

CHAPTER 4 MEASUREMENT OF POVERTY AND UNEMPLOYMENT

4.1 INTRODUCTION

Poverty is a debated concept and a human phenomenon that does not seem to go away. Arguments over how poverty should be conceptualised, defined and measured go beyond semantics and academic debates. The conceptualisation, definition and measurement of poverty in many instances lead to formation of strategies to alleviate it. It is therefore vital that the concepts, definitions and measurements of poverty are appropriate to the society in which they are applied (Bhorat *et al*, 2001:41).

Unemployment entails significant costs to the individuals who are unemployed as well as to society at large. Unemployment is arguably the most important and the most pressing problem facing the South Africa economy today. The problems of unemployment and poverty have been around for as long as humanity itself. The magnitude of research on poverty and unemployment makes the task of their conceptualisation a challenge (Mohr *et al.*, 2004:562).

This chapter discusses the theories on the concepts of poverty, inequality and unemployment. The purpose is to outline some of the major definitions of poverty and unemployment, and then proceed to study the associated measurements. Even though poverty does not assume inequality, measures of inequality are useful in the evaluation of relative poverty and will also be studied in this chapter.

4.2 POVERTY

The definition and measurements of poverty are related to each other as well as to other pertinent issues such as the perceived causes of and the solutions to poverty. People do not all perceive poverty in the same manner. This aspect makes policy development and initiatives aimed at combating poverty very difficult. Distinctions between what poverty means to different researchers may be largely irrelevant to those who live with the limitations that inadequate incomes impose. The debates about poverty should not obscure what it means to those who experience it (Alcock, 1997:72).

The ways in which politicians, citizens and experts view the problem of poverty have very different and diverse roots in social, political and philosophical dialogues. Present day poverty understanding draws on complex and sometimes contradictory underlying assumptions about what people are supposed to need in order to live a minimally human life; about the obligations between individuals and society, about the relation between have and have not, ill-being, wellbeing and suffering; and about social life and individual agency (Du Toit, 2005:15). Generally, recognising what something means in practice is much easier than defining or analysing it. When one defines people as poor, deprived, suffering from hardship or in need, there is a need to have a fairly good idea of what that means. The words to define this state may well mean different things to different people, and it is difficult to take this kind of ordinary language and make it perform the precise functions that are required in social analysis (Spicker, 1992:56).

An understanding of the cause of poverty and devising strategies to reduce it is a central component of the definition of poverty. Recognition thereof reinforces appreciation of the difficulties of the problem and serves as a reminder that a search for strategies and an understanding of poverty draws on the wider body of knowledge accumulated in the general field of development. Insights from development theory can thus be useful when considering the specific instance of poverty. The possibility of reducing poverty through effective redistribution policy is a good example (Slabbert, 1997:21). It is important for each society to amass all in order to eliminate poverty and its associated scourges. Streeten (1998:2-3) gives the following reasons for the desire to eliminate poverty from society:

- Firstly, the elimination of poverty leads to increased productivity. Increases in health, skills, education and mental alertness, which the poor are normally deprived of, make for a healthy workforce;
- Secondly, the elimination of poverty would lead to desirably lower family sizes. People will be empowered to make decisions about their lives; and
- Thirdly, poverty reduction leads to a healthier environment. Reducing poverty contributes to a healthy civil society, democracy and greater social stability.

For these and other reasons, it is desirable that poverty is eradicated or at least alleviated. Parnell and Mosdell (1999:4) indicate five key perspectives (Table 4.1) that need to be considered in the study of poverty. These key perspectives are the income, basic needs, social exclusion, locality and environmental justice perspectives.

TABLE 4.1: FACTORS TO BE CONSIDERED IN POVERTY STUDIES	
Perspective	Type of indicator
Income perspective: People are categorised as poor if their income falls below a certain income measure.	Welfare payments, wage levels, and poverty datum lines are income measures.
Basic needs: This is one of the most influential international perspectives on poverty, especial in the context of the Third World where millions of people live without adequate food, shelter or sanitation.	There are a number of indicators that come out of a basic needs perspective e.g. access to water, literacy, life expectancy and nutritional levels.
Social exclusion: Social exclusion refers to the fact that despite the welfare and the general wealth, there remains a group of people who are excluded from the mainstream benefits of society and who are prevented in some way from gaining from the general prosperity.	Indicators of social exclusion emphasise political, social and economic components of poverty and inequality, and are thus either multipart or composite indicators. These indicators are often qualitative in measuring, e.g. racism or sexism.
Locality: Space or geography is seen by some to be an independent variable in the poverty equation.	Indicators of poverty used in locality include segregation indices and transport indicators.
Environmental justice: Equitable access to a healthy, pollution free environment and to the environmental resources required to support a healthy life without compromising the opportunities of future generations.	Indicators typically found under these sections are environment reports, including air pollution, water quality and environmental health indicators.

Source: Parnell & Mosdell, 1999:4.

The section that follows will provide an overview of the understanding of poverty and the different methodologies which can be employed to measure it.

4.2.1 Definition of poverty

Poverty can mean different things to different people. In popular discourse, poverty is a concept that captures a range of meanings. One important strand in poverty debates is the notion of material lack – especially the lack of resources necessary for survival. At their most simplistic, poverty studies and definitions have resorted to identifying what goods a human being would require to prevent him/her from dying. The ability to function as a full member of society and individual dignity is also an important factor on the definition of poverty. People who are able to survive may still be considered poor if survival requires them to give up their self-respect, or if they are not able to fulfill their minimal social obligations in society. Another important consideration is that of subjective experiences: people are ordinarily considered poor if they experience forms of lack that lead to suffering (SPII, 2007:10).

The importance of understanding poverty stems from the fact that development of strategies in its reduction will require an informed understanding of what the problem constitutes. To devise policies to reduce poverty effectively, it is important to know what the problem entails. Understanding poverty can also help in measuring the success, or lack of success, of any programs undertaken to alleviate it. According to Wilson and Ramphela (1989:50), the study of poverty is important for the following reasons:

- The first reason is because of the damage poverty inflicts upon the individuals who must endure it.
- The second reason is the sheer inefficiency of poverty in economic terms. Hungry children cannot study properly; malnourished adults cannot be fully productive as workers; and an economy where a large proportion of the population is very poor has a demand structure that does not encourage the production and marketing of the goods that are most needed.
- The third reason relates to the consequences for any society where poverty is also a manifestation of great inequality.

- Finally, there is the fact that poverty in many societies is in itself symptomatic of a deeper malaise, for it is a consequence of a process which simultaneously produces wealth for some whilst impoverishing others (Wilson & Ramphele, 1989:50).

Clarification of how poverty is defined is important as different definitions of poverty imply the usage of different criterion for measurement; the identification of different individuals and groups as poor, and the use of different policy solutions for poverty reduction. Mokoena (2001:10) identified the following factors as important in an attempt to define poverty:

Political and cultural influences: Poverty is not only a social issue but also a highly political one, where power and interest groups have had a significant influence. Definitions of poverty therefore normally vary geographically and territorially depending on the politics of the area. Skewed power relations and economic, political and social injustices that deny people access to empowering resources such as safe water, health services or education can contribute to a situation underpinned by poverty. In South Africa, for example, the prevailing political climate underpins definitions of poverty. The same may be argued regarding cultural differences. Even within the same political environment, people may be seen as poor or well-off depending on the cultural group to which they belong (Mokena, 2001:10).

Deprivation and basic needs: Most definitions of poverty are grounded in the idea of a state of deprivation. What the poor are deprived from is not often clear. What is seen as basic needs or necessities is not clear cut and may differ from researcher to researcher and indeed from place to place. What is perceived as a basic need in one area may not necessarily be a need in another area (Mokena, 2001:10). According to the International Labour Organisation (ILO) (1976:13), basic needs have two elements: ensuring the provision of certain minimum requirements of a family for private consumption (adequate food, shelter, and clothing); and, ensuring that essential services are provided by and for the community at large (safe drinking water, sanitation, public transport, health, and education). Participation and human rights are included in the definition of basic needs.

Meeting basic needs is said to be universal, and applicable to all countries. The concept of basic needs should be placed within a context of a nation's overall economic and social development. In no circumstances should it be taken to mean merely the minimum necessary for subsistence. It should be placed within a context of national independence, the dignity of individuals and peoples and their freedom to chart their destiny without hindrance (ILO, 1976:13).

According to SPII (2007:20), clarifying what poverty means can contribute to effective poverty eradication in the following ways:

- The ability to measure poverty can assist in the geographical mapping of the severity of poverty and thereby allowing for optimal direction of resources;
- By understanding the various dimensions of deprivations experienced by people living in poverty, government can focus its resources on specific programs such as housing, basic services etc;
- Having a poverty measure can allow for the evaluation of the effectiveness of poverty alleviation programs and the number of people moving out of poverty and improving their wellbeing, both in the short term and over an extended period of time; and
- By placing information about the levels of poverty and the resultant inequality in the public domain, a national commitment to eradicate poverty that goes beyond government intervention can be enforced (SPII, 2007:20).

The traditional approach to poverty is characterised by the fact that poor people are identified according to a shortfall to some monetary indicator. The theory underlying this assumption is based on the criteria of utility and the use of income or expenditure as a proxy of wellbeing. From this thinking, poverty can be defined as a lack of economic welfare, i.e. income (Fusco, 2003:5).

Poverty can be construed in a narrow or broad sense. In the narrowest sense it means lack of income. In a broader sense poverty can be seen as multidimensional, encompassing other issues such as housing, health, education, access to services and to other avenues of accessing resources.

Poverty can also be construed in a minimalist or more expansive way: the most minimalist way is to consider people who are poor as being those who are unable to survive even in the short term, i.e. people who are utterly without the means of survival. A more expansive understanding of poverty is that people are poor if they are unable to participate in society as full citizens (SPIL, 2007:10).

The World Bank (2001b:1-2) defines poverty as a situation where one lacks command over commodities that are deemed essential to constitute a reasonable standard of living in a society or the lack of ability to function in a society. This definition also emphasizes command over resources as well as the lack of participation or voice in governance and civil matters.

According to Fusco (2003:5), the complex reality of poverty makes it difficult to capture the nature of this phenomenon by means of either a single unit or multidimensional definition or measure. The different existing definitions and measures takes into account an uncharacteristic nature of poverty. Each definition contains a part of truth but no single definition holds the full truth in defining poverty.

The definition of poverty can pose several problems. Laderchi *et al.*, (2003:244) pose the following questions:

- Should the definition of poverty be confined to material aspects only or should it be extended to cover social and political factors?
- Is there a universal definition of poverty? Or should definitions be adapted to particular societies, for example, developed versus developing countries?
- How to distinguish the poor from the non-poor through poverty lines?
- Should poverty be measured at the level of the individual or at the household level?
- The issue of time frame is also of importance. Should poverty be measured over a month, year or longer? The longer the period the smaller the number of households that can be classified as poor.

Some of the ways used in understanding the concept of poverty include absolute terms, relative approaches, the capability, monetary approach, participatory, human scale and the wellbeing approach. The next section will provide an analysis of these and other approaches to understanding poverty, and continue to study the associated measurements.

