

An analysis of planning intervention in the formalisation of informal settlements in Ikageng Township within the Tlokwe Local Municipality

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It all starts here TM

DEDICATIONS

This study is dedicated to the two women who fought hard to build a great foundation in me. This is for you Mama, Anne Taruza (1961-2013) and Grandma Gladys Mushambi.

The study is also dedicated to my siblings who allowed me to leave them behind and pursue my studies.

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For Your faithfulness, take all the Glory Abba.

Thank you Lord.

ABSTRACT

The proliferation of informal settlements is one of the major challenges faced by developing countries. In South Africa, informal settlements exist as the remnants of the apartheid spatial segregation and the inability of the housing sector to cope with the unprecedented rate of urbanisation. The government has responded to this challenge by implementing various policies and legislation.

Today, the inhabitants of informal settlements continue to live in poverty, without adequate basic services, lack of access to employment opportunities, and they are faced with disaster risks as well as threats of evictions. A case study of the informal settlements in Ikageng Township within the Tlokwe Local Municipality provides a basis for the analysis of government intervention in addressing the challenge of informal settlements through the use of planning instruments.

The study is based on literature and empirical analysis. The literature review is based on an analysis of the spatial aspects of housing for the poor, an assessment of how low income housing is provided in response to the needs of the poor, an examination of various aspects of informal settlements and the policy implications relating to addressing informal settlements also constitute part of the literature review. The empirical analysis focuses on the various policies and legislation implemented by the government, the living conditions of the inhabitants in the informal settlements under study and an analysis of how the three spheres of government have responded in addressing the informal settlements in Ikageng.

The Analytical Hierarchy Process (AHP) is utilised as a tool to measure the progress of the programme focusing on the local, provincial and national spheres of government. The results indicate that the North West Provincial Government ranked lowest in contributing to the upgrading of informal settlements in Ikageng as compared to the other two spheres of government. The stagnation in the upgrading of informal settlements in Ikageng is a result of lack of capacity and failure of the North West Provincial Government to fund and steer the upgrading process.

It is concluded that the lack of horizontal and vertical integration in spatial planning and programme implementation caused loopholes in the upgrading of informal settlements thus the stagnation in the programme. It is also concluded that the primary focus of the upgrading of informal settlements is on meeting targets in terms of quantity and less attention is paid to improving the lives of the inhabitants.

It is therefore recommended that the government adopts the formalisation approach to informal settlement intervention with greater emphasis on practical basic services delivery and full title ownership. The municipality should also consider the amendment of the IDP to include a section that focuses entirely on informal settlements and the formalisation programme. The formalisation approach should also include the revision of the roles of each sphere of government in housing delivery through the transfer of the housing function from the provincial government to the municipalities. It is also recommended that the government maximises on community engagement, communication, capacity building and collaboration with key role players in the planning field and the private sector thus improving the lives of the inhabitants and promoting the development of sustainable human settlements.

Key Terms

- Community participation
- Formalisation
- Informal settlements
- Planning intervention
- Spatial integration
- Upgrading
- Urban form
- Urban fragmentation

OPSOMMING

Die verspreiding van informele nedersettings is een van die groot uitdagings wat ontwikkelende lande in die gesig staar. In Suid Afrika het informele nedersettings ontstaan as oorblyfsels van die ruimtelike segregasie tydens apartheid en weens die behuisingsektor se onvermoë om met die ongekende hoë tempo van verstedeliking te hanteer. Die regering het gereageer op hierdie uitdaging deur die implementasie van beleide en wetgewing.

Vandag leef die inwoners van informele nedersettings steeds in armoede, sonder voldoende basiese dienste, 'n gebrek aan toegang tot werksgeleenthede, moontlike konfrontasies met ramp risiko's en die bedreigings van uitsettings. 'n Gevallestudie van die informele nedersettings in Ikageng, binne die Tlokwe Plaaslike Munisipaliteit, dien as basis vir die ontleding van die regering se intervensie deur middel van beplannings instrumente om die uitdagings wat informele nedersettings bied, aan te spreek.

Die studie is gebaseer op literatuur en empiriese analise. Die literatuuroorsig ontleed die ruimtelike aspekte van behuising vir armes, wat 'n evaluering behels rakende die manier waarop daar lae inkomste behuising voorsien word in verhouding tot die behoeftes van armes asook 'n ondersoek van die verskillende aspekte van informele nedersettings en die beleidsimplikasies wat dit inhou. Die empiriese ontleding fokus op die verskeie beleide en wetgewing geïmplementeer deur die regering, die inwoners van die informele nedersettings wat deelmaak van die gevallestudie se lewensomstandighede, asook 'n analise rakende die reaksies van die drie sfere van die regering om die informele nedersettings aan te spreek.

Daar word tot die gevolgtrekking gekom dat die gebrek aan horisontale en vertikale integrasie in ruimtelike beplanning en program implementering gapings veroorsaak in die opgradering van informele nedersettings en dus ook 'n stagnering in die program. Vervolgens word geargumenteer dat die primêre fokus van die opgradering van informele nedersettings die bereiking van doelwitte is in terme van kwantiteit terwyl daar min aandag geskenk word aan die verbetering van lewensomstandighede van die inwoners. Dus, is die opgradering benadering nie die beste geskik vir die aanspreek van informele nedersettings in Ikageng nie.

Daar word dus aanbeveel dat die regering die formalisering benadering aanneem wanneer dit kom by informele nedersettinge intervensie met die beklemtoning op die wysiging van die Tlokwe Behuising Sektor Plan en die IDP wat 'n afdeling insluit wat alleenlik fokus op informele nedersettings en die opgraderingsprogram. Die formalisering benadering hoort ook 'n hersiening van die rolle van elke sfeer van regering rakende die voorsiening van behuising in te sluit deur die oordrag van die behuisingsfunksie van die provinsiale regering tot die munisipaliteite. Daar word ook aanbeveel dat die regering maksimaliseer op gemeenskap

betrokkenheid, kommunikasie, kapasiteitsbou en samewerking met sleutel belangegroepe in beide die beplanningsveld en private sektor om ten einde die lewens van die inwoners te verbeter asook die bevording van volhoubare menslike nedersettinge.

