associations and the LGTP had to be strengthened to promote their role in supporting the transition phase (Mogale; 2000:1). Having set these principles, a set of support services were proposed to assist municipalities in performing their tasks. These services included supporting the establishment of the Municipal Demarcation Board, introducing performance management systems, developing administrative regulatory frameworks and developing communication strategies.

Finally, the strategy recommended the creation of the Local Government Transformation Programme (LGTP) as a cooperative governance vehicle for mobilising and coordinating programmes, resources and available personnel to support the establishment of the local government system. The strategy provided an outline for local government transformation within the framework of the three spheres of government. It suggests policy, legislative, training and other interventions that need to be affected within each focus area. It also sets the parameters within which all role-players, including government, NGOs, donors and the private sector, should operate.

Two key issues to local government transformation are mentioned by Mogale (2000:10). Firstly, organisation has had a major impact on local government's ability to deliver services, the biggest being in those

municipalities that have incorporated former homeland towns. Staff complements are divided along many modalities, namely culture, ethnicity, skills and language. Such division results in the amalgamation process not to be an easy process.

Mogale (2000:10) mentioned that local government re-organisation, which would have an impact on local government capacity, would take place again and it would have the following effect:

- Expansion of geographical areas of local government to include areas which administration may not be equipped to govern. They may need new skills, new organisational structures, etc.
- The number of staff members may be reduced, placing an additional burden on the remaining staff. This requires that these people perform with greater efficiency and have higher skills levels. Skilled staff may resign and resources spent on training will constitute direct loss.
- Likewise, the number of councillors may be reduced and skilled councillors may resign.

Following the White Paper, the third interim phase development was the passing of new laws and the re-demarcation of local government boundaries to arrive at final structures for local government. The Municipal Structures Act (117 of 1998) defined new institutional arrangement and new administrative systems and constituted developmental local government. The Municipal Demarcation Board was of the opinion that local government could be efficiently developed only if the 843 existing municipalities were rationalised into 274 more functional jurisdictions.

Many cities did not wait for the finalisation process in the second half of the 1990s. Municipalities utilised their own expertise and responded pro-actively to the financial and institutional difficulties they were faced with (South African Cities Network, 2004:138). The iGoli 2002 programme, which entailed significant resatructuring, was instituted by the Johannesburg Metropolitan Council.

7.3 GOVERNANCE AND CIVIL SOCIETY

In the 1950s the state was seen to be responsible for, and the guarantor of, the public interest. Our present understanding of the role of government has undergone dramatic changes since those days. A major turning point came with the civic struggle of the 1960s, when a number of social planners, led by Paul Davidoff, turned from being advocates of a presumptive public interest to advocacy of the disemboweled sectors of our cities. They tried to become spokespersons for poor inner-city neighbourhoods (Friedmann, 1998:19).

Friedmann states (1998:21) that civil society was used in a modern context by Hegel in the "*Philosophy of Right*" and by De Tocqueville in his classic "*Democracy in America.*' Civil society refers to something we claim to perceive in the observable world, something that may serve as a lens through which to view and interpret phenomena that would otherwise have appeared to be disconnected from each other. Civil society can be defined as the social organisations, associations and institutions that exist and belong to the sphere of direct supervision and control by the state.

Critics see civil society as essentially composed of institutions, namely neighbourhood, family, church and voluntary associations that mediate between the individual and the state. Historically it argued for the preservation of a sphere of freedom against a potentially despotic state, or a struggle for greater participation. Francis Hutchinson's writing of the "*Scottish Enlightenment*" defines civil society as the individual human being who is endowed with reason, including a capacity for moral reasoning. The second is defined by the person's social nature of doing things in groups.

Friedmann (1998:23) draws a comparison between organised and mobilised civil society. Households, associations and churches constitute the basic make-up of civil society, but encompass the private sphere of the human life. Mobilisation occurs around a certain purpose. Social mobilisations are necessarily of finite duration.

It is also important to note that mobilisations may be directed not only against the state, but also against the segments of civil society itself. Friedmann (1998-23-24) states the importance of households in civil society and their value to contributing meaningfully, instead of being seen as units of consumptions as promoted by corporate capitalists. Planners engaged in anti-poverty policies, should be directly involved in improving household access to structural power.

Citizen rights are defined as full membership in a distinct political community. Friedmann (1998:24) defines citizen rights plainly by saying that it determines with whom we make choices, for which we require obedience and collect taxes, to which we allocate goods and services. Friedmann (1998:24) captures the dynamic between citizenship and good governance by raising debate on citizenship rights in the light of reciprocal duties that have to be performed by local government.

Citizenship in broad social terms takes the quality of life of a mutually supportive economy, collective and individual rights and responsibilities such as legal, social, economic, cultural, environmental and the public and private resources necessary to sustain citizenship. Friedmann (1988) argues that citizenship is to a large extent insurgent and for itself. Friedmann (1998) states that citizenship is centralised in localism, which involves a post-Euclidian planning approach whereby planners and government act as agents of civil society. The various tiers of government must be aligned to provide efficient governance and promote sustainability.

7.4 ROLES AND RESPONSIBILITIES

Each specific sphere of government has a particular function and role. This section describes the responsibilities and roles of the specific spheres of government.

The State and Development

The state has a definite role to play in development, but a problem that often arises as a result of the state's relationship with other role-players is that it tends to overplay its role. If the state overplays its role, it harms the development of the human being, since development entails human beings making use of the infrastructure given to them.

Commitment To Development

Government commitment is the basis on which successful development is built. Government commitment means providing an atmosphere or climate where development can grow and prosper. This government commitment must be made concrete by doing the following:

National policy support

Rondinelli & Ruddle (1978: 152) state that the aims of development should be the focus of a government's total approach and be included in all national policies (social, economic, technical) as all policies should support these objectives. Development that is not supported by a governmental commitment reflected in a national policy will not be successful and will not be planned in advance to meet short-term needs.

Administrative policy

It is useless if there is a strong national commitment towards development, but no administrative support. The commitment of policy makers is important, but just as important is a committed bureaucracy. The attitude in the bureaucracy should be one of favouring development with the whole structure being geared toward it. The bureaucracy should be functional (Swanepoel, 2000:86).

National planning and programming

Rondinelli and Ruddle (1978:144) state that development programmes are technically and organisationally complex and therefore central planning and programming cannot but be essential. This is one of the most important functions of the bureaucracy. National policy objectives must be reached by means of national planning, which indicates a centralised direction and course in order to reach these objectives. In the process, however, decentralised planning is permitted. National planning sets the framework according to which natural resources are also allocated. Much of the planning from the bottom upwards also takes place within this framework.

The State as policy maker

One of the state's main functions is policy-making, including that of a development policy. Development policy can be defined as a set of objectives which specifically addresses the problems and potential associated with a certain policy era (Rothblatt, 1974:370).

Development policy can also be described as a process that is managed by the state. This process is cyclical, representing a continuous spiral. It does not start at one point and end at another, and it is not linear. The different phases named by De Coning and Fick (1995:24) are as follows:

- The initiation of policy where different things, which have to be done, are placed on the agenda.
- The design of the policy process, in other words, the design and planning of a specific process.
- The stage where indicators are set up to measure the outcome, in other words, analysis of the policy chosen.
- The formulation of the specific policy.

- The decision-making process, which is a formal phase where formal decisions are made on the policy process.
- Policy dialogue, which entails the government debating with other major stakeholders.
- Policy implementation where the practical implementation of the developed policy options are tested.
- The evaluation and monitoring phase where the degree of success of policy implementation is measured.

Development policy goals represent the " big picture" of the kind of society the government would like to see. Rothblatt (1974:370) states that a development policy should attempt to solve the problems of development in rural as well as urban regions. Development is contextual in other words it deals with several rural and urban areas with each area having its own unique problems.

It means therefore that development is a dynamic process that encompasses a whole range of environments such as political-, social- and economic environments. If policies are contextual, it also implicates that they are dynamic.

Policy-making is dependent on the circumstances and context in which it takes place. The most important influences in Third World countries are the colonial legacy and the protection of the environment. The political, social and economic environment of a country is determined by that country's colonial history. Even the geographical or natural environment could be and had been influenced by colonial legacy.

Policy-making faces the challenge of setting up policies which reflect the needs and the sentiments of the people they are intended for. The state must be informed of what these needs are. The only way the state can determine what these needs are is by using the population for policy formulation. This can only be successful if the government has a strong legitimacy base. Many Third World States do not enjoy this support base and lack the legitimacy they need.

Gulhati (1990:1148) states that the autonomy of rulers or their room to manoeuvre is limited by class, race and ethnic stratification, combined with regional loyalties. It is also limited by the fact that in most Third World Countries regimes revolve around the person of the ruler and there are only a few participants involved in the policy-making process. Communication between the government and the population is disasterous due to the fact that emphasis is placed on the ruler. The channels for the participation in the policy-making process remain underdeveloped. The government seldom receives adequate information on how to address the needs of the people and the different contextual aspects. Mythaba, Baggima & Halfani

(1993:50) state the following to describe this situation:" *...the organisational system for management policy and management and policy analysis tended to be weak in many Africa countries. Neither the central guidance cluster nor the sectional ministries had well - established organisational systems that ensured smooth flow, storage, and retrieval of policy-oriented data:*"

Governments do not always make the best-informed policy choices. The process of making informed choices is complex and entails more than merely getting the necessary communication channels into place. The position of a soft state, especially in a Third World Country, differs completely from that of a Western Country. The soft state was imposed by an external authority and did not evolve spontaneously over a historical period of time like in the case of Western Countries. It cannot assert unchallenged authority over its own property. As a result the soft state has to introduce hard-line coercive means to implement its decisions and maintain its authority (Myrdal, 1970).

The policy process is a process in which a policy reform initiative may be altered or reversed at any stage in its life cycle (Thomas & Griddle, 1990:1166). Thomas & Griddle (1990:1166) also state that it is a continuous decision-making process, which involves policy elite and managers, as a response to actual as well as anticipated reactions to reformist initiatives. This is an interactive process as the ordinary people are as busy and involved as the political leaders.

De Coning (1995:127) states: "*Policy-making exercises of the mid - 1990's necessitate participation and public choice in which direct representation, empowerment and active decision-making is required. If development is defined as the capacity to make rational choices, the participatory nature of policy processes is clearly of primary importance, as such opportunities to exercise choice and explore rational options should be accommodated by policy-making processes.*"

State As Policy Implementer

The implementation of policies depends on the capacity available to do so. Capacity includes material-, financial-, managerial- and bureaucratic as well as technical resources. Third World Countries lack many of the resources required, in other words there is a large gap between policy formulation and policy implementation. Third World bureaucracies are large, but often inefficient. The growth of a bureaucracy can be explained because of the notion that government must implement all development efforts. Chambers (1977:135) describes the result of this as follows:

"As a government persistently tries to do too much and proliferates its organisations...the overburdened, under - staffed and under- experienced machine becomes dysfunctional, demonstrating a spastic condition in which orders from the centre produce if anything unpredictable and often contrary twitching in the extremities of the limbs. At the same time, the government bureaucracy continues to expand, and lies as a deadening weight on the economy of the taxpayer."

The inefficiency of government structures in Third World Countries is well known, especially when it comes to dealing with priorities on public issues. This is because governmental organs in many instances lack the capacity to cope with the range and intensity of demands confronting them (Rothschild & Curry, 1978:17).

Esman (1980: 427) is of the impression that the reason for Third World bureaucracies' inefficiency is their egocentric and self-serving attitude, which makes it impossible for them to be important disseminators of development. In the past they often catered for the needs of the political, administrative and economic elite only, and without allowing for the interest of the general public. Official contact did not extend far beyond the boundaries of the urban areas where the bureaucracies were stationed and as a result of this rural areas were neglected. Third World bureaucracy had reverted to an excessively centralised control.

McCurdy (1977: 300) states: *"Executives in developing countries are incapable of delegating authority. They want to control everything. Even the simplest administrative decision has to be approved at the top."* Swanepoel (2000:91) suggests that the reason for this can be found in the colonial legacy of the Third World state: *"The outstanding feature of the history of Third World bureaucracies is the influence of western thought and theories. The extensive western - oriented bureaucratic structures in the Third World are striking manifestations of this. These bureaucracies were established at a time when it was believed that Third World development had to follow in the footsteps of the west to reach the development stage of the modern western economies. In order to accomplish this, a modern bureaucracy in the western bureaucratic structures had to be established. Little was achieved of the economic dream, but western bureaucratic structures survived and became entrenched."* (Swanepoel, 2000: 91.)

The Third World bureaucracy has to implement development but it is rigidly moulded on the western model of control administration, which makes it inappropriate to do the task assigned to it, especially in the environment in which it is supposed to operate. Many efforts have been unsuccessful in trying to streamline the bureaucracy to make it more appropriate in order for it to perform its functions efficiently.

The State As Benefactor

In most countries the state is seen as the benefactor, which means that if infrastructure is lacking, the state must provide it. If the health situation is not satisfactory, the state is supposed to rectify it. If there are any financial constraints concerning development, it must be solved and provided for by the state. The state simply does not have the capacity or broad and secure tax base to play the role of benefactor successfully. This is true in the case of most Third World Countries.

It is understandable that people make these demands on the state. The people are caught up in the poverty trap and the state is seen as the only possible saviour able to deliver them from it. The state reacts by formulating policies and objectives that are often ambitious and unrealistic. Policies are often statements of belief, rather than statements of intent. These policies are very often impossible to implement because they are statements of how things are supposed to be. The problem is made even more complex by the fact that the Third World State finds itself in a peculiar situation namely that it is simultaneously strong, if measured by the size of its structures, and weak, if measured by the legitimacy of the political leadership (Moore, 1987: 8).

"*It is strong in the sense that the bureaucracy is the only cohesive and organised structure, and weak in the sense that certain regional groups are dissatisfied and have secessionist tendencies.*" (Moore, 1987:8.) Every Third World Country is part of an international economic order and is, to a large extent, dependent on it. It is for this reason they are vulnerable to coercion on the part of the international leading role-players of world economics. The international economic order is threatened by the balance-of-payments situation of many Third World Countries and therefore structural adjustment arrangements and other conditions are attached to any development loans to these countries.

The State As Development Supporter

The ideal situation is where the state is a supporter of development, which means someone else has to be the initiator and manager of development, for example the people themselves. Development should be localised since development planning, decisions and financing cannot be the same for the whole country and should be

done by the local people. Local circumstances will determine local development and the local people should take responsibility. These people should plan and make the decisions.

The government's responsibility is to provide some infrastructure, some finances and a development supporting policy and the provision of expertise. De Coning (1995:217) states that it is essential for communities to be involved in the whole ambit of activities namely the physical projects and policy exercises. The communities should identify the problems, priorities and needs that have to be addressed for full participation to be achieved.

Institutions should promote and accommodate people's participation, because people cannot take part in programmes in an unorganised, uncoordinated way. The structures have to be created for them to take part. Local institutional capacity is essential before participation can be effective.

Development of institutional and financial capacity would ensure effective urban and rural management systems and social networks which would enable people to gain access to development resources more easily and would ultimately ensure the appropriateness of development objectives and the success of development projects and programmes. Non-governmental organisations serve as articulators of needs and interests, which are relevant to development, and in the process they complement the public and private market sectors. These organisations are helpful in assisting regional and local communities manage their own development and provide a balance concerning public, private and voluntary participation (De Coning, 1995:218).

The supporting role of the state can further be defined as the responsibility to develop a climate conducive to establishing organisations, building and nurturing them and recognising them as participatory forums and bodies.

Four major functions of the government in this regard are the supplementation of local resources and the redistribution from the richer to the poorer regions, the co-ordination of various community efforts to achieve the common national goal, training to members of local organisations to provide them with adequate technical and organisational skills to be able to be effective in their participation programmes as well as a source of relevant information to help curb corruption by playing a supervisory role which helps to audit financial records and its insistence on open management of these organisations (Monaheng, 1995:79).

Monaheng (1995: 298) emphasises that participatory structures are there for empowerment of the people and should not be seen as instruments of political control. The structures should be autonomous and no traditional leaders or political functionaries should be imposed on them.

The state plays a major role in development but it should be supportive and should promote participation of local communities. Third World governments have tried to play a much too impressive and important role in development, but their capacity and position exercised some detrimental effects on development policies and the implementation of policies. The re-evaluation of the state's role in the whole policy process should be done in the context of the Third World State's position to the international economic order and its own constituency. Ordinary people should play the most important role in their own development and the government must have a very important role in assisting in this matter.

Local Government In South Africa

The local government of South Africa has even in a post-apartheid era not been able to attain acceptable levels of economic viability and social stability (Swanepoel & De Beer, 2000:102). The Paper on Local Government of 1998 has given some much-needed direction to the local government of South Africa. South African local authorities should attain semblance of stability and continuity in the future as a result of the 1998 White Paper on Local Government and other legislation emanating from it.

Future role of local governments

The strengthening of local government in South Africa is of utmost importance at present, because in many countries in Africa independence led to highly centralised systems of government, and local authorities only served as agents of central government (Hilliard & Wissink, 1996a: 76).

The Constitution of the Republic of South Africa (1996) states that local government should implement laws which are consistent with provincial and national laws. The situation at local sphere of government should not be allowed to degenerate since South African local authorities become lackeys of the central and provincial authorities with only nominal independence and no real powers of their own. The only way local authorities can survive and develop into credible institutions and perform one of their most difficult constitutional tasks, namely development within their areas of jurisdiction, is by raising a large portion of funds on their own and also by being instrumental about improving the lives of their inhabitants.

The Constitution of the Republic of South Africa (1996) requires municipalities to take responsibility for socio-economic development in their various areas, thereby contributing to more sources of income and more employment opportunities. The local authorities should provide a climate of growth and development; otherwise it will become harder for them to justify their existence in their local communities. Hanukah (1988: 20) states that local authorities in many countries have played an important role in the pursuit of developmental objectives. Local authorities in South Africa have to prove themselves by promoting development in their own areas and by raising funds to take care of their people.

Engines of development

Local authorities have to be engines of development since they have a crucial role to play in the South African economy. Local economic development supports national macro-economic and provincial strategies (eThekwini Municipality, 2004). National and provincial government should also support local economic development (South Africa, 1996). The 1998 White Paper on Local Government stresses the importance of local authorities in development. Local government has the responsibility to promote the local economy by creating job opportunities within the jurisdictional area and using resources to improve the quality of life for all the inhabitants. This is confirmed in the White Paper on Local Government's Executive summary produced in 1998.

Building capacity must be the main objective of local authorities and they must become integrally involved in the communities that they serve (Hilliard & Wissink, 1996b: 26). Development must build capacity. Wealth can be created with the multitude of skills, and job opportunities could follow. Local authorities must be engines and instruments of development (DPLG, 1998). Local authorities have to be pro-active and uplift the less-developed section of the communities as well as provide the traditional services and activities. Local authorities must take on additional developmental roles and not merely the administration and controlling (Koster, 1007:102). Municipalities have the responsibility of improving the quality of life of the people in their community.

Improving quality of life

Local authorities in South Africa have to strive towards reaching the ideal situation, namely improving the quality of life of their local communities. The local authorities are faced with many constraints, namely

environmental, financial and other constraints but they should not become despondent. During the whole process of local government reform careful attention has to be paid to the role of local government authorities, not only as service providers, but also as vital socio-economic role players. The local authorities have to provide the right conditions where people and small businesses can flourish (DPLG, 1998). The roles of local authorities are broad (Koster, 1997:101).

If local authorities are not allowed to make their own decisions and they do not play a directive role in society and they become the lackeys of the central and provincial government, as in many other African countries (Hilliard, 1997: 31).

The lackey role

In many developing African countries and socialistic countries local authorities have usually been weak, powerless and without initiative. Central government was often strengthened and local government weakened in post-colonial Africa, after independence had been gained (Hilliard & Wissink, 1996a:76).The local authorities often slavishly performed all the policies of the central government and reached this state because they were dependent on "handouts" and subsidies from other spheres of government and they were unable to maintain viable traditional or tribal local authorities.

This hat-in-the-hand situation occurred as a result of the local communities that crippled the lowest sphere of government financially. The poor payment rate for services, for example, is a growing problem in South Africa, even in a post-apartheid era. According to statistics only 39 per cent of Port Elizabethans, for example, are considered good payers while the rest have defaulted at some stage (Hilliard & Wissink, 2000:100). Matters were made even worse when these African countries labelled post-colonial local authorities as illegitimate relics of colonialism and were reluctant to submit to home rule. This happened even though some of the local authorities had already been established and were trying to bring democracy to the grassroots level.

These countries thereupon set out and set up highly centralised unitary systems of government dominated by single-party regimes (Cammack *et al.*, 1993:9). The people who were in authority positions did not delegate authority because they were afraid they would lose or forfeit their own power. This authoritarian attitude could have been motivated by fear, lust, power and greed. This is one of the main reasons why liberal democracy has been weak in Third World Countries, Africa included (Cammack *et al.*, 1993:10). If South

Africa's local authorities struggle to provide even the basic, most essential services, they will continue playing the lackey role, as they had done in the past, in spite of the recent extensive democratisation of local government.

A good idea is to establish public-private-partnerships (PPPs), in other words, local authorities contract some of their traditional functions out, especially the financially non-viable ones, to private entrepreneurs, since this could serve as a survival mechanism in saving people from financial ruin (Hilliard & Wissink, 2000:100).

The local authorities are expected to assume their responsibility as developmental agencies and catalysts of change, instead of seeing their function as merely tax-collecting and redistributing agencies. In terms of section 152 (1)(c) of the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996), local authorities are responsible for social and economic development. The developmental role of local authorities challenges them and takes them out of their current state of inertia.

The local authorities in South Africa cannot evade their responsibility that they have to raise the overall standards of their inhabitants (DPLG, 1998). They cannot concentrate on providing services alone, they also have the responsibility to devote their time to social upliftment in their communities. Some of the strategies by means of which to reach these developmental goals are as follows:

Maximise tourist potential

By exploiting the potential of the local tourist industry, the local authority can stimulate economic growth as mentioned in Schedule 4 (B) of the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996), where local authorities are responsible for local tourism. Tourism development is strengthened through spatial development initiatives.

Capitalise on physical surroundings

The physical surroundings in a community should be attractive to make a good impression on investors and donors (National Environmental and Management Act, 1998 (Act 107 of 1998). People favour unspoilt, unpolluted areas. Each city or community should concentrate on its good features to sell itself to potential investors. Cities should be made aesthetically beautiful and their libraries, museums, parks and historical

buildings should be maintained well. All investors want a return on their investments. If the physical environment in which an industry or a business is established is seen as a safe haven, then investors will feel secure in investing money there. Jurisdictional areas should contain green belts to create the idea of spaciousness. South African urban areas should become increasingly investor-friendly. The responsibility for this should be placed in the hands of the local authority (Hilliard & Wissink, 2000: 102).

Provide appropriate infrastructure

Airports, breakdowns, road networks, railways and harbours must be fully operational at all times and if any breakdowns occur it must be repaired with as little disruption as possible to ensure service delivery and traffic flow. Investors are hesitant to invest in towns where services are not provided quickly and easily to the consumer. Dysfunctional railway systems, for instance, are most unsatisfactory. South African towns and cities have to see to it that their communication networks are in proper working order for them to be in contact with the rest of the world, since it is the responsibility of local government to take care of municipal airports, ferries, jetties, piers, harbours, excluding the regulation of international and national shipping. This is confirmed in Schedule 4 (B) of the Constitution of South Africa 1996 (Act 108 of 1996).

Create conducive entrepreneurial conditions

Swanepoel & De Beer (2000:104) stress the importance of the creation of job opportunities by local authorities, but add that they should also create favourable conditions for entrepreneurs to make a profit. Jobs are the spin-offs of successful entrepreneurship, but making a profit is the main objective. Rates, taxes and tariffs should remain at reasonable levels and building regulations and by-laws should not be too strict or restrictive for investors. The local authorities are also responsible for trading regulations but many investors do not want to be bothered with too much bureaucratic administration. Their business venture must demonstrate the potential to succeed at the outset and they, therefore, want the establishment stages of their business to be as smooth as possible.

"It's the duty of the local authority to ensure that it attracts large numbers of investors - cum - entrepreneurs and does not scare them off with pedantic procedures, bureaucratic inertia, and inflexible public policies. All contracts must be given out according to merit otherwise first time entrepreneurs will back off when it is a known fact that tenders may only be awarded on the basis of race. Awarding of tenders should follow a

transparent procedure to prevent corruption, nepotism and string - pulling. The potential entrepreneur and investor will be repulsed if procedures aren't honest and impartial. "(Hilliard & Wissink, 2000:103.)

Grant liberal incentives to investors and donors

The eThekwini Economic Development Strategy (2004) stresses the fact that local authorities have to compete with one another for big business. McCarthy (2004: 2) states that incentives have to be provided by local authorities to draw businesses to their area of jurisdiction, to draw on their comparative advantage. Rebates or concessions on rates, effluent disposal, electricity and water are essential services that the municipalities have to provide. The prices charged for these services will determine where the entrepreneur will establish a business (eThekwini Municipality, 2004:54).

Local authority must be especially helpful to big businesses and accommodate them in a mutually beneficial way. The local authorities could even hand out prizes to entrepreneurs who have discovered innovations or have made significant contributions to the development of the industrial zone. An excellent way of attracting entrepreneurs to one particular local authority area instead of another is the introduction of tax incentives. If no concessions are made, the entrepreneur may be forced to move his capital and expertise someplace else, sometimes even to another part of the world, instead of South Africa. New business ventures and job creation programmes need to be reviewed by local authorities on a continuous basis.

If businesses are over-taxed they may be forced to close down, much to the detriment of local development. Overtaxing could procrastinate economic growth and capacity building at local level. An investment strategy has to be implemented with economic development projects. A coherent investment strategy must be accompanied by a full spectrum of service of potential investors. Each sector, or bundles of interlinking sectors, should appoint specialists to drive investment. Arising out of the Best Practice City Commission Report (BACK), eThekwini developed an investment promotion agency with the task of facilitating economic development. The unit is tasked to attract and facilitate new investments and retain existing investments in the region. The Best Practice Commission Report revealed that many international cities have dedicated investment promotion agencies (IPA) that focus on direct and inward investment into their areas.

Build capacity

The biggest responsibility of local authorities is to focus on meeting the social, economic and material needs of the citizens and improving their quality of life. This role is described in the South African Bill of Rights found in chapter two of the Constitution of the Republic of South Africa, Act 108 of 1996. Access to housing, health care, education, food, water and social security for all South Africans, is one of the main goals of the government of South Africa. The government will take reasonable measures in reaching this goal with the resources available.

The present conditions in South African rural and urban areas are far from ideal, with many people still living in absolute poverty. The new developmental local government system has to perform the following:

- Promote social development and economic growth.
- Integrate and coordinate service providers and other role-players.
- Redistribute resources and empower the people.
- Teach and lead local communities and thereby be forced to rethink the way they are organised and governed (DPLG, 1998). The focus of local authorities should be the development of human capacity to ensure that South Africans are properly trained to meet the demand of a rapidly changing work environment and endless list of needs.

Consult experts

Hilliard & Wissink (2000:105) indicate that local authorities should consult experts at universities and tertiary institutions because not enough expertise is being drawn from this sector of the economy. Local government is still highly politicised and the government may be scared that they will fail if they make use of expert advice, but this is in fact, contradictory to the political ideology. If local authorities want to achieve their goals there are more than enough experts in the field of development administration, public management and local government who can assist with drafting new legislation, and improve a local government system which is development-oriented.

Local government plays more than a political role in society and should separate its political roles from its administrative tasks. All local authorities should strive for excellence in their administrative tasks and in reaching their goals otherwise the population will become increasingly disappointed with the government-of-the-day (Hilliard & Wissink, 2000:105).

Towards sustainable local government

Local authorities should build social capital and a sense of common purpose to find solutions to the developmental problems they are faced with. The main way of reaching goals should be through empowerment of the community and using them in the decision-making process as they should be continually engaged in all kinds of capacity-building projects.

In the White Paper on Local Government (1998) it is stated that in places where municipalities fail to develop their own strategies, national government may have a more prescriptive attitude towards municipal transformation. This indicates that independent state of local authority will not be reached and will have to rely on national and provincial government for funds and permission to be able to provide the most basic services. It can be concluded that local authorities have to be catalysts of development and promote growth in their local communities and areas of jurisdiction

The provincial and national government can assist the local authorities in reaching their goals, but the local authorities must take ownership for their communities and cannot shift their responsibility based on financial constraints. The local authorities have to raise sufficient funds by means of rates and taxes. This will promote a climate where entrepreneurship, investment, tourism, growth and development can take place. Local authorities must have their own identity and must not rely on other spheres of government. If this does not happen, the situation in South Africa will remain status quo and almost no change will be noticed at local level, except the growing perception of the inefficiency of a bureaucracy, which has several financial constraints and cannot make a significant change to society.

Non - Governmental Organisations as agents of development

Non-governmental organisations (NGOs) vary from "*charity in the noble and religious sense of the term , to political associations, and local and popular development initiatives*" (Kane , 1990 : 14). It is very difficult to formulate a definition of an NGO. Kane (1990:14) identifies three criteria for an NGO namely:

1. An NGO should be privately set up, structured and sufficiently autonomous in its activity and financing since this is what ensures its non - governmental character.
2. Its character should be benevolent and voluntary, in other words it should be a non-profitable organisation.

3. Its character should be one of public interest and it should support development, even if governments have introduced legislation to limit the areas in which public interest can be exercised.

NGOs are autonomous, non-profit making, privately set up institutions that support, manage or facilitate development action.

Nature of NGOs

The nature of NGOs can also be better understood if an analysis is made of all the possible categories NGOs can be divided into. NGOs can be classified according to their evolutionary stage, their organisational type, their functional nature, their geographical classification and their membership (Swanepoel & De Beer, 2000:110).

Evolutionary classification

Korten (1990: 115-124) states that NGOs go through an evolutionary process characterised by four stages. These four stages are:

- First generation: Relief and welfare organisations are organisations which are defined in terms of their primary commitment to relief and welfare.
- Second generation: Small-scale, self-reliant local development organisations utilise local resources and take care of the basic needs of society.
- Third generation: Sustainable systems development organisations try to maximise the decision-making potential and control by the local community of the macro-processes that concern themselves by focusing on sustainable development.
- Fourth generation: Public consciousness organisations aim to increase public awareness and change policies by means of development education.

Korten is arguing that NGOs have to change continually and be adaptable to be able to address the needs of the society and if they cannot adapt, they will not survive. The people's needs change continually. The specific needs which each of these generations try to address, become void as a result of the nature of evolution. As the organisation develops, the functions that it performs at a particular stage of evolution in which it finds itself, become void as the organisation starts to perform the functions that are required of it in

the next evolutionary stage. Korten states that these stages always follow one another, but this is not always true in practice. The fact is that a certain organisation may have several programmes running, which are in different evolutionary stages, in other words, there might be an organisation running a feeding scheme which is a first generation activity and it might also have a community-empowering programme, which can be classified as a third generation activity (Liebenberg , 2000:111).