4.2.1.1 Absolute approach

Conceptualizing poverty as an absolute condition is usually based on the notion of subsistence. Subsistence describes the minimum basic needs to sustain life, and being below the subsistence level therefore is to be experiencing absolute poverty because one does not have enough to live on (Alcock, 1997:68). The concept of absolute poverty refers to poverty that exists independently of any reference group. It does not depend on the general living standards of the society in which it is conceived and nor does it vary over time (Alcock, 1993:70). In this instance, poverty refers to a state of deprivation defined in relation to a supposedly objective, invariant and value free external definition of basic human needs. The standard of absolute poverty supposedly does not change according to prevailing living standards of a society, or over time, or according to needs of different groups in society (SPII, 2007:24).

Holman (1978:2) refers to the poor as those who have regular, though minimal income. The very poor are people whose income, for whatever reason, falls far below the subsistence level. The operative word in this approach is income. Income that consistently falls short of providing the basic necessities of life is viewed as causing poverty. In absolute poverty, people lack the command over resources to meet some absolute needs. The most common approach in defining an absolute poverty line is to estimate the cost of a bundle of goods deemed to assure that basic needs are met.

The World Bank (1990:5) defines poverty as a level of income that only allows subsistence amounts of food and other necessities, or as the condition of life in such a degree characterised by malnutrition, illiteracy and disease as to be beneath any reasonable definition of human decency. These definitions imply that subsistence is measured in terms of necessities like food, education and health.

Critics of the absolute approach say that the definition tends to neglect the effects of poverty beyond the physical sphere, thus taking no account of social needs. Duclois and Gregoire (1991:1) argue that very often, a closer examination of absolute poverty reveals that there is also a relative element involved. For instance, having no food is without doubt absolute poverty, but if not having access to enough healthy food reduces your life expectancy, shouldn't that also be considered as absolute poverty? In this sense, absolute poverty has to do with the deprivation of individuals from some absolute and predetermined norm(s) and standard(s) taken by society as a suitable measure of the minimum necessities of life or of a minimally accepted standard of living.

4.2.1.2 Relative approach

The relative approach is a more subjective measure than the absolute approach. The relative definition of poverty is based upon a comparison between the standard of living of those who are worse-off and to that of the society. Some measures of the average standard of the whole of the society in which poverty is studied are usually involved (Alcock, 1993:59). According to Alcock (1997:69), this is a more subjective or social standard in that it explicitly recognises that some element of judgement is involved in determining poverty levels. People are poor if their resources fall significantly below those of the rest of the community. This means that their income is consistently below the level that would allow them to attain a specific average standard of living.

Noble *et al.* (2004:4) writes that relative poverty is characterised by defining poverty from three perspectives: in relation to living standards of a reference group; or in terms of resources required to participate fully in society; or more narrowly by reference to the national income/expenditure distribution. According to Townsend (1979:31), the relative definition of poverty sees individuals or groups as poor when they lack the resources to obtain the type of diet, participate in the activities and have the living conditions and amenities which are customary. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities.

Saunders (1997:39) asserts that the definition of poverty must contain the following two central ideas:

- Firstly, poverty involves involuntarily restrictions on choice, and,
- Secondly, poverty is socially specific, grounded in a particular society or culture. A measure of poverty is not only socially determined, but must also be acceptable to the community involved if it is to have social legitimacy. This indicates that acceptability within a certain culture or community plays an important role in the definition of relative poverty. These imply an existence of inequality in wealth and income distribution that leads to a lopsided societal stratification and social classes.

Holman (1978:16) on the other hand argues that defining poverty as a relative concept has some implications, among which are the following four important elements:

- Comparisons with other persons - the lowest incomes are too far removed from those of the rest of the community. One is said to be poor in relation to their community;
- The contemporary environment - this takes the dynamic nature of society into account and the prevailing standard of living within a community is used as a measure of poverty;
- Inequality - inequality in wealth and income distribution that leads to a lopsided social stratification and classes; and
- The value judgment that refers to the standard that society sees as acceptable or the common standard that people pursue. This is because people tend to habitually judge themselves against a reference group. The poor do the same, having a standard they would like to attain, failing which, they see themselves as poor (Holman, 1978:16).

4.2.1.3 The monetary approach

The monetary approach to the identification and measurement of poverty is the most commonly used. It identifies poverty with a shortfall in monetary income (or

consumption) from some poverty line. The valuation of the different components of income or consumption is done at market prices, which requires identification of the relevant market and the imputation of monetary values for those items which are not valued through the market (such as subsistence production and, in principle, public goods) (Laderchi, *et al.*, 2003:8).

When estimating poverty using monetary measures, one may have a choice between using income or consumption as the indicator of wellbeing. There is an argument that, provided information on consumption obtained from a household survey is detailed enough, consumption will be a better indicator of poverty measurement than income. The following reasons are given (Coudouel *et al.*, 2002:30):

- Consumption is a better outcome indicator than income. Actual consumption is more closely related to a person's wellbeing in the sense defined above, that is, of having enough to meet current basic needs. On the other hand, income is only one of the elements that will allow consumption of goods; others include questions of access and availability.
- Consumption may be better measured than income. In poor agrarian economies, incomes for rural households may fluctuate during the year according to the harvest cycle. In urban economies with large informal sectors, income flows also may be erratic. This implies a potential difficulty for households in correctly recalling their income, in which case the information on income derived from the survey may be of low quality. In estimating agrarian economies, an additional difficulty in estimating income consists in excluding the inputs purchased for agricultural production from the farmer's revenues.
- Consumption may better reflect a household's actual standard of living and ability to meet basic needs. Consumption expenditures reflect not only the goods and services that a household can command based on its current income, but also whether that household can access credit markets or household savings at times when current income is low or even negative, perhaps because of seasonal variation, harvest failure, or other circumstances that cause income to fluctuate widely (Coudouel *et al.*, 2002:30).

When both income and consumption are available, computing poverty measures with both indicators and comparing the results might increase the validity of the results. Whether income or consumption is chosen, it is important to aggregate information provided at the household or individual level for many sources of income or consumption in the survey (Coudouel *et al*, 2002:31).

Laderchi *et al.* (2003:8) asserts that for economists, the appeal of the monetary approach lies in it being compatible with the utility maximising behaviour assumption which underpins microeconomics, i.e. that the objective of consumers and society at large is to maximise utility and that expenditures reflect the marginal value or utility people place on commodities. Welfare can then be measured as the total monetary income or consumption enjoyed, and poverty is defined as a shortfall below some minimum monetary income, which is termed the poverty line. From this thinking, the validity of this approach then depends, in part, on:

- Whether utility is an adequate definition of wellbeing;
- Whether monetary expenditure is a satisfactory measure of utility;
- Whether a short-fall in utility encompasses all we mean by poverty;
- The justification for a particular poverty line (Laderchi *et al.* 2003:8).

Atkinson (1989:45) cites that the use of a monetary approach to poverty can be justified in two different ways: firstly, the human rights approach, where a certain minimum income is regarded as a right without reference to utility. Secondly, because money is a good proxy for other aspects of welfare and poverty; it is therefore a convenient short-cut method, based on data that is widely available to identify the poor according to these other aspects.

Kamanou (2005:3) asserts that the following challenges undermine the claim of objectivity of this approach:

- Choice of the indicator of welfare: Is consumption or income a better approximation of welfare and which of the two is more reliable? The issue of what is lacking, which identifies someone as poor, is very broad and can be

discussed at very different levels. In the common practice of the monetary approach, however, practitioners do not dwell too much on the philosophical positions underlying alternative possibilities.

- The choice of a unit of analysis: Both income and consumption include only private resources and omit social income and benefits (goods and services provided publicly), leading to an implicit bias in policy choices in favour of the generation of private income as against public goods provision, and likewise, towards the identification of the poor for targeting purpose towards those lacking private income.
- Choice of the poverty line: Several approaches are available of which two methods are mostly used, (1) the nutritional poverty line and (2) the cost of basic needs line or a combination of both. There are important basic principles/assumptions that should underlie a poverty line. The derivation of a poverty line is central to the monetary approach to poverty measurement, and it is symptomatic of the longstanding debates on the nature of poverty i.e. its absolute or relative nature (Kamanou, 2005:3).

4.2.1.4 Capability approach

The capability approach focuses on indicators of the freedom to live a valued life. In this framework, poverty is defined as failure to achieve certain minimal or basic capabilities, where basic capabilities are the ability to satisfy certain crucially important functioning up to certain minimally adequate level (Sen, 1983:41). In the capability approach, wellbeing is seen as the freedom of individuals to lead lives that results in the realisation of human potential. In this context of poverty the focus is on the failure of some basic capability to function.

This approach implies both absolute and relative notions of poverty. Poverty is seen as being absolute in the space of capabilities, referring to a lack of supposedly universal human needs. The relative assertion refers to one's access to the resources that are required to realise those capabilities. Capabilities include such things as nutrition, shelter, and the capacity to move from A to B (these are not prescriptive and depend on society and generational paradigms), and should be defined in absolute

terms. The resources required to meet them will be relative and will depend on a particular society at a particular time. For example, it is necessary to have the capability to get from A to B, but in different societies this would require differing commodities such as a car, a bicycle or a pair of shoes (Sen, 1983:156).

Translating the capability approach into an operational framework for poverty evaluation requires one to deal with a number of issues. Most fundamental is the definition of basic capabilities and of the levels of achievement which are to be considered as essential (Laderchi *et al.*, 2003:18). Methods of defining basic capabilities invariably amount to the establishment of a list of sensitive basic needs using various fundamental criteria. Most of these techniques have led to similar interpretation of minimal essential capabilities as being constituted by health, nutrition and education (Kamanou, 2005:3). The other issue goes around the measurement and aggregation of capabilities. The fundamental question in aggregation is whether capability poverty should be presented separately for each capability. Sen (1983), who is regarded as the theorist of the capability approach, does not provide a list of minimally essentials meeting the capability approach. Alkire (1998) argues that the lack of specification was deliberate in order to allow room for choice across societies and ensure the relevance of the approach to different persons and cultures.

Nussbaum (2000:74) has attempted to provide a list of basic capabilities. She argues that there is an overlapping consensus between different societies on the conception of a human being and what is needed to be fully human. She lists the following features as essential to full human life:

- Normal length of life;
- Good health, adequate nutrition and shelter;
- Bodily integrity: movement; choice in reproduction;
- Senses, imagination and thought, informed by education;
- Practical reasoning resulting in critical reflection and planning life;
- Affiliation, social interaction and protection against discrimination;

- Respect for and living with other species; and
- Control over ones environment, politically (choice) and materially (property).

The capability approach provides a coherent framework for defining poverty in the context of the lives people live and the freedoms they enjoy. This approach draws attention to a much wider range of causes of poverty and options for policies than the monetary approach. The shift in emphasis is on the kind of life individuals can live rather than on the private resources to which they have access. The approach also addresses the neglect of social goods in the monetary approach and its views on wellbeing (Laderchi *et al.*, 2003:18).