Sleutelwoorde

- Gemeenskapsdeelname
- Informele nedersettings
- Beplanning ingryping
- Opgradering
- Formalisering
- Stedelike vorm
- Stedelike fragmentasie
- Ruimtelike integrasie

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LIST OF ACRONYMS AND ABBREVIATIONS

AHP	Analytical Hierarchy Process
BNG	Breaking New Ground
BRT	Bus Rapid Transportation
CBD	Central Business District
CSD	Commission for Sustainable Development
CSIR	Council for Scientific and Industrial Research
DEAT	Department of Environmental Affairs and Tourism
DHP	Department of Housing and Planning
DHS	Department of Human Settlements
DoH	Department of Housing
DoT	Department of Transport
DRDLR	Department of Rural Development and Land Reform
EC	Eastern Cape
EHP	Emergency Housing Programme
EIPs	Environmental Impact Plans
EMF	Environmental Management Framework
EPHP	Enhanced People's Housing Process
FS	Free State
GT	Gauteng
HDA	Housing Development Agency
HDA Act	Housing Development Act (23 of 2008)
HSDG	Human Settlements Development Grant

IDP	Integrated Development Plan
IEM	Integrated Environmental Management
IGRF Act	Intergovernmental Relations Framework Act (13 of 2005)
Indic	Indicator
IRDP	Integrated Residential Development Programme
ISP	Individual Subsidy Programme
ISUP	Informal Settlement Upgrading Programme
ITP	Integrated Transport Plan
IUDF	Integrated Urban Development Framework
IWMP	Integrated Waste Management Plan
KZN	KwaZulu-Natal
LP	Limpopo
MDGs	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MP	Mpumalanga
MTSF	Medium Term Strategic Framework
NC	Northern Cape
NDHS	National Department of Human Settlements
NDP	National Development Plan
NEMA	National Environmental Management Act (107 of 1998)
NSDP	National Spatial Development Plan
NUSP	National Upgrading Support Programme
NW	North West

NWDACERD	North West Department of Agriculture, Conservation, Environmental and Rural Development
NWDP	North West Development Plan
NWPG	North West Provincial Government
NWPSDF	North West Provincial Spatial Development Framework
NWPDP	North West Provincial Development Plan
NWRS	National Water Resource Strategy
NWU	North West University
Ob.	Objective
PIE (Act)	Prevention of Illegal Evictions from and Unlawful Occupation of Land Act (19 of 1998)
PISA	Prevention of Illegal Squatting Act (52 of 1952)
PSDF	Provincial Spatial Development Framework
RDP	Reconstruction Development Programme
RHP	Rural Housing Programme
SANS	South African National Standard
SANSA	South African National Space Agency
SAPS	South African Police Services
SDA	Service Delivery Agreement
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SMME	Small Medium and Micro Enterprises
SPLUMA	Spatial Planning and Land Use Management Act (16 of 2013)
Stats SA	Statistics South Africa

TCC	Tlokwe City Council
THP	Triple Helix Partnership
TLM	Tlokwe Local Municipality
UISP	Upgrading Informal Settlement Programme
UISP	Upgrading of Informal Settlement Programme
UN	United Nations
UN-HABITAT	United Nations Human Settlements Programme
USDG	Urban Settlements Development Grant
WC	Western Cape
WPH	White Paper on Housing
WPLG	White Paper on Local Government
WPSPLUM	White Paper on Spatial Planning and Land Use Management
WSDP	Water Strategy Development Plan

GLOSSARY

Term	Definition and/or description
Accessibility	The measure of the ease of reaching opportunities, activities, people, resources and information (jobs, shops, leisure activities) or the ease of being reached by contacts
Agency	Housing Development Agency
Basic services	The provision of potable/improved water, adequate sanitary facilities and domestic energy supply
Bus Rapid Transportation	A high quality bus based transit system that delivers fast, comfortable and cost effective urban mobility through the provision of integrated right of way infrastructure, rapid and frequent service, modern stations, on-board fare collections and high-tech vehicles.
Children	Anyone below the age of 17
Constitution	Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
Constitutional right	A right as stipulated in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
Densification	Increase in the concentration of houses and/or land-uses.
Economic opportunities	Prospects of improving a person's or a community's financial conditions mainly through access to employment.
Erf (plural erven)	A plot of land, usually urban, marked off for building purposes
External finance mechanisms	Ways by which funds for development purposes are obtained external sources, that is, sources other than the institution itself.
Floodline	An area where a formal flood scheme is used to accurately predict the likelihood and timing of flooding.
Formal housing	Housing that is provided in accordance with the stipulated standards for building materials, engineering services, site definition and identifiable location.
Formalisation	(a) The process of making informal settlements formal (b) The legal processes where townships are created (township establishment) with formal services through which residents obtain formal security of tenure and normally includes the development of top structures