Organisational classification

Korten (1990:2) states that according to the organisational structure NGOs can be classified as voluntary organisations, public service contractors, people's organisations and governmental and non - governmental organisations.

Voluntary organisations have a set of shared values and pursue a social mission in terms of their commitment to these values. Public service contractors are non- profitable and serve public purposes. The interest of self - reliant social groupings is represented by people's organisations (Jeppe, 1992a:2). Jeppe distinguishes between what he calls service delivery organisations, within the context of organisational classification, which aim at providing a developmental service to a specific community. He also calls these organisations non-governmental development organisations (Jeppe, 1992a:23). The organisational traits of these NGOs are very often similar and representative of all the organisational needs and functions of any development organisation. An example of this is where development organisations pursue a social mission in terms of a commitment to shared values. This is done while serving public purposes, which represent the interest of self-reliant social groupings, within the broader context of a national government development policy framework. These categories are not separate form one another but are essential components in a development organisation's design.

Functional organisation

Many authors divide NGOs into different categories. Cross (1994:10), for example, identifies two main categories of NGOs, i.e. political and goal-oriented. Political NGOs function according to a political agenda and they are politically aligned and a goal-oriented NGO promotes the interests of a specific group of people and is functionally aligned. Goals tend to be the first priority and overrule other processes and procedures (Cross 1994:10).

Carroll (1999:13) names three groupings of NGOs namely productive and income-generating activities, social services and networking. Jeppe (1992b:9) distinguishes between the following categories :

- Specialised NGOs, which focus on activities that lead to human and physical development. These activities include technical training, adult literacy, housing and agriculture, for example.
- Welfare NGOs, which concentrate on upliftment and relief actions.
- Developmental NGOs, which aim at building human capacity and the development of physical infrastructure.
- Advocacy NGOs, which provide communities with information and consultation services.

These categories are not exclusive in terms of a holistic development approach. An NGO has the responsibility of providing all the functions stated as functional categories to fit in with the multi-dimensional character of development (Swanepoel and De Beer, 2000:113)

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Geographical classification

According to Liebenberg (2000: 113) NGOs can be divided into the following categories:

- International NGOs based in the northern hemisphere with offices in Third World Countries and they facilitate the development process throughout the Third World by providing financial and human resources.
- Regional NGOs where the activities are restricted to a certain region and they provide the same assistance as international NGOs.
- National NGOs, which restrict their development assistance to a certain nation or state.
- Local NGOs that facilitate development at community level.

Membership classification

NGOs can also be classified according to their membership profile. Some NGOs may be set up to benefit their members for example unions, co-operatives, saving clubs. Other organisations may be set up for public benefit, for example campaigning organisations and charities. Local or indigenous organisations, called community-based organisations (CBOs) are also part of public benefit organisations (Thomas, 1992:122). It is hoped that the rise of NGOs and CBOs will lead to self-reliant development.

Functional classification

Swanepoel and De Beer (2000:112) state that NGOs function in a multidimensional context with four interrelated dimensions, namely the popular sector and the historical context, institutional relationships of the NGO, the internal dynamics of the NGO and the project itself. The functionality of an NGO exists by means of the establishment of a working relationship with the popular sector, which also functions within a historical context. The specific nature of the given social reality within which both the NGO and the popular sector or community function is determined by the historical context (Pardon, 1987: 72)

Communities must be allowed to express their own opinions on development and what it entails and their roles in the development process.

The NGOs are involved in relationships with the popular as well as the public sector and they engage in a mutual beneficial relationship with other agents which are active in the same area. NGOs are influenced by the popular and the institutional sector but also to a large extent by their own internal dynamics, institutional development and characteristics. The above-mentioned dynamics are indicators of how projects are to be implemented (Liebenberg, 2000:115).

The interrelated nature of this process is shown by this analysis of the phases of an NGO project cycle (Salem & Eaves, 1989:3):

1. The analysis of development issues
2. The identification of a project
3. The design of a project
4. The financing of a project
5. The implementation of projects
6. The monitoring and evaluation of the project

Every aspect of the different project phases is related to the four dimensions in some way.

NGOs have the responsibility of setting up programmes, projects and products for a specific target group by utilising all the possible resources available (Herrington, 1991:10).

The NGO forms an indefinite part of society and is dependent on it and operates at community level and all other abstract parts of society (Herrington, 1991:10).

Herrington also states that good, motivated staff is essential for an NGO to function efficiently and its organisational structure should be appropriate for the task it is supposed to accomplish and the vision should be shared by all stakeholders.

If all these dimensions are analysed in a holistic way it leads one to see the NGO's role as an agent of development and not just an organisation that implements development projects. The functions of an NGO in terms of the process of development need to be analysed to give a broad perspective of an NGO in terms of development (Pardon, 1987:73).

NGOs implement development by structured planning and leadership with an external vision since development very seldom starts spontaneously, and therefore it can be said that NGOs are catalysts of development. Development aims at starting a process where a process of awareness building, education, and people forming their own organisations is started (Basin, 1991:8).

There are many reasons why such a development process is not initiated by the people themselves, namely the lack of resources, a lack of organisational structures that are able to cope with initiatives that emerge from society and historical factors where most of the communities are trapped in a dependency relationship which hinders development programmes (Erasmus, 1991:17 -18).

The role of the NGO as a catalyst of development is only temporary and does not mean that the authority to control the development process accompanies it, especially since the development process focuses on people's participation and empowerment (Brown & Korten, 1989: 11).

An NGO should protect itself from power holders and their agenda by maintaining its own independence in defining and interpreting its own mission (Brown & Korten, 1989:12).

NGOs should then promote participation, sustainability and empowerment where the communities are able to make their needs known and develop their own strategies to take care of these needs. This supports the notion of Shaw (1990:14), which states that NGOs are functional in strengthening civil society. NGOs function as expressions of a given society's capacity for free organisation that is not controlled by, or localised as expressions or mechanisms of political or economic domination (Frantz , 1988:122-123).

The imperative role of NGOs in the development process and the fact that their functioning leads to participation and creation of a civil society leads to this statement by Erasmus (1991:15): evaluation of NGOs must revolve around the extent to which NGOs succeed in empowering people at grassroots level.

Empowerment depends on people more than on physical resources and cannot be delivered or bought. Empowerment is a result of participation and allows social groups to make certain about their situation and allow them to make decisions to alter it. Pedro (1987:163) states that evaluation should not take place merely by means of measuring results against a set of objectives, but that evaluation of the organisational effectiveness as compared to final programme impact in terms of morale, participation, leadership, power equations and social values, should also take place.

Evaluation aims at promoting sustainability of development programmes. All components of the development process are interrelated and all NGOs should take this into consideration and approach development processes holistically.

Weaknesses of the NGO sector

Clark (1990:60) states that NGOs have a few limitations that could influence their effective functioning namely:

- Planning, managing, and organisation, that could be inadequate.
- Inadequate staff training.
- Inability to replicate projects and promote sustainability.
- Inability to collaborate at the appropriate levels with government services.
- Too little co-ordination of the efforts of individual NGOs to ensure effective macro-level spread of development.

Management training and effective leadership is absolutely necessary for the effective functioning of an NGO and adequate training in these two fields should be given more attention. A leader of an NGO tends to be very charismatic and once that person leaves the NGO there is no-one to replace the person and this creates a leadership vacuum. Many NGO employees do not undergo proper management training, which would enable them to perform complex tasks. This may show the NGO's inability to implement successful projects and replicate them on a regional or national scale (Brown & Korten, 1989:16). NGOs are not able to provide routine services to large populations on a regular basis.

NGOs are often in rivalry with one another or isolated and therefore NGOs are often unable to learn from one another's mistakes. NGOs are not open to social learning. NGOs often have the advantage that they are very specialised when it comes to providing specific services to accommodate certain needs in the communities, but sometimes they become so focused that they ignore the bigger picture or the larger context in which they operate as well as the other agencies that also function in the same system (Clark , 1990:60).

Strengths of NGOs

The strengths of NGOs include the following:

- The community's needs are determined very accurately because NGOs facilitate a large degree of community participation. NGOs are closer to communities than the government. The NGO members may live in the community or be part of the community.
- NGOs are very often the result of a community initiative and have more legitimacy in a community, which they serve. The people in the community may feel that their own interests and needs are being taken care of by these initiatives. The community takes ownership of the project and the people are more likely to support it.
- Community participation creates an environment in which local knowledge and technology can be used and adapted to local development needs. The high degree of community participation enables the community to apply a lot of the knowledge and technology to their own situation.
- NGOs are flexible and adaptable to local changes in the environment because they do not have a bureaucratic nature like the government. They can respond to situations faster and because of their smaller organisational size their running costs are much lower (Liebenberg, 2000:120).

NGOs and government

Thomas (1992:140) states that NGOs relate to the state in three ways :

- Complementing the state, in other words the NGO participates with the state in providing services, which the state would otherwise not be able to provide and the NGO helps with government policy implementation.
- Opposing the state where the NGO directly opposes the state or opposes the state by means of pressure groups in an effort to engage government with regard to its policies, which the NGO and the community feel have a direct influence on them.
- Reforming the state, in other words interest groups working at grassroots level and negotiating with the government to improve their policies.

The government should make use of NGOs to provide services in the fields of welfare, development, local government and economic growth. Most governments would like to monitor NGOs very closely because NGOs play such a big role in government development delivery systems. This often leads to conflict since many NGOs interpret it as interference from the part of the government. The government cannot shed its responsibility and pour large amounts of money into the NGO sector and expect them to take over the government's role. Governments cannot function as NGOs and neither can NGOs function like the government. The two parties should complement each other.

It can therefore be concluded that NGOs should play an important role in the functional implementation of human development and they should broaden their scope when it comes to implementing functions to complement the holistic nature of development. The government would like to control the functioning of NGOs but they need them to function as agents of civil society to produce effective results.

NGOs need to be adaptable to their environment and need to utilise their unique characteristics in terms of functional implementation. NGOs should evaluate their environment and see which services they can provide - which the government cannot.

NGOs are agents of development and consist of many geographical-, functional-, membership-, organisational and evolutionary groupings, which make it increasingly difficult to formulate a definition.

NGOs still manage to be effective development agents and there is more than enough space in the field of development for both government and NGOs.

South Africa has a vibrant civil society that has a developed network of institutions, organisations and associations, which are an invaluable asset for urban development and transformation (Department of Housing, 1997:6).

There are approximately 54000 associations of one kind or another in South Africa. The three most important, however, include community-based organisations (CBOs), NGOs (non-governmental organisations) and business associations. Civil organisations have played a major role in negotiations at the local level for new forms of representation. At the national level they were involved in the conception of the Reconstruction and Development Programme (Department of Housing, 1997:6).

CBOs assist all members with different services like saving, collective purchasing, burial responsibilities, cultural activities, religious support, security, transportation and access to information. Many aim at creating housing, municipal services, training, environment, public health and social rights (Department of Housing, 1997:6). It is not necessary for NGOs to be membership based or to be geographically specific. They do, however, provide services to different sections of the society that are disadvantaged in one way or another, for example race, gender, class, spatial disability or age. Many are lobby groups that are organised around human rights or certain policy or cultural issues. They play an important role in society and help to build cross-cultural, multi-racial relations of trust (Department of Housing, 1997:6). The churches that have also been involved in many coalitions that are multi-institutional, have supported their role. South Africa has approximately 800 000 shareholder-owned businesses that are constituted under the Companies Act. These businesses differ in size. They are organised into a number of business associations, which have become increasingly effective in public policy negotiations at the different levels, i.e. local, national and provincial.

The Government is committed to sharing major urban issues with the stakeholders. The constructive ability of civil society as stakeholder to transcend old historical and political legacies is a major positive feature of the urban sector (Department of Housing, 1997:7).

As governance structures, involving both formal institutions of municipalities and role players in civil society, become a more prominent feature of the urban landscape, the strength and the resilience of the association fabric will play a key role in the formulation of urban policy and ultimately, delivery. Seeing that

full consensus is rarely attainable, elected representatives must therefore accept the responsibility of making decisions in terms of determining policies and priorities after consultation (Department of Housing, 1997:7).

It is generally accepted in our cities and towns that people's lives are interconnected. This sense has been promoted by widespread public approval of the goals of the Reconstruction and Development Programme. Many different stakeholders found more things in common in the forums that have become such an important part of the decision-making process over the past few years (Department of Housing, 1997:7). The Department of Housing (1997:7) states that most key stakeholders understand that townships cannot be insulated from higher-income suburbs as in the past. There is a joint recognition that there has to be interaction between the different rural and urban interest groups to work together to integrate the cities (Department of Housing, 1997:7).

7.5 INSTITUTIONAL EFFICIENCY

Due to structural and functional historical legacies, the number, size and capacity of transitional local councils (TLCs), inter-governmental linkages and networking structures have not always been what they should. This has prompted the formation of (political) intergovernmental forums headed by the premiers (Mogale, 2000:14).

These comprised of Members of the Executive Council (MECs) and organised local government. They were formed in 2000. In rural provinces, the relationship between traditional leaders and local councillors is complicated by the existence of additional structures such as the House of Traditional Leaders, which performs an advisory role. The efficiency if their relationship varies, depending on the area or specific issues concerned.

The Provincial Coordinating Committee on Training (linked to the National Training Board) was disbanded in 2000 (Mogale, 2000:14). This committee comprised of councillors, unions and the Local Government and Traditional Authority (LG&TA) Department. This was replaced by a sectoral education and training authority (SETA), which is run directly by the National Training Board.

Mogale (2000:14) mentions that the relationship between the province and district councils is not always congenial, neither is the relationship between district councillors and local councillors. Mistrust is initiated by poorly articulated funding mechanisms and suspicion that redistribution of resources to areas traditionally

marginalised by former apartheid policies, prejudices or other transitional local councils is not what it should be or seems to be. Mogale mentioned several capacity constraints experienced by transitional rural councils, as they often have only one official who acts as the administrator, development facilitator and implementer. Officials tend to lack necessary skills and do not have fixed office premises.

The South African Cities Network (2004:138) states that the largest municipalities in the country with the biggest budgets and staff complements formed part of the sample of cities studied to compile the report. The South African Cities Network states that because these are large metropolitan areas, there is sometimes a perception that most capacity and resources are available in these areas.

Capacity is always relative to context. Many of the municipalities face particular challenges, typical of large cities that a smaller urban area would not have to face. Two of the metropolitan municipalities, Ekurhuleni and Nelson Mandela, are new metros that have amalgamated a number of previously separate institutions. It was necessary for them to devote much energy to a comprehensive management change process. A number of the municipal areas now include extensive rural areas. Urban management expertise sometimes proves to be insufficient in the rural parts of eThekwini, Tshwane and Buffalo City. Tshwane faces unique intergovernmental relations challenges in being a cross-boundary municipality (South African Cities Network, 2004:138).

7.6 SERVICE DELIVERY PERFORMANCE

The constitution as well as the White Paper on Local Government obliges local government to deliver a range of services to meet the social, economic and material needs of their communities. To achieve this, it is essential that the local government's administrative system be transformed to respond to these needs. Local government capacity can be achieved by introducing the necessary planning techniques, management skills and administrative systems as well as by promoting improved relations with traditional leaders. In addition, various other approaches to service delivery, including partnerships with other role players, for example civil society organisations and the private sector, should be made to assist in the process. This requirement of the constitution also focuses on promoting the participation of women in leadership positions of local government. These key areas of local government reform should be addressed with the following approach:

Implementation And Monitoring Of The Integrated Development Plan Process

The Integrated Development Plan process manual was officially launched in September 1998 and is implemented by all local authorities in the country. The IDP manuals were designed to assist local authorities in formulating integrated development plans by prioritising and strategically focusing their efforts and resources (Department of Constitutional Development, 1998). Through this, training material was produced and workshops conducted to facilitate the implementation of the IDP process. Seminars were also conducted in selected local governments to familiarise councillors and provincial administration officials with the options available for service delivery (Mogale, 2000:15).

Implementation Of Local Economic Development Links With Developmental Local Government

As cited above, municipalities are grappling with their "developmental" role as dictated in the new constitution and the White Paper on Local Government. Confounded by unexpected financial and human resource constraints and massive difficulties in attempting mere service delivery, many smaller local authorities are completely overwhelmed. Furthermore, national and provincial government departments are rapidly producing policies, white papers and legislation that need to be complied with and programmes that could possibly be accessed. Understandably, some municipalities assume the "*ostrich approach*" to the external environment merely continuing in their previous roles and functions. Others, however, aggressively pursue the "*short gunshot*" approach of "*shooting everything that flies*", hoping that something will fall out of the sky. The problem with both these approaches is that neither will adequately lead to the "developmental" approach required from local government. If the success of municipalities is to be measured in terms of their developmental results, then local authorities have to begin actively identifying the support systems necessary for them to meet their developmental mandate (Mogale, 2000, 15).

One of the desired "*developmental*" results is "*promotion and facilitation of local economic development*". Unfortunately, some municipalities have become caught in a theoretical debate concerning local economic development (LED) and the definition of an economic role for local authorities (Mogale, 2000:15). Perhaps this is a reaction to a perceived "top-down" approach originally adopted by national government. It may also be a failure to understand the opportunities that local economic development (LED) strategies offer localities (McCarty, 2004:3).

Globalisation has had an uneven effect on regions and sectors in South Africa. There is also the threat of deepening divisions between the so-called "core" and "periphery" and between the "skilled" and "unskilled". Unless local authorities seriously address questions of poverty, job creation and competitiveness and strengthen their strategies through networks and linkages, the existing economic landscape may be reinforced in terms of the economically marginalised areas (DPLG, 1998). LED will contribute to the creation of opportunities for regeneration, economic participation and will positively enhance rates-generating economic activities (Swanepoel & De Beer, 2000:104).

Human Resources Development

Mogale (2000:16) indicated the importance of human resources development in the transformation programme. It will involve an assessment of training needs in order to plan training programmes, to prepare training material and organise workshops and seminars. In particular, the training sessions will focus on areas where major weaknesses have been observed, for example

- local government administration;
- project planning, management, monitoring and evaluation;
- financial management;
- budget preparation; and
- customer relations;

Training outlines will be prepared in coordination with South African Local Government Association (SALGA) and LGSETA to improve their commitment and contribution. In view of the requirement to increase women's participation in local government, particular efforts will be made to ensure gender balance in the selection of participants for training programmes. This will occur through specific mechanisms to be adopted at steering committee level.

Administrative Systems And Structures

Systems, procedures and administrative guidelines will need to be improved and strengthened for local government efficiency to be improved. Areas of weakness, which will be addressed, include financial planning, financial reporting, performance management systems and management information systems, including information technology strategies (Van Der Waldt, 2000).

The exercise will also include the streamlining of organisational structures to enhance administrative efficiency, including effective mechanisms for revenue collection. Workshops will be conducted to facilitate the implementation of the improved systems and procedures. Assistance will be provided in the following areas (Van der Waldt, 2000):

- Financial management and accounting systems
- Budgetary control procedures
- Management information systems
- Performance management systems
- Project management, monitoring and evaluation
- Manuals

Gender Mainstreaming

Representation of women in local government leadership positions was viewed by Mogale (2000) as inadequate. *"Although women constitute more than 50% of the population, only 20% of municipal councillors are women."* (DPLG, 1998)

The White Paper on Local Government addressed the issues of implementing specific training programmes for councillors, relevant local government officials and community leaders.

Municipal Service Partnerships

Partnerships involve assessing the advantages and disadvantages of entering into a partnership with the private sector and/or other interested organisations such as NGOs, community-based organisations (CBOs) and other municipalities, to provide municipal services for the community (Adam & Hastings, 20001:1475). There are various cooperative options that could be explored by providing information, organising demonstrations and training local government staff and other stakeholders, including representatives of business and labour communities. Presentations will be organised by experts to share experiences from successful South African and international projects as well as other government departments, to further increase understanding about local government service partnerships.

A national workshop on service partnerships should be organised to contribute to discussions at local, provincial and national level. Various parties should also be brought together to discuss problematic issues and innovative solutions.

Operational Efficiency

The dismantling of "apartheid" has meant that the government, at all levels, is working at removing the inequities of the old system (Department of Housing, 1997:6). The reorientation of expenditure priorities towards providing infrastructure to low-income households in the formerly black townships and informal settlements has placed particular pressures on municipalities (Department of Housing, 1997:6). Amalgamation of former "White" and "Black" authorities has led to the restructuring of municipalities. Ability of the new municipalities to undertake the necessary capital expenditures depends on the strength of their financial position and it varies across the country (Department of Housing, 1997:6). Many municipalities face increasing deficits in their operating budgets, resulting from non-payment for services. This increases their diminished creditworthiness and limited ability to levy property taxes and user fees (Department of Housing, 1997:6). Other municipalities have no operating deficits and are fairly stable financially with a solid revenue base and strong borrowing powers. Municipalities are in the front line of managing the urbanisation process and initiating and facilitating urban development in consultation and in partnerships with the stakeholders. It is crucial to the efficient performance of our cities and towns that they function effectively (Department of Housing, 1997: 6).

A critical issue for any municipality is service delivery performance (Department of Housing, 1997). This has two efficiency components namely operational efficiency and locative efficiency. Operational efficiency refers to the extent to which residents receive quality services at the right price. Any resident paying rates or service fees is necessarily concerned about whether he/she is getting the '*biggest bang for their buck*'. Municipalities are, therefore, concerned about the cost per unit of delivering any particular service (South African Cities Network, 2004:140).

It is important for political stability that municipalities avoid wasting resources by ensuring that residents do not feel that money spent by them is being wasted on less-than-efficient municipal operations. A solid benchmark-based comparison of service delivery efficiency is not available across the municipalities in the

nine major cities sampled in the State of the Cities Report. However, the information that is available does indicate widely disparate performance on some key service processes, and very different costs per service delivery unit across the municipalities.

It is important to recognise that benchmark comparisons, as with any performance indicator *"league table"*, is never useful by itself. By signaling major cost discrepancies they should prompt relatively poorly performing. Municipalities are to conduct a closer investigation of what lies behind a particular cost structure. There may be efficiency gains to be realised. But there may also be good and unavoidable reasons why the efficiency level is as it is (South African Cities Network, 2004:140).

Allocative Efficiency

Operational efficiency is concerned with inputs and outputs whereas locative efficiency is concerned with whether public resources are being channeled to the right things. A municipality can claim locative efficiency when its spending is in line with its development priorities, and, over and above this, when the outcomes of spending justify the spending choices of municipalities.

Allocative efficiency is becoming an ever-greater concern of municipalities, as it becomes clear that operating budgets, unlike capital budgets, are very hard to shift. This means three things. First, the cost of some services may remain relatively high, even when a municipality has recognised that the expense relative to the benefit is not warranted. This is because of historically inherited cost structures that are very difficult to unwind. Second, a greater share of council resources may still be going into those areas previously advantaged by apartheid. A municipality may want to improve delivery in an area, but it may be very difficult to shift staff because of the flexibility of conditions of service, where job descriptions say staff should report to work each morning, and so on. It is sometimes extremely difficult for a municipality to keep track of how much money is being spent where. Expenditure items in global allocations to departments are not always automatically tagged for a particular area in budget and accounting systems (South African Cities Network, 2004:144).

The South African Cities Network (2004:144) states that some municipalities, such as Cape Town, have initiated systems that will be able to more accurately identify where operating budgets are being spent, on what and why.

Municipalities face an ever-more sophisticated set of cost-benefit calculations. For example, the City of Johannesburg's low level of expenditure on maintenance may be due in part to relatively high bulk-water charges. It may also be due to a clear choice to protect short-term financial stability by budgeting more for Special Funds and Working Capital. Johannesburg allocated over R1 billion to these items in 2002/03, whereas the contribution of other similarly sized municipalities was negligible.

This is understandable given the very severe financial crisis the city went through in the mid to late 1990s. But the benefit of short-term stability comes with the long-term cost of mounting deferred maintenance. The city therefore plays a careful balancing game between allocating resources in order to accommodate future fiscal shocks and allocating in the interests of preventing future service breakdowns.

Financial Stability And Spending Efficacy

The 1996 Local Government Transition Act introduced the concept of integrated planning, budgeting and management. Harrison (2001) states that this was a move back to the established international precedent of re-emergence of integrated development planning and networking. The Act necessitated the drawing up of an integrate development plan for every area. The Act required planning in the fields of transport-, infrastructure-, and economic development

The Municipal Structures Act emphasises the differences in capacity of the municipalities at the beginning of the post-Apartheid era. The Department of Constitutional Development (1988) mentions that local governments are poorly –resourced and need to contend with a severe lack of skills and capacity in fulfilling their new role as the agent for growth and development. Newly elected councillors were new to the operation of local government and had limited experience in meeting the demands of their constituencies.

Experienced officials were confronted with new challenges, processes and tasks for which they lackedappropriate skills. In addition, the vast majority of local government bodies were in dire straits with regard to their financial situation, largely due to the inheritance of a culture of non-payment for services and inadequate financial management (CSIR, 1998). Many South African municipalities were destabilised with incorporation of new areas in their area of jurisdiction.

The post-apartheid municipalities went through very severe financial crises in the mid-1990s. (CSIR, 1998).

Many municipalities now function within new jurisdictions, and one of the key aims of the demarcation process was to ensure that all municipalities have a more stable tax base and are more able to meet the expectations of residents (CSIR, 1998). In spite of this, the cities investigated in the South African Cities Network report have not been freed from financial pressure (South African Cities Network 2004:142).

Two main concerns include financial management and fiscal policy. The Integrated Development Process (IDP) has helped to improve budgeting in municipalities as an integrated approach is followed (CSIR, 1998). The South African Cities Network (2004:142) reports that large expenditure has been made towards budgeting accounting, borrowing which has led to several improvements, to the point where it is now possible to seriously consider launching a municipal bond market, as recently done by the city of Johannesburg (South African Cities Network, 2004:141).

Kleynhans & Naudé (2001:14) emphasise the importance of fiscal authority to gain income for public administration, to increase economical stability and to prevent a decrease in wealth, generate funds for development, allocate other funds and resources productively and increase public wealth. The macro-economic policy is price stability, balanced equilibrium, economic growth and full employment where the fiscal authority has the power to control both growth and employment (Samuelson, 1980: 142-143).

The issue of concern is the fiscal capacity of municipalities relative to their growing responsibilities. The Normative Economic Model developed before the Reconstruction and Development Programme and the Growth Employment and Redistribution, was a plan put in place for stricter fiscal policy (Kleynhans & Naudé; 2001:61). With considerable political will, financial discipline and institutional innovation, municipalities survived the financial crises which continued until the late 1990s (South African Cities Network, 2004:141).

In truth, this was a financial management crisis brought on by uncontrolled expenditure in the face of insecure revenue streams in a new and dysfunctional institutional setting (South African Cities Network, 2001:145). More realistic budgets and tighter expenditure management could not have addressed the underlying fiscal weakness. Even with the best financial management systems possible, there is little that municipalities can do when less than half of their population can realistically afford the bills that a small household would normally attract. If they budget for it, the South African Cities Network municipalities can continue to write off debt. But if they are to effectively serve South Africa's majorities they cannot defer

major new infrastructure investments and maintenance expenditures forever (South African Cities Network, 2004:145).

Political Efficacy

Political governance arrangements of municipalities are of utmost importance (Van Niekerk *et al.*, 2000). This is confirmed by (Botes *et al.*, 1997). There are various concerns, ranging from the kind of political system that has been established to the efficiency of decision-making arrangements and the extent to which the channels of communication exist between councillors who work with communities and officials who manage resources on behalf of those communities (South African Cities Network, 2004:141).

Political systems

The Municipal Structures Act (Act 117 of 1998) provides different political systems. The municipalities in the nine South African Cities Network cities have established different political systems in terms of the Municipal Structures Act, Act 117 of 1998 (South Africa, 1998:10). The differences are as follows: the City of Johannesburg has an Executive Mayor and wards; Cape Town has an Executive Mayor with sub-councils (CMC, 1997); eThekwini has an Executive Committee instead of an executive mayor. Even between municipalities with the same 'type', there are important differences in structure, understanding and day-to-day practice. For example, two municipalities will have different configurations of Council and Mayoral committees and different processes for ushering recommendations through the decision-making system (South African Cities Network, 2004:141).

Municipal Financial Viability

Diseconomies of scale already exist in South African cities, but can still be managed effectively. The population is still growing in all the major centres. Premature urbanisation, a global phenomenon of Less Developed Countries (LDCs) is characteristic of the South African city (Castells, 1993). The municipalities of metropoles are tasked with a major responsibility.

Cities are, however, adjusting to the new financial environment. Senior political and administrative leadership is more aware of the possibility of financial failure and the need to avoid it. Thus cities are more readily prepared than before to limit expenditure in the face of revenue constraints. The kind of crisis that

faced Johannesburg in the late 1990s has largely been avoided elsewhere (South African Cities Network, 2004:141).

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The financial viability issue mentioned in the South African Cities Network (2004:141) includes the following:

- Financial pressure stimulates **creative innovation** to prevent unsustainable decisions as it becomes clear that old approaches are unsustainable.
- A **build-up of maintenance backlogs** and a failure to replace departing staff members in critical areas are not uncommon and impacts on financial viability.
- **Inflexibility in the human resources environment** can lead to unsustainable practice.
- **Personnel costs as a percentage of total operating expenditure** must not be too high. Above-inflation wage settlements for unskilled employees since the late 1980s, has resulted in fairly high remuneration for these workers, relative to most of the private sector. Thus labour-intensive approaches to the provision of services have become increasingly unaffordable.
- **Overstaffing** at senior and middle class levels as a result of amalgamation of former municipalities remains a financial drain, while inherited service conditions mean that the costs of addressing this other than through natural attrition remain prohibitive.
- **Maintenance** should not exceed the recommended benchmark between 4% and 11% to implement financially viable practices.
- **Effective revenue collection** is the single most important key to financial sustainability in the short to medium term and a pre-requisite to financial health in the longer term, too. Innovation and modernisation in this area has not been as deep or widespread as might have been expected, although this has begun to change. The introduction of Regional Electricity Distributors could present a very considerable threat to municipal revenue. Focus tends to be placed on the potential loss of the surpluses that municipalities currently generate from distributing electricity, and which they use to help fund other services. The loss of surpluses would undoubtedly need to be compensated for; however, this could be done relatively simply through imposing a levy on electricity consumed, to be paid over to the municipality.
- **Billing and collection** of electricity revenue is a key pillar of most municipal revenue systems contributing up to 40% of turnover.
- **Regional service levies** could lead to a decrease in financial sustainability.