4.2.1.5 The social exclusion approach

Social exclusion originated from European debates on welfare policy, and originally referred narrowly to particular minority groups (immigrants, single mothers, and the insane) who were assumed to be inadequately integrated into the welfare state. Since then the term has become much more widely used, and currently it usually refers to the process by which poor people are excluded or marginalised from mainstream economic, social and political life.

The main way in which social exclusion is different from other concepts of poverty is that it focuses attention on social processes and social relations, and emphasises the ways in which adverse power relations, discrimination and identity can help to marginalise and impoverish people (du Toit, 2004:10). Three main characteristics of social exclusion are identified as being: relativity (exclusion is relative to a particular society); agency (exclusion is as a result of the action of an agent or a particular group); and it is a dynamic concept (future prospects are relevant as well as current circumstances) (Atkinson, 1989:45). Notions of social exclusion focus on the processes which produce deprivation. Agency refers to the behaviour of particular agents or institutions leading to the exclusion of certain groups.

Social exclusion is at times regarded as a dynamic process in that some disadvantages lead to some exclusion, which in turn leads to more disadvantages and more exclusion and ends up with persistent multiple disadvantages (Steward, 2004:2).

Social exclusion is a multidimensional concept which includes social, political and economic aspects within a society. Social exclusion tends to be a feature of groups, rather than individuals. These groups may be distinguished from others in society by their culture, religion, colour, gender, nationality or migration status, or caste; or they may be identified by gender, age, physical or mental disabilities or illness. It is relational, in that its definition depends on what is normal in the particular society where people live (Steward, 2004:2).

4.2.1.6 The participatory approach

The participatory approach stresses the importance of taking local people's perspectives into account and giving them a greater say in defining their economic status and deciding on the means to be undertaken to eradicate any identified scourges. Local people, community organisations, NGOs and other stakeholder agencies decide together how to measure results and what actions should follow once this information has been collected and analysed (EU, 2003:1). Common principles in participatory monitoring and evaluation include the following (EU, 2003:1-2):-

- **Participation** - opening up the design of the process to include those most directly affected and giving the intended beneficiaries the chance to speak out about local impacts.
- **Negotiation** - between the different stakeholders to reach agreement about what will be monitored and evaluated, how and when data will be collected and analysed, what the data actually means, and how findings will be shared, and action taken.
- **Learning** - a focus on cumulative learning by all the participants as the basis for subsequent improvement and sustained action. This action includes local institution building or strengthening, thus increasing the capacity of people to initiate action on their own.
- **Flexibility** - in adapting the evaluation to the wider external environment and to the set of local conditions and actors, as these factors change over time (EU, 2003:1-2).

Laderchi *et al.* (2003:27) assert that the major advantage of this approach is that it largely gets away from externally imposed standards. This approach also provides a way of solving some of the problems encountered in the other methods. For example, helping to define an appropriate minimum basket of commodities for the monetary approach; basic capabilities in the capability approach; and whether social exclusion makes sense in a particular society, and what the main dimensions of social exclusion are.

4.2.1.7 Human scale development approach

This definition makes a clear distinction between needs and satisfiers of those needs. Human needs are viewed as interrelated and interactive. Needs are classified into two categories; with the needs of being, having, doing and interacting on the one hand, and the needs of subsistence, protection, affection, understanding, participation, idleness, creation, identity and freedom on the other (Max-Neef *et al.*, 1989:17). Food and shelter are not seen as needs, but as satisfiers of the need for subsistence. Education, either formal or informal, study, investigation and meditation are viewed as satisfiers of the need for understanding. A satisfier may contribute simultaneously to the satisfaction of different needs, or conversely, a need may require various satisfiers in order to be met. For example, a mother breast-feeding her baby is simultaneously satisfying the infant's need for subsistence and protection, affection and identity (Max-Neef *et al.*, 1989:17-46).

The insights into the human scale development approach are summarised below (Max-Neef, 1992:197-201):

- Development refers to people and not to objects. This approach entails a theory of human needs for development, one that goes beyond economic rationality and comprehends the realization of human needs in holistic terms.
- Human needs are seen as finite. Moreover, they are considered to be few and classifiable. This approach emphasise that fundamental human needs are the same in all cultures and historical periods, changing only in a very slow pace according to our evolution as species.

- Every system of needs is either satisfied, or not, by different types of satisfiers. These, whether of an individual or collective nature, include all things that, by representing form of being, having, doing, and interacting, contribute to the realization of human needs.
- Through the way different satisfiers are articulated specific human needs may or may not be satisfied.
- Satisfiers, unlike needs, are less static. Overall, they define the prevailing mode that a culture or a society ascribes to. These may include organizational structures, political systems, social practices, subjective conditions, norms, values, spaces, contexts, behaviours and attitudes (Max-Neef, 1992:197-201).

Table 4.2 presents Max-Neef's needs and satisfiers. The human needs matrix represents a fundamental tool in assessing different development strategies as well as helping different communities to gain self-awareness about their preferences in a given set of satisfiers, and moreover, the way these interrelate and affect each other systemically. By classifying and identifying satisfiers by the way each one affects the different dimensions of wellbeing, it helps to highlight the way specific social and cultural settings enhance or inhibit personal freedom, autonomy and wellbeing (Max-Neef, 1992: 206-207).

Max-Neef *et al.* (1989:21) suggest that poverty is multidimensional and that we should speak of poverties rather than poverty. In this thinking, each poverty generates a number of pathologies. The existence of collective pathologies of frustration, for which traditional treatments are simply inefficient, must be recognized. Extended unemployment, for example, generates pathologies that will totally upset a person's fundamental need system. Due to unemployment, and owing to subsistence problems, the person will feel increasingly unprotected; crises in the family and guilt feelings may destroy affections; lack of participation will give way to feelings of isolation and marginalisation; and declining self-esteem may generate an identity crisis. In the same way, violence directly upsets the need for protection, thus inducing intense anxiety.

TABLE 4.2: MAX-NEEF'S MATRIX OF NEEDS AND SATISFIERS

	BEING (personal or collective attributes)	HAVING (institutions, norms, tools)	DOING (personal or collective actions)	INTERACTING (spaces or atmospheres)
Subsistence	Physical health, mental health, equilibrium, sense of humour	Food, shelter, work	Feed, procreate, rest, work	Living environment, social setting
Protection	Care, adaptability, autonomy, solidarity, equilibrium	Insurance systems, savings, social rights, security, work	Co-operate, prevent, plan, take care of, cure, help	Living space, social environment, dwelling
Affection	Self esteem, solidarity, respect, tolerance, generosity, passion, receptiveness, determination	Friendships, partners, family, partnerships, relationships with nature	Make love, caress, express emotions, share, take care of, cultivate, appreciate	Privacy, intimacy, home, spaces of togetherness
Understanding	Critical conscience, receptiveness, curiosity, astonishment, discipline, intuition, rationality	Literature, teachers, educational and communication policies	Investigate, study, educate, experiment, analyze, meditate, interpret	Settings of formative interaction, schools, universities, family, communities
Participation	Adaptability, sense of humor, solidarity, receptiveness, respect, willingness, passion	Rights, privileges, work, responsibilities, duties	Become affiliated, cooperate, propose, share, dissent, obey, interact	Settings of participative interaction – parties, churches
Leisure	Curiosity, imagination, receptiveness, recklessness, sense of humour, lack of worry, tranquility	Games, spectacles, clubs, parties, peace of mind	Day-dream, brood, dream, recall old times, give way to fantasies, remember, relax	Privacy, intimacy, spaces of closeness, free time, landscapes, surroundings
Creation	Passion, determination, intuition, imagination, boldness, rationality, autonomy, curiosity	Abilities, skills, work	Work, invent, build, design compose, interpret	Productive and feedback settings, workshops, cultural groups, audiences
Identity	Sense of belonging, consistency, differentiation, self-esteem, assertiveness	Symbols, language, religions, customs, reference groups, groups, sexuality, values	Commit oneself, integrate oneself, decide on, get to know oneself, actualize oneself	Social rhythms, every day settings, setting which one belongs to, maturation stages
Freedom	Autonomy, self-esteem, determination, passion, assertiveness, open mindedness, boldness,	Equal rights	Dissent, choose, be different from, run risks, develop awareness	Temporal/special flexibility

Source: Max-Neef, 1992: 206-207

4.2.2 Measuring poverty

A credible measure of poverty can be a powerful instrument for focusing the attention of policy makers on the living conditions of the poor. A great deal of attention has been given to the functional form of a particular poverty measure, such as how the measure should respond to changes in distribution below the poverty line. In the measurement of poverty two distinct problems must be faced, firstly, identifying the poor among the total population, and then constructing an index of poverty using the available information on the poor (Sen, 1976:1). The former problem involves the choice of a criterion of poverty (e.g., the selection of a "poverty line" in terms of real income per head), and then ascertaining those who satisfy that criterion (e.g., fall below the poverty line) and those who do not (Sen, 1976:1).

The development of sound poverty measures to guide national and therefore international policy is a complex exercise, in part due to the multi-dimensional nature and different manifestations of poverty. Clarifications of how poverty is defined are important as different definitions of poverty imply the use of different criteria for measurement leading potentially to the identification of different individuals and groups as poor. This also has implications on the different policy solutions employed to reduce poverty (Kamanou, 2005:2).

The fundamental requirement to develop adequate poverty measures is a prior understanding of the objective of the measures, and more specifically, the way the measures would help to inform policy and to address the problem of poverty. Poverty measurements might serve a number of purposes, among which are the following:-

- To differentiate the poor individuals or groups from the non-poor;
- To monitor poverty by comparing poverty rates across different subgroups of the population or across countries;
- To monitor poverty over time; and
- To develop poverty profiles that describe the characteristics of those in poverty (Kamanou, 2005:2).

The World Bank (2005:8) cites the following reasons for measuring poverty:-

- To keep the poor on the agenda; if poverty were not measured, it would be easy to forget the poor;
- One needs to be able to identify the poor if one is to be able to target interventions that aim to reduce or alleviate poverty;
- To monitor and evaluate projects and policy interventions that are geared towards the poor; and
- To evaluate the effectiveness of institutions whose goal is to help the poor.

The next part of this section will provide an understanding of the different measurements which can be employed in poverty studies.

4.2.2.1 Poverty lines

A poverty line is a statistical representation of the value of all the goods and services considered necessary for either an individual or a household to maintain a decent standard of living. Once this value has been determined as a poverty line, it can be used to analyse the distribution of resources within a country using quantitative survey data in order to answer how many people in that country fall above the poverty line and how many fall below it. The poverty line does not describe the depth of poverty nor does it provide a degree of different manifestations of poverty and needs (Rio, 2006).

The poverty line is generally calculated by giving a monetary value to a basket of goods or services that are identified according to the standard of living or wellbeing that policy makers decide should reflect a state of impoverishment. Decisions about how to quantify the contents of the basket have to be made, and so do decisions about what services policy makers can assume people are receiving for free and thus can be excluded from the basket of goods. A poverty line can at best reflect that people who live above it ought to be enjoying a certain quality of life, but it cannot provide any guarantee of the actual wellbeing of these people. It is therefore seen as being a proxy of the goods that the money could purchase if used to buy exactly the

same goods or services as listed by the policy makers. It is clear that those who design the line will have to take into account whether prices of goods are equivalent across the country and the listed goods (or similar substitutes) are easily available. In some countries, separate urban and rural poverty lines are constructed in an attempt to avoid any such difficulties (SPII, 2007:28-29).