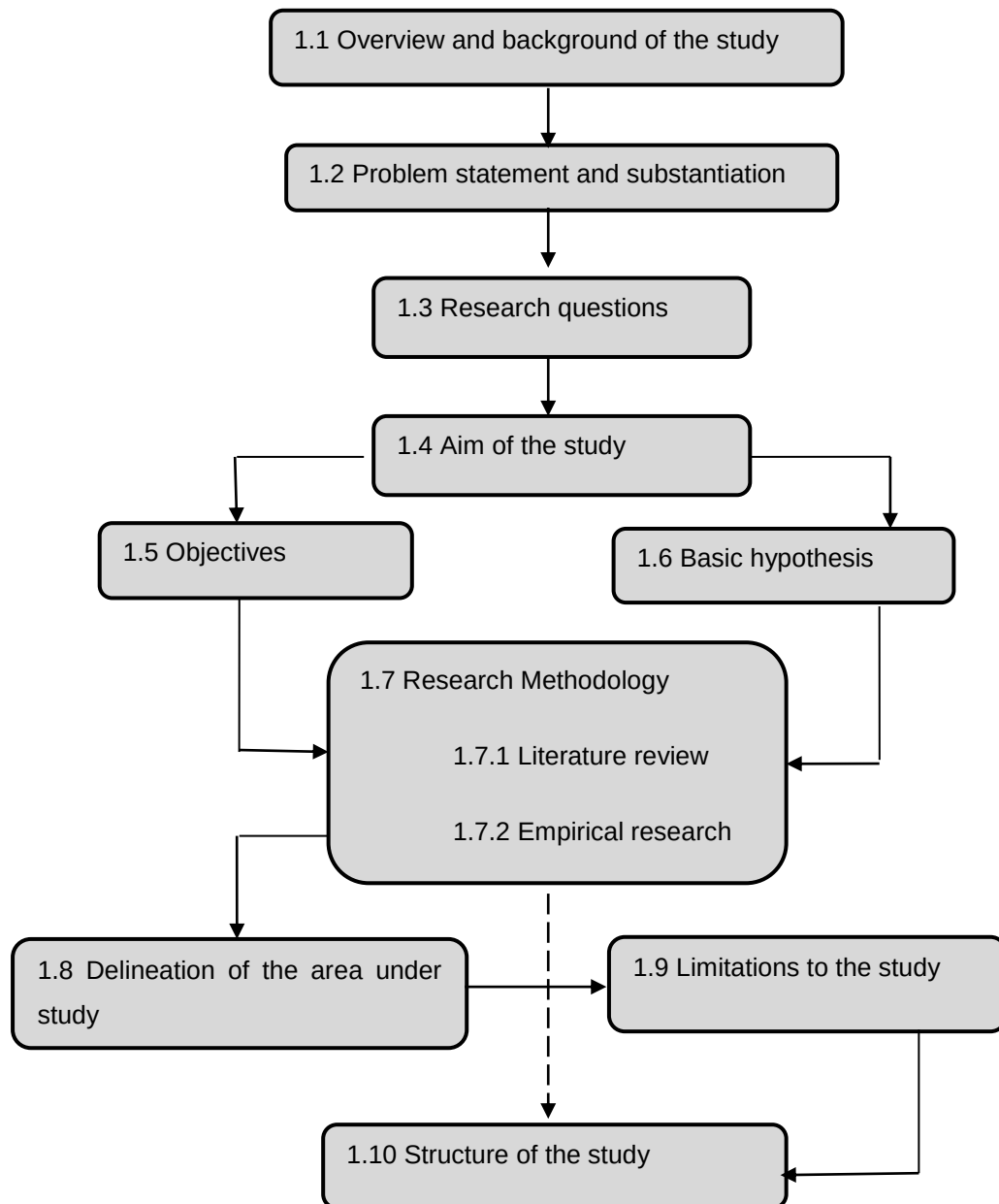
Functional integration	Linkages and coordination between different services, sectors or departments that ensure that a broader vision, strategy and programmes are established.
Household head	The person (male or female) who assumes the responsibility of the household, that is, the chief economic provider, the chief decision maker, or the person designated by other members as the head of the household
Housing development	the establishment and maintenance of habitable, stable and sustainable public and private residential environments to ensure viable households and communities in areas allowing convenient access to economic opportunities, and to health, educational and social amenities
Ideal urban form	One that addressed all the components of an urban form in a sustainable manner.
Informal settlement	An unplanned area recognised by: insecure residential status, inadequate access to safe water, inadequate access to sanitation and other basic infrastructure and services, poor structural quality of housing, chaotic design where a proper street outline cannot be defined and overcrowding
Inhabitants	The people who live in the informal settlements
Integrated Development Planning	Planning for development that co-ordinates and aligns many sectoral functions within the local municipal landscape from different levels of government
Internal finance mechanisms	Ways by which funds for development purposes are obtained from the institutions revenue or savings.
Low income housing	Any housing that is generally limited to occupancy by persons whose family income does not exceed certain pre-set maximum levels.
Mixed use development	The location of residential, commercial, industrial and environmental land-uses in close proximity to one another.
Mobility	The ability to move at an acceptable speed and travel time without undue interruption and at acceptable levels of comfort and safety.
Organ of state	An entity as defined in section 239 of the Constitution
Owner	The registered owner of land and includes an organ of state
Peripherisation	The location of low income housing on the peripheries/margins of a city or town

Person in charge	A person who has or at the relevant time, had legal authority to grant permission to enter or reside upon the relevant land. Land includes a portion of land
Planning instruments	Statutory instruments that articulate the government's position on planning and development related issues and provide for the protection and management of those issues within the planning and development system
Planning intervention	Government intervention in addressing informal settlements through the use of planning instruments
Political will	The extent to which politicians are will to commit to a particular concept
Poverty	The deprivation in well-being and includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity
Security of tenure	An agreement between individuals or groups to land and residential property, which is governed and regulated by a legal and administrative framework. It represents the various aspects of tenure provision which include permission to occupy, recognition through town planning scheme or by-law and formal freehold tenure of a stand in a formally established township.
Self-built housing	Housing built by the owners themselves using locally produced resources to reduce costs
Service Delivery Agreement	An agreement between the government and service provider or financing agents and the roles and responsibilities of each party.
Shebeen	An informal licensed or unlicensed drinking place in a township
Social facilities	Facilities that provide basic amenities to communities which cannot be supplied directly to the individual dwelling unit and are thus supplied to communities in collective fashion within the public environment. These include schools, hospitals/clinics, parks, community halls, libraries among others.
Spatial integration	The provision of residential development closer to facilities and job opportunities, and reduce the costs of development by exploiting surplus bulk infrastructural capacity.
Spatial planning	Planning of the way in which different activities, land uses and buildings are located in relation to each other, in terms of distance between them, proximity to each other and the way in which spatial considerations