- **Adequate revenue streams** are a pre-requisite to financial health.
- **High levels of poverty** impact on financial sustainability.
- **Planning for the global export-oriented** market is a prerequisite for sustainability.
- Apart from establishing democracy, **the constitutional and related changes** have created scope for significant improvements in the overall management of city finances.

There are also different schools of thought emerging over what executive decision-making means should be applied. Some municipalities understand it to mean that the Mayoral Committee provides strong strategic oversight, with Members of Mayoral Committee (MMCs) having broad outcome-defined portfolios such as 'economic development' or 'infrastructure'. In this system the Municipal Manager and Heads of Department are delegated responsibility to make day-to-day judgment calls on policy interpretation, strategy implementation and resource allocation. Others have preferred to follow a model tried and tested in provincial government. This sees MMCs working like provincial Members of the Executive Committee (MECs). They are given functionally defined portfolios that align with the allocated responsibilities of departments; and then each is located in a department and delegated authority to be strongly involved in leading its day-to-day management and decision-making processes.

Efficiency Of Decision-Making

Christensen (1999) comments on the increasing complexity of governance worldwide which is characterised by increased subjection to conflicting demands. He emphasises the role of integration and decision-making on local government level.

Bagchi defines it as one "*...that puts economic development as the top priority and is able to design effective instruments to promote such an objective*" (Bagchi, 2000:398). The instruments identified include, *inter alia*, forging new formal institutions, the weaving of formal and informal networks of collaboration among the citizens and officials and the use of new opportunities for trade and profitable production. Prominent features of the most successful developmental local governments are their ability to switch direction from market- to government-directed growth, or vice versa, depending once-political circumstances.

They also combine both market and state direction in a synergistic manner when the opportunity allows. Thus the degree and nature of a developmental local government's involvement in economic activity is likely

to vary over time. The instruments for pursuing these goals are likely to change from state to state and epoch to epoch.

The White Paper spells out the framework and programme in terms of which the existing local government system will be radically transformed. It establishes the basis for a system of local government, which is centrally concerned with working with local communities to find sustainable ways to meet the needs and improve the quality of life.

The White Paper (1998) presents certain models of local government and suggests criteria for choosing a model, based on effective governance and the ability to deliver services to disadvantaged sectors of society. The criteria include setting up viable and transforming administrative systems and financial management, effective service delivery targeting the poor and formerly disadvantaged groups, and promoting spatial and sectoral integrated development.

In order to assist local governments in meeting policy requirements and to speed up service delivery to the poor, extensive resource acquisitioning terms of funding, human resources, appropriate institutions and concerted capacity building in a number of areas, are crucial.

The constitution, the White Paper on Local Government and related documents all advocate that local government should aim to be more developmental in its approach. This aim should become a cornerstone in the transformation process. In pursuit of this goal, local government will need to be committed to working with citizens and groups within communities to develop sustainable methods of meeting the community's social, economic and material needs. The basis for developmental local government is set out in the constitution and the Bill of Rights. The constitution commits government to protecting human rights and meeting basic needs. While this has not always been apparent, these new responsibilities require local government to maximise social development and economic growth potential, integrate and coordinate development.

In order for local government to be developmental, it needs to prioritise certain functions and community requirements. With a history of poor service delivery and poverty, local government should be striving to provide household services and infrastructure; creating livable, integrated cities, towns and rural areas; promoting local economic development and playing a key role in community empowerment and the redistribution resources.

National and provincial government is responsible for assisting local government with policy and the means to achieve this. The introduction of the Integrated Development Planning (IDP) is an important policy initiative. It compels local governments to become more strategic in their approach to development and the allocation of resources towards achievement of these goals.

The ability to integrate sectoral functions is the key to effective local government (Mogale, 2000:12). The Development Facilitation Act (DFA) has initiated integrated development through Chapter 1 principles and the Land Development Objectives (LDOs). The Department of Provincial Affairs and Local Government originally drove integrated planning. In addition to the LDOs, which are more service-delivery oriented, the IDPs need to include institutional plans with human resource development imperatives and financial plans, which combine planning and budgeting. A key concept to be introduced into this is performance management for local government.

This would foster a culture of accountability for performance. Developmental local government also requires that local democracy be developed and promoted. This would encourage greater participation from voters, citizen groups, consumers and end-users, as well as organised partners, such as NGOs. The result will be the provision of a decent quality of life that will meet the social, economic and material needs of communities. Some of these aspects are new challenges to local government (e.g. being service or customer-oriented) and will require considerable capacity building and support. The current level of resources and skills, together with the means to shift attitudes and practices, are areas that still require considerable intervention.

Closely related to the structure and approach to political systems, is the question of how efficient decision making in the municipality is executed (South African Cities Network 2004:2). The executive system of government was introduced to ensure that critical decisions do not have to wait for full meetings of council, and to ensure that there is someone who can be held accountable if poor decisions are made or are not implemented effectively. However, there is no guarantee that the new systems will deliver fast and effective decisions (South African Cities Network, 2004:141).

Information on the length of time it takes for a recommendation from unofficial to move through the decision-making system is not available. Nor is information on the number of matters that end up at the Mayoral or Executive Committee meeting, as well as the effect this has on the quality of consideration given

to each. However, anecdotal evidence shows that decisions still take far longer than expected (South African Cities Network, 2004:1).

A study done to evaluate Housing Planning and Delivery in Natal over the past ten years describes the dynamics of institutional integration and alignment. The Department of Housing (2004) states the following with regard to institutional arrangements during housing delivery:

The delivery challenges faced were compounded by institutional complexities. The Local Government Transition Act and the White Paper on Local Government mandated local government as developers, which were accompanied by institutional restructuring. The majority of the projects in KwaZulu-Natal are located in Durban, which consists of 40 local councils that were amalgamated into a Metropolitan authority with six local substructure authorities with different powers, functions and responsibilities at different levels. In 2000 the Unicity was formed, today known as eThekwini Municipality. Local level transitions occurred at the same time as national-level constitutional transition.

The institutional upheaval led to internal tensions where objectives and autonomies clashed and political agendas competed. This manifested itself where municipal departments with a strong development and delivery-oriented agenda conflicted with those struggling to adapt from a traditional regulatory and maintenance role.

The Metro Housing service unit was established in 1997, representing an early attempt to play a delivery and coordinating role in the implementation of housing in the metropolitan area. This was initiated when housing was not seen as a municipal function. Metro Housing was located institutionally at a metropolitan level responsible for providing vision and direction across substructures, but with implementation responsibility for the delivery of new housing stock in only two substructure authorities.

Conflict arose where the approach of Metro Housing conflicted with that of substructures with autonomy over implementation in their area. An example of this occurred in the allocation of sites in new housing projects, which tended to be to the benefit of local interest rather than to servicing metropolitan-wide backlogs.

Beyond the local government institutional sphere, the municipality and the provincial and national housing departments did not have the same vision and approaches. In some projects, housing funding was sourced in

the national sphere, dispersed by the provincial sphere, but the responsibilities of delivery were experienced in the local sphere, the nature of these relationships was significant. Housing delivery in the late 1990s was characterised by an emphasis from both provincial and national spheres on target-driven delivery in terms of the number of houses built, as well as concerns over blockages and delays that prevented approved housing projects from proceeding according to the project cycle.

In the mid-1990s housing projects were being implemented in the city in a largely uncoordinated fashion by a range of implementing agents, who were awarded national subsidy money via the provincial authority on an individual, project-by-project basis, in line with the mechanisms of the housing policy at the time. The piecemeal approach to delivery left a legacy of dysfunctional projects, which were not integrated with the city's bulk service delivery programme. The major challenge was to secure subsidy funding from the Province for projects identified as city priorities and to link them to the delivery programme of Metro Housing.

Meaningful interaction with the National Department of Housing was weak. Channels of communication through the KwaZulu-Natal Local Government Association and the South African Local Government Association were not effective perhaps because housing was not a local authority function in terms of the Constitution and not considered in some quarters as a local government priority. There was very little input from local government with respect to national policy formulation. Policy documents were frequently done under very short time frames and while there were often substantive issues needing debate, the process was often so far down the line that such engagement was not possible.

Conflicts were also apparent in varying interpretations of policy between national and provincial housing departments. An example of this is the Norms and Standards defining top-structure specifications, which werenot applied to informal settlements at a national level but applied to the projects in KZN's provincial Department of Housing.

Conflicts between different policies have been noted, for example projects in Durban were in conflict with environmental requirements where the satisfaction of such requirements imposed a financial burden on housing development subsidies. This was sometimes by means of direct additional costs, such as the requirement to construct physical barriers between development and sensitive areas, but was experienced through the loss of developable land for housing. The physical barrier in many instances was utilised for food and subsistence purposes, instead of pristine areas that had to be preserved.

While there was considerable support for the need to satisfy environmental requirements, conflicts arose when the housing subsidy money had to cover additional costs. The impression was that national policy was formulated independently within different departmental silos. Conflicts and tensions were only recognised at the time of implementation and at a sphere of government, which was relatively powerless to resolve such tensions. Local government has ended up as the sole coordinator of national government policy, which is an overwhelming task, and often practically impossible to achieve as a result of limited resources and capacity problems and the lack of political congruence between key sectors.

Metro Housing aimed to move delivery to a clear programme-driven delivery process, which coordinated and integrated with the development of the city as a whole. A number of principles were adopted to ensure that Greenfield developments were located close to transport and economic opportunity. Informal settlements were to be upgraded on-site. Where this was not possible shack dwellers were to be offered relocation options as close as possible to original settlements. Metro Housing sought to play a coordinating role between external players and local authority and within the programmes of the local authority.

Metro Housing had some of the resources necessary for integrated development as it also formulated a strategy for the effective utilisation of grant funding provided by the Durban Metropolitan Housing Development Account, which was expected to increase.

Most of the projects implemented during the 1990s gave little opportunity for the involvement of local authorities in coordinating and directing an overall programme of housing delivery in which development occurred in agreed locations, in a sequence that allowed for integration with related service providers, in a manner that responded to the most urgent needs and priorities of KwaZulu-Natal. The resultant programme implementation was piecemeal and uncoordinated.

There was lack of a clear position on spatial interventions and this was contributed to the widespread confusion on notions of stakeholder participation in housing development. Instead of focusing on how projects should best happen within a set of non-negotiable parameters, councillors, officials and residents became polarised in debates around whether projects should be implemented and it often led to implementation of developments that could have been more sensitively handled. Local constituency politics dominated any collective vision for integrated delivery.

The reliance on the private sector to implement projects through private sector developers led to delegation of responsibility of some departments who were reluctant to take responsibility for private development. This approach included a lack of engagement with layout plans submitted for approval, where the general attitude developed by officials mimicked that taken with private commercial developers, i.e. where any problematic sites impacted on their marketability the developer would either scrap the development or invest more money to make it more attractive. This was not an appropriate attitude to adopt in the case of low-income housing, where sites would not be sold in the market but allocated to a captive "*market*".

The detached attitude stretched to issues of maintenance, where housing projects tended to be overlooked in the aftercare typically afforded to established suburbs.

The informal settlements in Durban were incorporated into a programme developed by First Metro Housing, which identified, profiled and prioritised a set of informal settlement projects. To this end a comprehensive and detailed informal settlement and land audit was undertaken in Durban resulting in the identification of a preferred sequence of implementation of housing projects.

Coordination was also encouraged in Durban by establishing departmental forums of officials to whom project proposals were submitted for evaluation. The developer as well as the city development could benefit by this process as the problems that needed to be resolved in order for the housing projects to succeed, could be identified. Attention was also paid to any additional funding needed for commitment to and completion of the project. Considerable progress was made in integrating bulk service and environmental issues. The success of First Metro in coordinating other city investment as well as influencing the urban quality of projects, nevertheless remained limited.

Coordination was approached by means of an attempt to acquire the necessary control over the allocation of state house funding, i.e. through a comprehensive application to the province for accreditation, a mechanism provided for in the housing policy. The application was not approved. Much effort was put into prioritising projects and securing Council funds for projects such as bulk and top-up funding that the Metro was unable to gain control over. These projects were allocated subsidy money at provincial level. Attempts at coordination rendered a variety of questions as to the required institutional arrangements at various levels of government. Certainty had to be gained on the requirements needed to achieve coordinated delivery and how it could be achieved successfully by means of the IDP. Several models for area-based management have been discussed. Coordination is a major exercise in an institution organised into functional compartments

and which has no control over certain aspects of residential neighbourhood delivery, e.g. the funding for bulk services, nor control over access of housing funding in its area of jurisdiction. Capacity problems are being rectified by employing more people.

Evidence shows that many beneficiaries who relocated had sold their houses to move to new areas, and had in some cases migrated back to informal settlements. The informality, low-cost and limited investment meets the needs of many transient, migratory residents, of those who do not qualify for subsidy and those who respond to opportunity as they follow a basic survival strategy. It has also been revealed that the use of the product of the subsidy is an important cash injection into poor people's lives. Relocation to the built housing projects has been poorly understood in terms of the impact of relocation on people's survival strategies, economic opportunities and social networks.

The rules of the subsidies made no allowance for the specific local project conditions and problems, which require variable approaches, responses and a diverse set of inputs. The subsidy scheme was rigid in terms of eligibility and was aimed at the nuclear family within a defined income bracket and did not respond to the needs of the single or the elderly with any dependants.

Highly defined policy parameters give very little flexibility to respond to a subtle and complex range of housing problems.

Within the conventional one-unit plot model it was clear that there was not enough money available to develop areas to a satisfactory level for beneficiaries and officials. Basic sanitation and water levels prescribed by the National Department of Housing implied a large site, which generally implied relatively peripheral development where land is cheaper and on-site sanitation is more acceptable. The implications are at odds with policy objectives to encourage higher density development in well-located areas. The notion of pit latrines for low-income development was seen as unacceptable and gravel roads were technically not feasible in the steep topography of the area.

The National Department of Housing suggested that if the subsidy appeared to be inadequate, the local authorities, desiring a higher level of service, should also contribute additional money to servicing. Many local authorities are not in a position to do this. Additional funding may have been provided with many of the projects, especially in Durban, where use was made of the Durban Metropolitan Housing Development Account. Three thousand rand per site was used to cover additional servicing requirements associated with

trying to balance up-front development costs with longer-term maintenance costs, in well-located developments.

The adequacy of internal site development remained questionable. The projects are structured in such a way that the budget determines everything. The relationship between the project yield and the infrastructure, however, remains very important. In many cases no allowances were made to accommodate difficult sites, for instance to increase their size to accommodate issues of slope, or by making financial provision for engineering solutions in order to make them really usable. Housing developments tended to have an appearance of money having been stretched too far in comparison with established areas developed under past sources of funding. A consequence of financial constraints was the fact that the low-income housing development became unattractive to the private sector, resulting from low-profit margins accompanied by high expectations, especially when the available funding was also taken into account.

Institutional Experimentation

In South Africa several administrative designs are applied. The South African Cities Network (2004:149) states that the municipalities have taken a different approach to the design of their administration. The systems are innovative and efficient in addressing needs in areas of jurisdiction. Municipalities have taken divergent approaches to the same institutional design matter. For example, Johannesburg, Ekurhuleni, eThekwini and Cape Town have all established some or other form of regional administration. However, each has taken a slightly different view linked to the purpose it has in mind.. Johannesburg has given its Regional Administrations responsibility for social and community development to provide services such as health, library services, building control and people's centres.

eThekwini views its regional structures as agile units operating between the bureaucracies of different departments to facilitate and co-ordinate coherent area-based urban development programmes. In an effort to improve governance in each city, the South African Cities Network municipalities have also launched a process of peer reviews. Peer reviews for Johannesburg and Buffalo City have been conducted to date. These give the reviewed municipality an objective assessment of how it is doing, and the reviewing municipalities can at the same time gain key insights into institutional "*experiments*" in companion cities.

Corruption and Misadministration

Local government

Systems for dealing with corruption and misadministration are enclosed in the Municipal Systems Act. The South African Cities Network (2004:145) indicates that seven of the nine municipalities surveyed in late 2003 said they had established some kind of office to investigate corruption in the municipality. Five of the municipalities indicated that they had established a functioning ombudsman's office to respond to citizen complaints.

The Mercury of 18 November 2004 states that a corruption blitz has saved forty-six million of ratepayers'money during the past three years and 33 council members have been dismissed during the same time for theft and corruption. These were actions that followed after investigations had been conducted by the office of the Ombudsperson of KwaZulu-Natal. This is a promotion of Access to Information Act. Although the extent of corruption and misadministration within municipalities is of primary importance in shaping residents' perceptions of whether the local state can be regarded as stable and effective, the behaviour in other spheres of government, is also very important. Corrupt practices at the national and provincial government-resident interface may taint residents' perceptions of the local state as a whole, regardless of how scrupulous municipalities are.

The Wits Forced Migration Studies Programme survey asked respondents whether they had ever had their identity documents taken away or destroyed by government officials in South Africa. Eight per cent of non-South Africans and 7 % of South Africans said they had experienced this. Municipalities may not be responsible for this, but their legitimacy is indirectly affected by it.

Satisfaction And Political Participation

The quality of life survey in eThekwini, undertaken for the Corporate Policy Unit indicates that many residents have access to housing. The South African Cities Network (2001:150) confirms this finding on comparison of the various quality of life surveys by stating that between 1996 and 2001 it was able to reduce its proportion of households living in informal settlement from 29,5 % to 27.2%. Other cities are better off than eThekwini on questions of level of services.

The most telling survey results are from Johannesburg's Quality of Life survey (2004). According to its survey of 3 328 residents responsible for paying for services, conducted in May 2003, some 27% of residents believe that the City of Johannesburg is doing poorly or very poorly. However, this figure is lower for White residents and higher for African and Coloured residents. Some 29% of African residents and over 30% of Coloured residents believed that the municipality was doing a very poor job. Only about 18% of White residents felt this way. The results are even more striking when broken down by settlement type. Only 22% of residents living in informal settlements felt that the municipality was doing a good or very good job. On average, 60% of residents living in still predominantly White suburbs saw the council as doing good or very good work.

5.5 PARTICIPATION

The Municipal Systems Act (1998) requires that municipalities establish systems of participatory governance to complement their systems of representative democracy. The Act specifies in some detail when and how municipalities must communicate and consult with residents and involve them in various structures and processes. Participation is a prerequisite for community development, one of the ultimate goals of development.

The extent to which residents participate in the affairs of municipalities is a far better indicator of the strength of municipality-resident relations than satisfaction levels. However, it is also a complex indicator. Residents often do not participate in government processes when they are entirely happy that government is performing well on its responsibilities (Swanepoel, 1998:23). Low participation rates can be an indicator of resident happiness with, and confidence in the municipality. However, experience from all over the world shows that low participation rates may also result from deep dissatisfaction. Residents may feel so negative about government that they no longer believe that government can attend to their needs and concerns and they may see no point in participating (Friedmann & Douglass, 1998:19).

Two issues are important here, i.e. whether residents are provided with means to participate in the affairs of the municipality; and whether residents do in fact actively participate through these mechanisms.

Means To Participate

The South African Cities Network (2004:151) report sates that a survey of all nine South African Cities Network cities late in 2003 showed that most had some means of involving their residents in critical decision-making processes, although different kinds of mechanisms were available. However, a more interesting story is told by resident satisfaction surveys from each city. Asked whether they were given sufficient information and opportunity to influence the running of the City of Johannesburg in its May 2003 survey, only 24,1% gave a definite yes. The results varied widely by race and settlement type. Approximately 26% of Africans felt they were given sufficient information and opportunity to participate as opposed to 19% of White residents. Twenty-nine per cent of residents in formal townships felt they were sufficiently empowered, compared with around 20% for informal settlements and suburbs. Positive results were noticeably lower in the regions dominated by large informal settlements such as Diepsloot, Orange Farm and Ivory Park. The inner city and Sandton were also low.

Petitions are a form of participating. City of Johannesburg's Public Participation Report (2003) states that petitions are an important part of the democratic life of our communities and represent the ability of community members to freely come together to articulate their needs for that community.

In 2002, at the time the Participation Report was developed, a total of 149 petitions had been formally received by the City of Johannesburg. To meet the requirements of any petition, it often requires an operational budget and/or capital expenditure that has not been anticipated. Improvements in the active participation in the local integrated development planning process and associated budget will reduce the frustrations felt by the short-term structural financial inability of council to respond appropriately to petitions. The important role of petitions will not be diminished and the volume of petitions is anticipated to increase as communities rightfully articulate their needs and the petition process is an important complimentary mechanism to increase participation of communities in local government. Feedback to petitioners and communities by the relevant business unit with councils renders a cause for concern and there is a need for improved petition management and tracking systems to ensure resolution within the shortest possible period.

Engagement or Disengagement

The extent to which people participate or disengage in local government activities is determined by their faith in government (Friedmann & Douglass, 1998:12). Public violence and vandalism, increased crime levels and fragmentation of the city into primarily governed enclaves are associated with a shrinkage of public space and exercise an influence on people's willingness to participate or engage.

Political unrest was a well-known phenomenon in the period leading up to the 1994 elections. There were many street wars and riots. Public violence reached static levels between April 1994 and April 2003. The Wits Forced Migration Studies Programme (2003) surveyed migrants in Inner City Johannesburg. Migrants were questioned as to what they would do if someone broke into their home and whether they thought calling the police would be of any use. Eighty-five per cent of South Africans indicated they would not go to the police compared to 75.8% of migrants. Only 63.4% of South Africans compared to 40.1% of migrants stated that going to the police would do any good.

Crime as a governance challenge

Crime is a very important indicator of governance as it is an indicator of premature urbanisation where people cannot fine employment and engage in misemployment (Geyer, 2001). This leads to increased pressure on the municipality, which could lead to diseconomies of scale (McNamara, 1984:1107).

Crime is an important indicator of governance (McNamara 1984:1107). It is also a sign of premature urbanism (Geyer, 2001) and shows disengagements, as there is a rise in diseconomies of scale (McNamara, 1984:1107). Levels of crime speak to whether residents are willing or unwilling to trust that the local state can continue to ensure their well-being. High crime levels signify a psychological disengagement, an opting out by larger numbers of residents who are no longer prepared to invest their faith in the order and stability supposedly represented by government (Douglas & Friedmann, 1998:12). Crime also has a potential knock-on effect on governance. The threat is that victims of and witnesses to crime, and not only perpetrators, may disengage when they see the local state as unable to guarantee their security. Furthermore, crime may have serious consequences for community coherence.

Johannesburg's May 2003 Resident Satisfaction Survey, noted that crime was the number one development challenge identified by residents. It was judged as more serious than employment, health care, HIV and

housing. . The prioritisation of crime held across all settlement types except informal settlements, which saw unemployment as the most serious challenge.

Varied levels of crime are apparent across and within cities. The perceived lack of security also varies across parts of each city. In the Buffalo City Quality of Life Survey conducted in August 2001, 30% of residents said they had been victim to a crime against property and 14% said they had been a victim to violent crime. Percentages of residents who said they felt unsafe at night varied by areas of different housing type, as follows: formal African 24%; formal Coloured 31%; formal White 46%; formal Asian 52%; traditional African 43%; and informal African 17%.

Similar feelings were expressed in the 2004 eThekwini Quality of Life Survey 2002/03. According to results obtained from the respondents 32,2% of all residents said they felt very unsafe or a bit unsafe. Asked to rate their perceived levels of safety from crime in their own community, eThekwini residents responded as follows: very good 13,8%; good 19%; neutral 16,7%; bad 27,3%; and very bad 23,2%. The unsafe communities were perceived to be informal settlements. Different racial groups in eThekwini were more likely to be victims of crime than others.

In the Wits Forced Migration Studies Programme survey (2003), 42,9% of South Africans living in suburbs in or near to the Johannesburg city centre said they or someone they lived with had been a victim of crime. Seventy-two per cent of non-South Africans surveyed had been victims of crime.

The South African Cities Network (2004:152) states that many of the municipalities in the nine South African Cities Network cities have re-established their traffic departments as 'metropolitan police services'. These now divide their time between traffic control, by-law enforcement and crime prevention or crime response working in conjunction with the SAPS. A range of other safety and security initiatives has been launched.

The institutional developments over the last 10 years have resulted in the political and administrative re-integration of South African cities. By and large, the one-city-one-tax-base principle that rallied many anti-apartheid urban social movements and NGOs, is now a reality. This does mean that the impulse towards spatial and institutional separation is no longer a feature of the South African Cities Network cities (Marcuse & Van Kempen, 2000:4)

Cluster developments

In recent years South African cities have seen some new trends towards spatial and institutional fragmentation (Marcuse & Van Kempen, 2000:4). One trend is the shift in residential living patterns in wealthier suburbs to supposedly more secure townhouse and cluster complexes, golf-estates or equivalents, and walled and gated suburbs.

Various forms can be seen, from the subdivision of larger suburban properties, into between four and six self-standing units, through to the exclusive and controlled-access golf-estate or mock-game-park/eco-park lifestyle community developments on the peri-urban edge. Some lifestyle communities are almost entirely self-contained "*new towns*" designed to include schools, shopping, centres, office parks and recreation facilities. In some South African Cities Network cities these developments now account for a third of all new residential property value. In 2002, 19,6% of the value of new residential building plans was passed for townhouse developments.

This figure was much higher for specific cities, notably Johannesburg at 28,5% and Tshwane at 35,8%. By contrast, only 13,3% was for residential accommodation in new homes less than 80 square metres, although this value was as high as 39,4% in Nelson Mandela and 43,8% in Buffalo City. This form of development may go hand in hand with kinds of private government. Cluster homes and golf estates often have body corporate arrangements that impose their own fee structures for the maintenance of the common property, and administer their own sets of regulations on the conduct of property owners (South African Cities Network, 2004:15).

Private government is not an automatic result of cluster living; nor are rules to manage the upkeep of property within agreed standards or to moderate the interactions between residents who share a place,necessarily inconsistent with the governance of society in general. But if taken to extremes, the trend in favour of clusters and golf estates may have negative effects. It may politically and administratively fragment the city into, on the one hand, publicly governed space and, on the other, exclusive territories whose residents mistrust the local state to such an extent that they would prefer to retain resources to manage their own shared space and individual household service arrangements, usually at standards well above those which are sustainable across the entire city (Marcuse & Van Kempen, 2000).

Gated / enclosed communities

Marcuse and Van Kempen (2000) as well as Charlton (2001), point out that limited access created by means of fencing off of roads to some wealthier neighbourhoods that have experienced high levels of crime, is a phenomenon of a close community. Access is controlled through a single boomed or gated road staffed by security personnel. These gated communities give residents a sense of security, but they also have negative effects. They may restrict mobility of residents from other neighbourhoods who may have used the roads within the gated communities to get to work. In some cases, this severely impacts on traffic flow as more people use fewer roads. They may also jeopardise the speedy reaction of emergency services to calls from parts of the city now turned into a maze of blocked routes (South African Cities Network: 2004:155). Some municipalities are attempting to manage the trend towards gated communities more systematically.

Tshwane has developed an Enclosed Communities Policy that carefully weighs the right to security of residents within the communities against other rights, notably city mobility and broader safety. The policy then sets out a clear application procedure. Other municipalities have taken the view that gated communities will not be a feature of their cities. They have simply turned down those gates that residents' associations had not applied for, or received planning permission in the ordinary sense. They do not represent interests or try to engage government around a definable issue. Instead they are highly fragmented and transitory clan or gang-based formations, subject to intense internal political contestation and geared primarily towards competition for space and resources (which may be anything from community status to control of the informal trade sector) with identified economic and social competitors (South African Cities Network, 2004:155).

Urban Policy, Intergovernmental Co-ordination And Stakeholder Collaboration

Municipalities do not govern cities alone, as national government and provincial government are also involved. In the same way that residents' perceptions of municipalities are affected by corruption and misadministration in other spheres, the governance of cities is contingent on all spheres of government performing efficiently and effectively.

Governments hereto have been promoting active participation of citizens as well as improved governance (Douglass & Friedmann, 1998:19).

The architecture of intergovernmental decision-making structures has been overhauled, following the launch of South Africa's Local Government Association and the introduction of various structures, such as the President's Co-coordinating Council (PAC) and the Budget Forum in which SALGA represents local government interests.

A picture of governance issues affecting various spheres of governments includes aspects such as the following:

- The intergovernmental planning system is taking shape, especially with Integrated Development Plans accorded new legal status (CSIR, 1998).
- The national and provincial legislative framework defining the functioning of local government in areas of concern are as diverse as requirements for administrative justice, water resource management and water quality.
- Control as well as establishing a public private partnership has been completely changed and is still changing.
- The distribution of powers and functions between national, provincial and local government is being re-examined to address overlap and confusion and to mitigate the effects of unfounded mandates.
- The conditions and procedures for provincial interventions in the affairs of local government have been defined in law, and continue to be clarified in practice.

A national urban policy must consist of two things. In the first place there has to be an agreement around where and when to allocate scarce public sector resources, on the basis of a clear understanding of how country-wide settlement patterns are naturally evolving, and also an agreement on how they should be encouraged to evolve, given what will enable the most rational allocation of resources in the future (Harrison *et al.*, 2003:41).

In the second place a national urban policy has to provide for a set of institutional arrangements that allow all actors with responsibility for managing urban growth and change, to perform their mandates well, both separately and collectively. The aspects of urban policy are not easy to achieve and both have proved elusive in South Africa.

Urban policy after 1994

The post-apartheid era has been marked by fragmented attempts to correct the country's distorted settlements (Harrison *et al.*, 2003:5). Some of the initiatives over the last 10 years include:

- Under the auspices of the RDP office an Urban Development Task Team (UDTT) was established. This was chaired by the National Department of Housing and involved representatives from State Expenditure and the Department of Constitutional Development.
- . The DUST was mandated to set a framework for urban development that would steer RAP funds to address urban backlogs and promote the development of the urban economy; ensure co-ordination of urban development projects and programmes driven by line departments; initiate lead/presidential and Special Integrated Projects (SIPS) that would catalyse sustained urban development. Its various programmes of work provided a basis for the Municipal Infrastructure vestment Framework (MIFF), the Consolidated Municipal Infrastructure Programme (CHIP) and the National Urban Development Framework.
- The Municipal Infrastructure Investment Framework (MIIF) built on earlier work conducted by the World Bank in the early 1990s as well as models from its 20 Towns Study. It pegged average costs for a basket of services (water, electricity, sanitation, roads and waste) at various levels of supply (basic, intermediate and high) in both rural and urban areas. It then projected a total capital and operating cost of infrastructure to eliminate backlogs across the country. It established in principle that the country was unlikely to be able to afford more than a basic level of infrastructure in many places. It informed various capital grant programmes such as the CHIP and the Department of Water Affair's Community Water and Sanitation Services (CUSS) programme.
- An Urban Development Framework was developed. This was then transferred to the National Department of Housing where it was simplified in redrafting and formally issued. Unfortunately it had little impact on the planning of settlement-related infrastructure (Harrison *et al.*, 2003:51).
- Before the RDP Office was closed in 1996, it worked with the Forum for Effective Planning and Development (FED) to develop a National Spatial Development Framework. The FED brought together the national Ministers of Land Affairs, RDP and Housing with provincial MECs for Development Planning. The RAP office and FED helped provincial governments think through the spatial implications of their Growth and Development Strategies. They also initiated the work in CZAR on a national spatial Geographic Information System (GIS) that would eventually inform the NED. Later, in late 1996, a

Development Planning Commission that systematically reviewed the country's planning legislation was launched (South African Cities Network, 2004:156).