The World Bank (1990:16) defines poverty as the inability to attain a minimal standard of living measured in terms of basic consumption needs or income required to satisfy them. Poverty is thus characterised by the inability of individuals, households or the entire community to command sufficient resources to satisfy their basic needs. The World Bank's poverty line separates the poor from the non-poor based on the expenditure necessary to buy a minimum standard of nutrition and other necessities. This expenditure varies from country to country; therefore country-specific poverty lines have to be drawn.

Arndt and Simler (2004:11) argue that there is no single blueprint for what goods and services constitute basic needs, or who decides what these should be. Often the tool used is a money metric poverty line that is represented as a single global amount of money, with no clear reference to what basic needs the amount is meant to cover and what is excluded. The resultant chosen level of minimum wellbeing can often appear to be very arbitrary. In addition, there is an argument that over time, basic needs are culturally specific - in other words, it is not possible to decide on a minimum core of basic needs which are relevant universally.

Relative poverty lines can also be used in the study of poverty. These types of poverty lines do not necessarily need to be set within the parameters of meeting basic needs (however defined). It is also possible to cost out a basket of goods that instead reflects, for example, the standard of living that is customary in the given society. The importance of what constitutes the contents of the basket of goods, on which the value of the line is based, is clear. What is included in that basket should reflect what the broader society believes constitutes a minimum acceptable standard of life (SPII, 2007:29). In South Africa, the relative poverty line is often set at the level that includes people living below 40% of national income, with those living below 20% as being very

poor. Internationally, however, such poverty lines are more typically defined as people or households living below a percentage of median or mean equivalised income. These latter have the advantage that it is possible to imagine a society where relative poverty, so defined, has been eliminated, whereas there will always be a bottom 20% or 40% of the income distribution and so relative poverty defined in that way could never be eradicated (SPII, 2007:29).

Subjective poverty lines on the other hand explicitly recognize that poverty lines can also be inherently subjective judgements people make about what constitutes a socially acceptable minimum standard of living in a particular society. Just as different countries tend to use different poverty lines, and that richer countries tend to have higher poverty lines, so too is the same with individuals. This approach is often based on a survey asking respondents about the income that they consider absolutely minimal. The answer tends to be an increasing function of actual income (Ravallion, 1992:33).

The use of poverty lines to measure poverty is an old practice, with some poverty lines being antiquated and irrelevant in modern societies. Generally, they demarcate a group of households whose income or consumption is too low in comparison to that of the general population. Poverty lines are adjusted to changes in the median or mean income or consumption of the general population as well to the general price level. The reason for this is that as technology progresses and new products are introduced, these new products may initially be bought by the upper income households, but generally diffuse to lower income households. This causes the income elasticity of these goods. The goods may initially be seen as conveniences, but end up as necessities. For example, cell phones are slowly becoming necessities in modern society. The price elasticity occurs as a result of inflation. Thus poverty lines are normally adjusted upwards with the passage of time due to technology and inflation (Mokoena, 2001:21).

In South Africa, poverty lines have also been used in an attempt to provide an understanding of poverty; several poverty lines have been introduced since 1993. The Minimum Living Level (MLL) was the minimum level at which a non-white family would

be able to maintain the health of its members and conform to Western standards of decency. It includes the cost of items such as tax, medical expenses, education and household equipment, in addition to the items included by the poverty datum line (PDL). The Supplementing Living Level (SLL) was also introduced, which provides for more items than the MLL; such as pension, insurance, medical aid and recreation (Wilson & Ramphela, 1989:17).

Potgieter (1980:4) developed the Household Subsistence Level (HSL) and the Household Effective Level (HEL). He defines the HSL as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short term. It is based on the lowest retail basket of necessities of adequate quality. This basket includes: food, clothing, fuel and lighting, and washing and cleaning material for each individual in a household and for the whole household, and the cost of rent and transport.

Potgieter (1980:7) argues that although the Household Subsistence Level indicates the theoretical budget of necessities, it does not suggest an adequate income. In practice, one third of the total income equivalent to an HSL budget will be diverted away from the specific items to other immediate essentials. In the case of the HSL, the income is not effective in enabling the household to maintain the standards of long-term decency. Potgieter, therefore, determines the Household Effective Level, which is 150% of the HSL.

The HSL will be used in this study, firstly, as it is the most frequently used measure in recent years. Secondly, the method of calculating the HSL as has been done by Potgieter (1994:63) makes it easy to calculate the subsistence for individual households. A breakdown of the subsistence level for different age groups of different sexes is given, as well as certain costs for a household as a whole. By calculating the HSL for an individual household, and comparing it with the combined income of the different members of the same household, the degree of poverty can be measured at micro or household level. The HEL is calculated as the HSL plus 50%, and thus gives a higher cut-off point (Mokoena, 2001:22).

4.2.2.2 Headcount index

The simplest measure of poverty is the head-count index, given by the proportion of the population for whose consumption (or another suitable measure of living standard) y is less than the poverty line z . Suppose q people are poor by this definition in a population of size n . Then the head-count index is $H = q/n$ (Ravallion, 1992:36).

The headcount index has been criticized by Sen (1983:32-24), as it takes no account of the degree of poverty. In order to capture the degree of poverty, the poverty gap measure is normally used. The headcount index is concerned with the number of poor people or households whose incomes fall below a given poverty line as a ratio of the whole population. Another criticism of the headcount index is that it does not satisfy the transfer axiom. This means that the headcount ratio is insensitive to transfers of resources from one individual to another, unless one of them crosses the poverty line as a result of the transfer. A suitable poverty index would be expected to show a decrease in poverty when a transfer occurs from a richer person to a poorer one, even if their relative ranking in the distribution remains unchanged.

Trigger (2003:8), however, argues that notwithstanding the definitional difficulties related to specifying the level of resources to indicate poverty, and the determination of the appropriate poverty line, the calculation of such an index is both feasible and simple. Additionally, such a measure is well understood and easily interpreted by the general public, thus increasing its level of acceptability.

4.2.2.3 Poverty gap index

Borooah and McGregor (1991:357) define the poverty gap as the mean shortfall of the total population from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line; it adds up the extent to which individuals on average fall below the poverty line, and expresses it as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. The indicator is often described as measuring the per capita amount of resources needed to eliminate poverty, or reduce the poor's shortfall from the poverty line to

zero, through perfectly targeted cash transfers. The poverty gap equation is described as:

$$\frac{1}{N} \sum_{i=1}^q \frac{(Z_i - Y_i)}{Z_i} \dots\dots\dots (4.1)$$

Where (Y) = income of poor household,
 (Z) =poverty line,
 (N) = total number of population,
 (q) = number of the poor.

Ravallion (1992:32) cites that the poverty gap can also be written as: $PG = I \times H$, where H is the number of poor households and I is often referred to as the income gap ratio (mean depth of poverty as a proportion of the poverty line), and is defined by:

$$I = \frac{Z - Y^p}{Z} \dots\dots\dots (4.2)$$

Where y^p denotes the mean consumption of the poor,
 Z is the mean income of the poor.

Ravallion (1992:32) cites that the above income gap is not a good poverty measure. To see why, suppose that someone just below the poverty line is made sufficiently better off to escape poverty. The mean of the remaining poor will fall, and so the income gap ratio will increase. And yet one of the poor has become better off, and none are worse off; one would be loathed to say that there is not less poverty, and yet that is what the income gap ratio would suggest. This problem does not arise if the income gap ratio is multiplied by the head count index to yield PG; under the same circumstances, that measure will register a decrease in poverty.

The poverty gap also has an interpretation as an indicator of the potential for eliminating poverty by targeting transfers to the poor. The minimum cost of eliminating poverty using targeted transfers then becomes the sum of all the poverty gaps in a

population; every poverty gap is filled up to the poverty line. On the other hand, one can also consider the maximum cost of eliminating poverty, assuming that the policy maker knows nothing about who is poor and who is not. Then the policy makers would have to give z to everyone to be sure that none are poor; the cost is z multiplied by the population size (Ravallion, 1992:32). The cost would be summarised by the equation:

$$\sum_{i=1}^q [z - y_i] \dots\dots\dots (4.3)$$

Slabbert (1997:49) has adapted the poverty gap to a measure of an individual household's income shortfall. The poverty gap of an individual household (in monetary terms) can therefore be expressed by the equation:

$$G_i(y; z) = z_i - y_i \dots\dots\dots (4.4)$$

where:

G_i = the income shortfall of a household;

Y_i = the income of a specific household; and

Z_i = the poverty line of a specific household (Slabbert, 1997:49).

4.2.2.4 The Foster-Greer-Thorbecke P2 measure

The Foster-Greer-Thorbecke P2 measure is introduced by Foster, Greer and Thorbecke as a measure of the severity of poverty which is additive; whereby the poverty gaps of the poor are weighted in order to assess aggregate poverty. This can be ascribed by the following equation (Ravallion, 1992:39):

$$P_2 = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right]^2 = \text{mean of squared proportion of poverty gaps} \dots\dots\dots (4.5)$$

As an example if P_2 for A = 0.2 and B=0.1 – this figure will indicate a more severe poverty in B. The measure can be thought of as the sum of two components: an amount due to the poverty gap, and an amount due to inequality amongst the poor. The drawback for this measure is that it is not easy to interpret. However, the key point is that dates, places, or policies in terms of P_2 should reflect well their ranking in

terms of the severity of poverty. It is the ability of the measure to order distributions in a better way than the alternatives that makes it useful, not the precise numbers obtained. On comparing the above formulas for H, PG and P_2 a common structure is evident. Foster-Greer-Thorbecke suggested a class of poverty measures (Ravallion, 1992:39):

$$P_{\alpha}(y; z) = \frac{1}{n} \sum_{i=1}^q \left(\frac{z - y_i}{z} \right)^{\alpha} \quad (\text{Ravallion, 1992:39}) \dots\dots\dots (4.6)$$

P_{α} is simply the mean over the whole population of an individual poverty measure which takes the value $(1 - y_i/z)^{\alpha}$ for the poor and zero for the non-poor. This is also the simplest and most accurate way to calculate P_{α} if one has access to the individual or household level data. The higher the value of α the more sensitive the measure is to the wellbeing of the poorest person; as α approaches infinity, the measure collapses to one which only reflects the poverty of the poorest person.

There are other additive poverty measures, developed by Atkinson (1987), which can characterise a general class of additive measures, encompassing the FGT class of measures, and some other measures taking the following form:

$$P = \sum_{i=1}^n p(z, y_i) / n \dots\dots\dots (4.7)$$

Where $p(z, y_i)$ is the individual poverty measure, taking the value zero for the non-poor ($y_i > z$) and some positive number for the poor. This value is a function of both the poverty line and the individual living standard (Atkinson, 1987:15).

4.2.2.5 Sen Index

The Sen Index is a combination of the headcount index, the poverty gap index and the Gini coefficient. It is an attempt to reflect the degree of inequality in income/expenditure among the poor. The index is calculated as the average of the headcount index and the poverty gap index weighted by the Gini coefficient of the poor.