	influence and are influenced by economic, social, political, infrastructural and environmental considerations.
Spaza shops	Mini grocery shops found in townships
Sustainable Development	Development that meets the needs of the present without compromising the ability of the future generations to meet their own needs
Sustainable Human Settlements	Well-managed entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity
Triple Helix Partnership	The concept of having the three spheres of business, higher education and public institutions working together to obtain an enhanced outcome in the form of innovative new products and solutions.
Unlawful occupier	A person who occupies land without the express or tacit consent of the owner or person in charge or without any other right in law to occupy such land
Upgrading	A staged process of improvement of quality of life in informal settlements, based on incremental provision of basic services and tenure.
Urban decay	The process whereby a previously functioning city, or part of a city, falls into disrepair and decrepitude.
Urban fabric	The manner in which buildings, roads and open spaces relate to one another.
Urban form	The shape of urban settings in terms of the defining characteristics such as the design and structure, where development occurs, what type of developments are likely to realize, what type of spaces are available and the interconnection of these areas.
Urban fragmentation	The spatial separation of residential areas from social facilities and economic opportunities.
Urban Sprawl	The uncontrolled expansion of urban areas through the spreading of urban developments such as houses on undeveloped land near the city.
Urbanisation	Increase in the number of people living in cities and towns against those in rural areas.

CHAPTER 1: INTRODUCTION TO THE STUDY

The diagram below illustrates the graphical overview of Chapter 1



1.1 Overview and background of the study

Globally, the issue of informal settlements is regarded as one of the major challenges in the field of planning. Approximately 33% of the urban population in the developing world, that is, 863 million people, live in informal settlements. The number is projected to double by 2030 if developed nations do not reverse course and start giving serious attention to this issue (UN-Habitat, 2015a). Addressing informal settlements is therefore placed at the core of planning, drawing the attention of international organisations such as the United Nations and the World Bank.

Over the years, attempts have been made to address the proliferation of informal settlements at local, national and international levels. The most recent strategy is the implementation of Millennium Development Goals (MDGs) Goal 7 Target 11 which aims to “have achieved significant improvement in the lives of at least 100 million slum dwellers by 2020” (UN-Habitat, 2003a:3). In response, countries such as Timor-Leste, Mongolia, Tanzania and Nigeria among others have embarked on upgrading strategies, upgrading and investment plans and the promotion of alternatives to forced eviction programs (UN-Habitat, 2010:22).

Like many countries across the world, South Africa is marred by the existence of informal settlement. These informal settlements are a manifestation of the legacy of apartheid which left divided cities, townships with minimal facilities and services, low-cost areas with rows of standardised houses, rampant urban sprawl, high transportation and environmental costs, widespread poverty and high levels of unemployment (van Schwalkyk, 2012:2). Their proliferation is exacerbated by the mismatch between the high rate of urbanisation and the capacity of the housing sector to provide adequate housing for the current urban population.

Since the attainment of independence in 1994, the government of South Africa is committed to addressing the housing challenges faced by the poor through the implementation of a vast array of programmes, policies and legislation. These include, among others, the Reconstruction Development Programme (RDP) in 1994, the Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlements (2004), the National Housing Code (2000 and 2009), the National Development Plan (2010) and the Delivery Agreement: Outcome 8 (2010).

Today, the 2700 informal settlements across the country are the homes of approximately 1.1 million households (SAIRR, 2012:620). The increase in the number of the settlements from 300 settlements in 1994 has imposed a large burden on the government whilst its

intervention measures have become subject to scrutiny. Though this study recognises and appreciates the goals set in the newly implemented Medium Term Strategic Framework (MTSF) (2014-2019), the focus of the study is on the performance of government intervention in respect of the specific goal in the MTSF of “eradicating informal settlements by 2014”. An investigation in the upgrading of informal settlements in Ikageng within the Tlokwe Local Municipality (TLM) provides a broader view of government intervention in addressing informal settlements at local level.

1.2 Problem Statements and Substantiation

The proliferation of informal settlements in Ikageng Extensions 6, 7, 11 and 12, within TLM, is a clear indication of the dire need for low income housing within the township. Typical to informal settlements, the inhabitants in Ikageng lack access to basic services, secure tenure and social and economic facilities. The majority of the informal settlements in this area are located on marginal land underlain by dolomite, reserved for high voltage electricity servitude or on land which forms part of a 1:100 floodline.

TLM in conjunction with the North West Provincial Government (NWPG) implemented an Informal Settlement Upgrading Programme (ISUP) in 2011 to formalise the informal settlements. To date, the inhabitants continue to live in poor conditions with minimal or no basic services. On the other hand, the government continues to provide formal housing but with stagnation in the area of informal settlement intervention.

It is in this regard that the underlying principles and practices relating to the government’s intervention in informal settlements become questionable. The lack of urgency officially afforded to the informal settlement question in Ikageng is also reflected by the absence of debates and research directly addressing the phenomenon. The present research becomes a necessity as a means of investigating, analysing and understanding the roles and responsibilities of the government and the opportunities that exist in addressing the challenge of informal settlements.

1.3 Research questions

- What is the current state of informal settlements in Ikageng?
- What factors are hindering the completion of the upgrading programme in Ikageng?
- To what extent are government planning instruments effective in addressing the informal settlements in Ikageng?

- What is the potential of planning instruments as strategies for the formalisation of informal settlements?
- What are the opportunities that exist to curb the challenges in the formalisation of the informal settlements?

1.4 Aim of the study

- Investigating the effectiveness of government intervention in the formalisation of informal settlements through the application of planning instruments

1.5 Objectives

- To understand how informal settlements manifest spatially and how they can be addressed through spatial planning
- To explore the various ways by which low income housing is delivered in response to the needs of the poor
- To examine the current social, economic and environmental conditions of the informal settlements in Ikageng
- To study the regulatory framework for planning intervention in the formalisation of the informal settlements and determine if they are adequately reflected in the development plans and policies
- To understand and evaluate the role of the three spheres of government in the informal settlement intervention programmes.
- To proffer effective strategies and practices to help curb the challenges in the formalisation of the informal settlements.

1.6 Basic Hypothesis

The government has not been successful in the implementation of the ISUP in order to address the informal settlements in Ikageng. It is also hypothesised that the upgrading approach has contributed largely to the stagnation in the formalisation of the informal settlements.