- The Green Paper on Local Government developed a settlement typology that considered whether the final categories and types of local government, defined in outline form by the Constitution, could be directly informed by the spatial character of settlements being governed. The logic was not carried through into the final White Paper (National Development and Planning Committee, 2004).
- Provincial Departments responsible for housing and/or local government developed their own urban policies and frameworks. One example was Gluten's Susana Amadhloba framework. This tried to identify key development nodes in the province. It also led to the establishment of funds, which for a brief period financed creative development programmes and projects proposed by Gauteng municipalities. Another is the revised Spatial Framework for the Area Based Management Learning Area of the South Basin in eThekwini.
- More recently, the Department of Provincial and Local Government has drafted an Urban Development Strategy. The draft re-establishes the importance of investing in urban development, and proposes a number of focused institutional initiatives to strengthen the hand of municipalities in managing rapidly changing urban environment.

The most important recent urban policy initiative has been the development of the National Spatial Development Perspective (NED) as described by Treason (2004:156). Cabinet adopted the NED as an indicative framework in 2003.

The aims of the NED are ambitious. It aims to address distortions arising from the inherited apartheid-space economy by developing a framework that would guide all forms of planning for infrastructure investment and development spending. The NED takes the view that it is ultimately impossible to map exactly where people will be moving. Hence, the focus of government expenditure should be on people, not places. The potential of people should be developed irrespective of where they are located. As a result, investment promotion should focus on human resource development, labour market intelligence and social transfers in order to empower citizens. However, trends also affirm the idea that social objectives can best be achieved by focusing on economic growth. Hence, where lump fixed investments are made these should be steered towards areas of the greatest potential for sustainable economic development and the potential to alleviate poverty and promote economic growth. Areas of limited potential still need to get a level of basic services, but prioritisation should favour those areas with the largest economic footprints. These areas are invariably the country's major urban centres. The NED is an important intervention. But it is only really meaningful to

the extent that it influences choices. The NED work could easily be taken forward into stronger guidance to departments and spheres of government about what its principles mean in practice. Whether this will happen remains to be seen. The Accelerated Depreciation Allowance that will give businesses investing in inner-city Urban Development Zones across the country a key tax incentive, implicitly follows the NED. It is, however, not yet clear that the Perspective has had a real impact on emerging infrastructure policy.

Implicit in the approach motivated by the NED is, for example, the idea that there needs to be high level strategic assessments as to where infrastructure should be placed. Yet the new Municipal Infrastructure Grant(MUG) is premised on the idea that we need to move away from national departments strategically planning for municipal infrastructure. Instead formula-driven municipal infrastructure grant dispersal systems, wherein allocations will be made per municipality on the basis of assessed backlogs, will dictate the geographic spread of funds. This is not to suggest that the theme runs against the NED. It deals with basic infrastructure after all, and the NED is clear that everyone should get basic infrastructure wherever he/she lives. There is, though, a difference of principle and approach that may need to be re-examined in future.(South African Cities Network, 2004:156)

Corporatism

Corporatism is described by Friedman and Douglass (1998) where they describe the power relationships of transnational companies throughout the world. This does not really happen in South Africa as the situation is unique because the people are not connected in terms of business contacts, due to spatial and cultural segregation, which is focused on the social networks within townships and in homelands (Tomlinson,2003).

7.7 CONCLUSION

Tremendous progress has been made in transforming South Africa's "*Apartheid*" cities. The most significant has been in relation to the institutional arrangements required for good governance. Monumental effort has been put into configuring appropriate institutions and administrations to manage South African cities, and to reincorporating citizens who had never been allowed to participate, and who had actively disengaged, into normal political life (Harrison *et al.*, 2003).

Continuous policy debates and institutional change initiatives have been complex, sometimes abortive. At times, citizens have taken up their rights but not their obligations, as noted in Douglass and Friedmann

(1998:19), in particular failing to meet their service payment obligations to the state. Poor reading of underlying fiscal conditions and poor financial decisions and oversight have led some of the cities into dire financial crises that have limited their capacity to see through development programmes. In spite of all this good progress has been made.

On the whole, the South African city has a stable local state, where most citizens still look to government to see to it that their needs and aspirations are realised, and where all spheres of government work effectively and efficiently to serve residents (South African Cities Network, 2001:158).

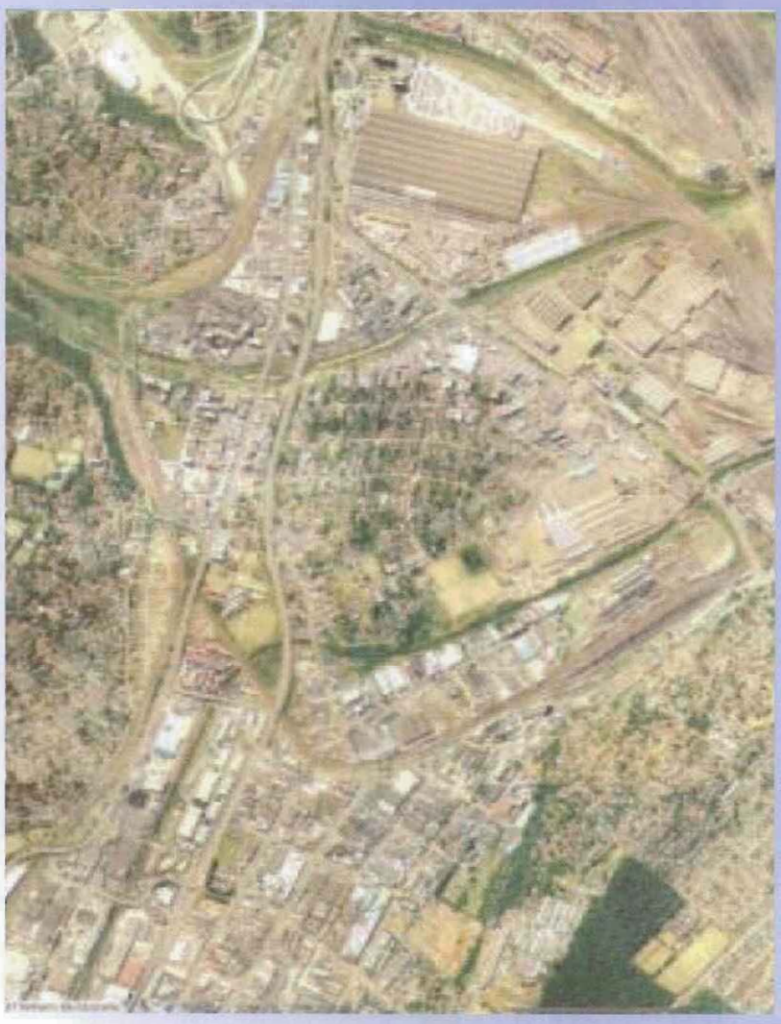
However, this does not mean that this dimension of the urban challenge would need no further attention in future. All cities are invariably contested places. It cannot be guaranteed that residents will continue to see competing interests mediated through the efforts of government to build cities for all. If government efficiency and effectiveness wanes, disengagement from the local state may follow as it has in many other parts of the world where governance relations remain fragile (South African Cities Network; 201:158).

There is evidence to suggest that the risk may be more immediate than some would care to admit. Low levels of satisfaction, weak participation, levels of crime and violence, urban fragmentation into enclaves of wealth with forms of private government all suggest the potential for disengagement.

In addition government capacity, efficiency, financial stability and ability to coordinate effective cross-department stakeholder responses to urban challenges, all still need further attention if South African cities are to continue to be well-governed (Kleynhans & Naudé, 2001:103).

CHAPTER EIGHT

CASE STUDY OF THE CLAIRWOOD PRECINCT



CHAPTER EIGHT: CASE STUDY OF THE CLAIRWOOD PRECINCT

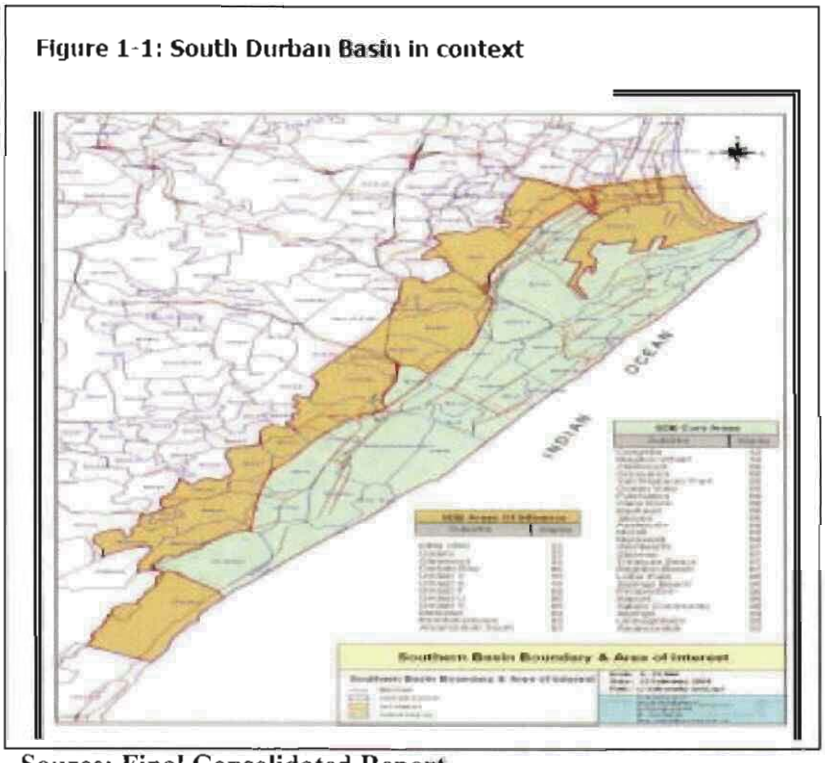
8.1 INTRODUCTION

The chapter introduces the Clairwood Precinct as a case study of urban sustainability. It is aimed at:

- Creating a consolidated framework on urban sustainability based on research in previous chapters and
- Providing a clear developmental direction and guidelines for the future and instill confidence in investors and developers for the Clairwood Precinct.

Clairwood is located in the South Durban Basin (SDB) of the eThekwini Area. The SDB is one of five key strategic learning areas stipulated in the eThekwini Integrated Development Plan and shown in Figure 8-1.

Figure 8-1: The South Durban Basin



Source: Final Consolidated Report

A study of the urban sustainability of the Clairwood Precinct complements the programmes and initiatives of the South Durban Basin Area Based Management Programme. The SDABMP is aimed at restoring business confidence and investor interest, improving quality of life by tackling operational deficiencies, improving the built environment in a sustainable manner by tackling environmental problems and addressing operational deficiencies. These objectives are similar to objectives identified for achieving urban sustainability.

8.2 CLAIRWOOD PRECINCT AS A CASE STUDY FOR URBAN SUSTAINABILITY

The South Durban Basin (SDB) has drafted a five-year plan to assist in implementing all planned objectives. It has approved seventeen projects of which renewal of the Clairwood Precinct is an identified priority.

Several studies have been done in the area namely the South Durban Basin Economic Study, the Spatial Development Framework and an environmental consolidation study and the development of a Clairwood Precinct Plan.

The purpose of the study is to evaluate Clairwood on components identified as contributing to urban sustainability and to further create development principles and objectives, principles and vision and an integrated development and management framework that include stakeholder liaison, implementation and a management strategy.

Research has been conducted by means of stakeholder facilitation, desktop analysis of existing studies and surveys, site visits and participation as part of multi-disciplinary team developing the Clairwood Precinct Plan.

8.3 THE STUDY AREA

The study area comprises Clairwood, a small residential enclave surrounded by industrial and other mixed land uses in the South Durban Basin. It is located seven kilometres south of the Durban CBD. The area falls under the eThekwini Municipality and is managed by the South Basin Area Based Management. This area is mainly zoned for residential use. The pressure for

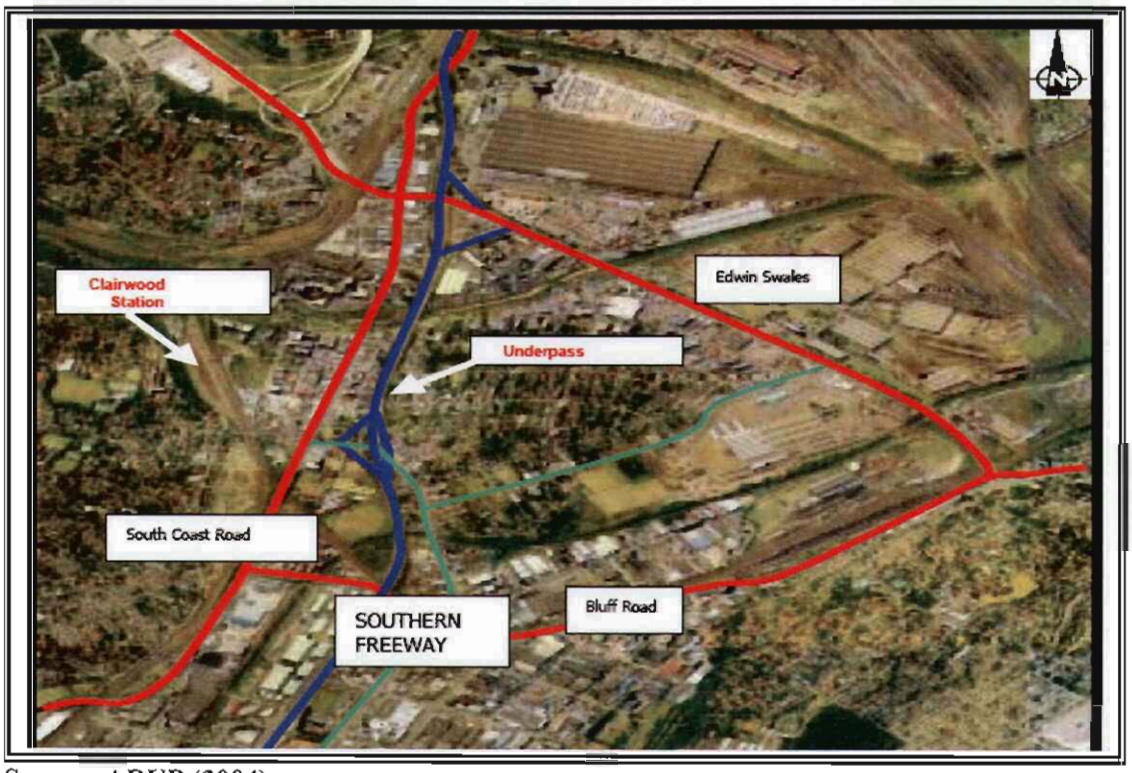
industrial development has seen a gradual infiltration of small-scale engineering, manufacturing and transport related uses into the residential area. Clairwood's study area is bordered by the following structural elements, which in effect isolates the area:

1. Edwin Swales Drive on the north-eastern side,
2. Bluff Road on the south east
3. The main railway line on the west.

The Jacobs industrial area, a prime employment area, is situated to the south of Clairwood. The Durban Harbour lies to the north, whilst the Bluff and Merebank lies to the north and east. Clairwood is situated on a major bus route and commuter railway line, thereby providing residents with good access to the major employment and commercial areas of the city. The major spatial characteristics of Clairwood are that it consists of the Clairwood market, mixed residential and industrial land use. %. The area consists of a medium-size Central Business District and smaller commercial or industrial areas, normally associated with decentralised areas of cities and large towns, as well as a residential area of conventional construction.

Major land uses include industrial (38.3%), urban formal (30.2%), rail (12.3%) and other land uses (19.2%). River catchment areas are Umbilo River and Umhlatuzana River. Environmental concerns include hazardous industrial and residential interfaces, which expose residents to pollution (mainly noise and air pollution), inadequate integrated and co-ordinated disaster management and illegal industrial operations within the residential area and illegal industrial operations within the residential area. Environmental opportunities in Clairwood include the implementations of a national multi-point residential plan.

Figure 8-2: Map of Clairwood



Source: ARUP (2004)

The urban sustainability framework developed by studying the Clairwood Precinct, will assist to initiate and achieve the social, economic and financial terms for this area in a well-conceptualised urban environment. The scope of analysis is done around the following aspects namely:

- The geographic scale linking Clairwood with its local environment and the global environment.
- Urbanisation and urban form and the physical environment
- Economy and the environment
- Politics and institutions in the Clairwood area

8.4 GEOGRAPHIC SCALE AND SPATIAL ANALYSIS OF CLAIRWOOD

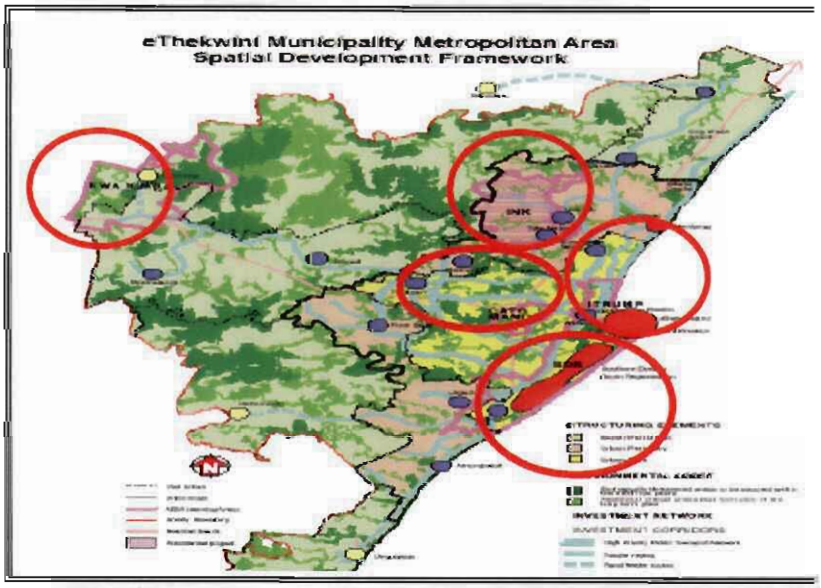
eThekwini

Clairwood is located within the South Basin of eThekwini. eThekwini is located on the eastern seaboard of South Africa and is strategically located in terms of trade routes. Key logistical assets of the port and airport are located close to the CBD and coast. The Durban Metropolitan Area (DMA) is the second largest metropolitan area in South Africa.

South Durban Basin

Clairwood is located in the South Durban Basin, which is one of five strategic learning areas of eThekwini Durban identified in the Integrated Development Plan and shown in figure 8-3:

Figure 8-3: eThekwini Spatial Development Framework



Source: Final report SIB

The area is managed by the South Durban Basin Area Based Management. (SDB ABM). The SDB ABM's main purpose is to restore investor confidence, provide developmental directions for the future, and initiate social, economic and financial development in a well-conceptualised urban environment.

The SDB is defined from the Port (north) to Umbogintwini (south) & stretches to the South Coast Road corridor. It is the key manufacturing and industrial zone of the city, contributing 30% of Durban's GGP, comprises of approximately 1000 companies and employs 90 000 to 120 000 people (10% of RSA's manufacturing jobs).

The Council acknowledges that the South Durban Basin (SDB) has been neglected and is in decline, and recognising the SDB's economic and social importance, has included it in the ABM programme. The aim is to:

- Re-establish the SDB's growth and economic vitality to assume the areas' rightful place in eThekwini socio-economic milieu.
- Develop effective partnerships with a variety of different stakeholder to deliver development objectives.
- Aid the transformation of local government toward greater efficiencies and smarter working.
- Improve workflows throughout Council via a Customer Service Improvement Programme
- Establish an appropriate performance measurement system to monitor and manage achievement of development targets.

The key priorities that have to be addressed include poor urban management, ageing infrastructure and a negative image resulting from:

- Lack of access to social and economic opportunities
- Ad-hoc and uncoordinated development
- Environmental pollution

The SDB can be broadly defined as the area extending south of the port incorporating industrial areas such Bayhead, Jacobs, Mobeni, Prospecton, Umbogintwini, mixed use areas such as Isipingo, Clairwood and residential areas such as Austerville, Wentworth and Merebank. Included in this area lies key city, provincial and national installations such as the port, national roads and the Durban International airport. The area is bounded in the east by the Bluff and on the west by the M4 and N2. It can be argued that portions of the adjacent large residential areas of Umlazi and Lamontville form part of the SDB although they are located west of the N2. Close to 100 000 people and 22 000 households reside in the SDB. Average household size is therefore approximately 4 persons per household.

Merewent and Austerville accommodate around 50% of the SDB population and high densities of 17 and 22 households per hectare respectively are situated in these areas. Twenty five percent of the potential workforce of the SDB is unemployed, with some 10% (2.5% of total workforce) of the unemployed not seeking work at present. The unemployment rate is most significant in areas such as Mobeni (56%), Jacobs (64%) and Austerville (30%).Eighteen percent of households in the SDB earn less than R12 000 per annum (or R1 000 per month), which places them well below the subsistence level, i.e. the income required to sustain a healthy living standard. A further 20% of households earn below R2500 per month (R30 000 per annum). In a number of areas the percentage of households earning below R12 000 per annum is substantially higher than the area as a whole (18%), Austerville (24% earning below R12 000 per annum), Clairwood (34%) and Grosvenor (21.2%).

The Spatial Development Framework

An initial spatial development framework was developed in 2002. The Spatial Framework is currently in the process of being revised. A Spatial Development Framework provides spatial guidance with regard to the allocation of public resources and expenditure. It is underpinned by two planning principles, namely:

- Building and protecting vibrant economic areas that lay the foundation for economic growth;

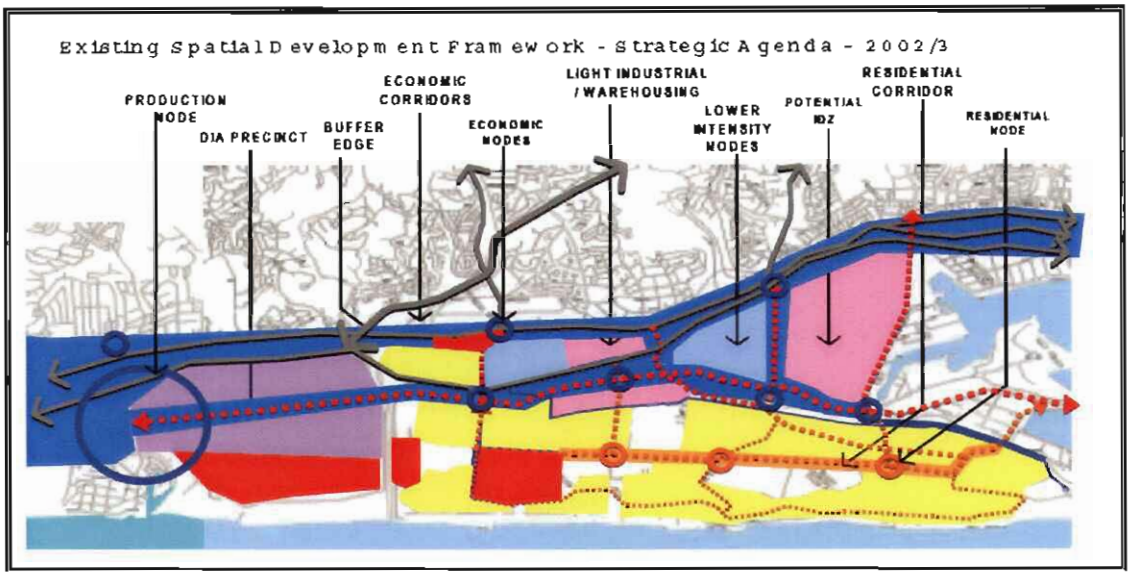
- Creating and maintaining viable built environments that support the social and economic needs of the population; and sustaining natural environments and resources that provide the basis for both economic prosperity and social well being.

Revision of the Spatial Framework identifies the SDB as an existing economic node of major significance and confirms the area as a strategic spatial investment area. The main issues identified in the revision of the strategic framework affecting Clairwood are as follows namely developing a network of well-located facilities and an integrated public space system. The strategic framework will further focus on promoting surveillance and ensuring that public spaces are visible, allowing for a variety and hierarchy in built form, allowing for flexibility in terms of economic activities and making opportunities accessible, reducing economic costs. Defining an economic sense of place and creating opportunities for investment around public places is a major objective.

The Framework will promote sustainable development by recognizing the environment as an integral part of the urban system will also be investigated. Improving transport linkages to individual precincts, improving efficiency of overall transport system and creating a legible structure for future land use development is also of importance.

The Framework is shown in Figure 8-4:

Figure 8-4:The Spatial Framework



Source: Final consolidated SIB report (2004)

The main findings of analysis for the spatial framework shows that the SDB has a variety of functions namely it is a place to work & invest, live & play, transport goods and people. Key findings established in the process include:

1. Alternate and **separate movement systems** for both residential and industrial traffic needs to bedeveloped so as to provide a small start to resolving bigger pollution concerns.
2. The **nature of mitigation needs to be considered** as accepting the continued role of residential and seeking to address conflicts over uses might necessitate alternate approaches to mitigation. Such approaches must extend beyond local visual and physical improvement at a micro level to one, which acknowledges that large problems require big solutions. Macro and micro solutions need to be considered. Bold decisions at district level could have greater value in extending the potential of mitigation at a local level. This implies a potentially wider pot and a need for greater pooling of resources in changing the future of the South Durban Basin.

3. The SDB contains discreet, identifiable residential entities where a strong sense of place, community and ownership has developed over decades. There is a high level of integration between income groups, race and density. Residential and industrial functions have to be catered for and **residential revitalisation** is to be incorporated with regional programmes for renewal

4. **Spatial planning** is to be **integrated** with **economic initiatives.** The SDB accommodates a wide range of residential choices within close proximity to the core city.

5. Widespread **degeneration** is noticeable and is expressed in the built environment. The extent to which this is a result of economic decline or lack of servicing and maintenance is questionable. It may be argued that both processes have resulted in decline but both factors contribute in finding solutions. A greater municipal presence is needed in the area to reverse the processes of decay.

6. Broader upliftment of the SDB rests within an integrated future. **Urban renewal initiatives** need to be **coupled with economic regeneration initiatives**. A common platform needs to be set for approaching the local, regional and national space economy. An economic vision must be a primary starting point. Key installations have the potential to expand and create cluster. The auto manufacturing cluster is the cluster with the most potential.

7. **Port of Durban** is a major city installation. Seventy five percent of all businesses in the SDB have a direct relationship and link with the port. Consolidation of the fact that the port and SDB are mutually dependent needs to be considered. Stronger relationships and mutual investment is a precondition to resolving problems, particularly investment and growth issues within the Port SDB.

8. The **SDB is the gateway of Durban** as it contains national roads, port and the airport. Coupled with an export focused economic drive, the role of the SDB must be further entrenched in public investment decision making. The role of the port continues to extend its roles as the genesis of the city. The port and SDB will continue to remain important installations in the attempt to pursue export led growth. Options for pursuing zones within the SDB to facilitate such must be considered and should also increase the amount of investment opportunities.

- Analysis has lead to development of the following objectives derived from the key issues:
- The main objectives derived from the key issues includes
- Allowing mixed used development.
- Making places accessible.

- Developing a network of well-located facilities.
- Developing an integrated public space system.
- Promoting surveillance and ensuring that public spaces are visible
- Allow for a variety and hierarchy in built form
- Developing public spaces.
- Allow for flexibility in terms of economic activities
- Making opportunities accessible.
- Reducing economic costs
- Defining an economic sense of place and creating opportunities for investment around public places.
- Sustainable development by recognising environment as integral part of urban system.
- Improving transport linkages to individual precinct
- Improving efficiency of overall transport system.
- Creating a legible structure for future land use development.

Clairwood is also encompassed by the planning objectives put forward in the Spatial Development Framework. Clairwood is dualistic in nature characterized by prime industrial developments and a decaying residential enclave. The traditional residential core is under constant threat from surrounding industrial land uses. Property values of commercial sites remain relatively high, while there is a decrease in the property values in the residential node resulting from urban decay, informal settlements and the presence of illegal businesses. The major contributors to the Clairwood economy are transport, manufacturing and retail industries. Clairwood is located close to the Port of Durban; which leads to the prevalence of a large amount of trucks transporting goods as well as container industries in the Clairwood area.

Clairwood's economy is based mainly on manufacturing and retail with economic development nodes situated along major roads and intersections. Clairwood is connected nationally and internationally due to the presence of road-, port, rail and air transport links in the South Durban Basin.

Major transport routes and networks

The South Durban Basin is multi faceted and multi nodal. It comprises of the Southern Freeway (M4, N2), Old South Coast Road (R102), Umlazi and South Coast Rail Line. The transport corridor caters for local trips (R102), Metropolitan trips (M2), Regional trips (N2) and international trips.

The Port of Durban and Durban International Airport provides national and international linkages. The highest percentage of public transport trips (75%) takes place in the SDB.

The Port of Durban is the main focus for international movement of goods. Approximately 70 to 75% of total port traffic (either as a source of exported cargo, a destination of cargo loaded or handling cargo) is associated with the South Durban Basin. The association is very strong in the case of petroleum products, chemicals and other bulk liquids, vehicle components and paper products. Durban International Airport provides for national and international movement of people and goods to a lesser extent. Land based linkages are supportive of above the facilities by providing regional and sub regional connectivity. The road network provides a gateway to southern tourism opportunities. There is limited capacity for road-based movement. The SDB has a poorly structured lower order road network which leads to overloading of higher order network within the SDB. There is lack of suitable north/south mobility routes east of the M4.

Major issues include the fact that the Port of Durban is experiencing immense congestion due to an increase in the cost of handling goods resulting in loss of competitive advantage. Another major issue is the fact that the Durban International Airport has limited capabilities for direct flights. There is also a lack of clear separation of traffic.

The most important economic priorities in the South Durban Basin with regard to major transport networks that has to be considered for short-term planning includes the Port of Durban maintaining its competitive advantage, the increase in capacity of north-south demand and the improvement of lower order road network, particularly east of the Southern Freeway (M4) for transport of people and goods.

The key industrial sectors include food and beverage, textile and clothing, petrochemical, pulp and paper and automotive components and assembly. Industries within the South Durban Basin are more dependent on the port than other industrial areas in Durban and, in turn, the port is strongly dependent on the South Durban Basin industrial activity.