The formula for calculating the Sen Index is given as (Govender *et al.*, 2007:10):-

$$S = [H \times G] + P \times [1 - G] \dots\dots\dots (4.8)$$

Where H is the population headcount index
 P is the population poverty gap index
 G is the Gini coefficient of the poor

When $G=1$, the Sen Index will be the same as the poverty gap index and when $G=0$ the Sen Index would be the same as the headcount index. In other words, the Sen Index takes into account the numbers of the poor, their shortfall in income/expenditure relative to the poverty line, and the degree of their inequality relative to their income (Malherbe, 2007:12).

4.2.2.6 Dependency ratio

Dependency ratios are usually calculated by dividing the total number of non income earners by the total number of earners. One of the causes of poverty in South Africa is the high dependency in black families. Those who earn income have to support many non-earners (Slabbert, 1997:55).

The calculation of the dependency ratio can be given by the two examples (Table 4.3 and 4.4). The first example (Table 4.3) has in total 6 income earners supporting 10 non-income earners, resulting in a dependency ratio of 1.67. This method might not be entirely accurate in reflecting the true state of affairs within such a population, it creates the impression that there are six income earners supporting 10 non-income earners, but the fact is that the 4 income earners in household 1 are not supporting non-income earners in households 2 and 3 (Slabbert, 1997:57).

The second method (Table 4.4) gives an average dependency ratio of 3.08. This method of calculation depicts the situation more realistically as it looks at the breakdown of each household. This method has gained favour with this study and will be used to compute the dependency ratio for the area of study.

TABLE 4.3: DEPENDENCY RATIO CALCULATION-METHOD 1

Given	
Household A: 5 members- 4 income earners and 1 non-earner	
Household B: 5 members- 1 income earner and 4 non-earners	
Household C: 6 members- 1 income earner and 5 non-earners	
Total income earners	6
Total non-income earners	10
Dependency ratio	10/6= 1.67

Source: Slabbert, 1997:57.

TABLE 4.4: DEPENDENCY RATIO CALCULATION-METHOD 2

Given:	
Household A: 5 members- 4 income earners and 1 non-earner	
Household B: 5 members- 1 income earner and 4 non-earners	
Household C: 6 members- 1 income earner and 5 non-earners	
Dependency ratio	<i>Household A = 1/4 = 0.25</i> <i>Household B = 4/1 = 4</i> <i>Household C = 5/1 = 2</i>
Total	9.25
Average dependency ratio = 9.25 / 3= 3.08	

Source: Slabbert, 1997:57.

4.2.3 Causes of poverty

There are a number of different approaches to understanding the causes of poverty. Different views about the causes of poverty can impact on the types of policies that are used to reduce the levels of poverty. Identifying the causes of poverty can be complex exercise. The World Bank (1997:4) cites the following as the main basic causes of poverty: inadequate access to employment opportunities, physical assets such as land and capital, and markets for goods and services which the poor can sell;

inadequate participation of the poor in the design of programs earmarked for their upliftment; and low endowment of human capital as a result of inadequate access to social services. The Studies in Poverty and Inequality Institute (SPPI, 2007:15) broadly divides explanations of the causes of poverty into three kinds: residual and pathological, structural.

- **Residualist** notions of poverty see poverty simply as the result of being left out of the growth and development process. Often reliant on a notion of trickle-down, residualist approaches tend to assume that a rising tide lifts all boats and that what is required is simply getting more people linked to markets or participating in employment. Residualists assumes that economic growth and participation is good for poverty as such are often linked to explanations of the persistence of poverty that pathologises the poor (SPPI, 2007:15).
- **Pathological** explanations emphasise the responsibility of individuals for their own poverty. Simply put, those who advocate for such an analysis of the causes of poverty would argue that each individual should be responsible for moving themselves out of poverty. A pathological line of reasoning would argue that a person's poverty can be attributed to their failure to get a job. This approach would attribute the failure to find a job to a person's lack of initiative or preference for leisure. This thinking clearly lacks a rational understanding that finding a job for many people is not possible due to a labour surplus, or that the total costs of finding and maintaining a low paid job might exceed the total cost benefit that that employment might be able to provide (SPPI, 2007:15).
- **Structural** or relational explanations point out that growth and development can in themselves produce poverty and inequality. In order to address the resultant poverty, it must therefore be necessary to change the structure of the nature of the social and economic forces. An applied example of this in South Africa is understanding that poverty for many people is caused by unemployment, which is itself influenced by changes in both global and national production strategies and hence also of the historical trajectory of the political economy (SPPI, 2007:15).

The World Bank (2005:125) draws caution to what one might point as causes of poverty:

- It can be difficult to separate causation from correlation. For instance, there is a general understanding that poor people tend to have low levels of education; but are they poor because they have little education, or do they have little education because they are poor? A statistical association alone is not enough to establish causality, and additional information is likely to be required (World Bank, 2005:125).
- There is a distinction between proximate causes and deep causes of poverty. For instance, suppose that we can demonstrate that low levels of education do indeed increase the risk of poverty. This is interesting, but now begs the question of why some people have low levels of education in the first place. Were the school fees too high? Was there no school nearby? Was the quality of the education abysmal? Were their parents unsupportive, or even hostile to education? (World Bank, 2005:125).

The World Bank (2005:132) points that poverty may be due to national, sector-specific, community, household or individual characteristics. Table 4.5 summarises some of the characteristics of the poor by region, community, household and individual characteristics. This is an understanding of the many structural influences might influence an individual or a group's chances of being poor. As in the table, regional characteristics, for example, can include factors like the remoteness of the location thereby limiting access to opportunities to access markets and escape poverty. On the other hand, household characteristics like the size of the household can impact on the level or degree of one's poverty status.

TABLE 4.5: MAIN DETERMINANTS OF POVERTY

Regional characteristics	Isolation/remoteness, including less infrastructure and poorer access to markets and services Resource base, including land availability and quality. Weather (e.g. are typhoons or droughts common) and environmental conditions (e.g. frequency of earthquakes) Regional governance and management
Community characteristics	Infrastructure (e.g. is there piped water, access to a tarred road) Land distribution Access to public goods and services (e.g. proximity of schools, clinics) Social structure and social capital
Household characteristics	Size of household Dependency ratio (i.e. unemployed old and young relative to working age adults) Gender of head; or of household adults on average Assets (typically including land, tools and other means of production, housing) Employment and income structure (i.e. proportion of adults employed; type of work – wage labour or self employment; remittance inflows) Health and education of household members on average
Individual characteristics	Age Education Employment Health status Ethnicity

Source: World Bank, 2005:132.

4.3 INEQUALITY

Poverty measures depend on the average level of income or consumption in a country and the distribution of income or consumption. Based on these two elements, poverty measures therefore focus on the situation of those individuals or households at the

bottom of the distribution. Inequality is a broader concept than poverty in that it is defined over the entire population, not only below a certain poverty line. Most inequality measures do not depend on the mean of the distribution (at least this is considered to be a desirable property of an inequality measure). Instead, inequality is concerned with distribution. Equality can be understood as parity in the enjoyment of fundamental rights and freedoms, and equality of opportunities with regards to education and work and the fulfillment of one's potential (Coudouel, 2002:47).

Inequality means different things to different people. Whether inequality should encapsulate ethical concepts such as the desirability of a particular system of rewards or simply mean differences in income is the subject of much debate (Litchfield, 1999:1). Poverty is a prescriptive concept whilst inequality should be seen as a descriptive concept. Poverty is concerned with the absolute standard of living of a part of the population, i.e. the poor who are not able to attain a minimum standard of living, whereas inequality refers to the relative standards across the whole population (Ligthelm, 1993:3).

There are many ways of measuring inequality, all of which have some intuitive or mathematical appeal. Poverty is not the same as inequality. Inequality shows relative living standards of the entire population, not only poor standards. Although poverty and inequality are related, the one does not assume the other (Sen, 1981:15). Even though poverty does not assume inequality, measures of inequality are useful in the evaluation of relative poverty (Slabbert, 1997:62).

The relationship between poverty and inequality is neither clear nor direct. Poverty and inequality are analytically distinct concepts. They vary independently of each other, and it is misleading beyond a point to treat the one as leading to the other. The study of both poverty and inequality has been closely associated with an interest in economic and social change. Poverty and inequality do not change at the same pace, and they may even change in opposite directions. This makes it difficult to make any meaningful statement about the relationship between the two without specifying which conception of poverty and which aspect of inequality one has in mind (Beteille, 2003).

Litchfield (1999:2) asserts that a good inequality measure should contain the following:

- **The Pigou-Dalton Transfer Principle**. This axiom requires the inequality measure to rise (or at least not fall) in response to a mean-preserving spread; an income transfer from a poorer person to a richer person should register as a rise (or at least not as a fall) in inequality and an income transfer from a richer to a poorer person should register as a fall (or at least not as an increase) in inequality. What it points to is that a redistribution of wealth or income from the 'haves' to the 'have-nots' should not leave both poorer, inequality should be reduced and at least one person should be better-off than before.
- **Income Scale Independence**. This requires the inequality measure to be invariant to uniform proportional changes: if each individual's income changes by the same proportion (as happens when changing currency unit) then inequality should not change.
- **Principle of Population**. The population principle requires inequality measures to be invariant to replications of the population: merging two identical distributions should not alter inequality.
- **Anonymity**. The axiom - sometimes also referred to as "Symmetry", requires that the inequality measure be independent of any characteristics of individuals other than their income (or the welfare indicator whose distribution is being measured).
- **Decomposability**. This requires overall inequality to be related consistently to constituent parts of the distribution, such as population sub-groups. For example, if inequality is seen to rise amongst each sub-group of the population then we would expect inequality overall to also increase.

The next sections will provide an overview of the commonly used measures of inequality.