1.7 Research Methodology

The research methodology is based on literature analysis and an empirical study.

1.7.1 Literature Analysis

The theoretical part of the research is based on the use of text books, journals, internet material and databases that focus on: low cost housing provision; informal settlements formation, growth challenges and benefits; poverty; security of tenure, urban fragmentation; responses to the issue of informal settlements, sustainable human settlements, government intervention, upgrading of informal settlements, amongst many others.

Various policies, legislation, plans and strategies were consulted. These include, among others: the Tlokwe Municipality Integrated Development Plan (2014-2015), the National Housing Code (2009), the Housing Act No. 107 of 1997, the Breaking New Ground Policy Document (2004), the Spatial Planning Land Use Management Act (SPLUMA) No.16 of 2013, the Tlokwe Housing Sector Plan (2012), the Spatial Development Frameworks and Outcome 8.

1.7.2 Empirical research

The empirical study was conducted through gathering data regarding the existing phenomena as well as exploring the causation in order to find underlying principles. The study was conducted using both the quantitative and qualitative approaches. Questionnaires (provided in Annexure A) were administered to the inhabitants of the informal settlements. The drafting of the questionnaires and evaluation of the data gathered from administering the questionnaires was carried out with the assistance of the Department of Statistics and Consultation Services at the North-West University.

Semi-structured interviews were conducted with the ward councillors, Department of Human Settlements (DHS) and the Town Planning Department from the Tlokwe City Council (TCC) as well as the AGES Group. The key informants preferred not to have their names published in this study hence the name of the municipality was used as the source of the information.

1.7.2.1 Sampling

Systematic random sampling was used to select the inhabitants that were to respond to the questionnaires. The exact number of dwellings within each settlement could not be determined necessitating the use of the transit survey technique to estimate the number of

the inhabitants to be used as respondents. Figure 1-1 illustrates the distribution of the sample population.



Figure 1-1: An example of the sample population distribution

Source: Own Construction (2015)

*it should be noted that the image does not indicate the exact locality of the respondents but simply shows their distribution of the households for which the questionnaires were administered in principle.

1.8 Delineation of the study area

The informal settlements under study are situated on the west of Potchefstroom within the Ikageng Township. Figure 1-2 indicates the locality of the informal settlements being investigated.

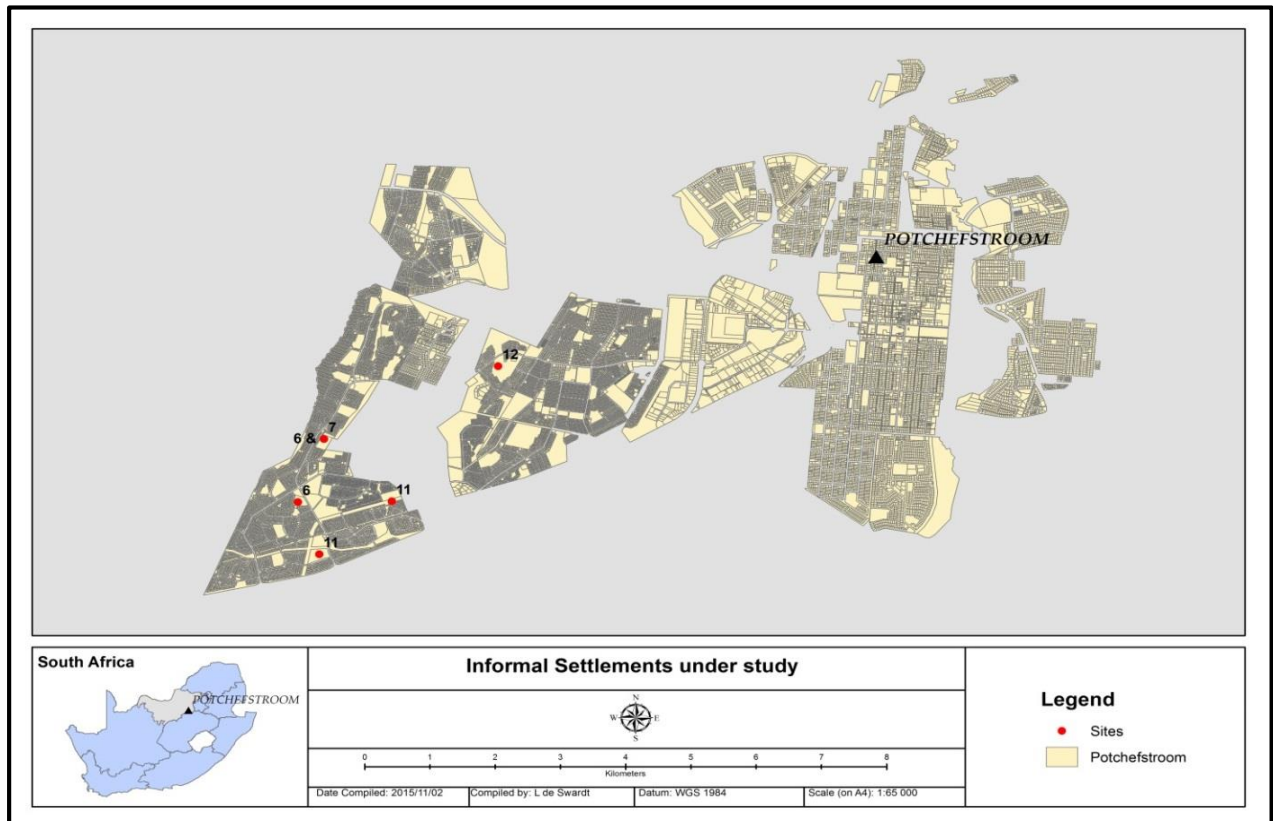


Figure 1-2: Informal settlements under study

Source: de Swart (2015)

Further details regarding the location of the informal settlements are provided in sections 5.2 and 5.4 of the study.