Agglomeration of activity

The South Durban Basin (SDB) consists of a number of residential areas, development corridors and potential industrial development zones and interface areas. Macro-land uses include primary dune/coastal zones, heavy industry, markets, river corridors/canalisation, industry and residential interfaces. The main residential areas include Austerville and Merewent. The other main suburbs in the SDB include Congella, Maydon Wharf, Clairwood, Grosvenor, Ocean view, Bayhead, Jacobs, Austerville, Mondi, Wentworth, Treasure Beach, Brighton Beach, Amanzimtoti, Isipingo, and Umbogotwini. Areas of influence in the SDB include the Durban Central Business District, Umbilo, Glenwood, Durban Bay, Umlazi, Makukazi and Amanzimtoti South.

Major activity results from the industries in the area namely textile, petrochemical and car dealerships. A significant amount of industry is linked to the Toyota motor vehicle manufacturing plant. A number of other sectors such as paper, packaging, metal containers drum reconditioning, carpeting, paint manufacturing and beverages are all prominent in the SDB. There are several small-, medium and large enterprises within the SDB generating a large amount of noise pollution and activity in the area.

Physical characteristics include heavy polluting industry, high density housing, transport-based land uses, juxtaposition of industry with middle and high-income residential areas, a dry-dock port, poor quality realm around the Bayhead area, growth of informal settlements due to lack of management, old industrial stock, access to residential neighbourhoods via industrial land uses, unsuccessful attempts of screening heavy industry, sub standard housing and many residential land uses in need of urban renewal, entrance to major Industrial sites via residential collectors and lush environments surrounded by stacks.

The SDB consists of an individual conglomeration of harbour container areas, manufacturing, rail shunting yards and residential areas. The SDB is the industrial hub of Durban characterised by an agglomeration of activity and noise resulting from the various activities generated by the Port, the major transport routes namely the N2, South Coast Road, rail, airport, market and different types of industry.

High levels of pollution

The South Durban Basin is the industrial hub of Durban, KwaZulu-Natal Province. It is "home" to one of the two biggest oil refineries in South Africa. South Durban has the largest concentration of petrochemical industries in the country, and it refines approximately 60% of South Africa's petroleum. Apart from being overwhelmed with the petrochemical companies, the South Durban industrial basin is also home to "waste water treatment works, numerous toxic waste landfill sites, an airport, a paper manufacturing plant and a multitude of chemical process industries" In total, the South Durban area contains over 120 industries, including two oil refineries. This petrochemical basin contributes significantly to the economy, but overburdens low income-housing settlements with high levels of pollution, which is a major issue of concern in the South Durban Basin.

Conclusion

Clairwood is located in the South Durban Basin, which is the industrial hub of eThekwini and is characterized by a variety of industries with the major contributors being transport, manufacturing and retail industries.

Clairwood is located to major international connectors e.g. the Port of Durban, the airport; rail and road links which leads to the prevalence of traffic congestion and many logistics industries. Clairwood has several economic development nodes situated along major roads and intersections.

Clairwood's physical form is characterized by prime industrial developments and a decaying residential enclave.

The traditional residential core is under constant threat from the "sea" of surrounding industrial land uses. Urban decay, informal settlements and the presence of illegal businesses affect the residential node negatively leading to a rapid decrease in property values.

In terms of the relationship between sustainability and the flows of population, capital, resources, information, etc. linking Clairwood to other localities and other geographic scales as well as the relationship between the duration and intensity of flows and sustainability it is evident that the majority of people work in the South Durban Basin which is the second largest industrial area in the country. Clairwood is dependent on the economic activity within its larger metropolitan context.

Surveys indicate that sixty percent of the population of Clairwood use public transport to commute outside the areas. There is scope for further development of resources and growth in the transport, manufacturing and retail sectors.

Clairwood accounts approximately 3% of the South Durban Basin population and 34% of Clairwood earns below R 12 000 per annum which is indicative of a relatively poverty stricken community with not much buying power.

The relationship between local perceptions of scale interdependencies in Clairwood indicates that it supports sustainability as the majority of the population of Clairwood is employed within the larger South Durban Basin area.

The flows connecting Clairwood to other scales (regional contexts) mediated by technology and regulation indicates that it is sustainable as the South Durban Basin is the second largest contributor to the country's Gross Geographic Product indicating that this industrial hub is still competitive in a export-led economy. The Clairwood Household Survey indicates that many of the residents also commute to the Durban Central Business District.

Clairwood, being a territorially-bounded locality, addresses broader economic and environmental systems operating as it forms an integral part of the South Durban Basin Area Based

Management's programme to revitalize the area and increase investor confidence in the area. The area is also encompassed by the South Durban Basin's area wide pollution management programme. The Clairwood residents are part of an active group of environmental lobbying groups to counteract pollution in the area. The South Durban Basin Area Based Management has also established air pollution monitoring systems throughout the South Durban Basin (Consolidated South Industrial Basin Report, 2004)

The social, political, economic, and cultural history of a Clairwood contributes to the sustainability of the area. The fact that it was the first Indian settlement area in KwaZulu-Natal and has several national monuments (74 recorded through a municipal survey done by the eThekwini municipality in 2004) contributes strongly to the urban sustainability of the area based on its cultural history. The strong political history of the area and the attempts to retain the area as a residential enclave by the Clairwood Ratepayers Associations is an important factor to consider when planning for urban sustainability. The continuous engagement of the Ratepayers Association and the South Durban Basin Area Based Management is conducive to achieving urban sustainability as continuous participation is a prerequisite for sustainability and indicates that there is not disengagement.

Strong environmental lobbying groups and an active Ratepayers Association and an increasing business community indicates good participation which indicates good governance as the stakeholders are willing to participate in planning for the area. It also indicates the need to identify a solution where the residential enclave can be retained in an increasing industrial area. Clairwood is a good example how sense of place, stocks of social capital, and civic culture can increase urban sustainability where the history of the area can be retained through rejuvenation of the traditional residential enclave and the surrounding businesses can be expanded to increase its competitiveness in the global economy in the heart of the South Durban Basin.

The relationship between the social and cultural resources and the willingness to invest in a place is currently a threat for urban sustainability as there is competition between stakeholders that want to retain the cultural and social resources in the area to save the traditional residential enclave and those who want to develop it as an industrial area. Many landowners are not

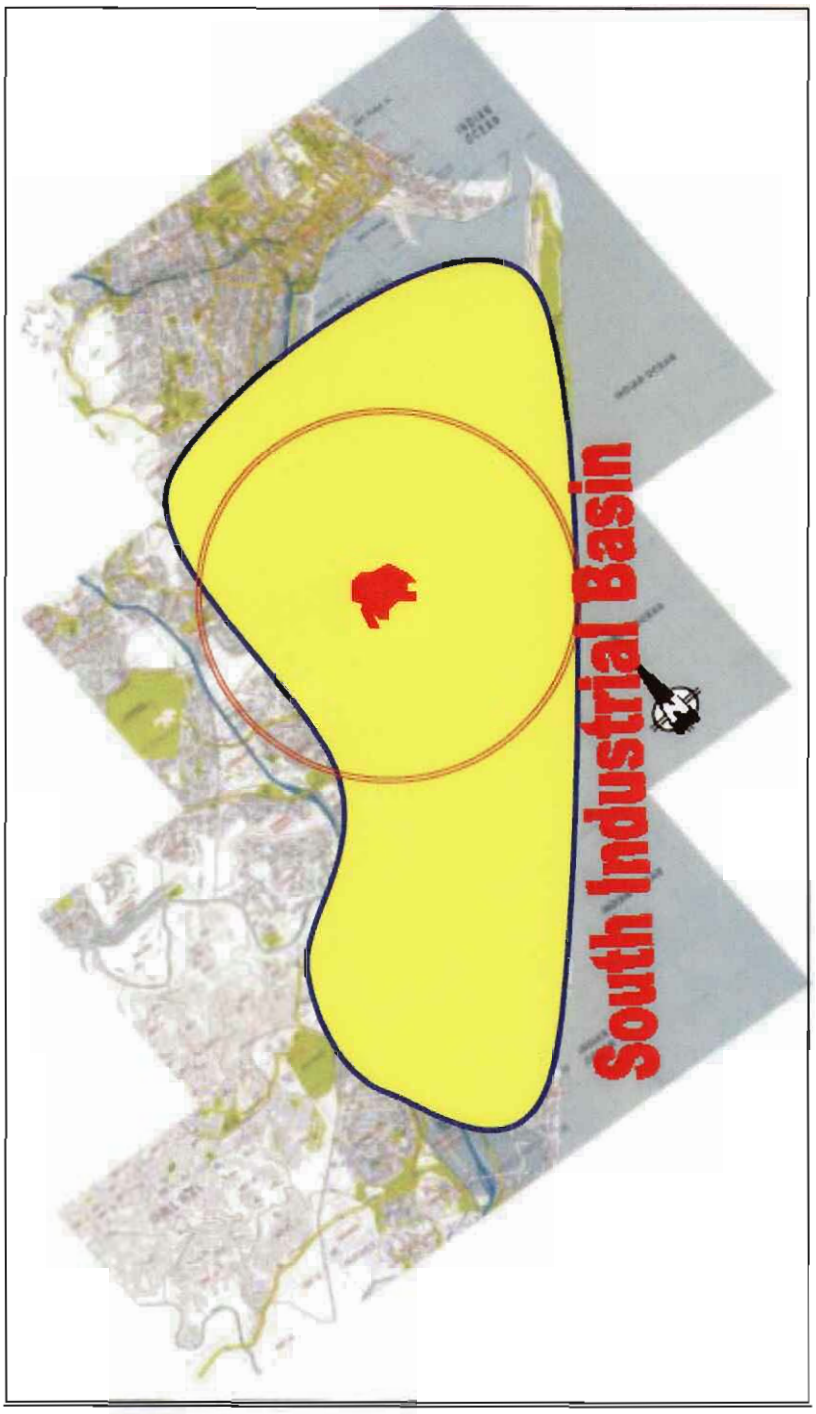
investing into the area until a firm decision regarding the future development of Clairwood is made.

8.5 URBANISATION, URBAN FORM AND THE PHYSICAL ENVIRONMENT

Metropolitan context of Clairwood

The study area comprises Clairwood, a small residential enclave surrounded by industrial and other mixed land uses in the South Durban Basin of eThekwini Municipality. Clairwood within the metropolitan context is shown in figure 8-5:

Figure 8-5: Clairwood in context



Source: Urban-Econ (2004)

Clairwood is located as follows within the metropolitan context:

- Clairwood is bordered on the north-eastern side by Edwin Swales VC Drive and on the west by the Southern Freeway
- The Durban Harbour lies to the north of Clairwood. The area is also in close proximity of the Durban International Airport.
- The area is located seven kilometres south of the Durban Central Business District. In relation to Durban.

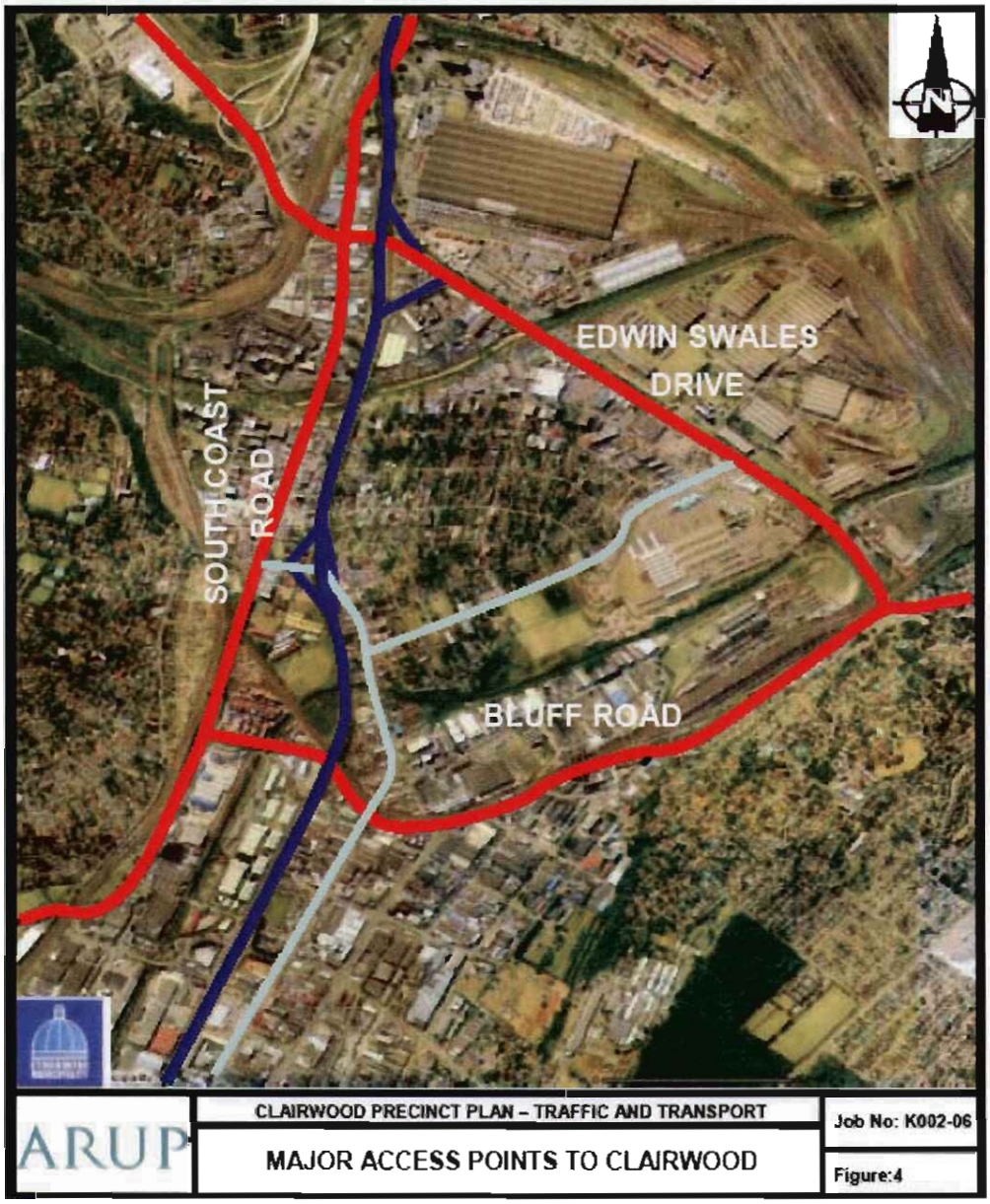
Clairwood is situated on a major bus route and commuter railway line, thereby providing residents with good access to the major employment and commercial areas of the city. The Jacobs industrial area, a prime employment area, is situated to the south of Clairwood.
The residential areas, Bluff and Merebank, lie to the east of Clairwood

Clairwood is located in the middle of an agglomeration of activities generated by the manufacturing and retail industries, the Port and airport as well as major rail and road networks that facilitate transport of people and goods nationally and internationally. It is located in the industrial hub of Durban which brings about environmental and pollution issues that have to be dealt with on a region wide basis. Clairwood is located centrally in the middle of an agglomeration of transport and logistics activities.

Local structural elements of Clairwood

A map consisting of structural elements in Clairwood is shown in figure 8-6:

Figure 8-6: Structural elements of Clairwood



Source: ARUP (2004)

Clairwood originally consisted of an integrated residential area and a thriving central business district. The construction of the Southern Freeway (M4), however, split Clairwood into two namely the residential area and the old Central Business District.

A large portion of Clairwood is used for residential purposes and is concentrated in the area on the Eastern side of the M4 Freeway between Archary Road and Dayal Road. The area is occupied predominantly by low- and medium cost housing with a few medium income houses in the vicinity. Within this residential area there are some small businesses for example panel beaters, car repair centres, manufacturing of building materials as well as sites utilised for storage of fresh produce, waste products, heavy-duty vehicles, etc. On the Western side of the Southern Freeway is the central business district of Clairwood with four schools locate din the same area. While there is an underpass under the M4 Freeway many scholars still have to brave the traffic on South Coast Road in order to get to their respective schools.

Edwin Swales Drive and Archary Road define the area that is occupied by predominantly large businesses such as Makro, petrol stations and borders on the residential component of Clairwood. The Amanzimnyama Canal separates the Housewives Market and Dayal Road Sport field on the Western side and the industrial area situated along Teakwood Road on the Eastern side. South Coast Road, Edwin Swales Drive and Bluff Road are the major roads that form the boundaries that define Clairwood with the M4 freeway running through it. Within the residential area there is a network of minor roads (Ganesh Road, Lockhat Road, Cherry Road, Horsham Road, etc) that are 5m wide and provide numerous access points onto the 10m wide feeder roads (Dayal Road, Flower Road and Jacobs Road). These feeder roads intersect with the major road network at various intersections.

South Coast Road runs from the Durban CBD and Port Southbound towards Durban International Airport providing access to the urban areas North and South of Clairwood (Bayhead, Glenwood, Jacobs, Merewent, etc). On the Northern side of South Coast Road is Tongaat Hulett and to the South of South Coast Road a ribbon development of formal businesses and informal traders. Bluff Road runs from the East of Clairwood (Fynnland, Ocean View, Grosvenor, etc) and intersects with South Coast Road. Edwin Swales Drive runs from the West of Clairwood

(Ridgeview, Hillary, Bellair, etc) and provides access to South Coast Road, Bluff Road and the Southern Freeway (M4).

The major spatial characteristics consist of the Clairwood Bulk Sales Market, major industries e.g. Tongaat Hulett and DEFY, mixed residential and industrial land use. The area under open space system is 0.3%.

The area consist of a medium-size central business district and smaller commercial or industrial areas, normally associated with decentralized areas o cities and large towns, as well as the residential are of conventional construction.

Major land uses include industrial 38.3%, urban formal (30.2)%,Rail (12.3%) and other land uses (19.2%)

River catchment areas are Umbilo River and Umhlatuzana River. Environmental concerns include hazardous industrial and residential interfaces, which expose residents to pollution (mainly noise and air pollution), inadequate integrated and co-ordinated disaster management and illegal industrial operations within the residential area and illegal industrial operations within the residential area. Environmental opportunities in Clairwood include the implementations of a national multi-point residential plan.

Clairwood is located in the South Durban Basin, which is the industrial hub of eThekwini. Clairwood is characterized by a variety of industries with the major contributors being transport, manufacturing and retail industries. Clairwood is located to major international connectors e.g. the Port of Durban, the airport; rail and road links which leads to the prevalence of traffic congestion and many logistics industries. Clairwood has several economic development nodes situated along major roads and intersections. Prime industrial developments and a decaying residential enclave are some of the major characteristics of the area.

The traditional residential core is under constant threat from the "sea" of surrounding industrial land uses. Urban decay, informal settlements and the presence of illegal businesses affect the residential node negatively leading to a rapid decrease in property values.

The main issues derived from the spatial characteristics and assessments of the socio-economic and demographic assessments include:

Need for spatial redevelopment: The area is the first economic node after the CBD to the south but the physical connections are severely congested and in need of redevelopment. The residential area is under threat from surrounding industrial land use

Economic activity: The area is zoned mainly for residential purposes. The main income is earned by means of manufacturing. High levels of crime, low property values and lack of maintenance by business owners and unauthorised businesses discourage investment

Employment: Thirty one percent of the population is educated up to grade ten and higher. People prefer to employ skilled people. Low education and skills levels are impediments preventing people from finding employment. The informal economy is identified as a means of survival but not helping people escape the deprivation trap of poverty.

Crime and safety: The area is characterised but high crime levels and inadequate criminal justice capacity and inadequate policing systems. There is poor traffic and road safety (e.g. lighting).

Poor physical environment: The area is characterised by old industrial stock, high levels of pollution. There is also decay of businesses, houses and poor access to services and amenities. Low maintenance of council owned properties and illegal dumping.

Poor comprehensive living environment: Lack of recreational space. Overall there is a shortage of major facilities. There is a shortage of major facilities.

Poor quality housing: Informal settlements relocated. Substantial sub-letting to tenants and business do not maintain residential sites.

Complex community structures and capacities: Clairwood has experienced severe political conflicts in the past. The area is strategically located in terms of transport and economic links leading to an area wide network of stakeholders. The area is also traditionally a residential area. The major stakeholders include businesses and residents.

Future development impacting on the Clairwood Precinct

The trajectory of growth in Durban is notably centered on the location and role of major logistical

installations in relation to the hinterland. The SDB is anchored between the Port to the north of the SDB and Durban International Airport to the south. The Port, while designed to handle 800 0000 containers a year, handles close to 2 million. Of these, more than 1 million are SA exports to Europe under the SA/EU trade agreement. and the harbour operates as an African hub port. While Durban provides an important regional container facility, Richards Bay is favoured for bulk cargo in terms of ease of access and storage space. The expansion of the harbour and its related industries will have a major impact on the Clairwood area.

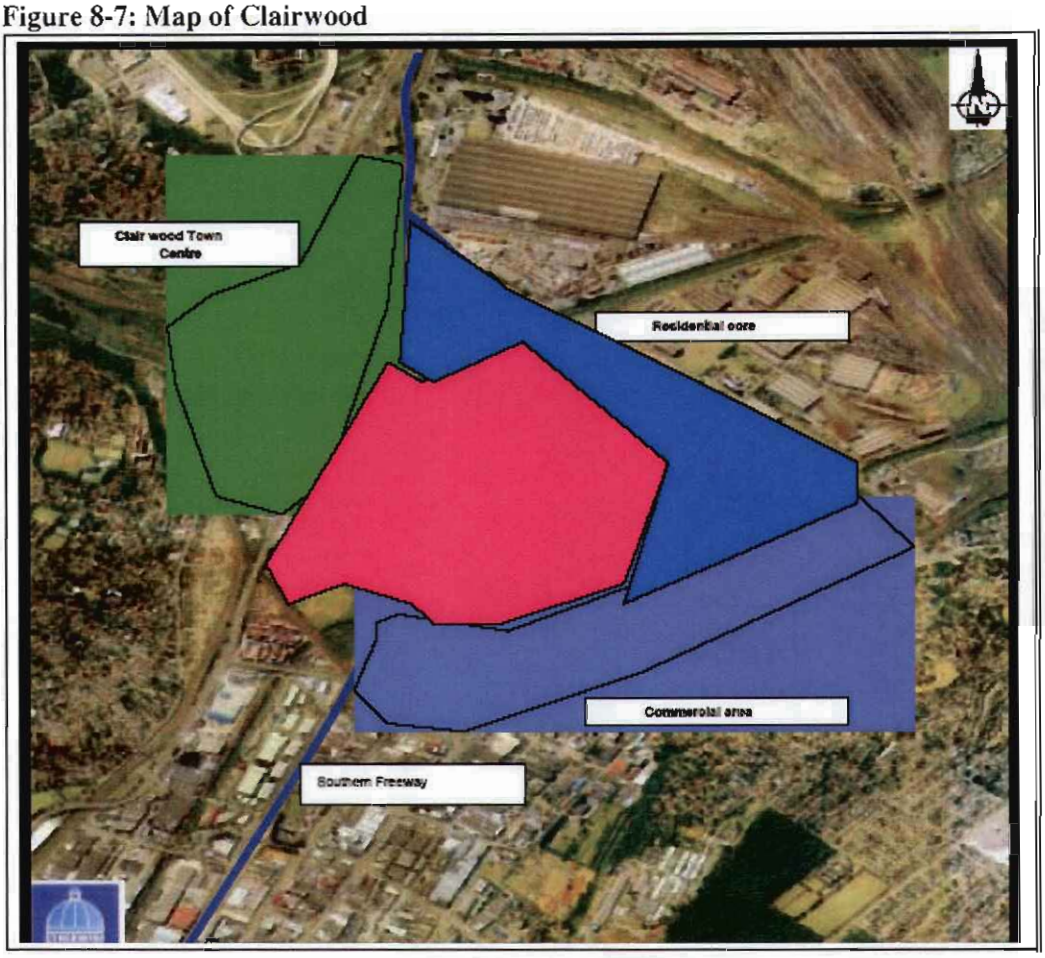
The airport is currently handling an estimated 1.2 million PAX departing and 20 000 PAX arriving. In terms of passenger numbers and cargo handling facilities the Johannesburg Internal Airport dominates, followed by Cape Town International and then Durban airport. The linkages between major logistics are primarily by road, despite existing rail infrastructure, and the ability to deliver services within scheduled times are unreliable. The airport is to be relocated to La Mercy, which not only provides an opportunity for the redevelopment of the existing airport site but also provides opportunities in future to deal with the potential impact of an airport and associated uses in a proactive manner.

In summary. the major developments within the SDB that will have an effect on the Clairwood Precinct Plan includes extension of the harbour and its related industries, extension of the Bulk Sales Market and the Master Plan for traffic and transportation in the SDB.

An overview of Clairwood

Clairwood is located 7 kilometres south of the Durban CBD between the Port of Durban and Durban International Airport in the South Durban Basin. Major roads and rail include Edwin Swales, South Coast Road, the Southern Freeway, Jacobs Road, Blamey Road, Bluff Road. Dayal and Chalmers Roads. Major railway stations include Montclair, Clairwood and Rossburgh. The Clairwood area is shown in figure 8-7.

Figure 8-7: Map of Clairwood



The Clairwood Precinct can be divided into specific areas:

The area located north on South Coast Road from Rossburgh Station to Umhlatuzana Canal:

The main characteristics of this area are:

- The area comprises of manufacturing industries
- Tongaat-Hulett is one of the major industries located in this area.
- The area is characterised by urban decay, which provides an opportunity for urban renewal to attract investment.

- Movement of people and goods among South Coast Road leads to congestion resulting from the Port of Durban, the adjacent container terminal and industrial areas.

The area located to the south of South Coast Road from Umhlatuzana Canal to the railway line.

The main characteristics are:

- The Clairwood area initially consisted of an integrated residential area and a thriving business
- district. The construction of the Southern Freeway (M41 splits Clairwood into two portions
- namely the residential area and the traditional "town centre". The residential population was cutoff from the CBD, leading to a decrease in the number of consumers in the traditional CBD. The Central Business District is located in this area and is characterised by urban decay, which provides an opportunity for renewal to attract investment.
- There is a high percentage of pedestrian movement along South Coast Road, which provides plenty of consumers for the emerging informal market and existing shops and industries.
- Major business and retail node in area.
- There has also been an increase in the number of industrial developments in the area that has to be managed effectively to attract investment.
- Community facilities in this area include three schools.
- Mixed land uses e.g. furniture manufacturing, textile manufacturing, and car dealerships.

The area located adjacent to Jacobs Road and surrounding land uses.

The area is characterized by the following:

- Jacobs Road is part of the lower order road network and has business interfaces on edges.
- Area provides access to Teakwood Road as well as Dayal and Flower Roads where the market and large industries are located.
- Verges in Jacobs Road need to be done to renew area to attract investment.
- Jacobs Road provides a link into Blamey Road linking residents with South Coast Road thereby

- providing consumers for businesses in South Coast Road.
- Widening of Jacobs Road to be done to improve movement of goods and people.

All the land uses located adjacent to Teakwood Road

The area is characterized by the following:

- The area is isolated with big industries e.g. Defy located in this area as well as Spoornet.

All land uses adjacent to Dayal Road:

The area is characterized by the following:

- Land uses located to the south of Dayal Road include the fresh produce market and housewives market.
- An Industrial hive is located to the north of Dayal Road opposite the housewives market.
- Mixed land uses as recreational facilities for the community are provided adjacent to the
- market

The industrial area along Edwin Swales and Chalmers Roads

The area is characterized by the following:

- Contains Edwin Swales intersection and boundary.
- Edwin Swales Drive as well as Archary Road are defined by businesses like MAKRO, petrol stations and is an industrial – residential interface area as it borders on the traditional residential component of Clairwood.
- Industrial land uses in this sub-precinct threaten residential core of Clairwood.
- Traffic overflow resulting from traffic travelling to and from the market
- Illegal parking and traffic congestion along Archary Road.
- Traffic problems associated with on and off ramp onto Southern Freeway due to traffic congestion.

- Sirdar Road link to South Coast Road provides difficult vehicular access points to South Coast
  Road.

The traditional residential area between Blamey and Archary Road

- The traditional "residential" zone is concentrated in the area on the Eastern side of the M4 Freeway between Archary and Dayal Roads. The area is characterized by mixed land use ranging from residential developments in dire need of upgrading and middle-income houses utilized for residential or business purposes. There are a few small businesses operating, e.g. panel beaters, car repair centres, manufacturers of building materials, as well as sites utilised for storage of fresh produce, waste products and heavy duty vehicles.
- Unauthorised businesses operating in area.
- Residential core under threat from industrial land uses.
- Informal settlements in process of being relocated to Welbedacht
- Low property values.
- Limited accessibility due to surrounding land uses.
- Limited links with harbour.
- Located in heart of South Durban Basin and is therefore under pressure.

Based on the above characteristics of Clairwood it has been divided into sub-precincts (regions) for the purpose of planning and analysis. A region is defined as an area with certain identified characteristics giving it a definite identity. The sub-precincts are functional regions that have been classified according to functional cohesion within the Clairwood region. A functional region assists with defining an area as a whole. The functional regions/sub-precincts is interdependent and can also be seen as nodal or polarized areas. The sub-precinct is planning regions displaying some form of coherence. A characteristic of a sub precinct or a planning region is that it is big enough to address issues and bring about changes in Clairwood, but small enough deal with planning problems of Clairwood as a whole.

The proposed sub precincts are as follows:

Sub Precinct One: Northern Section - South Coast Road and associated land uses.

Sub Precinct Two: Southern Section – South Coast Road and associated land uses.

Sub Precinct Three: Teakwood and Jacobs avenue and associated industries.

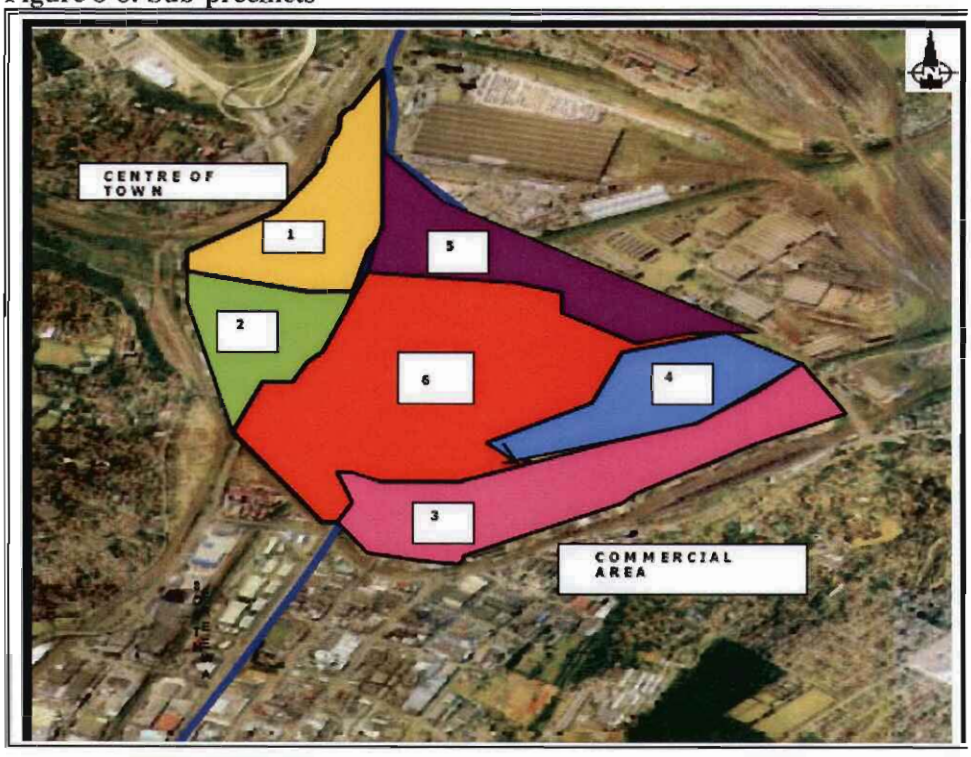
Sub Precinct Four: Bulk Sales Market and surroundings.