4.3.1 The Lorenz curve

The Lorenz curve is a tool used to represent income distributions as proposed by Max Otto Lorenz (1905); it tells us which proportion of total income is in the hands of a given percentage of the population (Bellu & Liberati, 2005:6). Graphically, the percentage of income recipients or households is plotted cumulatively along the horizontal axis and the percentage of income earned on the vertical axis. Along the line of equality, the distribution of income is equal, i.e. the 'line of equality' is a 45-degree line sloping up from the origin of the figure. If the distribution is unequal, the curve is bowed away from the 45-degree line. The greater the bow, the larger the inequality (Todaro, 1985:146). The x-axis records the cumulative proportion of population ranked by income level. Its range is therefore (0, 1). The y-axis records the cumulative proportion of income for a given proportion of population, i.e. the income share calculated by taking the cumulated income of a given share of the population, divided by the total income Y, as follows:

$$L\left(\frac{k}{p}\right) = \frac{\sum_{i=1}^k y_i}{y} \dots\dots\dots (4.9)$$

Where:

$k=1\dots n$ is the position of each individual in the income distribution;

$i=1\dots k$ is the position of each individual in the income distribution;

P is the total number of individuals in the distribution;

Y_i is the income of the i^{th} individual in the distribution

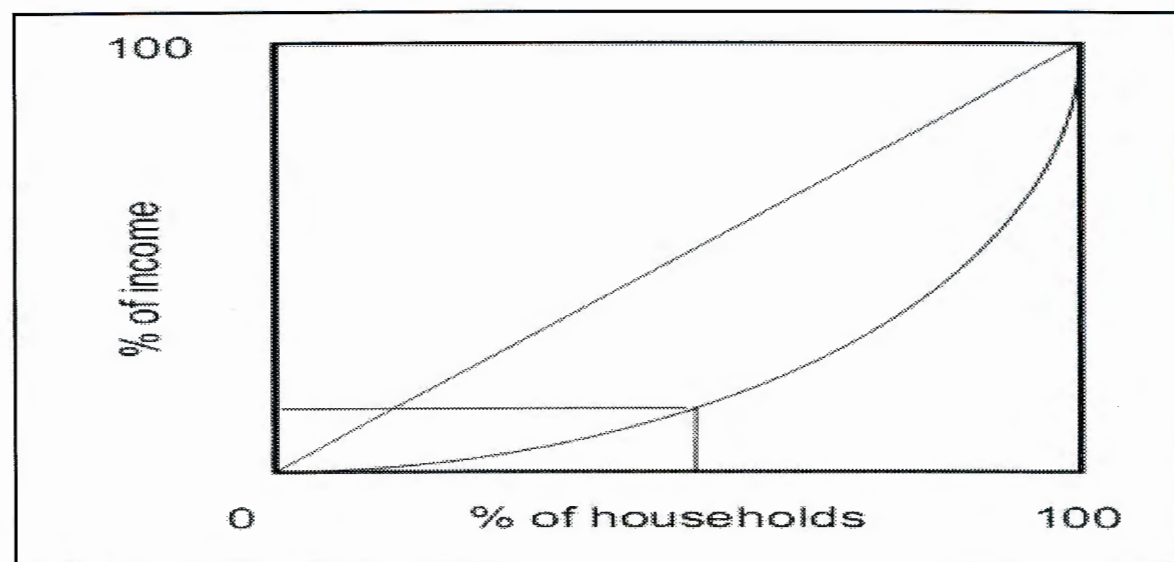
L is the average income of the distribution

$\sum_{i=1}^k y_i$ is the cumulated income up to the k individual (Bellu & Liberati, 2005:4).

The Lorenz curve (Figure 4.1), which may be plotted for individuals or households, shows the proportions of income accruing to various proportions of the population.

The vertical line at halfway point on the x-axis show that in the hypothetical distribution plotted in the diagram below, about 50% of households receive about 15% of income. If all values lie along the 45° line, income would be equally distributed. The greater the distance of the curve from the 45° line, the greater the inequality (SPII, 2007:45).

FIGURE 4.1: THE LORENZ CURVE



Source: SPII, 2007:45

4.3.2 The Gini index

The Gini index is a standard measure of inequality, which varies from 0 (absolute equality) to 1 (high degree of inequality). The procedure involves ranking all the income units in ascending order of magnitude of income, and then graphing the cumulative income of the units against the cumulative percentage of units. In an equal society where each unit receives the same income, the Gini-coefficient is zero. In a perfectly unequal society, where one individual or household has all the income and all the others have nothing, the Gini-coefficient is equal to one. The nearer the Gini-coefficient is to one, the more unequal the society (Whiteford & Posel, 1995: 19).

The Gini coefficient is another method of comparison which measures the degree of inequality based on the areas on the Lorenz curve diagram. As mentioned in Section 4.3.1, the more unequal the distribution, the more bowed the Lorenz curve will be. The Gini coefficient is estimated (graphically) by dividing the area between the curve and

the 45° line by the area of the triangle which contains the curve (Figure 4.1). The smaller the area between the curve and the 45° line, the lower the inequality, and the smaller the Gini coefficient (which can assume values between zero and unity) (SPIL, 2007:45).

Litchfield (1999:5) expresses the Gini co-efficient using the equation:

$$Gini = \frac{1}{2n^2 y} \sum_{i=1}^n \sum_{j=1}^n |y_i - y_j| \dots\dots\dots (4.10)$$

Where n is the size of the population,

y_i is the income of individual i, $i \in (1, 2, \dots, n)$, and

$y = (1/n) \sum y_i$, the arithmetic mean income.

4.3.3 Human development index

The human development index (HDI) is a composite relative index, which attempts to quantify the extent of human development within a community. It is based on measures of life expectancy, literacy levels (education) and income. It is thus seen as a measure of people's ability to live a long and healthy life, communicate, to participate in the life of the community and to have enough resources to obtain a decent standard of living. The HDI can assume a maximum value of 1, indicating a high level of human development and minimum value of 0. The HDI is produced by the United Nations (Phycroft, 1998:155).

The HDI does not define a threshold, but three levels of achievement in human development: high (HDI of 0.800 and above), medium (0.500–0.799), and low (less than 0.500). It allows for analysing changes over time to explore how individual indices have improved or declined. It also allows for cross-country comparisons or how a specific country relates to the world average. The UNDP calculates the HDI every year in its Human Development Report (UNDP, 2006:286).

4.3.4 Human poverty index

The Human Poverty Index (HPI) was developed in 1997 and is calculated using separate formulae for developed and developing countries, compared to the HDI. While the HDI measures average achievement, the HPI (for developing countries) measures deprivation in the following three dimensions (UNDP, 2006:395):

- A long and healthy life – vulnerability to death at a relatively early age, as measured by the probability at birth of not surviving to age 40;
- Knowledge – exclusion from the world of reading and communications, as measured by the adult illiteracy rate; and
- A decent standard of living – lack of access to overall economic provisioning, as measured by the unweighed average of two indicators, the percentage of the population without sustainable access to an improved water source and the percentage of children underweight for age (UNDP, 2006:395).

4.3.5 Human opportunity index

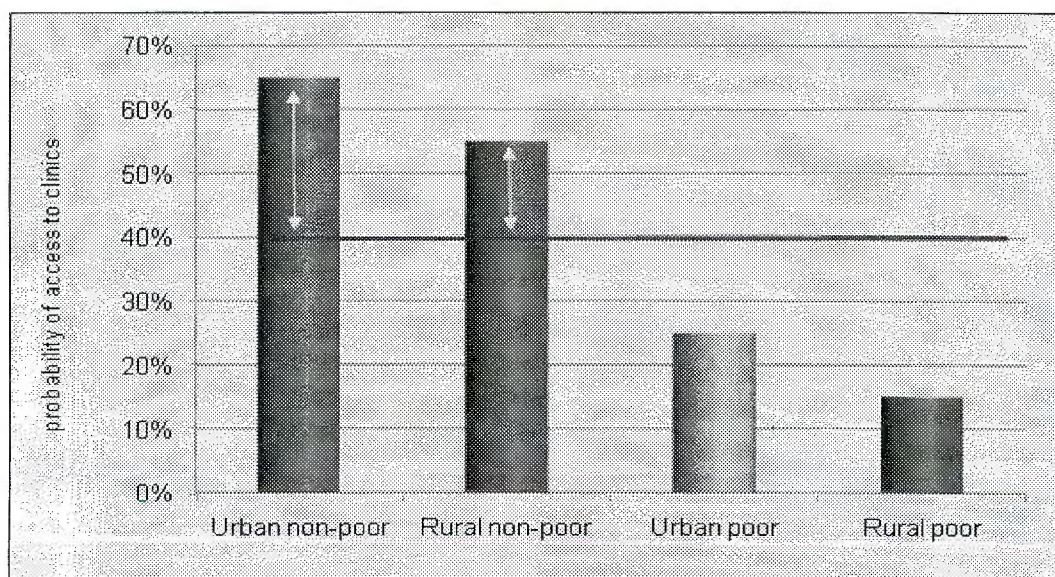
The Human Opportunity Index is a synthetic measure of inequality of opportunity in basic services for children. The index holds that a development process in which society attempts to equitably supply basic opportunities requires ensuring that as many children as possible have access to those basic opportunities, with a target of universalism. It requires distributing available basic opportunities increasingly toward the more disadvantaged groups (De Barros *et al.*, 2008:3).

The Human Opportunity Index summarizes in a composite indicator both elements: how many opportunities are available, and how equitably those opportunities are distributed. Availability refers to the extent of coverage of a basic service, while equitability questions whether the distribution of that coverage is related to exogenous circumstances (De Barros *et al.*, 2008:3).

This index defines basic opportunities as a subset of goods and services for children, such as access to education, to safe water, or to vaccinations, that are critical in determining opportunity for economic advancement in life. These are either affordable by society at large already, or could be in the near future, given the available technology. Universal provision of basic opportunities is a valid and realistic social goal. The Human Opportunity Index synthesizes into a single indicator of measurements of both the absolute level of basic opportunities in a society and how equitably those opportunities are distributed (De Barros *et al.*, 2008:3).

The D-index (Human Opportunity Index) can be interpreted as showing the fraction of all available opportunities that need to be reassigned from better-off groups to worse-off groups to achieve equal opportunity for all. In Figure 4.2, an illustration of the probability of access to clinic services is undertaken. If as an example, the D-index is calculated at 20% for accessing clinic services; this means that 20% of opportunities to accessing clinic services have to be redistributed to ensure equal chances for all (De Barros *et al.*, 2008:4).

FIGURE 4.2: MEASURING INEQUALITY OF OPPORTUNITY



Source: Adapted from: De Barros *et al.*, 2008:6

The Human Opportunity Index focuses on coverage and inequality of opportunities among children for three main reasons (De Barros *et al.*, 2008:4):

- Firstly, from an empirical standpoint, the principle of equality of opportunity as levelling the playing field can be readily operationalised by measuring children's access to basic goods and services that are critical for the full development of a child. For children, access defines opportunity, because children (unlike adults) cannot be expected to make the efforts needed to access these basic goods without assistance.
- Secondly, from a policy standpoint, evidence indicates that interventions to equalize opportunity early in the lifecycle of an individual are significantly more cost effective and successful than interventions later in life.
- Thirdly, focusing on children helps put inequality of opportunity at the centre of the policy debate (De Barros *et al.*, 2008:4).

4.3.6 Decile dispersion ratio

The decile dispersion ratio presents the ratio of the average consumption of income of the richest 10 percent of the population divided by the average income of the bottom 10 percent. This ratio can also be calculated for other percentiles (for instance, dividing the average consumption of the richest 5 percent, the 95th percentile by that of the poorest 5 percent, the 5th percentile). The decile ratio is readily interpretable by expressing the income of the top 10% (the rich) as a multiple of that of those in the poorest decile (the poor). However, it ignores information about incomes in the middle of the income distribution, and does not even use information about the distribution of income within the top and bottom deciles (World Bank, 2005:101).

4.4 UNEMPLOYMENT

South Africa has one of the most interesting labour markets in the world. Its sharp segmentation, high unemployment and low non-farm informal sector employment make it an international outlier. Moreover, developments in the labour market may well hold the key to South African prosperity or penury. It is from the labour market that the income benefits from growing labour scarcity, or the threat to social and political stability from growing unemployment and underemployment, could emerge (Kingdon & Knight, 2007:2).