1.9 Limitations to the research

The study was limited to informal settlements located on the periphery of a high order secondary city in a rural province. Therefore, it is important to note that the conclusions reached and the recommendations proffered may not apply to all informal settlement intervention programmes in South Africa but can be used to guide the implementation of programmes in municipalities which fall within the same category as Tlokwe.

1.10 Structure of the study

The rest of the study is made up of the following 7 chapters:

- **Chapter 2: Understanding housing and the urban form** is the first part of the literature study. The focus of the chapter is on exploring the relationship between housing development and the urban form. The chapter provides the explanations for the location of informal settlements and the spatial opportunities that exist to incorporate the informal settlements into the broader urban fabric.
- **Chapter 3: Understanding informal settlements** constitutes the second part of the literature study. The chapter provides insight on the provision of low income housing in response to the needs of the poor. The chapter addresses the provision of formal and informal housing, the causes and characteristics of informal settlements and the different approaches that have been implemented to address these settlements.
- **Chapter 4: Policies and Legislation** constitutes part of the literature study as well as the first part of the empirical study. The chapter provides an analysis of the policies, legislation, plans and strategies that govern the interventions by government in addressing informal settlements.
- **Chapter 5: A case study of the informal settlements in Ikageng** forms part of the second and principal component of the empirical study. The chapter provides an analysis of the characteristics of the informal settlements and the living condition of the inhabitants. The chapter is based on the responses from the questionnaires and key informant interviews hence the analysis was carried with the assistance of the Department of Statistics and Consultation Services.
- **Chapter 6: An analysis of planning intervention in addressing informal settlements.** The focus of the chapter is on assessing the performance of the three spheres of government in the upgrading of informal settlements at local, provincial and national level. The analysis of government intervention through the use of the Analytical Hierarchy Process was also carried out with the assistance of the Department of Statistics and Consultation Services.
- **Chapter 7: Conclusions.** The chapter provides the conclusions of the study.
- **Chapter 8: Recommendations.** The chapter provides recommendations that can aid in improving government intervention in the formalisation of informal settlements.

Figure 1-3 illustrates the structure of the study

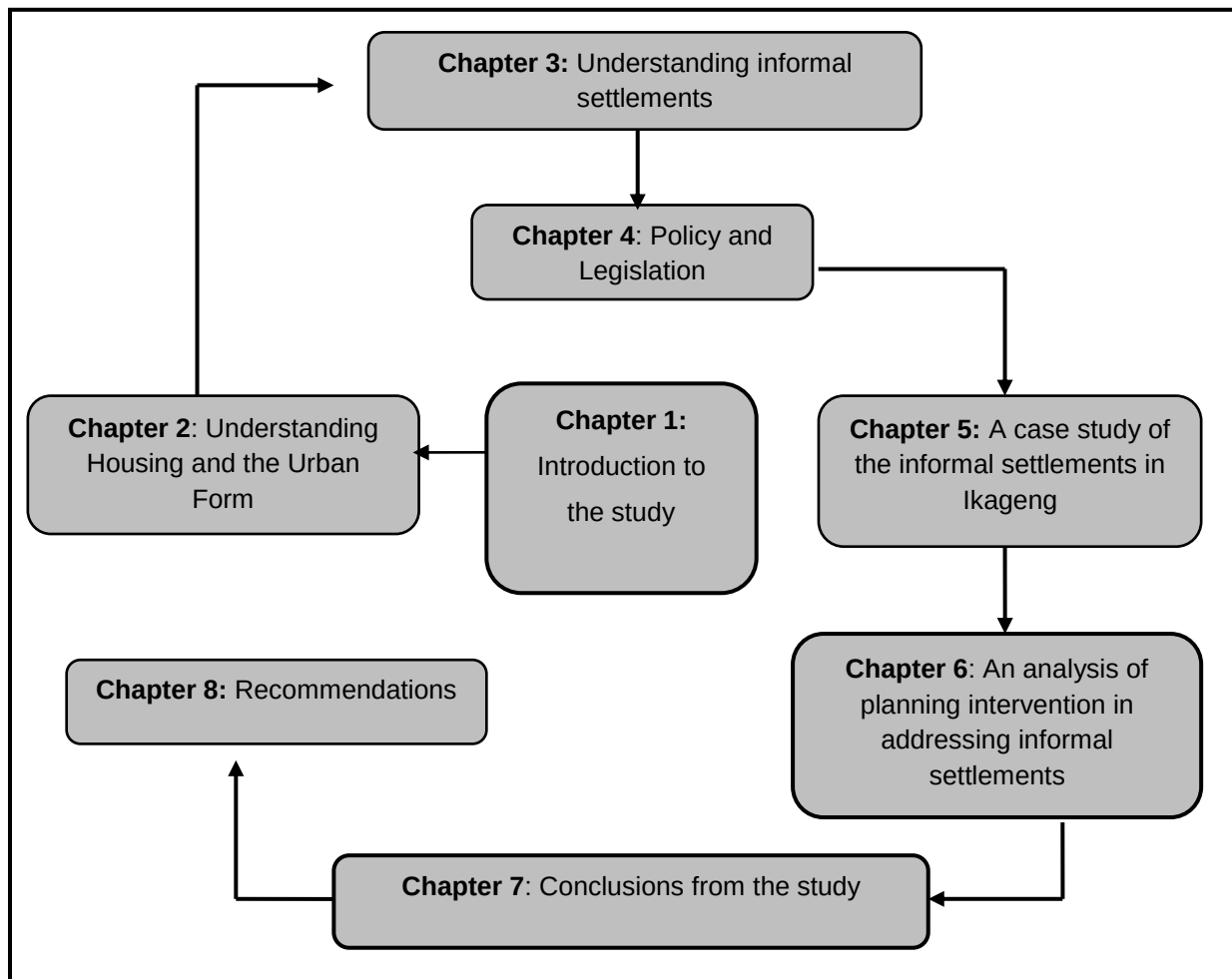
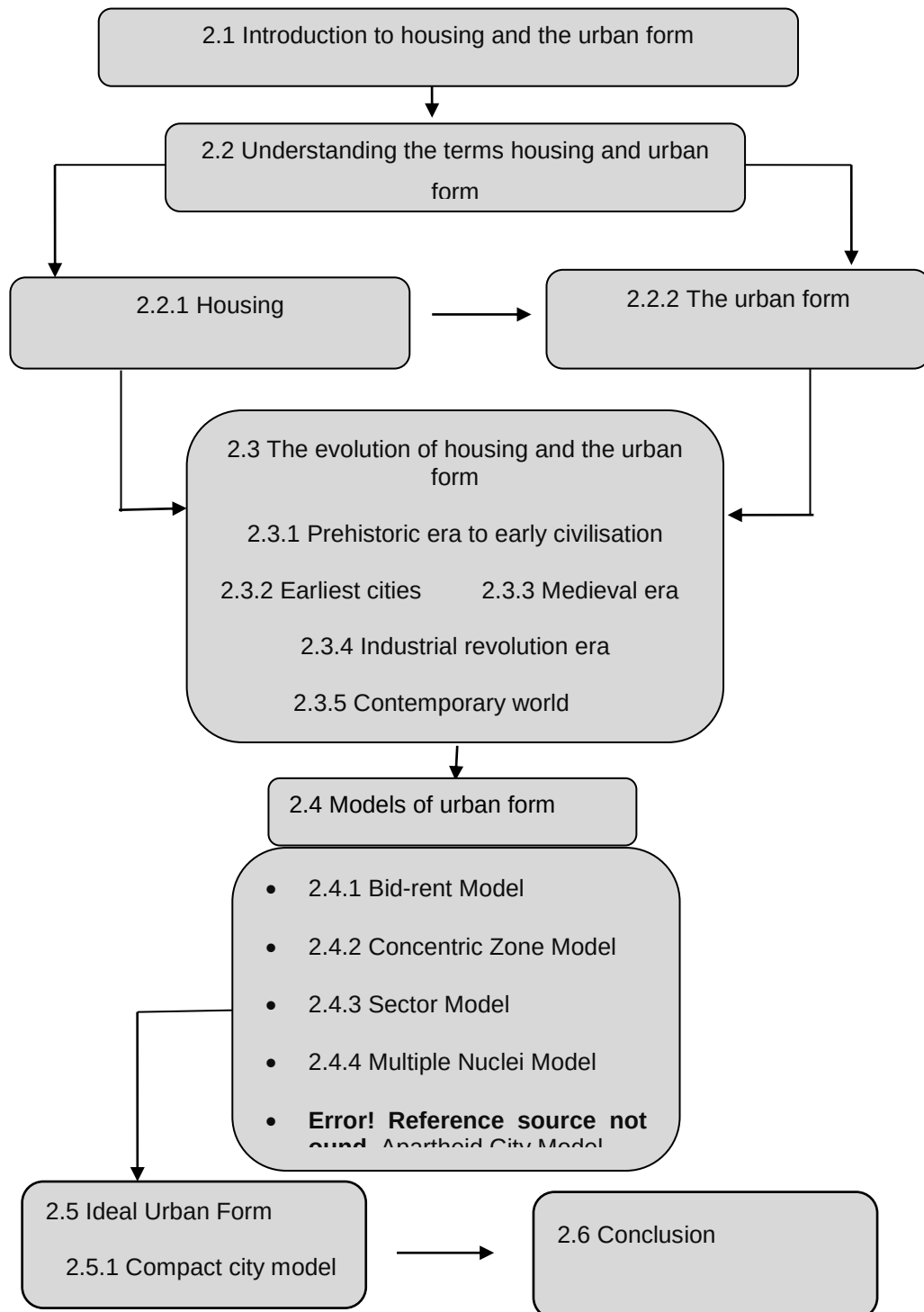