Sub Precinct Five: Edwin Swales and adjacent land uses.

Sub Precinct Six: Traditional residential core

The sub-precincts can also be instituted for stakeholder involvement, planning and management purposes. The sub-precinct areas are shown in figure 8-8:

Figure 8-8: Sub-precincts



Conclusion

Internal traffic and transportation

An analysis of the physical form of the Clairwood area has encompassed transport and traffic issues, land use considerations as well as environmental considerations. The major issues can be categorised into physical, economic-, social- and urban management issues and will have to be addressed to enable spatial reorganisation, stakeholder involvement, equitable access to community services, facilities and amenities and redevelopment and increased investment in the area.

The effect of form and density of settlement patterns in Clairwood on the process of sustainability and how this relationship varies in the different contexts is indicated through the effects on the traffic and transportation and land use.

Analysis of the traffic system and transportation network of the Clairwood area revealed the following:

- The condition of the lower order road network of Clairwood is deteriorating due to the large number of heavy vehicles that frequent the area. These roads need to be evaluated and the need to upgrade them determined. Further, actions need to be taken to keep heavy vehicles out of this area.
- The condition of South Coast Road is deteriorating due to large volumes of traffic as well as large volumes of heavy vehicle traffic. Yet again, this metropolitan route needs to be evaluated and the necessary steps taken to upgrade and maintain it.
- The main contributors to the traffic congestion occurring at the various access points to Clairwood are from the surrounding areas and not Clairwood. This needs to be investigated further in order to determine the specific contributors to the congestion and suitable action taken to rectify the problem.
- From a Traffic and Transportation perspective, Clairwood needs to be assessed as an integrated part of the South Industrial Basin or a larger area and not just as an independent

area. This would allow for a more relevant and appropriate analysis and the provision of practical solutions.

- Access to the Teakwood Road commercial area can be improved through a link with Edwin Swales Drive to the North of Teakwood Road. This link could also provide much needed access to the market area and Clairwood area.

The major challenges and implications for land use management are summarized in terms of housing, access, lack of proper municipal services and no adherence to zoning regulations

Housing

Key challenges include:

- Poor condition of housing & living conditions.
- Ghost houses (with no roof, windows and doors) with "TO LET" signs.
- The implications are that the housing component requires urgent intervention and if it does not happen soon, the residential area will collapse.

Access

Passing truck traffic forces residents to compete for access in their homes. The implications are that the boundaries of the residential area vs. the industrial area have already collapsed. Lack of enforcement makes it impossible for residents to have a good quality of life. Enforcement will have to be enhanced to reverse the current situation.

Lack of proper municipal services

Key issues include:

- Illegal dumping inside the residential area which is a large environmental factor threatening sustainability of the area.
- A pile of refuse in the middle of the road prohibiting access to the remainder of Horseshoe

Road.

- The implications are that illegal dumping could become a health hazard. The refuse present on the banks of Amanzimnyama canal has contaminated the water inside the canal, & some of the refuse is being washed down the canal.

No adherence to zoning regulations (i.e. Industrial activity inside the residential the area)

Industries in the area include panel beating; scrap-yards; auto-car repairs; container storage; bus and truck terminals inside residential area. There are also many houses that have been converted into shops. If the zoning regulations are not enforced the residential area will slowly disappear and give in to the industrial component. There is an increase in demand for industrial space in close proximity of the harbour, especially for transport industries. This economic demand for logistics and transport industries is a definite threat for urban sustainability of Clairwood as there will no longer be a balance between retaining the social and cultural history of the area if the residential enclave is not retained through zoning regulations.

Lack of proper public facilities

Key issues include:

- No proper public transport facility;
- Lack of sports field;
- Unkept park
- No visible community hall etc.

The implications are as follows:

An unstructured public transport system has led to the existence of an unauthorized taxi rank. This in turn could lead to conflict from within the taxi operators due to undefined transport routes which could over spill into the residential area. The lack of proper recreational activities results to a sub-standard life. Young people are the ones mostly affected by this as they turn their energy towards negative activities including crime.

The material environmental impacts of urbanisation in Clairwood, mediated by social relations is conducive to urban sustainability as the pollution in the area is caused by oil refineries in the area and not socio-cultural practices and is largely the result of past planning policies where people were placed in decentralized areas among industry. Strong environmental lobbying groups.

Sustainability at household and community level, as well as how sustainability is influenced by gender relations within households, by livelihood strategies of households, and by changes in household composition due to urbanisation, selective migration and commuting patterns is a component impacting on urban sustainability. There is a similar amount of females compared to males in Clairwood. Seventy one percent of the population is employed, 26.8% unemployed and 54.6% not economically active. The dependency ratio is 35:1 and the literacy rate is 57%.Income levels show that 37.8% earn over R18000 per month, 12.8% between R 12000 and R 18000,7.5% between R 2401 and R 6000 and 11.6% don't earn an income. Household surveys indicate that the majority of people work outside of Clairwood in the South Durban Basin and more than one member in the family is economically active. There is outmigration on a daily basis to places of work. The high level of literacy and high percentage of people earning an income above R 18 000 indicates the existence of economic opportunities and the possibility of providing further training opportunities which could increase competitiveness of individuals living in Clairwood. Strategies that could possibly retain this buying power will increase sustainability of the area.

The changing position of poor or other marginalised segments of households and community members in Clairwood as they are exposed to rapid urbanisation and the related effect on sustainability is a challenge. Thirty-four percent of the population earns less than R 12 000 a year and surveys indicate that the businesses employ skilled and semi-skilled workers. The fact that only 31% of the population is educated to grade ten levels may be problematic in securing employment. Mitigation steps that are currently being implemented includes the establishment of a business support center in the area and also the planning of a housing programme that will provide two to three storey walk-ups in the area so as to improve the quality of life of the poor living in the area.

8.6 ECONOMIC OVERVIEW AND THE ENVIRONMENT

Introduction

The purpose with this section is to present a profile on the economy of Clairwood in terms of its relative size, and the contribution and significance of the various sectors, including the informal economic activities. A perspective on the economy be gained on three levels namely the metropolitan level (i.e. its relative size), the Clairwood level (i.e. the relative contributions of the various sectors and the role of the informal sector), and thirdly on the spatial level. The economic landscape of Clairwood is not uniform. The significance of this is that the differences in the availability of disposable income will determine the feasibility of new economic activities e.g. light industries, and therefore the feasibility of areas of economic activity. As such, an accurate perspective on the economic landscape will inform the decision on the particular areas of economic activity to target for intervention strategies.

Relative size of the Clairwood economy

The formal economy of Clairwood is very small resulting from the small population of 4262 and an employable workforce of 1951. One thousand three hundred ninety nine members of the workforce in Clairwood are employed, which comprises seventy one percent of the employable workforce. The total contribution of Clairwood towards the economy of the Durban South Basin is unknown except for the fact that Clairwood comprises 4.51% of the South Durban Basin's population. The main contributions are made in the sectors of manufacturing, retail and service industries as the major land uses in Clairwood are as follows namely industry (38.3%), urban formal (30.2%), rail (12.3%) and other land uses (19.2%) (Final consolidated report, 2001).

Clairwood itself has a small economic base resulting from the small geographical area of 2.7 km^2 it covers. Clairwood is dependent on the economy of the Durban South Basin for other formal employment opportunities, as between 90 000 and 120 000 job opportunities are created by the industries in the South Durban Basin. The population size, employment and income levels of Clairwood compared to other areas in the South Durban Basin is given in the tables below

Table 8-1: Population size and number of households in South Durban Basin

Planning Unit	No. Of Households	Population No.	% -Of Total SIB Population	Density (Du/Ha)
Austerville	4990	23258	24.60%	22
Bayhead	16	21	0.02%	0
Brighton Beach	1358	4652	4.92%	5
Clairwood	1109	4262	4.51%	4
DIA	0	0	0.00%	0
Fynnlands	1794	5713	6.04%	10
Grosvenor	1430	4089	4.32%	9
Isipingo Beach	888	4037	4.27%	6
Jacobs	134	2392	2.53%	0
Merewent	5773	23043	24.37%	17
Mobeni	52	9075	9.60%	0
Mondi	308	1300	1.37%	2
Ocean View	2152	6707	7.09%	8
Prospecton	0	0	0.00%	0
Treasure Beach	307	1630	1.72%	4
Wentworth	1323	4377	4.63%	8
Total	**21634**	**94556**	**100.0%**	**21664**

Source: Final Consolidated Report SIB (1996-2001)

Table 8-2: Employment in South Durban Basin

	EMPLOYMENT/UNEMPLOYMENT NUMBERS				EMPLOYMENT PERCENTAGES	
PU Name	Total Workforce	No. Employed	Seeking Work	Not Seeking Work	% Employed	% Unemployed
Austerville	9949	6951	2761	237	69.87%	30.13%
Bayhead	19	4	15	0	21.05%	78.95%
Brighton Beach	2348	2210	116	22	94.12%	5.88%
Clairwood	1951	1399	500	52	71.71%	28.29%
DIA	0	0	0	0	0.00%	0.00%

	EMPLOYMENT/UNEMPLOYMENT NUMBERS				EMPLOYMENT PERCENTAGES	
PU Name	**Total Workforce**	**No. Employed**	**Seeking Work**	**Not Seeking Work**	**% Employed**	**% Unemployed**
Fynnlands	2946	2676	228	42	90.84%	9.16%
Grosvenor	1959	1777	146	36	90.71%	9.29%
Isipingo Beach	1612	1436	153	23	89.08%	10.92%
Jacobs	2091	755	1227	109	36.11%	63.89%
Merewent	9312	7981	1130	201	85.71%	14.29%
Mobeni	7242	3215	3728	299	44.39%	55.61%
Mondi	510	372	126	12	72.94%	27.06%
Ocean View	3489	3274	172	43	93.84%	6.16%
Prospecton	0	0	0	0	0.00%	0.00%
Treasure Beach	706	598	84	24	84.70%	15.30%
Wentworth	2232	2040	142	50	91.40%	8.60%
Total	**46366**	**34688**	**10528**	**1150**	**74.81%**	**25.19%**

Source: Final Consolidated Report SIB (1996-2001)

Table 8-3: Income Levels in South Durban Basin

Planning Unit	No. of Households	R0-2400	R2401-R12000	R12001-R30000	R30001-R42000	R54001-R96000	R96000+	Unspecified
Austerville	4990	6.7%	17.3%	23.5%	20.0%	14.6%	6.1%	11.8%
Bayhead	16	93.8%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Brighton Beach	1358	1.4%	4.7%	8.5%	12.5%	21.0%	29.2%	22.8%
Clairwood	1109	13.9%	21.0%	26.2%	13.5%	6.9%	4.0%	14.4%
DIA	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fynnlands	1794	2.6%	9.1%	14.5%	15.1%	23.1%	24.0%	11.5%
Grosvenor	1430	3.5%	17.7%	11.5%	16.5%	16.9%	18.6%	15.4%
Isipingo Beach	888	5.7%	7.0%	16.9%	20.0%	25.1%	18.4%	6.8%
Jacobs	134	4.5%	13.4%	32.8%	28.4%	12.7%	3.0%	5.2%
Merewent	5773	5.2%	11.2%	27.5%	22.3%	15.6%	7.8%	10.4%

Mobeni	52	1.9%	5.8%	7.7%	7.7%	5.8%	0.0%	71.2%
Mondi	308	12.0%	18.8%	37.0%	16.9%	8.1%	2.6%	4.5%
Ocean View	2152	2.8%	13.4%	10.1%	11.2%	19.1%	26.3%	17.1%
Prospecton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treasure Beach	307	0.0%	6.2%	3.9%	15.6%	31.3%	33.6%	9.4%
Wentworth	1323	4.0%	10.1%	9.5%	15.3%	21.3%	17.5%	22.2%
Total	**21634**	**5.2%**	**13.0%**	**19.7%**	**17.9%**	**17.1%**	**13.7%**	**13.4%**

Source: Final Consolidated Report SIB (1996-2001)

Internal structure of the Clairwood economy

The purpose with this paragraph is to present perspective on the second level of the economic assessment, namely the internal structure of the Clairwood economy.

Clairwood contributes to the local economy in terms of the light industries sector of the Durban South Basin and also provides labour to the surrounding areas of the South Durban Basin. The Clairwood economy is open, and vulnerable to the changes that occur in the Durban South Basin economy. The manufacturing sector is the main source of employment for Clairwood inhabitants but structural changes in the economy could lead to the tertiary sectors becoming increasingly important.

According to the business survey conducted in the area in 2000, manufacturing is the main contributor to the local economy, followed by the retail and service industries. The growth of the informal market could be an implication that at present, the traditional sources of employment in Clairwood do not generate enough job opportunities, resulting in an increase in the average level of unemployment in Clairwood. At present, the level of unemployment is 28%, which could cause people to enter the informal market.

It is assumed that the unemployment profile is not cyclical, but structural in nature. This can be attributed to structural changes in the economy from the Primary to the Tertiary Sectors shown by the increasing number of retail and service industries emerging or preferences for example to employ skilled or semi-skilled instead of unskilled workers.

There has been proliferation of the informal sector. The strong growth in the informal sector can be attributed to the growing inability of the formal sector to provide opportunities for the local labour force. As such, the growth in the informal sector should be seen as part of the household survival strategy of the Clairwood population.

A Profile of the local economy needs to be determined in terms of a comparison between the main elements namely the relative contribution per sector, formal employment and remuneration per sector as well as employment in the informal sector

Relative contribution per sector (formal)

The economy of Clairwood is dominated mainly by primary sectors e.g. manufacturing and industry.
The industrial land uses are the highest and indicate that manufacturing is the major contributor to the local economy followed by commercial businesses.

Formal employment and remuneration per sector

The main sectors of formal employment include manufacturing, retail, and service industries as well as transport and warehousing. It is assumed that manufacturing is the major contributor to the local economy as the industrial land use is the highest at 38.3% followed by urban formal, which consists of offices and commercial uses.

Employment in the informal sector

The estimated number of employment opportunities generated by the informal sector is unknown. It can be assumed that this is an undercount of the actual number of job opportunities, as some informal activities may involve illegal activities.

The majority of the employment opportunities in the informal sector are generated in the sectors of trade, manufacturing and transport.

The informal trade sector involves the numerous informal markets as well as the spaza shops in the residential core that trade in a variety of goods such as fruit and vegetables and clothes. These activities locate directly where the actual demand is for example the intersections of high order roads, opposite the formal market selling similar goods, etc.

The informal transport sector is dominated by the large taxi industry. The informal. Community Services sector involves numerous activities such as hair cutting and public telephones, for example.

It is important to note that whereas most of the trade related informal activities are found in areas of economic activity, the majority of those that involve services are found in private homes.

Components of the Clairwood economy

Based on the assessment on the relative size of the Clairwood economy, and the internal structure, it is possible to identify those particular sectors and industries that are considered most important for the Clairwood economy.

These sectors and industries include:

- Industry
- Logistics industries (transport and warehousing)
- Market and associated economic activity areas (Easy)
- Retail
- Informal sector
- Social facilities
- Residential consumer

Industry

Industry is the major employment sector in Clairwood and 38.3% of land uses in Clairwood are used for industrial purposes. Industry is located at a few different economic activity areas in Clairwood. The areas are as follows:

- The traditional residential core on the eastern side of the Southern Freeway between Archary Road and Dayal Road has a few small businesses operating in the area e.g. panelbeaters, car repair centres, manufacturers of building materials etc.
- The industries located adjacent to Jacobs, street, a 10m feeder road. The land uses include panelbeaters, car repair centres, manufacturers of building materials and light industries.
- The industries adjacent to Teakwood Road e.g. Defy.
- On the Western side of the Southern Freeway (M4) is the traditional central business district, which also has a number of textile industries, clothing manufacturers.
- The southern part South Coast Road from the Umhlatuzana canal to the railway line is characterized by many mixed land uses e.g. the manufacturing and repair of equipment used in schools (e.g. desks), clothing manufacturing or furniture making industries, manufacturing of uniforms for both the education and health services, manufacturing of building supplies such as bricks, doors and window frames etc. More detail studies are required to identify and thoroughly investigate these markets.
- The major industry, Tongaat Hulett is located to the north on South Coast Rd from Rossburgh Station to Umhlatuzana Canal.

The industry sector contributes significantly to the local economy and several multinational companies are located in the Clairwood area namely Tongaat Hulett, for example.

Clairwood is very accessible and in close proximity to the Port of Durban, container areas and surrounding industrial areas. These factors promote the marketability and attractiveness of Clairwood as a location for industrial investment. It has to be stressed that the Structure Plan will form the basis of development, which entails that Clairwood will be developed as an area where the traditional core is preserved and the surrounding areas.

The most realistic strategy to build confidence in the area is to market the sustainable manufacturing enterprises already located successfully in Clairwood.

The Manufacturing Sector by its nature has a very strong multiplier effect and generates a significant contribution to an economy. The industrial sites will continue to contribute to high property values and is a major employment generator in the area

Logistics industries

Clairwood is in close proximity to the Port and container industries and is surrounded by industrial land uses. There are several logistics industries namely transport, warehousing and diesel repair works resulting mainly from the activities of the Port. There are several warehousing industries in the area as well as sites used as storage sites for heavy vehicles etc.

The economic activity areas pertaining to this sector includes:

- The traditional residential core between Archary and Dayal Road on the Eastern side of the Southern Freeway has several sites that is currently utilised as storage sites of fresh produce, waste products, heavy-duty vehicles, bus depots
- Diesel repair works situated on the Southern Freeway
- Spoornet situated on Edwin Swales Drive
- Warehouses and petrochemical plant adjacent to Edwin Swales Drive

The logistics industries are mainly generated by the activities of the Port, which is one of the major employment generators in the South Durban Basin. The petrochemical plant and Spoornet, for example, are well-established industries contributing to the local economy.

Possible problems related to this component of the Clairwood economy is the bus depot and the storage of heavy vehicles and warehousing on the residential properties, as this leads to a decrease in the property value and maximum leverage of properties is not created.

The Port will extend its activities in the future, which implies that the logistics industries will also expand. The related industries in Clairwood will continue to contribute to the local economy. Possible relocation of the bus depot and the heavy vehicle storage businesses, will provide the opportunity to redevelop the residential area thereby increasing property values and creating leverage of Council and private land.

Extension of the Port's activities may lead to an increased need for office space, which could be accommodated within Clairwood.

Market and associated economic activity areas

The market is located on the corner at the intersection of Edwin Swales and Dayal Road. It consists of a formal market and has led to other associated markets namely the Farmer's Bulk Sales Market, the Housewives Market and the informal markets located in close proximity of the market selling similar goods.

The market and associated industries contributes significantly to the local economy and the market is a major occupier of land in Clairwood, which makes it one of the major role-players in the local economy. It has led to the creation of additional areas of economic activity namely the Housewives Market (who have a ten year lease agreement with the Council), the Bulk Sales Market and an increasing informal market selling similar goods. It has thereby created many sustainable employment opportunities.

The Market is a major occupier of land and a Master Plan for future development is currently being developed. The market will therefore continue to expand and increase its activities in the future, which will contribute significantly to the local economy.
The local Trade Sector involves a wide profile of businesses, ranging from the micro level informal spaza shop, the small retail industries run from residential properties as well as the local shopping centers. In general, the current focus is on the trade sector

Retail/trade

The local Trade Sector involves a wide profile of businesses, ranging from the micro level informal spaza shop, the small retail industries run from residential properties as well as the local shopping centres.

The main EAAs related to the related sector are as follows:

- Small businesses located in the traditional residential core between Archery and Dayal Roads on the Eastern side of the Southern Freeway. The small businesses include tearooms, spaza shops, a butchery etc.
- The major retail sector in South Coast Road from the Umhlatuzana Canal to the railway line e.g. car dealerships, clothing stores etc.
- The traditional Central Business District of Clairwood located to the west. Clairwood originally consisted of an integrated residential area and a thriving COD, but the construction of the Southern Freeway split Clairwood into two portions, cutting the residential zone off from the CBD. The CBD comprises of many retail stores and a shopping centre e.g. Clairwood Centre

Thirty percent of land uses are used for "formal urban" purposes. The trade sector is one of the components in this sector and therefore contributes significantly to the local economy.

A household survey conducted in 2000 in Clairwood revealed that 55.9% of household members shop for food in Clairwood and 43.4% shop for non-food items in Clairwood. One tenth of the households buy food in Durban Central and one tenth in South Coast Road. 29.4% of the households shop for non-food items in Durban Central and 11.8% shop in South Coast Road for non-food items. One tent h of the households visits the Bluff, Chatsworth, Merebank and Isipingo to shop for non-food items.

Loss of local buying power in Clairwood could be caused by a number of factors namely that people tend to shop where they work and also the very pleasant shopping environments offered in other places for example the Durban Central Business District (its location, ambience and the

wide range of commodities on offer). People may visit the "Wheel", for example, for the experience of an "outing", which the areas of economic activity in Clairwood do not offer. On another level, the local "shopper psyche" may also contribute to the loss of buying power, as people may also perceive the local facilities and commodities to be inferior to that of the surrounding areas.
The majority of people do buy their goods in Clairwood but the population may be too small to service the surrounding trade commodities sufficiently.

Retail industries located in South Coast Road do not only service the local population but also people who travel to the area daily for work or school, for example, thereby increasing their client base.

The Trade Sector is significant for the local economy from two perspectives namely its ability to retain local spending power, and secondly the potential to attract outside spending power to Clairwood. The cumulative effect is a strong multiplier, which can generate a meaningful contribution to the local economy. The most important market segments are to be determined.

The local spending power is not distributed evenly in Clairwood, and it would appear as if those people living in private houses have the most disposable income when compared to the population members living in outbuildings and shacks. It is therefore important to determine the locations of these more affluent areas, as that will influence the decision on the identification of the EAAs to be targeted for focused intervention.

Emerging economies

The emerging economies in Clairwood provide a source of income for many living in the area. The emerging economies are not the result of a sudden increase in the number of entrepreneurs, but could be due to a lack of availability of job opportunities in the formal market or preference of companies to employ skilled or semi-skilled people as indicated in Business Survey in Clairwood conducted in 2000. These factors in effect force people to engage in other economic

activities so as to augment their household survival strategy. The level of skill of the people working in the informal sector is unknown.

The location of the informal sector is a very good indication of the degree of demand for particular goods or services, as the informal activities settle where the demand is. The informal markets concentrate at major intersections that are easily accessible, and at modal interchanges, where there is a large flow of pedestrian traffic. A good example of this is in South Coast Road in front of the formal businesses.

The informal market concentrates at places where the goods that are sold are similar to their products e.g. in Dayal road opposite the Housewives Market, where they "feed off" the traffic generated by the relevant business or organisation. It becomes clear that a very strong link exists between the formal and informal sector. The informal sector caters for a different market segment than the formal sector, and does not pose a direct threat to the formal market. A possible threat is the concentration of the informal market in South Coast Road in front of the formal businesses, which becomes inaccessible through the agglomeration of vendors.

Factors that hamper the informal sector include the unavailability of ablution facilities, and a lack of protection against the elements. Most of the traders do not have access to storage facilities. The large number of people in the informal market has resulted in high levels of competition and low profit margins. As a result, most informal activities are at a subsistence level. The number of direct employment opportunities created in the informal sector is unknown.

Site visits to Clairwood showed that the dominant commodities and services offered by the informal sector are the selling of fruit & vegetables, the provision of public telephones. Other typical commodities and services include shoe repairs, hair cutting, the sale of meat, sale of snacks and spaza shops. The customer profile depends on the location, and can include taxi/train commuters, pedestrians, residents and the customers to the other facilities in the area like the Bulk Sales Market or Clairwood Shopping Centre.

In broad terms, a distinction can be made between those informal activities that are located in particular places, and those informal activities that are conducted from home. The former type

locates at highly accessible points such as taxi ranks and they rely on a constant flow of vehicular or pedestrian traffic.

The typical activity carried out is trade orientated. The informal activities that are performed at people's homes do not require a high traffic volume to be profitable, and a typical example is that of a spaza shop.

The typical informal entrepreneur usually works for him/herself, works seven days a week, and hopes to make a profit. This profit would typically contribute towards the larger household survival strategy to support approximately five to seven people.

It will be beneficial to conduct a business audit to obtain more information with regards to the informal market but the main emerging economies are as follows:

- Spaza shops in the traditional residential zone
- Clairwood hive located in Dayal Road opposite the Housewives Market
- Informal markets in front of shops in South Coast Road selling similar goods, hair cutting etc.
- Farmer's market at the Bulk Sales Market

The inability of the formal sector to absorb a larger portion of the economically active population forces some community members in Clairwood to resort to the informal sector to earn a living. The informal sector is very flexible as it does not require a significant capital layout, and is not governed by the regulations and legislation as the formal activities. The informal sector therefore offers opportunity to those individuals with entrepreneurial spirit and imagination, to identify a particular demand and cater for it. The flexibility of the informal market gives the entrepreneur the opportunity to position him/herself at any location, and if required, makes it possible to relocate easily. The profile of services and commodities, as well as the location of informal activities are a very good and accurate indication and measure of the actual needs of the local community. Also, the informal sector can offer services for longer hours than the formal sector, which is very convenient for the consumer.

The informal sector by its nature is robust and flexible. The local informal sector has become a major source of employment, and it has a significant role to play in the local economy.

Social facilities

Social facilities include four schools, one clinic and recreational facilities. There are several churches and religious buildings in the area e.g. the Shree Siva Temple, the Methodist Church, the Full Gospel Church, the Madressa School etc.

The pupils attending local schools become consumers for the retail industries, especially in South Coast Road, as many pupils are from other areas and make use of public transport systems on South Coast Road. Access from schools to retail industries are provided by means of an underpass under the Southern Freeway.

Three of the schools are public schools with several staff members thereby increasing the number of people employed by the public sector thereby contributing to the tertiary sectors of the local economy.

One of the schools is a national monument, which could influence the property value of the area and contributes to the historical value of property.
The civil and religious organisations in the area could form sustainable public-private partnership with local government thereby building social capital to attract investment and build confidence in the area.

Significance for further development of the economy includes:

- Sustainable public private partnerships could attract investment to the area.

- Recreational land could be redeveloped to create leverage of property value of public land.
- Increasing amounts of pupils from other areas increase the amount of consumers for industries located in Clairwood.
- Contribution to tertiary sectors of economy due to employees of schools employed by public realm. Future developments in area based on identified needs include a library and a police station which will further contribute to the amount of employment opportunities generated by the tertiary sector.

Residents /consumers

The population of Clairwood is 4262, which means that there are several consumers contributing to local buying power. Household surveys conducted in 2000 show that the most residents buy goods locally. The majority of the residents are located within the traditional residential zone east of the Southern Freeway between Archary and Dayal Roads.

The building of the Southern Freeway cut the residents off from the traditional CBD but it can still be accessed by means of an underpass under the M4. Most inhabitants of Clairwood have stated that they buy most of their goods locally but loss of buying power does occur where inhabitants work in other areas or shop at bigger shopping centres resulting from its ambience and a bigger variety of goods.

The CBD caters for residents but also for people who commute to Clairwood on a daily basis for work or school. The residents form part of the client base of the South Coast Road retail industries, the emerging economies and surrounding land uses concentrated around Jacobs Road and form the sole client base in many cases for the small businesses located in the traditional residential zone e.g. the butchery or spaza shops, for example.

The Structure Plan will form the basis of redevelopment of Clairwood whereby the residential core will be preserved. It is proposed that a housing programme be implemented which will increase property values, create job opportunities; provide the workforce in the South Durban Basin with a prime residential property in close proximity of major transport routes and their

work. This will increase the amount of people living in the area thereby providing local retail industries with a bigger client base and creating the opportunity for the development of new industries to service the increased population.

The current spatial pattern

The spatial patterns of an area can be considered the physical manifestation of two forces namely an institutional and economic force. The institutional force includes elements such as government development and planning policies. In the case of Clairwood, the lack of application of zoning regulations by institutional forces in the past played a key role in the establishment of Clairwood as a small residential enclave surrounded by industrial land uses. Clairwood was never developed as a contained urban entity, but is an ideal the place of residence for the workers in the South Durban Basin. Land use and development is largely the result of very restrictive legislation that regulated and controlled almost all development, resulting in Clairwood's distorted land use pattern. In general, Clairwood lacks the typical range of land uses and facilities and urban cohesion. There are a few access points to Clairwood, and the internal road network does not provide for good circulation as it is in a poor condition. A number of areas of economic activity have been established, but there is a general lack of a clear hierarchy (i.e. Clairwood does not have a dominant and strong town center, with a logical hierarchy of neighborhood and local centers). The most community facilities are still undeveloped e.g. a library, a police station.

The second force, the economic force, plays a very important role in the location of areas of economic activity of which the main driver is Industry. The Retail Sector requires maximum accessibility for its success, and these EAAs have established themselves either at the intersection of busy roads, along busy roads, or at points of modal interchange (e.g. taxi and bus ranks in South Coast Road, for example). The best indicator of the actual levels of accessibility and movement is provided by the location of the informal sector. Because of the flexibility of the sector, it can locate at or very close to the points of maximum access. From this perspective, the location and conglomeration of informal activities can be considered "trade desire points".