Unemployment is one of those things which everybody understands but turns out to be quite difficult to define and to measure (Mohr *et al.*, 2004:562). Unemployment is generally regarded as a bad thing for society as well as for the unemployed. Unemployment entails significant costs to the individuals who are unemployed as well as to society at large. The unemployed may become discouraged; they may also lose their self-esteem and confidence. This may affect their motivation to search for employment opportunities. The longer they are unemployed, the more they may lose their skills. The unemployed suffer mental and physical hardship and unemployment poses a serious threat to social and political stability. For example, when unemployment increases, crime and social unrest also tend to increase (Mohr *et al.*, 2004:128).

Unemployment can also be viewed as a measure of economic efficiency. It constitutes a permanent loss of output and high unemployment figures indicate that an economy is losing in terms of potential output (Dornbusch, 2000:162). The section that follows will discuss the different forms of unemployment, how it is measured and it continues to discuss the different perspectives to its causes. The problem of unemployment lies at the root of most other social problems. The loss of unemployment and the consequent loss of income, status and self-esteem bring in its wake a host of personal and domestic difficulties and communal problems (Hasluck, 1987:1).

4.4.1 Definition of unemployment

Unemployment is a situation where members of the labour force are without work and are currently available for work, and are seeking work (Barker, 1992:83). In South Africa, two different concepts of unemployment are used routinely: the strict (narrow) and the expanded (broad) definition. The narrow definition applies a job-search test whereas the broad definition accepts as unemployed those who did not search for work in a 4-week reference period but who report being available for work and say they would accept the offer of a suitable job. In 1998, the narrow concept was declared the official definition of unemployment and it is now the one generally used (Kingdon & Knight, 2007:4).

Unemployment can be viewed as a state of an individual looking for a paying job but not having one. This definition excludes full time students, the retired, children and those not actively looking for a job. This situation is marked by the fact that individuals are actively seeking for a job and remain unemployed. This group of people is then expressed as a percentage of the total workforce. The unemployment level varies with economic conditions and other circumstances (Ottosen & Thompson, 1996:2).

Stats SA (2000) uses the following definition of unemployment as its official definition. The unemployed are those people within the economically active population who:

- a) did not work during the seven days prior to the interview;
- b) want to work and are available to start within a week of the interview; and
- c) have taken active steps to look for work or to start some form of self employment in the four weeks prior to the interview.

The unemployment rate (U_r) is calculated using the standard equation:

$$U_r = \frac{\text{number of unemployed}}{\text{economically active population}} \times 100 \dots\dots\dots (4.11)$$

The shortcoming of this definition is that it is silent about the discouraged workers. These are the people who want to work but are not actively seeking one because it seems hopeless. They would be discouraged to look for employment and it can be costly for them. The cost of looking for a job includes the costs of applying and travelling for an interview. This definition has been relaxed by taking away the criterion of taking steps to look for work. The ILO has made provision for the problem by indicating that the definition can be applied by waving the criterion of taking steps seeking work. By relaxing this requirement, the expanded definition is arrived at. Therefore, other relevant tests to suit national conditions should be created (ILO, 1995:2).

The expanded definition of unemployment includes that part of the economically active population who: did not work during the seven days prior to a specific survey interview; want to work and are available to start work within a week after the

interview, but did not take active steps to look for work or to start some form of self employment in the four weeks prior to the interview (ILO, 1995:2).

The challenge of defining unemployment is the issue of discouraged job seekers. These are not unemployed by choice, but have ceased looking for a job because they believe that it is impossible to obtain. Another problem of defining unemployment is the issue of underemployment. It is where jobseekers end up taking a job which is below their skills level. This leads to an underestimate of the unemployment level given an economic scenario (Ottosen & Thompson, 1996:7).

4.4.2 Types of unemployment

Unemployment can be understood from a number of different perspectives. This differentiation arises from the different causative factors to unemployment. Different causative factors will require different means of tackling it. Defining unemployment will also guide policy decisions and manners in which the problem is to be tackled (Mohr *et al.*, 2004:562). Conventional literature classifies the types of unemployment using four perspectives; frictional, seasonal, cyclical and structural unemployment.

4.4.2.1 Frictional unemployment

Frictional unemployment arises because of time lags in finding a job or moving from one job to another. At any particular time, there will always be workers who are moving from one job to another (Haydam, 1997:8). This is caused by imperfect information in the job market and the fact that it takes time for unemployed workers and employers with job vacancies to find each other. If information was perfect and mobility was costless, this process could be done instantaneously, and unemployment of this nature would not occur (Kaufman, 1994:652).

Frictional unemployment can coexist together with job vacancies because unemployed workers do not have the right skill or are not in the right place. Workers voluntarily leave their jobs in search of better ones, and are not able to find employment in another job straight away. Until such time as they do find alternative employment, they are said to be frictionally unemployed (Routh, 1986: 20).

If there was perfect flow of information, and labour was highly mobile, this type of unemployment would not exist. Public policy could also reduce the level of frictional unemployment by eliminating undesirable causes of turnover. One suggestion is the reform of the unemployment compensation system (Kaufman, 1986:652). Barker (1992:73) argues that frictional unemployment normally occurs over a short space of time and can be reduced further by improving information flows and placement services in the labour market, thereby eliminating the time lags involved in the re-employment or labour.

4.4.2.2 Seasonal unemployment

Seasonal unemployment is due to normal and expected changes in economic activity during the course of a single year. This kind of unemployment occurs because certain kinds of jobs or occupations require workers only for a certain times of the year. This situation is more common in the agricultural sector, where the harvesting season needs large numbers of workers, and tourism, where summer months are busiest (Roux, 2005:56).

Seasonal unemployment is as a result of changes in the demand for labour due to changes in the demand for the output that labour produces. This unemployment can be anticipated as it follows a systematic pattern over the course of the year. The impact of seasonal unemployment can be minimised by using appropriate measures since it is recurring and usually anticipated; for example by producing a large amount of stock during the offseason for that output. In order to have the ability to acquire enough labour during the peak season it may mean employing more labour or avoiding retrenchment during the rest of the year (Sadie, 1980:336).

4.4.2.3 Cyclical unemployment

Cyclical unemployment is associated with the short-term fluctuations in the level of the formal economic activity or business cycle. This kind of unemployment is related to the general strength and vitality of the economy. If the economy is in a recession, the demand for goods and services tends to grow at a slower rate, and producers need fewer production factors - including labour to meet the lower level of consumer

demand. The opposite also hold true: when the economy recovers, more labour would be required in order to meet the growing demand for goods and services. This relationship implies that unemployment should fall when the economy grows and should increase when economic growth slows down (Roux, 2005:56).

This type of unemployment can be reduced by boosting the country's aggregate demand. The policy makers can adopt fiscal and monetary policies that ensure a stable and healthy rate of economic growth. Stable economic growth can be achieved through an increase in aggregate demand, and if aggregate demand goes up, more labour is employed for the production of goods and services. Impact of the recession can be reduced by tax cuts and easier monetary policy. Tax cuts will create incentive for production (Kaufman, 1986: 654).

4.4.2.4 Structural unemployment

Structural unemployment occurs when there is a significant gap between education, skills, expertise, etc. required for a job and the availability of appropriately qualified workers to fill those posts (Roux, 2005:56). According to Mohr *et al.*, (1995:611), structural unemployment arises when changes in the pattern of the labour demand cause a mismatch between the skills demanded and the skills supplied in a given area or cause an imbalance between supply and demand for workers across areas. Changes in production methods or techniques could cause a drop in the demand for people with particular qualifications or skills. Nowadays, machines can perform many tasks that previously required qualified or skilled people. For example, the introduction of automatic teller machines reduced the number of job opportunities for bank tellers. People who are replaced by labour-saving machines are sometimes classified as technologically unemployed (Mohr *et al.*, 1995:612).

Structural unemployment cannot be easily resolved. It cannot be combated by stimulating aggregate economic activity (e.g. by raising government spending, reducing taxes, increasing the money supply or reducing interest rates). Workers who are structurally unemployed have to be trained or retrained, or they have to move to locations where their experience, qualifications or skills are in demand. One solution to reduce this kind of unemployment could be the government's provision or

subsidisation of training programmes (Mohr *et al.*, 1995:611). This could possibly be achieved by giving unemployable young people marketable skills and offering tax incentives to companies that offer training to workers from targeted groups. A second approach could be to make the government the employer of last resort by offering public service jobs to workers who suffer from persistent unemployment (Kaufman, 1994:70).

4.4.3 Measuring unemployment

Unemployment can be measured in a number of ways. The way unemployment is measured determines the ultimate figure. The economic policies that are adopted to fight unemployment are based on the resultant figure obtained. Because the level of unemployment is such an important indicator to the health of the economy, the governments of industrialized countries have elaborate systems of measuring it (Routh, 1986:6). The accepted international norm focuses on the strict (or official or narrow) measures that include only workers still actively looking for work. The broad (or expanded) definition includes those segments of the labour force that say they would like to work but have become discouraged (Altman, 2003:159). The following methods are more or less standard methods.

4.4.3.1 Census method

The census method of measuring unemployment is the process of counting the number of people, at a given point in time in a country, and collecting information about their demographic, social and economic characteristics, such as their employment and unemployment status. The process includes the processing, analysis and dissemination of the data collected (Stats SA, 2000). In every population census there are some questions aimed at determining the economic status of the population. There are, however, shortcomings associated with this method as a measure of unemployment. The problem is that the focus of the census is on estimating the population rather than on obtaining information about employment profile of the population. Censuses are conducted periodically and have limited questions pertaining to unemployment (Slabbert, 2007:69). Further, their accuracy may be distorted by instructions given to those who do the counting. For example, people

working in subsistence agriculture could be classified as employed although they consider themselves as unemployed people (Barker, 1992:75).

4.4.3.2 Registration method

In this method, the unemployed are required to register at the Department of Labour. To encourage registration, only those who have registered qualify for unemployment benefits. However, there are some shortcomings in using this method of registration as it does not show the real number of those in unemployment. For example, there are those people who do not know about this registration processes and these offices and those who do not have any faith in being placed on a job list by the Department of Labour or maybe are discouraged from registering because they also did not qualify for unemployment benefits (Barker, 1992:77).

4.4.3.3 Survey method

In this method, a representative sample of the whole population is questioned regarding their work status. Surveys are taken on a sample basis and the sample results are meant to represent the whole population (Slabbert, 1997:67). Since 1996, Statistics South Africa has conducted October Household Surveys (OHS). The OHS is a survey based on a probability sample of a large number of households (Barker, 1996:84).

4.4.3.4 Differences

According to this method, unemployment is measured by subtracting the total number of persons actually employed in the formal sector from the economically active population. This method tends to exclude people active in the informal sector, except if presumed estimates are made for the number of people involved in these activities and if such persons are considered as actually having a job. The number of the economically active population is ascertained together with the number of jobs created in the economy. The unemployment figure is attained by subtracting the number of jobs in the economy from the total economical active population (Barker, 1992:76).

4.4.4 Causes of unemployment

The different conceptualisations of unemployment give insights into its causes. The literature on the causes of unemployment follows thinking from a said school of thought. There is exhaustive literature on this subject, and the aim of this section is to highlight some of the major schools of thought on the causes of unemployment.