Figure 1-3: Structure of the study

Source: Own Construction (2015)

CHAPTER 2: UNDERSTANDING HOUSING AND THE URBAN FORM

The diagram below illustrates the graphical overview of Chapter 2



2.1 Introduction

Informal settlements do not occur in vacuum (UN- HABITAT, 2003:17) but manifest spatially. The focus of this chapter is on providing the basis for understanding how informal settlements manifest in spatial terms through an investigation of the relationship between housing and the urban form. This is achieved by understanding the concepts of housing and the urban form, and how they have evolved from a historical perspective.

To this end, an analysis of the models of urban form is necessary to explain the relationship between housing development and urban form. The concepts relating to the ideal urban form indicate opportunities that exist to address the anomalies relating to housing development and the urban form thus guiding the appropriate interventions for informal settlements through spatial planning.

2.2 Understanding the key terms

2.2.1 Housing

“Housing is, as I have found out during the past two years, about everything but houses! It is about the availability of land, about access to credit, about affordability, about basic services, about economic growth, about social development, about the environment. Some elements of all these have to be in place before the first brick of a house is even laid.” Former Minister of Housing, Ms Sankie Mthembi-Mahanyele in Cohen (1997:137)

The multi-dimensional and complex nature of housing influences the myriad of definitions and perspectives proffered by different authors, theorists and institutions. Housing is a building or shelter in which people live (Collins Dictionary: 2015). The recognition of housing as shelter, that is, one of the basic commodities expected to be available to all citizens, has been used as the basis of recognising the significance of adequate housing as a basic human right.

Bourne (1981:14) adds that housing is a physical facility unit or structure which provides shelter for its occupants, but also consumes land and demands the provision of physical services such as water and sewerage, and social services such as schools, clinics and recreational facilities to households. This definition introduces the concept of human settlements through the recognition of the interconnectedness of the physical constructs within a neighbourhood, auxiliary services and community facilities which are necessary to human well-being. This definition forms the crux of this chapter

John Turner views housing as a verb which is described as the process or activity of housing in which people engage (Turner, 1972:151). Lindamood (1974:22) supports this assertion by defining housing as a process that involves the provision of houses by market mechanisms and the acquisition of houses by particular families. Lindamood's definition introduces the aspect of market mechanisms which are the instruments by which housing is produced and delivered. The definition also reflects the final stage of the process, which is the procurement and ownership of the houses. Understanding housing as a process of providing the product or commodity to the people propels the recognition of the concept of housing as a social and economic policy imperative.