Areas of economic activity

The main areas of economic activity identified are as follows:

- The area located north on South Coast Rd from Rossburgh Station to Umhlatuzana Canal which is characterised by many manufacturing industries e.g. Tongaat Hulett and there is lots of movement of people and goods along South Coast Road towards and from the port and industrial areas.
- The area located to the south of South Coast Road from Umhlatuzana Canal to the railway line where the traditional Central Business District is located as well as manufacturing industries, car dealerships, large retail industries and government institutions e.g. schools
- The area located adjacent to Jacobs Road and surrounding land uses which is a business interface area with panelbeaters and car dealerships and an important access point for consumers living in residential core to businesses in South Coast Road and to the market in Dayal Road.
- The area adjacent to Teakwood Road which is characterized by large industries e.g. Defy.
- Land uses adjacent to Dayal Road consists have the Fresh Produce Market and all related industries and an industrial hive.
- The industrial area along Edwin Swales and Chalmers Roads which also contains petrochemical plants and Makro and serves as an industrial/residential interface area
- The residential area located between Blamey and Archary Road where there are a few small businesses operating e.g. panelbeaters, car repair centres, manufacturers of building materials as well as sites utilised for storage of fresh produce, waste products and heavy duty vehicles.

Areas of economic activity are divided according to scale namely micro-size, small size, medium size and large size.

Micro scale mostly comprises corner shops that serve the local suburb e.g. butchery and tearoom in traditional residential core area of Clairwood. They are generally visited by pedestrians in the residential area. The average enterprise employs between 1 and 10 workers, and has a monthly turn over of less than R150 000. The floor area is about < 500m^2.

Small size economic activity areas serve a larger area than the immediate population, and the business would therefore not only capture passing traffic, but people would also make trips to the area of economic activity e.g. businesses situated in South Coast Road. These areas of economic activity typically comprise one or more a small size retail outlets, with a few informal traders. The average turn over is in the region of R100 000 to R500 000 per month, and about 10 to 20 people are employed. The typical floor area is 500 – 2000m^2.

The medium sized category is mostly located along busy transport roads and at bus or taxi ranks. The monthly turnover is about R300 000, and may even be as high as a one million rand per month. There are on average 20 – 50 people employed in a medium size area of economic activity. The typical floor size is about 2001 – 5000m^2. An example of this is BMW car dealership in Edwin Swales Road.

This size of economic activity areas usually serves a large region. a Large retail EAA usually serves as the anchor, with numerous medium and smaller size outlets. The typical turn over for this size EAA is in excess of R1 million per months, and about 100 employment opportunities are created. The typical floor size is > 5001m^2. An example of this is Makro. Other large size EAAS include Tongaat -Hulett, for example.

The main drivers of the economy were identified and categorized in terms of their main activity namely industry, logistics, market and associated activities, retail, the informal sector, social facilities and residential consumers. These sectors are all of special economic significance.

The value of the industry sector is its ability to create and capitalize on both forward and backward linkages with other sectors in the local economy. Clairwood is fully developed in terms of demarcated for industrial development. The prime location of Clairwood relative to the other locations in Durban utilised for industrial purposes contributes to its marketability for investment as it is located close to major transport routes thereby creating national and international linkages.

The sector has an intermediate role to play in the further development of the local economy.

The value of the logistics industry is that it brings in "new" money into an area e.g. drivers of trucks transporting goods to the port and also new types of industries e.g. increased warehousing.

The industry is multi-sectoral and also has the potential to create many opportunities for forward and backward linkages on a national and international scale. Given the uniqueness of the logistics industries created by the location of Clairwood to the Port, the industry can be further developed if managed correctly e.g. building of a truck depot or building offices for administrative support of these industries.

The value of the market and associated land uses is that it circulates local disposable income, and also brings in "new" money. The income generated through sales of vegetables and fruit with very few opportunities for local entrepreneurs to part in the industry.

The sport industry has a marginal to play in the further development of the local economy.

The value of the retail sector is that it captures the local buying power, thereby improving the multiplier effect. Given the leakage of local buying power, there is ample scope for the improvement of this sector.

The sector has a very significant role to play in the further development of the local economy.

The value of the informal sector lies in its flexibility and therefore its ability to locate at the exact point of demand, and change location and offering very quickly in response to changes in the demand profile. The sector also captures some of the local spending power, albeit at a much lower rate than the formal Trade Sector. It is important to note that there are strong linkages between the formal and informal sector, and in most cases, the informal sector feeds off the pedestrian traffic generated by the formal sector.

However, the informal sector is not necessarily a threat to the formal sector as they serve different market segments. The informal sector has an intermediate role to play in the further development of the local economy.

In the case of Clairwood, the government salary bill represents such a small percentage (of the total salary bill, that it generates an insignificant percentage of the local spending power. The sector is underdeveloped and provision of additional social and community activities e.g. a library and police station will create job opportunities and contribute to the local economy.

An overview on the sector distribution of the areas of economic activity indicates that trade is the dominant sector and this is followed by logistics industries. This confirms the assessment about the current importance of Industry for the local economy, and the leading role that it should play in the further development of the Clairwood economy and in attracting new investors and building confidence in the area.

The industry sector is the biggest, followed by logistics and retail and the market and related industries. Emerging economies includes the informal market and industrial hive which is growing rapidly.

Property economics

Clairwood is a fully developed area in terms of industrial land uses, logistic industries e.g. containers and warehousing, and is a prime location for business purposes, resulting from the fact that it is located adjacent to the major routes leading to the harbour and the airport, enabling businesses to establish both national and international linkages.

The traditional residential component of Clairwood surrounded by commercial and industrial sites, is characterised by progressive urban decay, dumping, the presence of unauthorised businesses and informal settlements (currently being relocated) and rapidly decreasing property values (Sold Price Index 2002 –2004). The area has an increasing amount of business interface sites while there has been a significant decline in the number of residential sites the past few years resulting from increased industrialization of the surrounding areas e.g. Jacobs .The traditional residential enclave is under threat of being overtaken by industrial and commercial land uses. The traditional residential enclave is of great historical significance and has the potential of being redeveloped to accommodate a large number of people in housing facilities that

will be developed. This will enable employees in the South Durban Basin to live in close proximity of their work.

The South Durban Basin Areas Based Management has proposed the redevelopment of Clairwood so as to attract investors and build confidence in the area. The main focus will be on the residential redevelopment according to the Structure Plan developed in 1991. The Structure Plan stipulates that the traditional residential core is zoned for residential purposes. Redevelopment will increase the currently low property values (Sold Price Index). The objective is to develop the area as a residential area providing housing opportunities for people working in the South Durban Basin.

An analysis of property values of the traditional residential core of Clairwood has been done to make recommendations with respect to retaining existing investment and promoting further investment in the Clairwood area. This has been achieved through a detailed analysis of the characteristics of the Clairwood area and an analysis of factors impacting on property values and investment promotion in the Clairwood.

A number of factors contribute to the Clairwood becoming less attractive to property developers and investors. This has a direct negative impact on property values in the Clairwood, which will in the long-term impact on the rates contribution of Clairwood to the South Durban Basin coffers. The rates structure applied by the eThekwini Municipality is an important tool to be used by the eThekwini Municipality to maintain appropriate levels of investment in the Clairwood area. Restructuring the rates structure alone will, however, not be sufficient. Other forms of intervention should also be considered.

It is further evident that the Clairwood area is not a homogenous area, but that it is made up of industrial, commercial and a residential land uses. The characteristics of the traditional residential core will be analysed as this forms the focus of the redevelopment according to the Structure Plan of 1991.

Current land-uses (and therefore future potential), surface area of land, public versus private land, rates income and property values and a comparison of property values in Clairwood, Seaview, Wentworth and the Bluff as put forward in the Sold Price Index is given.

An overview of the main characteristics of Clairwood, property rates and perspectives on property values, factors impacting on values as well as recommendations for further investigation have been given. The methodology applied in this section is as follows:

- A Contextual overview of Clairwood and an introduction to the property markets considered in this section is discussed. This provides a broad understanding of the of factors impacting on property values and investment promotion in Clairwood
- Analysis of public versus private land and different land uses, municipal rates and property values in the Clairwood area. This analysis reflects key trends on both a district and a land-use level.
- An investigation into factors impacting on property values and investment promotion in Clairwood is investigated. This investigation is based on an analysis of data from various reports addressing trends in the property sector.
- A list of various factors impacting on property values and investment is researched.

Three basic sources of information informed the analysis namely existing reports and studies, maps of Clairwood showing the Structure Plan as well as a map showing the public versus private land electronic data / databases; sold price index for the areas of Clairwood, Wentworth, Seaview and the Bluff between 2002-2004 and rateable values and classifications

Public and private land analysis
Clairwood consists of 1059 erven (Structure Plan). Seven hundred and twenty eight erven is privately owned compared to the 326 erven in the residential core belonging to eThekwini Municipality (please see Annexure A for a list of all land owned by Council). The council-owned public land constitutes approximately 519 051 m^2 of the 2.7 km^2 of Clairwood.

The land uses of the public land according to the Structure Plan are as follows:

Table 8-4: Council and privately owned land in Clairwood

LAND USE	COUNCIL OWNED LAND (NUMBER OF ERVEN)	PRIVATE OWNED LAND (NUMBER OF ERVEN)
Industrial	54	143
Business interface	32	123
Residential	105	394
Public open space	61	0
Roads and municipal grounds	74	0
Cemeteries	0	5
Other	0	65
TOTAL	**326**	**728**

Source: Structure Plan and Public owned land maps

The following conclusions can be derived from the data obtained form the Structure Plan:

- The residential cluster forms the basis for redevelopment, which implicates those new housing developments, can be designed so as to create leverage of Council and private land by attracting investors and increasing property values.
- Commercial and industrial areas surround the traditional residential zone, which means that new housing developments will be ideal for people to stay in close proximity of their work.
- The Council owns a significant amount of land that can be redeveloped to create more leverage and returns on Council owned property.

Property values and transfer of land

A Comprehensive understanding of municipal rates and property values in the Clairwood district should be developed to ensure effective and informed future planning This ensures that the impact of future projects and activities in the Clair wood area is well understood A comprehensive analysis of property values also provides a strong basis for monitoring the impact of strategies. Such monitoring will use property values as a key performance indicator.

This section, therefore, provides a detailed analysis of rates and property values relating to Clairwood and surrounding areas.

The Sold Price Index for 2002 to 2004 and the Rateable Values and Classifications form the basis for the analysis in this section. The SPI indicates properties that have been sold in a particular area, street or complex within a specified timeframe, what the sale prices were, who the owners are and whether the properties are bonded.

One is able to gauge the current market value of similar properties in the area. It is also possible to compare it with a municipal valuation of the property for rates purposes. The Property SPI report was obtained from Property24's website and contains familiar suburb sold price averages, which enables one to determine whether the average price in that area has increased or decreased in the past year.

This dataset therefore provides a comparative analysis of the sold price averages for the areas of Wentworth, Clair wood and Seaview are discussed. Sold price averages are based on property transfers recorded by the Deeds Office and are published only as a general guide to home values in the specified area (including extensions and zones). Averages are based on the sale prices of freehold or sectional title properties transferred between R 5000 and two million rand. Averages are divided into six-month periods.

Table 8-5: Sold price averages for Clairwood in Dunns Grant, Wentworth and Seaview

SOLD PRICE AVERAGES:		
Sold Price Averages for DUNNS GRANT - October 2003 - March 2004		
Price Range	Transfers	Average Sold Price
R 5,000 - R 250,000	8	R 126,313
R 250,001 - R 500,000	2	R 307,500
R 500,001 - R 750,000	0	R 0
R 750,001 - R 1,000,000	0	R 0
R 1,000,001 - R 2,000,000	0	R 0
R 2,000,001 - R 500,000,000	1	R 2,419,300
October 2002 - March 2003	**April 2003 - September 2003**	**October 2003 - March 2004**

R 475,640	R 279,545	R 162,550

Sold Price Averages for SEA VIEW - October 2003 - March 2004

Price Range	Transfers	Average Sold Price
R 5,000 - R 250,000	180	R 152,444
R 250,001 - R 500,000	48	R 328,617
R 500,001 - R 750,000	1	R 520,000
R 750,001 - R 1,000,000	0	R 0
R 1,000,001 - R 2,000,000	0	R 0
R 2,000,001 - R 500,000,000	1	R 6,000,000

October 2002 - March 2003	April 2003 - September 2003	October 2003 - March 2004
R 176,373	R 180,837	R 190,976

Sold Price Averages for WENTWORTH - October 2003 - March 2004

Price Range	Transfers	Average Sold Price
R 5,000 - R 250,000	80	R 163,578
R 250,001 - R 500,000	80	R 342,669
R 500,001 - R 750,000	10	R 638,700
R 750,001 - R 1,000,000	6	R 869,500
R 1,000,001 - R 2,000,000	24	R 1,226,329
R 2,000,001 - R 500,000,000	12	R 19,426,608

October 2002 - March 2003	April 2003 - September 2003	October 2003 - March 2004
R 310,948	R 288,553	R 407,678

Source: Property 24 (www.property24.com)

*Clair wood is located in Dunns Grant.

The sold price indicates that the average sales price in Clair wood is almost halving every six months leading to very low property values compared to increasing property values in other residential areas e.g. Wentworth (R 407, 678) and Seaview (R 190 976) which are increasing.

The residential erven located in the traditional residential core area of Clairwood and their land surface areas and costs are enclosed in Annexure C: The erven is compared to erven in neighbouring areas and their valuations. Land values for all Council –owned properties in Cherry

Road is compared to erven of the same size in the residential area adjacent to Hazeldene in Seaview, as obtained from the rateable values and classifications.

It is shown in the table below:

Table 8-6: Rateable land values in Clairwood

Erf	Area	Property description	Road	Land area	Land value	Building value	TOTAL
696	Dunns Grant	115 of A of V of Dunns Grant 873	Cherry Road	697	38500	0	38500
480	Dunns Grant	A of 330 of V of Dunns Grant 873	Cherry Road	782	49000	112800	161800
455	Dunns Grant	307 of V of Dunns Grant 873	Cherry Road	1521	85000	0	85000
454	Dunns Grant	306 of V of Dunns Grant 873	Cherry Road	1723	97000	0	97000
453	Dunns Grant	305 of V of Dunns Grant 873	Cherry Road	1925	1925	108000	109 925

Source: eThelwini Municipality Real Estate Clair wood file

This can be compared to the values obtained for erven in Hazeldene Street, a residential road in Seaview. Erven of similar size was chosen for the comparison:

Table 8-7: Rateable values in Seaview

SEAVIEW							
Erf	Area	Property description	Road	Land area	Land value	Building value	Total
9 Hazeldene Road	Seaview	Portion 5 of Lot 325 of Sea View	Hazeldene Road	519	R41,000	150200	191200
19 Hazeldene	Seaview	Portion 7 Lot 325 of Sea View	Hazeldene Road	530	33500	76200	109700
Hazeldene	Seaview	Portion 7 Lot 325 of Sea View	Hazeldene Road	702	46500	0	46500

11 Hazelden e	Seaview	Portion 6 Lot 325 of Sea View	Hazeldene Road	782	46500	500100	546600
30 Hazelden e Road	Seaview	Portion 18 Lot 325 of Sea View	Hazeldene Road	863	46500	35700	82200
52 Hazelden e Road	Seaview	Portion 1 Lot 329 of Sea View	Hazeldene Road	1012	53500	125900	179400
34 Hazelden e Road	Seaview	Portion 1 Lot 326 of Sea View	Hazeldene Road	1016	49000	101300	150300

Source: Rateable Values and classifications volume 5

Analysis shows that there are two erven of the same size zoned for residential purposes in both Clair wood and Seaview. Analysis of the two properties of similar size shows that the municipal valuation of the erven in the respective areas is valued higher in Clairwood (R 49 000)is compared to the property value of the Seaview property rated at R46,500. The remaining erven in the Clair wood sample have lower values than those erven that compromise the Seaview sample.

The sold price index indicates that the average property value in Seaview was originally lower than Clair wood but has increased significantly and is currently much higher than the average property value in Cairwood.

Clair wood's traditional residential core is in transition and is threatened of being taken over by surrounding industrial and commercial land uses. The property values are low and there is little investor confidence in the area.

Clair wood's property values are decreasing rapidly and it is assumed that is the result of urban decay, unauthorized businesses, illegal dumping and the presence of informal settlements. It has become imperative to upgrade and redevelop area so as to create leverage of Council and privately owned land as property values are at the lowest point in two years.

The average sales price is lower in this area compared to the neighbouring residential areas of Wentworth and Seaview. The majority of the erven in Clair wood's traditional residential zone is zoned for residential purposes and therefore forms the basis of redevelopment, which will be done according to the Structure Plan of 1991.

Clair wood is an area of great historical significance and should be preserved. Redevelopment of the Clair wood area will attract investors, build confidence in the area and maintain the cultural and historical character of Clair wood.

Conclusion

The major statistics gathered from the Household surveys conducted in the area indicated the following:

- There are high levels of unemployment related to the fact that only 31% is educated up to grade ten and higher as surveys done indicate that companies prefer to employ skilled and semi-skilled labour instead of unskilled labour.
- It is easier for skilled and semi-skilled member to obtain employment in the area than unskilled labourers.
- Average household income is high. The majority keep semi-skilled jobs and a large percentages have their own businesses.
- Sixty nine percent of the population is employed, 26.8% unemployed, 54.6% not economically active. The dependency ratio is 35:1 and the literacy rate is 57%.
- Income levels show that 37.8% earn over R18000 per month, 12.8% between R 12000 and R 18000,7.5% between R 2401 and R 6000 and 11.6% don't earn an income.

Clairwood is dualistic in nature as the average household income is high, based on the fact that the majority of people keep semi-skilled jobs and a large amount have their own businesses. There is a high level of employment but some of the poorer families (11.%) don't earn an income. This is an indication of the extent to which livelihoods are differentially constructed at

the level of the household, the locality, and larger spatial scales and this affects sustainability in Clairwood.

The forms and conditions of livelihood that are more or less conducive to sustainability are indicated by a high level of employment and by the fact that there are many entrepreneurs in Clairwood that run their own businesses and a large semi-skilled community. The fact that Clairwood is located in the South Durban Basin which is the second largest industrial area and a major employment node is conducive to sustainability.

Structural impediments hindering fostering of sustainable livelihoods in Clairwood are the Southern Freeway and South Coast Road which cuts off the traditional residential area from the commercial centre and economic opportunities. The highways provide easy access to other areas which cause leakage of buying power. Fostering links between the traditional residential area and the commercial node in South Coast Road and renewal of the economy and other major economic activity areas will ensure sustainable livelihoods in Clairwood.

Opportunities for markets include increasing warehousing space around the traditional residential area for cold storage of the Durban market and also warehousing space for the Port. A Land Use Management Scheme defining boundaries of traditional residential enclave and surrounding mixed land use will foster economic sustainability and opportunity.

Analysis of the economics and property economics of the area has further led to the identification of following major aspects:

Lack of vision on the future economic role of Clairwood

One of the most important factors that inhibit the development of a proper base for the Clairwood economy is the lack of a coherent vision. At present, the economic role of Clairwood is to provide limited labour to the various industries in the Durban South Basin and it also consists of many logistics industries that serve the needs of the port as well as several mixed land uses consisting of mainly light industrial land uses, e.g. building material supplies, building of furniture and

manufacturing of uniforms (Urban-Econ, 2004). Livelihoods must be constructed through proper zoning and the creation of specific economic activity areas.

The economic landscape in Clairwood is not uniform

The extent to which livelihoods are differentially constructed at the level of the household, the locality, and larger spatial scales and the extent to which these differences affect sustainability in Clairwood were researched. There are major differences in the economic landscape of Clairwood in terms of elements such as disposable income, with some of the neighbourhoods having much higher income levels than others. On this particular criterion, there is a positive correlation between the housing type and income levels, as those living in the informal settlements, backyard shacks and outbuildings generally have lower income levels that those living in the main buildings on properties

It is important to gather more information so as to gain an accurate understanding about the nature and extent of these differences in the economic landscape as it to a large extent determines the size and demand profile of the catchment area.

As an example, a low-income area can only sustain micro and small scale economic access areas that offer basic commodities such as foodstuff. By comparison, a more affluent area will be able to sustain medium and larger scale Economic Access Areas that also offer luxury commodities. From the above, it is clear that the profile of the economic landscape influences the decision on which particular economic access areas should be targeted for focused intervention, as well as the profile of services and facilities that can be located at the particular economic access areas.

The degree of leakage differs amongst the types of commodities

The general spending profile in Clairwood is reflective of a poor community, as by far the largest portion of disposable income is spend on necessities such as consumables, and a much smaller portion is available for non-necessities such as household appliances. This is an impediment to further growth and expansion.

The current leakage profile shows that Clairwood residents buy most of their bulk groceries and luxury commodities (including household appliances, furniture, etc.) in Clairwood (43.4%) and Durban Central (29.4%) and South Coast Road (11.8%). The only category of commodity largely purchased inside Clairwood is daily consumables. Fifty six percent of residents shop in Clairwood. Other areas where people shop for consumables include South Coast Road, Durban Central (8.8%), Montclair (8.1%) and the Bluff (7.4%).

The largest points of leakage seem to be the Durban Central and South Coast Road areas. The reasons for these particular locations include the wider variety offered and a "nicer" shopping environment. It seems as if a particular shopper psyche is developing with people preferring to shop outside Clairwood for the experience (i.e. they make it an "outing"), and secondly because they may perceive the local commodities to be of a lower quality or the choice being too limited. In order to stop the leakage, it is critical that the current leakage profile be changed so that more bulk groceries and luxury commodities are purchased in Clairwood. To achieve this, the total "shopping offering", which includes the physical shopping environment, the range of commodities, and the price levels, need to be developed to at least a comparable standard with that offered elsewhere. The extent to which consumer-led campaigns can be implemented and a "shopping experience" is created, patterns of consumption and production can be altered where after the impact on sustainable livelihoods can be measured.

Also, there needs to be a change in the perception supporting the fact the Clairwood can provide all the necessary luxury items and consumables. The extent to which consumer-led campaigns to prevent leakage can alter patterns of consumption and production to determine the impact on sustainable livelihoods is still to be measured.

The sectors differ in terms of their ability to achieve economic leverage

A shift in attention from sustainable development in Clairwood to sustainable livelihoods and its effect on how livelihoods are conceptualised, measured, analysed and assessed has also been researched and a sector-based approach was utilized.

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Sectors differ in their ability to generate a contribution to the local economy through measurements such as employment opportunities, contribution to the GVA, taxes, the creation for forward and backward linkages, etc. These abilities of the sectors should be further developed and actually "exploited" to the maximum benefit of the local economy.

There are opportunities for markets and economic activity areas to further expand to widen the economic base. In the case of Clairwood, it was found that the retail and the informal sector both play an important role in absorbing local disposable income, and in creating employment opportunities (particularly the informal sector). The industry sector on the other hand contributes by "creating" new money within the local economy through the production of physical products.

The Logistics Industry plays a valuable role in bringing in "new" money through the local spending of people transporting goods to the harbour. These sectors interact with each other by means of forward and backward linkages, thereby creating the multiplier effect. This interaction can be promoted through the development of the agglomeration effect. It is therefore of critical importance that economic access areas not only be located at the most appropriate locations, but also that they comprise the correct mixture of sectors in order to encourage the development of local forward and backward interaction.

The economic activity areas differ in terms of their ability to achieve economic leverage

The Economic Activity Areas vary in terms of how successful they are in performing their function, which varies from being industrial, manufacturing, transport and warehousing, market and retail as well as the informal sector. The main reasons for such differences in abilities can be attributed to a combination between their inherent capacities, and their physical state. The inherent capacities mainly refer to their location (the amount of traffic that passes by), the size and income levels of the primary catchment area, and the mixture of services and facilities offered in the economic access areas. In broad terms, the more accessible the area of economic activity, the higher the disposable income in the primary catchment area, and the wider the profile of services and facilities offered, the higher the inherent capacity of the Economic Activity Areas to facilitate and support growth and further development.

The physical state of the Economic Access Areas mainly refers to its current phase in the nodal cycle (i.e. proposed, emerging, mature or stagnant / declining). Another important element is the overall physical impression and neatness of the Economic Access Areas (i.e. how well it is maintained). In broad terms, an economic activity area that offers a neat appearance, and being in the early phases of the nodal cycle (i.e. emerging or mature), normally has a much higher ability to facilitate and promote the further development of the economic activity area.

Lack of investor confidence

The Clairwood area is characterized by low property values due to increasing decay. The area is fully developed in terms of industries but the property values in the traditional residential area are decreasing due to the presence of unauthorized businesses and dumping and, the shack farming have now mostly been dealt with.

Greening the industry

The environmental legislation implemented in the South Durban Basin has decreased pollution levels in the area and many of the businesses have created large green open spaces between residential areas and the businesses acting as a "buffer zone". Air monitoring is done by the South Durban Basin Area Based Management to measure all the pollution levels in the various economic activity areas. This has increased environmental sustainability in the area, thereby improving the health and quality of life of the Clairwood residents. "Air swaps" by industries in the South Durban Basin is currently also being implemented.

Many of the local businesses have started greening their surrounding s in Edwin Swales Road. Clairwood forms part of an entire pollution reduction strategy currently being developed for the entire South Durban Basin area.

Economic development in this area is being balance with mitigation strategies for the environment.

8.7 POLITICS AND INSTITUTIONS IN THE CLAIRWOOD AREA

Political history of the Clairwood area

Clairwood was originally a predominantly Indian residential area, incorporated in 1932 into the borough of Durban. In 1943 a special committee was appointed by the City Council to draw up plans for post-war development. The plans included the Industrial Development of Clairwood In the late 1950's, the Durban City Council attempted to industrialise Clairwood. There was a shortage of suitable flat land for the development of industry, which was a matter of concern for town planners at the time. The residents in
Clairwood protested heavily with regard to the proposed industrialization process and formed one of the main stakeholder organisations, which is still operational in the area, namely the Clairwood Ratepayers Association.

There were many attempts at industrializing the area but in 1993, a Town Planning Scheme was developed based on the Clairwood Structure Plan which stipulates that the residential areas of Clairwood should " retain their architectural heritage" and stated the importance of achieving a more intensive form of development in the form of a low-rise medium density type of zoning that is flexible with regard to the form and layout to encourage residential development.

Currently Clairwood forms an integral part of the Durban South Basin, an area managed by the South Durban Basin Area Based Management. The SDB ABM initiated the idea of the previously mentioned SDB five-year plan, which incorporates the Clairwood Precinct Plan as one of seventeen projects to be implemented in the area.

Clairwood Precinct Plan is an integrated part of the overall strategic plan for the South Basin which includes further development of production nodes, buffer nodes, economic corridors, economic nodes, light industrial warehousing, potential industrial development zones, residential corridors and residential nodes.

The Clairwood Precinct Plan will focus on urban renewal or development and not just on decay. Within the fabric of Clairwood core elements exist, which provides an opportunity for substantial

redevelopment of both business and residential land use activities, formation of partnerships in local areas and beyond the periphery.

Clairwood is zoned mainly for the following land uses namely commercial, industrial and residential. These uses are located haphazardly in the centre of the original Clairwood. Business and social and demographic surveys were conducted in 2002.

Socio-economic and demographic context of Clairwood within the eThekwini area

The purpose with this section is firstly to present perspective on the demographic profile of the Clairwood population in terms of the population size, gender, age profile, and stability. Secondly, the section also provides perspective on the socio-economic profile of the Clairwood population in terms of criteria such as skill, employment and income levels. Combined, the section therefore presents an overview on the human resources, as well as the level of living in Clairwood. From a socio-economic perspective, the overview on the human resources is important as it gives insight into the ability of the community to participate in the economy in one, or in a combination of roles namely as a consumer (the demand profile), as labour, and as entrepreneurs. The overview on the level of living is important as it give insight into the financial abilities of the population, and measures taken by the population to improve their financial abilities.

Demographics

Population size

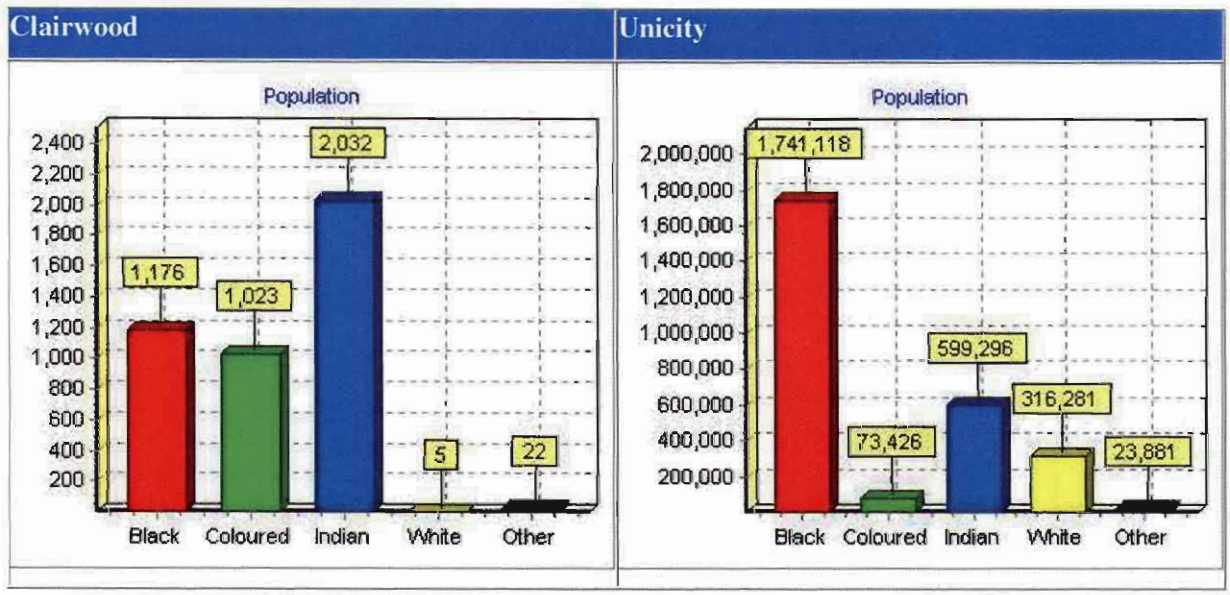
Clairwood has a population of four thousand two hundred sixty two people. The population originally consisted of approximately 40 000 people, as Clairwood originally covered a much larger geographical area stretching from its current location, right up to the Clairwood Race Course. The area adjacent to Clairwood became increasingly industrialized and is now known as Jacobs. The current population of 4262 comprises 4.51% of the South Durban Basin population. The number of households in Clairwood is 1109.