4.4.4.1 Classical view

Unemployment in this view is due to wages being too high. More workers would like to be employed, but, at the present level of wages, employers cannot afford to take them on (Atkinson *et al.*, 1996:241). Under the classical view, unemployment is only a short run phenomenon. It is a result of people searching for a job, rigid wages and efficient wages. Imperfect market information causes the search period to be longer regardless of whether the person seeking for employment is a new entrant into the job market or is a victim of a plant closure (Atkinson *et al.*, 1996:241). The inflexibility in the money wage rate in the labour market also perpetuates the unemployment problem. The main cause for the downward inflexibility of the wage rate is the influence of trade unions and the minimum wage laws. Unions prevent any type of wage cut. The minimum wage laws have the same effect as union contracts in that they impose an artificial floor below which wage rates cannot fall. When firms cannot reduce the level of wages in line with production activities, they end up having to lay-off workers due to the cost burden (Kaufman & Hotchkiss, 2000:665).

4.4.4.2 Keynesian view

The Keynesian view regards unemployment as the result of insufficient expenditure, also referred to as demand deficiency. The Keynesian view contrasts the classical view on the importance of wage reduction during difficult times to curb unemployment. Their view is that if wages are reduced this would reduce aggregate demand reducing the demand for goods and services, causing firms to adjust their output downwards and thus reducing their demand for labour. Hence unemployment, in this view, is associated with too little aggregate demand for goods and services in the economy as a whole. Any of the elements that make up aggregate demand could be the cause of

demand deficiency; consumer spending may fall, investment spending may fall, government expenditure may be reduced, or net exports may decline. In each case, it is within the power of the government to act to reverse the trend, as only the state has an overview of the needs of the economy (Atkinson *et al.*, 1996:242).

The Keynesian view points to two possible causes of fluctuations in employment; firstly, unemployment can be caused by fluctuation in aggregate expenditure, and secondly, there could be shocks from the supply side of the economy which can be internal or external (Frederick & Fourie, 1999:362).

4.4.4.3 The monetarist view

Monetarists argue that, for any economy, at any given point in time, there is a natural rate of unemployment, given by the state of the labour market. The natural rate of unemployment represents the amount of the labour force that will remain unemployed even when the supply of labour is in equilibrium with the demand for labour, brought about by changes in the real wage rate (Atkinson *et al.*, 1996:243).

Monetarists also hold the view that involuntary unemployment is not a long run problem; the economy is inherently stable and self-stabilising and will return to full employment after a negative cyclical period. The normal market forces of demand and supply will soon eliminate this kind of unemployment. It follows that macro-economic policy will be ineffective in the long run as far as unemployment is concerned. Government policy becomes the cause of, and not the solution to sustained employment. It is considered to be a micro-economic problem, and efforts should concentrate on the improvement in the responsiveness of the labour market to reduce the natural rate of unemployment (Atkinson *et al.*, 1996:243).

Policy recommendations include the need to improve occupational and geographical mobility, reduction of trade union restrictive practices and the provision of suitable wage differentials within the labour market and between the employed and the unemployed (Atkinson *et al.*, 1996:243).

4.5 SUMMARY AND CONCLUSION

There is a body of knowledge underpinning the understanding of poverty. Arguments over how poverty should be conceptualised, defined and measured go beyond semantics and academic debates. Different theoretical interpretations of poverty can underpin each approach used in providing its understanding. Clarification of how poverty is defined is important as different definitions of poverty imply the usage of different criterion for measurement, as well as the use of different policy solutions for poverty reduction.

Poverty can be construed in a narrow or broad sense. In the narrowest sense it means lack of income. In a broader sense poverty can be seen as multidimensional, encompassing other issues such as housing, health, education, access to services and to other avenues of accessing resources. Poverty can also be construed in a minimalist or more expansive way: the most minimalist way is to consider people who are poor as being those who are unable to survive even in the short term, i.e. people who are utterly without the means of survival. A more expansive understanding of poverty is that people are poor if they are unable to participate in society as full citizens. The complex reality of poverty makes it difficult to capture the nature of this phenomenon by means of either a single unit or multidimensional definition or measure. The different existing definitions and measures takes into account an uncharacteristic nature of poverty. Each definition contains a part of truth but no single definition holds the full truth in defining poverty.

There are different approaches to the understanding of poverty. The absolute definition of poverty is usually based on the notion of subsistence. Subsistence describes the minimum basic needs to sustain life, and being below the subsistence level, therefore, is to be experiencing absolute poverty because one does not have enough to live on. The relative approach is a more subjective measure than the absolute approach. The relative definition of poverty is based upon a comparison between the standard of living of those who are worse-off and to that of the society.

The other way of looking at poverty is through the monetary approach. It identifies poverty with a shortfall in monetary income (or consumption) from some poverty line. The valuation of the different components of income or consumption is done at market prices, which requires identification of the relevant market and the imputation of monetary values for those items which are not valued through the market. There is the capability approach which focuses on indicators of the freedom to live a valued life. In this framework, poverty is defined as failure to achieve certain minimal or basic capabilities, where basic capabilities are the ability to satisfy certain crucially important functioning up to certain minimally adequate level.

Some scholars have also focus on poverty as the process by which poor people are excluded or marginalised from mainstream economic, social and political life. Social exclusion is different from other poverty-related concepts of poverty in that it focuses attention on social processes and social relations, and emphasises the ways in which adverse power relations, discrimination and identity can help to marginalise and impoverish people.

All of these approaches have their weaknesses, but go a long way in providing an understanding of what living in poverty entails. Each of the different approaches to poverty requires a set of methodological assumptions, which are often not obvious. Because of the major differences in definitions, the different approaches could have different implications with regards to policy.

There are important policy implications which follow each of the different approaches in addressing poverty, these are:-

- The use of a monetary concept suggests that the solution is generation of money incomes. The development of capabilities might be also recommended but only as a means of increasing money incomes among the poor.
- The use of the capability approach in general suggests emphasis on a wider range of mechanisms – the social provision of goods, improved allocation of goods within the family and the more efficient use of goods to achieve health, nutrition and education, as well as money income as a means for promoting some capabilities.

- Both monetary and capability approaches are fundamentally concerned with absolute poverty in most developing countries' contexts.
- In contrast, the relative element in poverty is at the forefront in the social exclusion approach. Indeed, for this it is unlikely that growth alone can ever eliminate social exclusion. Hence redistributive policies and structural policies get priority and growth may be irrelevant, and,
- The monetary and capability approaches are essentially individualistic. Group features are consequently often ignored in policies, which tend to be focussed on individual access to resources or transfers, and at best are regarded as instrumental. Yet in social exclusion particularly, and also to a considerable extent in participatory approaches, the prime focus is on group characteristics. For social exclusion therefore such policies as correcting racial discrimination or class barriers, or citizenship restrictions, are likely to form a central role.

An important issue is whether the different approaches identify broadly the same people as poor, because if they do, the theoretical differences may be unimportant in policy or targeting terms. Distinctions between what poverty means to different researchers may be largely irrelevant to those who live with the limitations that inadequate incomes impose, and debates about poverty should not obscure what it means to those who experience it. Poverty is seen in all its manifestations as a denial of opportunities and choices most basic to human development to lead long, healthy and creative lives, and to enjoy a decent standard of living. However, there is no single, universally accepted definition of poverty. People living in and out of poverty may all hold conflicting views on the definition, cause, effect and solution to the problem of poverty.

Absolute definitions of poverty necessarily involve relative judgements to apply them to any particular society, and relative definitions require some absolute core in order to distinguish them from broader inequalities. Both definitions seem to have disadvantages, and if these definitions are used as a basis for analysis, measurement and ultimately political action, their disadvantages should be avoided, or there should rather be capitalised on their advantages.

There are various ways to measure poverty. The main measures of poverty, which are used in this study, are the household subsistence level, the headcount index, poverty gap ratio and the dependency ratio. For the purpose of this study, poverty is defined as the inability to attain a minimal standard of living. The standard of living is usually expressed in terms of household income and expenditure. Because this measure does not capture dimensions of welfare such as health, life expectancy, literacy, and access to public goods, consumption based poverty measures are usually supplemented with other non-income measures such as unemployment, education, urbanisation, housing, health, etc. These additional measures are beyond this study.

The HSL was used as a poverty line for this study. The HSL makes it easy to calculate the subsistence for individual households. A breakdown of the subsistence level for different age groups of different sexes is given, as well as certain costs for a household as a whole. By calculating the HSL for an individual household, and comparing it with the combined income of the different members of the same household, the degree of poverty can be measured at micro or household level

The poverty gap will be used as a measure of an individual household's income shortfall. Each household will have an individual calculated poverty gap. The mean of all households' poverty gaps can be taken as the poverty gap for the population concerned. The mean of all individual poverty gap indexes will be the poverty gap index for the population concerned.

Using the same analogy as above, the headcount index for the community will be the mean of all individual household's indexes i.e. all households who fall below their individual calculated poverty line (HSL).

With reference to unemployment, the unemployed are those people within the economically active population who: did not work during the seven days prior to the interview; want to work and are available to start within a week of the interview; and have taken active steps to look for work or to start some form of self employment in the four weeks prior to the interview.

There are different types of unemployment. The causes differ with the type and therefore the cure as well. There is frictional unemployment which is a result of normal labour movement, structural unemployment which can persist even in the long run, cyclical unemployment associated with the changes in the demand and output and lastly there is seasonal unemployment which can be anticipated and therefore contingency plans made. Different methods are used to measure unemployment and none is without its shortcomings. The census method of measuring unemployment is the process of counting the number of people at a given point in time in a country, and collecting information about their demographic, social and economic characteristics such as their employment and unemployment status. The registration method of accounting for the unemployed has some shortcoming. In this method, the unemployed are required to register at the Department of Labour. There are people who do not know about this registration processes and these offices as well as those who do not have any faith in being placed on a job list by the Department of Labour or maybe are discouraged from registering because they also did not qualify for unemployment benefits.

The unemployed can also be accounted for using the survey method: surveys are taken on a sample basis and the sample results are meant to represent the whole population. Finally there is the differences method: according to this method, unemployment is measured by subtracting the total number of persons actually employed in the formal sector from the economically active population.

This method tends to exclude people active in the informal sector, except if presumed estimates are made for the number of people involved in these activities and if such persons are considered as actually having a job.

Poverty is not the same as inequality. Inequality shows relative living standards of the entire population, not only the living standards of the poor. Although poverty and inequality are related one does not assume the other. Even though poverty does not assume inequality, measures of inequality are useful in the evaluation of relative poverty. The question on whether inequality should encapsulate ethical concepts such as the desirability of a particular system of rewards or simply mean differences in

income is the subject of much debate. There are many ways of measuring inequality, all of which have some intuitive or mathematical appeal. The Lorenz curve shows the distribution of income earned over a given period in relation to its recipients, whereas the Gini coefficient measures the degree of inequality based on the areas on the Lorenz curve. The human development index (HDI) is a composite relative index which attempts to quantify the extent of human development within a community.