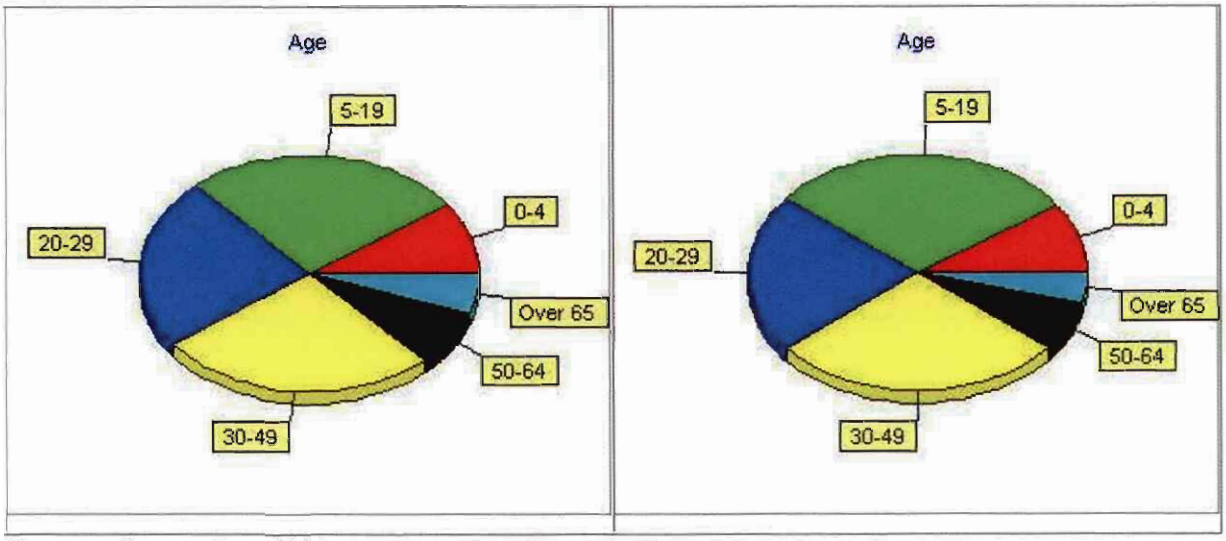
Age, gender and population distribution

The age and population distribution of Clairwood compared to the Durban Unicity is shown in Figure 8-8.

Figure 8-8 shows that cumulatively a large percentage of the population is younger than 19 years, and only a small percentage older than 65 years. A young population structure would imply high dependency levels as this portion of the population cannot work, and therefore has to be supported by those that are employed. Also, such young age structure implies a high demand for social facilities such as schools. However, as noted above, by developing world standards, this age profile can be considered fairly "old". The remainder between 20 and 64 can be considered "potentially economic active". By interpretation, this is the percentage of the population that would be available for work. However, not all people in the age category are available for full time employment (e.g. students and housewives), and they have to be subtracted. It is estimated that about 17% of the population older than 16 comprises scholars, and as such would not be available for work.

Figure 8-8: Age and race distribution of Clairwood compared to the Durban Unicity (1996-2001)





Source: Census data 2001

The population distribution percentages are shown in Table 8-1:

Table 8-8: Population distribution percentage

POPULATION DISTRIBUTION	
TOTAL POPULATION 4262	
Black	27.6%
Coloured	24.0%
Indian	47.7%
White	0.1%
Other	0.5%

Source: Census data 2001

There is a larger percentage of females compared to males shown in Table 8-2 below:

Table 8-9: Gender distribution

GENDER DISTRIBUTION IN CLAIRWOOD	
Males	48.6%
Females	51.3%

Source: Census data 2001

Socio-economic information

This section presents the socio-economic status of the population in terms of the skill level, level of employment and income levels.

Level of unemployment

The total employable workforce in Clairwood consists of 1951 people. One thousand three hundred ninety nine people are employed, five hundred are seeking work and fifty-two are not looking for work. Seventy one percent of the economically active population is employed, which implies that 28.2% are unemployed.

Table 8-10: Employment status of people living in Clairwood compared to Durban Unicity

EMPLOYMENT STATUS		
	Clairwood	**Unicity**
Employed	71.71%	28.8%
Seeking Work	26.6%	13.8%
Not Economically Active	54.6%	55.7%
Dependency Ratio:	3.5:1	3.9:1
Literacy Rate:	57%	55%
Grade Ten and Higher:	31%	36%

Source: Census data 2001

Clairwood's population has a smaller percentage of people that are educated above grade ten compared to Durban Unicity, but the literacy percentage is higher in Clairwood than in the Durban Unicity. The literacy and level of education in Clairwood in comparison with Durban Unicity is also shown in the table above.

One of the most important factors influencing the marketability of a labour force is the level of skill and education. Also, there is a positive correlation between the level of education and the level of entrepreneurship.

Therefore, it can be expected that a better-educated community will in general have higher levels of employment, higher paid positions, and more entrepreneurs.

The Clairwood community has a high level of literacy and a fairly well educated population. Clairwood is characterized by a relatively high level of employment which is directly related to the fact that 31% of the population is educated up to grade ten or higher.

The household survey conducted in 2000 shows that companies prefer to employ skilled and semi-skilled labour instead of unskilled labour.. The survey indicated that skilled and semi-skilled members of the community obtained employment in the area easier than the unskilled labourers.

A positive correlation between the level of education and productivity was also noted in the results obtained from a business survey conducted in 2000.

Income levels

The income levels in Clairwood are shown in the table below:

Table 8-11: Income levels in Clairwood compared to Durban Unicity

INCOME (PER ANNUM)	CLAIRWOOD	UNICITY
None	11.6%	11.4%
R1-R2400	2.3%	3.3%
R2401-R6000	7.5%	9.3%
R6001-R12000	13.5%	10.1%
R12001-R18000	12.8%	10.3%
Over R18000	37.8%	43.7%
Unspecified	14.5%	11.9%

Source: Census data 2001

The average household income is relatively high. The business survey conducted in the area in 2000 indicated that the majority of the people keep semi-skilled jobs and there are a large number of people that own their own businesses.

Baseline information

Land tenure and housing

The households interviewed during a survey conducted in 2000 in the Clairwood area indicated that they had lived in Clairwood for periods ranging from one month to 70 years. The median length of time households had spent in Clairwood, was six years. It becomes clear that while there are several households with quite a long history of residency, other households have only lived in Clairwood for a much shorter period.

The duration of stay in Clairwood is shown in table 8-12:

Table 8-12: Years of stay in Clairwood

YEARS RESIDING IN CLAIRWOOD	PERCENTAGE
Did not know	6.6%
1 year	55.2%
2 years	11.7%
3 years	9.6%
4 years	3.7%
5 years	5.2%
6 years	4.4%
6-70 years	3.7%
Total	100.0

Source: Clairwood Social and Demographics Survey, 2001

The majority of the inhabitants are tenants. Most of them do not have lease agreements. A household survey showed that only one tenant had a one-month lease agreement. This shows the unstable housing situation of most of the residents.

One of the greatest needs in the area is access to proper housing. A household survey conducted in 2000 indicates that shack farming is prevalent and a large percentage of the population resides in outbuildings and shacks, which contributes to the instability of the area. The need for housing is shown in the table below:

Table 8-13: Need for housing

NEED FOR HOUSING	PERCENTAGE
Formal Housing, High services, Household Income>R6000pm	0%
Formal Housing, High services, Household Income<R6000pm	83%
Formal Housing, Medium services	17%
Formal Housing, Low Services	0%
Informal Housing, Medium Services	0%
Informal Housing, Low Services	0%

Source: Community profile of Clairwood

Short periods of stay in Clairwood, lack of availability of lease agreements and inaccessibility of proper housing facilities are factors that contribute to the instability of the area.

Facilities, amenities and infrastructure

The Clairwood area is well serviced as shown in the table below, which contributes to the population stability:

Table 8- 14: Services provided for households surveyed in 2001

% HOUSEHOLDS SERVICED (2001)	CLAIRWOOD
Water	100

Sanitation (flush toilet)	100
Electricity connection	100
Refuse disposal	100

Source: Community profile of Clairwood

All households surveyed in 2001 had running water in their houses, waterborne sewerage and electricity. A municipal pickup service for waste removal was also provided as shown in the table below:

Table 8-15: Services provided by municipality

WATER SERVICES		SANITATION		ELECTRICITY		REFUSE	
In dwelling	100%	Waterborne	100%	Connected	100%	Municipal pickup	100%
On site	0%	Septic tank	0%	Not connected	0%	Own dump	0%
Community standpipes	0%	VIPs	0%				
Other	0%	Inadequate service	0%				

Source: Community profile of Clairwood

A large need identified is for the provision of community facilities. The existing infrastructure is poor and there eyes only one clinic and two schools in the area. The biggest needs identified in surveys done in 2000 and 2003 indicate the need for a police station and a library.

Table 8-16: Existing community facilities in Clairwood

MAJOR COMMUNITY FACILITIES LOCATED IN THE PLANNING UNIT INCLUDE:					
Library		Pension Pay-out Point		School	2
Clinic/Hospital	1	Pay-Point		Postal Service	
SAPS Police station		Park		Postal Agent	
Metro Police station		Fire station	1		

Source: Community profile of Clairwood

This could influence the stability of the population, as people tend to migrate to areas where there is sufficient infrastructure in the form of community facilities.

Conclusion

The Durban Unicity population is approximately 2 754 002. Clairwood's population makes up approximately 1.57 % of the city's population and 4.95% of the South Durban Basin's population. The area remains significant, as it is located strategically in the core of the Durban South Basin, the economic generator of KwaZulu Natal.

In general it would appear as if the population of Clairwood is stable, but there are a number of factors that could contribute to instability of the area namely a large percentage of the population in Clairwood does not have access to proper housing facilities, there is a shortage of community facilities and amenities e.g. a police station or a clinic and libraries, and very few of the tenants residing in Clairwood have lease agreements. Population stability is strengthened by the fact that there is good provision of services like water, sanitation etc.

The Clairwood population has a relatively high level of education, which would normally be associated with relative high levels of employment. It is important to note that the income profile is not uniform in Clairwood, with those residing in either private house having a higher average household income than those that reside informal houses.

The level of unemployment may be attributed to the growing inability of the formal sector and the local economy to generate more employment opportunities. The implication is that a number of households in the area live below the poverty line. This situation forces the households to engage in household survival strategies that involve one or a combination of informal activities (e.g. hawking), crime, or being dependent on welfare grants. From this perspective, the informal sector is not necessarily a growth in entrepreneurship, but a desperate effort of the households to supplement their income.

The main demographic and socio-economic issues identified are as follows:

- Clairwood has a population of 4262 people

- A large percentage of the population is younger than 19 years, and only a small percentage older than 65 years.
- There is a larger amount of females (51.3%) compared to males (48.3)
- The cultural composition is as follows namely 27.6% Black, 2.0% Coloured, 47.7% Indian, 0.1% White and 0.5 % others.
- The Clairwood community has a fairly well educated population.

The needs in the area include the need for community facilities, protection measures, access to housing, job creation programme implementation, skills development, provision of infrastructure, strengthening of the local economy, regeneration of the central business district, regeneration of existing residential and business areas and maximum use of existing facilities and infrastructure.

Other needs include retaining role as hub, provision of gateways and managing conflicts in land uses. All needs are interdependent with clear linkages between them. Physical utilities require attention but the backbone infrastructure (rail, roads and facilities) already exist. Existing conflicts exist between industrial and residential land uses. The key challenges derived from findings are spatial reorganisation, public participation, equitable access to community services, facilities and amenities and redevelopment and reinvestment in the area.

Table 8-17-: Summary table of key challenges

Issue/Challenges	Details
Need for spatial redevelopment	The area is last economic node after the CBD but the physical connections are severely congested and in need of redevelopment. The residential area is under threat from surrounding industrial land use.
Economic activity	They are zoned for residential purposes. The main income is earned by means of manufacturing. High levels of crime, low property values and lack of maintenance by business owners and unauthorised businesses discourage investment.

Unemployment	Thirty one percent of the population is educated up to grade ten and higher. People prefer to employ skilled people. Low education and skills levels are impediments preventing people from finding employment. The informal economy is identified as a means of survival but not helping people escape the deprivation trap of poverty.
Crime and safety	The area is characterised but high crime levels and inadequate criminal justice capacity and inadequate policing systems. There is poor traffic and road safety (e.g. lighting).
Poor physical environment	The area is characterised by old industrial stock, high levels of pollution. There is also decay of businesses, houses and poor access to services and amenities. Low maintenance of council owned properties and illegal dumping.
Poor comprehensive living environment	Lack of recreational space. Overall there is a shortage of major facilities. There is a shortage of major facilities.
Poor quality housing	Informal settlements relocated. Substantial sub-letting to tenants and business do not maintain residential sites
Complex community structures and capacities	Clairwood has experienced severe political conflicts in the past. The area is strategically located in terms of transport and economic links leading to an area wide network of stakeholders. The area is also traditionally a residential area. The major stakeholders include businesses and residents.

Source: Urban-Econ (2004)

Stakeholder analysis

The stakeholders identified include the local community, tenants, informal traders and micro enterprises and local nongovernmental organizations (NGOs), absent land owners, local government, business support, South Durban Basin Area Based Management, provincial and national departments.

The South Durban Basin Area Based Management aims to develop effective partnerships with a variety of different stakeholder to deliver development objectives in Clairwood. The major stakeholders in Clairwood will be from residential and specific business groups to deal with identified issues in Clairwood.

A process has been launched to identify key stakeholders in the Clairwood area as part of a study on urban sustainability. Workshops were held on the 27th of May and 21st June 2004 respectively. The areas of investigation were pre-determined to investigate the major issues to guide future development for Clairwood so as to assist with the formulation of the Clairwood Precinct Plan and an attempt to ensure urban sustainability through the promotion of good governance. The workshops on the 27th of May 2004 were well attended and held in the Bulk Sales Market.

A cross section of the most important issues related to business-, residential, educational and community service issues were covered during the workshops. The results of these workshops were analysed together to identify the core problems and cause and effect relationships between issues. Workshops may not have represented all sectors of the community as many professional of the business sector (who have now been identified by means of business surveys), did not attend. Surveys were also conducted of all businesses in the residential core and along South Coast Road and a database has been compiled of the information and has been incorporated into the Clairwood Precinct Plan.

Stakeholder identification

Stakeholders include local stakeholders, government departments and local government

Local stakeholders

Local business people, local organisations e.g. Clairwood Ratepayers Associations or other Community Based Organisations and Non-Governmental Organisations, local communities, landowners, community leaders, political organisations and local chamber of commerce.

Government departments

These departments are drawn from all three spheres of government e.g. local, provincial and national.

Local government

Local government departments include:

- South Durban Basin Area Based Management Office who will be responsible for development facilitation, programme and project coordination, project funding and sourcing networking ad referrals.
- Business support unit: Business support, Creation of possibilities for development and mentorship
- Local Economic Development: Economic development policy co-ordination; facilitation and Project
- management.
- Infrastructure and housing: Relocation of informal settlements, improvement in physical, social and economic infrastructure provision, affirmative procurement for infrastructure rollout project e.g. Housing Programme in Clairwood, capacity building of local communities for development planning, construction and maintenance of infrastructure.
- Engineering unit: Project Management for projects like the expanded Public Works Programme
- All sector departments will be responsible for conducting an enforcement blitz in Clairwood area on a regular basis.

Provincial and national government

Provincial and national government participation is described as follows:

- Department of Labour – training, recruitment, appropriate skills development programmes, in line with the Sector Training Authorities
- Department of Transport - SME and emerging contractor empowerment programmes
- Department of Works – Public Works Programmes
- Department of Economic Development – LED and SMME Support Programmes
- Department of Trade and Industry – Enterprise development through various programmes

- Department of Arts and Culture – Development and support of cultural heritage and national monuments in Clairwood
- Department of Agriculture – Community gardens
- Department of Science and Technology – Technology demonstration and productivity Improvement

Key stakeholders

The most significant stakeholders were identified namely: local residents, local organizations, local business people, property owners, SDB ABM, provincial and national departments for economic development, housing and infrastructure, trade and industry, business support units. A stakeholder analysis was carried out resulting from the public participation meetings and surveys, highlighting each stakeholder's problems, interest potential and linkages to the project. The main stakeholders are shown below:

Table 8-18: Key stakeholders

S/holder	Problems	Interests	Potential	Linkages
Local community	-Crime. -Decay o residential area. -Pollution. -Residential area under threat. -Unauthorised businesses.	-Need work, safety, and access to services, skills and clean environment.	-Human capital, creativity support.	-Linked to land and facilities.
Local NGOs,CBOs	-Crime impeding work. -Decay of area. -Increasing poor community.	-Provision of access to services and preservation as residential area.	-Human capital and support.	-Linked to business people and community.
Land owners	-Crime, -underutilized land- no return.	-Earn income from land, increase investment.	-Redevelopment options. -Clean up	-Linked to land and facilities and clean up of area.
Local government	-Identify area as priority for redevelopment.	-Urban renewal of area and economically active and leverage of property value.	-Provide financial, structural and technical support.	-Implementation of urban improvement programmes.
Business support	-Lack of maintenance of properties by businesses.	-Leverage of property value and economic development.	-Provision of business skills, expertise, training.	-Linked to land and facilities and public-private partnerships
SDB ABM	-Urban decay -Low leverage on property values.	-Allocation of resources adequately and timeously.	-Provision of facilities, funding, expertise and skills.	-Directly connected to success of programme.
Provincial & National Depts.	-Lack of investment in area.	-Allocation of resources.	-Provision of facilities, funding, expertise, skills.	-Directly connected to success of programme.

Source: Public participation meetings 2004

Conclusion

Clairwood has strong lobbying groups in terms of the Clairwood Ratepayers Association and an active business community ensuring sustainability as there is active participation in context and issue-specific matters in Clairwood.

The systemic changes in the form of economic restructuring, global environmental change and scale shifts in governance structures has impacted on Clairwood tremendously. Economic restructuring in Clairwood through introduction to the global economy has left Clairwood with several empty buildings base don the fact that the China price has impacted severely on the clothing and textiles industry, which was concentrated in the Clairwood area.

Changes in institutional rules and relationships have been introduced with public participation being a prerequisite for decision-making in a new political dispensation, which is a major contributor to sustainability in the Clairwood area.

Changes in institutional rules and relationships needed in Clairwood to facilitate a transition toward greater sustainability is for business community to ensure that the residents of Clairwood are taken into consideration and that the traditional residential core be preserved.

New categories of actors, scope, authority and decisions needed to facilitate attainment of sustainable livelihoods in Clairwood includes adherence by all groups to a proposed land use management scheme where all parties are taken into consideration to ensure sustainable businesses and also a vibrant residential area.

Institutional rules and arrangements as would promote greater local control over local processes and conditions whereby local government commences a legal process to ensure that a new land use management scheme is adopted and that local role-players are consulted on a regular basis.

8.8 CONCLUSION

The major issues identified during these processes are summarized as follows:

- The traditional residential core is under threat from surrounding land uses.
- There has been an increase in traffic congestion in area resulting from the fact that Clairwood is
- located in the logistical hub of the city in close proximity to major industries, the bulk sales market,

- the Port and major road and rail networks.
- There is an increasing demand and growth of industrial and warehousing developments in the area.
- This demand for land and logistical spaces is on the increase and is likely to get compounded in
- future.
- Increasing urban decay of Clairwood area resulting from a historical lapse in urban management
- control.

Analysis has indicated specific successes which are as follows:

Apartheid barriers restricting movement to and from Clairwood has been removed allowing all South Africans movement into Clairwood and providing people with a right where they would like to live.

The institutions of local government have been completely reconfigured which means all city residents can look to the same political and administrative powers to meet and voice their needs. Huge effort is being made by the South Durban Basin Areas Based Management to ensure that the local state is stable, responsible and that local Clairwood residents and stakeholders do not disinvest and do invest their expectations in it.

The new local government structures has made progress in initiating upgrading programmes in an attempt of meeting service delivery needs and provision of community facilities which were previously lacking in the Clairwood area.

Assisted by the eThekwini Municipality, the local Clairwood economy has grown and the local municipality is increasing the formal jobs in the Clairwood and creating opportunities to earn a living by building a local economic development centre and increasing links between the traditional residential areas and South Coast.

Despite the progress that has been made an analysis of the Clairwood areas has indicated that many challenges still remain. In many cases the challenges are similar to the challenges posed in the apartheid era. In some cases these challenges have intensified or taken on a different form.

This analysis of Clairwood will lead to a detailed Precinct Plan and programmes of actions. This will generate more concrete ideas for how the eThekwini Municipality should understand the current urban challenge of Clairwood in practical terms. Some recommendations are made and includes initial ideas for development partnerships which may enable Clairwood to address the challenges at hand.

Managing the population in Clairwood

The South Durban Basin Area Based Management will have to develop long-terms strategies to manage the inevitable consequence of growth in Clairwood. This includes planning for services, the need to facilitate expanding work opportunities and the need to manage growth in the number and density of housing by introducing a housing programme to prevent the establishment of informal settlements. The key challenge for Clairwood is to receive new residents and in particular young people in a manner that quickly assimilates them , thereby stablilising the urban environment and maintaining financial viability. Managing this growth involves collaboration between the eThekwini Municipality and other parts of government focused on infrastructure planning, housing , transport and economic development.

The South Durban Basin Area Based Management should have a long-term plan to combat stagnation and decline by preventing under-investment by residents in urban assets leading to lower rates returns, lower demand for goods and services leading to slower economic growth, leakages of financial resources, weakened social capital and a tendency for residents to use facilities and amenities in Clairwood and not care for their upkeep. The key challenge is to stabilize the existing population, attract newcomers, through measures aimed at improving the quality of life.

Increasing productivity in Clairwood

The South Durban Basin Areas Based Management needs to develop long-term strategic, city-level economic development perspectives that gives certainty to all players and stakeholders. The Areas Based Management should play a nuance role in promoting economic development. Local government is seldom able to directly influence economic fundamental such as labour market efficiency or key macro-economic policy choices. The eThewkini municipality has a key role in addressing micro-economic constraints on the economy in Clairwood in their ability to direct the nature and responsiveness of city services, prioritise city infrastructure and lead economic development partnerships. The South Durban Basin Area Based Management can implement strategies that enhance local business competitiveness. This includes helping to optimize the logistics pathways (transportation in the internal residential road network and traffic Master Plan for eThekwini, Durban Harbour, the airport etc) through strategic infrastructure investments, developing skills partnerships to focus human development on key sectors, promoting sector and supply-chain agglomeration and maintaining and enhancing public infrastructure.

Interventions also includes improving local government efficiency to address constraints on the business environment. This includes speeding up the processing of business related applications according to a clearly zoned land use management scheme, ensuring municipal service continuity and quality, especially of services such as transport and electricity supply that business functioning is particularly sensitive too and creating incentives for sectors and location within specified areas in Clairwood.

Address market failures and enhance the capacity for new market entrants to set up and sustain new businesses. The eThekwini Municipality may help to stabilize the property market and promote redevelopment in Clairwood by means of focused urban renewal. This has positive effects across the local economy, but it will also help new small business get access to decent business space by creating an area of mix land use around the traditional residential enclave.

Although local economic development initiatives have sometimes been to small scale and ad hoc to make any difference at all, it is still important to assist in capacitating new market entrants.

Supporting the local informal economy in Clairwood by reducing their transaction costs and demarcating trading areas rather than hampering their expansions with restrictive trading laws and stimulating local demand through procurement reform, are elements of more meaningful local economic development initiatives.

Building an inclusive area

Poverty reduction strategies are key to the stabilization of an urban population. It is vital that Clairwood develop a solid understanding of the extent, structure and location of poverty in Clairwood. Based on this understanding the eThekwini Municipality has to work closely with other spheres of government to develop social safety nets that give immediate relief and protection to people in chronic poverty; help people out of poverty and prevent people from falling back into poverty and assist the working poor negotiate periods of vulnerability.

Service delivery will always remain a key component of the social assistance package in Clairwood. It is likely that service delivery backlogs will remain for a period in Clairwood. A key challenge is to address the service delivery backlogs in a systemic manner that reflects both household affordability of households and maintains financial sustainability within Clairwood. This requires the development of innovative, scaleable and incremental service infrastructure models. It also requires a continuous assessment of existing subsidy mechanisms, including the adequacy of fiscal transfers and mechanisms for their effective targeting.

A comprehensive social development strategy which addresses issues other than just infrastructure must be developed. Many other interventions are conceivable both within eThekwini Municipality's existing powers and functions and by means of creative inter-governmental partnership and alliances across sectors. These interventions range from simple measures such as supporting development NGOs with targeted rates rebates and other grant in aid, and facilitating their collaboration around the common programmes of action in Clairwood through to more complex multifaceted strategies that aim to reduce the high urban cost of living borne disproportionately by poorer people. eThekwini Municipality and their partners are most likely to make the greatest impact in the short to medium term. It involves mitigating household

costs of new challenges such as HIV//AIDS and addressing high urban costs such as transport and housing location.

All city actors need to develop an understanding of how Clairwood functions to define and help people realize personal growth aspirations. There are blockages to social mobility in the way Clairwood functions, managing from who gets access to banking facilities and various forms of risk insurance; through to how housing markets work to expand or limit access. Poor functioning needs to be addressed through carefully calculated multi-stakeholder initiatives.
Building a sustainable neigbourood

The South Durban Basin environmental strategy and the existing open space system in eThekwini indicates that environmental considerations are no longer at the periphery of local government decision-making. Cities need to become more conscious of the mounting costs that not managing urban costs that not managing the urban environment proactively will impose on the natural resources that sustains the city. All areas have sustainability limits, and South African cities need a much clearer sense of what these imits area. This effort will continue with continuous investment in information that can help to define the state of the environment in Clairwood.

Long-term stratus are needed to shape appropriately locate development, improve public transport, mitigate environmental risks and investment in bulk infrastructure capacity to strengthen links between the traditional residential core and the commercial areas in South Coast Road.

Clairwood must address urban dysfunctionality through integrated spatial, transportation and environmental planning, followed by more decisive interventions e.g. infrastructure delivery programmes e.g. a housing programme in Clairwood including municipal engineering infrastructure and the upgrading of informal settlements currently managed by different parts of government. This can be better co-ordinated at a local level. The logic of settlement development programmes also needs to change e g. by means of key revisions in the current location-supplied housing subsidy system, housing delivery could be made more responsive to household location

choices and demand-side pressures which factor location costs into allocation and purchase decisions.

Clairwood should have clearly demarcated zones but should not prescribe urban-edge boundaries as this may have a perverse effect. The unanticipated consequence of interventions in land markets needs to be watched very carefully. The advantages of engaging with key public sector players such as parastatals that hold huge portfolios of strategically located land close to city centre need to be considered. Expropriation of public land is within the legal power of local government.

The local government should play a major role in managing the burden of settlements on the environment in Clairwood. All stakeholders should be rigorous about managing building energy usage and waste. Partnerships will help mitigate the effects of air and water pollution and help build a more liveable greener Clairwood. Multi-stakeholder strategies will contribute to better public transport systems in and around Clairwood e.g. the Master Plan for the South Durban Basin area and a healthier community in Clairwood.

Improving urban management

Great effort has been made in creating appropriate institutions and administrations to manage Clairwood and the South Durban Basin. Institutional development work of the past decade has to be continued. The institutions have to become more stable and dynamic and flexible. Establishment and stability were the major priorities but in future it will be innovation and learning that will ensure stable urban management of Clairwood. EThekwini Municipality will continuously need to benchmark itself against other metropolitan municipalities, comparing what they are doing with how they are doing it and learn together about what works and what does not.

A great deal of attentions has been given in the South Durban Basin in reincorporating citizens into normal political life. It is essential for the South Durban Basin Area Based Management to

engage meaningfully with citizens to ensure ongoing dialogue to deepen awareness of the citizen needs, to enhance citizen participation in prioritization decisions and to enhance city responsiveness to these problems. City actors could do much more to encourage and assist in the redevelopment of organized civil society in Clairwood and to respond actively to what is heard from these formations e.g. the Clairwood Ratepayers Association and business communities, for example. Vibrant social formations are critical to stablising the social body and improving perceived quality of life

The South Durban Basin Area Based Management needs to be aware of trends that may enervate and fragment the local state of things in the long run, leading to potential conflict and a new era of disengagement e.g. the residents versus the illegal businesses in the traditional residential core. The South Durban Basin Area Based Management is doing a lot to address some of the more obvious problems e.g. broken verges and pavements. Plenty of work needs to be done, e.g. desolate buildings where criminal activity is taking place.

Difficulties in cross-sphere and inter-municipal co-operative governance as well as past weaknesses in public-private sector co-operation needs to be overcome. The first requires clear rules to enable open-ended bargaining processes, the outcome of which all stakeholders can be held accountable to. The second requires that the public sector reach out to the private sector by means of briefing sessions, quarterly planning forums with key business leaders in Clairwood could contribute significantly through little effort.

Ensuring urban sustainability in Clairwood

Clairwood was shaped significantly through implementation of apartheid policies that led to spatially marginalised residents of Clairwood. Over the last 10 years, the eThekwini Municipality and its partners have done a huge amount to unwind the inherited reality. Clairwood's future depends on clear vision, careful planning and sustained effort. Decisive actions like bold interventions in relation to publicly owned land may be essential in unlocking a host of further development possibilities in Clairwood e.g. the implementation of a housing programme on council-owned land in the traditional residential core.

It will take a new willingness for all stakeholders to enter developmental partnership in which they are prepared to think outside the box of traditional powers and functions and work collectively to accomplices the agreed objectives and strategies for Clairwood.

South Durban Basin Area Based Management strategies are the key. These strategies for Clairwood are to be incorporated with the totality of challenge in eThekwini, plan for the long term over the life-cycle of cities and then commit all signatories to clear short-to-medium-term actions that will have the biggest impact for the effort and available resources.

Municipal resources are extremely limited on their own and new generation of developmental partnerships between eThekwini Municipality, national and provincial government, the private sector, communities and other actors will be needed to drive the transformation of Clairwood. This will require a change of attitude and approach on the part of all players. In particular, national and provincial government as well as business stakeholders will needs to take local government more seriously. Local government, through the South Durban Basin Area Based Management will need to make a serious effort to engage those partners whose resources they need to drive Clairwood transformation initiatives.

Clairwood development partnerships do not happen by themselves. They need to be defined, configure and driven by a lead partner. The South Durban Basin Area Based Management may be the main partner. A change of mindset is necessary within local government. As budget pressures present themselves and the list of Clairwood residents demands grow longer, local government may be of the opinion that their mandate stops with the list of powers and functions described in the Constitution and the obligations place on them by the law.

The South Durban Basin Area Based Management has to ensure social and economic development of Clairwood and the South Durban Basin. Spheres of government need to co-operate when a challenge demands their joint contribution.

The South Durban Basin Area Based Managements needs to be proactive in leading development initiatives that many different stakeholders can buy into and contribute. Meaningful collaborative action, in which each partner contributes their own capacity, can be configured through simple memorandums of understanding.

City development partnerships in Clairwood, led by eThekwini municipality thinking beyond its traditional mandate, needs to be guided by clearly defined objectives and well justified outcomes and shared by all partners. These outcomes will be structured around achieving the following objectives and outcomes:

- Objectives that relate to securing the residential core.
- Economic and social development objectives to deal with the growth of industry and warehousing.
- Urban management objectives to deal with progressive urban decay.
- Traffic and transportation management objectives.

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