Taking into cognisance the above mentioned definitions, among others, housing can be described as:

- A physical facility, unit or structure
- A package or bundle of services
- A basic right
- An activity of providing housing
- A social or collective good
- An economic good or commodity
- A key sector of the economy
- An asset and investment opportunity
- A process of enablement and community development
- A vital part of integrated development planning
- All of the above at the same time

Sources: South Africa (1997a: Preamble), United Nations (1976:7-8), Bourne (1981:14), Askerooth (2014: 220-221)

According to Knox (1987:247) housing provides a relative location which provides access to a number of neighbourhood and community attributes including health services, education facilities, recreational amenities and environmental quality as well as a social and cultural milieu. The location of housing influences the daily lives, health, security and well-being of people (UN-HABITAT, 2012:14). It is in this regard that an understanding of the concept of urban form is necessitated.

2.2.2 The urban form

Though various attempts have been made to define urban form, there is no single agreed definition hence the urban form is interpreted differently by various researchers. Anderson *et al.* (1996:9) forward that the urban form is a configuration of several fixed elements such as land use, street layout, building configurations and urban spaces within a region. Barton (2000:12) describes the urban form as the “distribution and pattern of human settlement within the city region described by shape, density, degree of dispersal or concentration and the quality of the infrastructure for public transportation”.

Doherty *et al.* (2009:4) elaborate on this by referring to the urban form as the arrangements of the large functional units of the city which reflects both the historical development of the city and its more recent planning history and is defined by the spatial patterning of industries, commercial and residential land-uses and also by the different levels of residential density. Urban form also refers to “the shape of urban settings in terms of the defining characteristics such as the design and structure, where development occurs, what type of developments are likely to realise, what type of spaces are available and the interconnection of these areas” (Cilliers, 2015:22). Thus, the urban form is best understood as a composite of the physical and non-physical elements illustrated in Figure 2-1.



Figure 2-1: Elements of the urban form

Source: Adapted from Dempsey *et al.* (2010:22)

Urban form is classified as either organic or planned. While planned urban form refers to an urban form which is the result of predetermined intention or planning, organic urban form is the kind of urban form that has evolved without preconceived planned intervention (Morris, 2013: 9-10). The urban form of an area is as a result of natural and human made factors. These are illustrated in Figure 2-2:

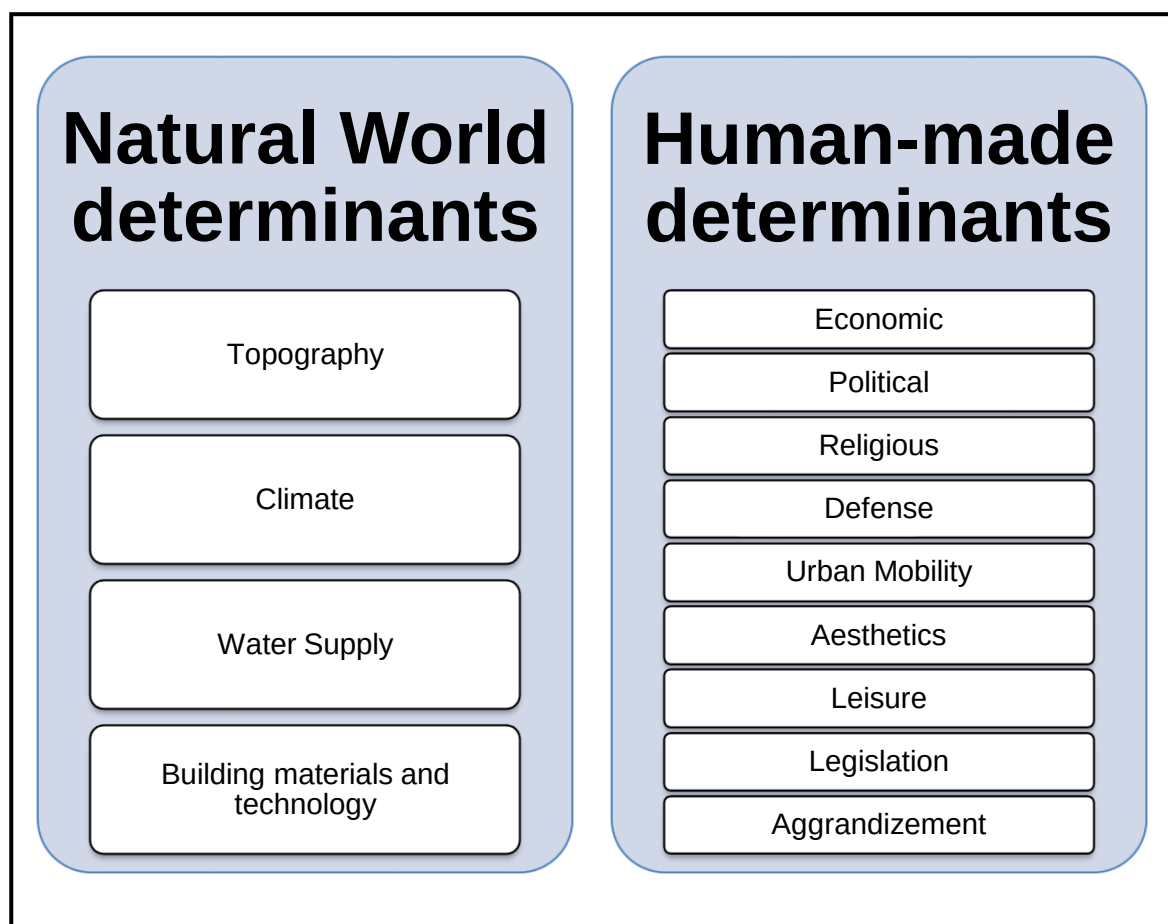


Figure 2-2: Determinants of the urban form

Source: Adapted from Morris (2013:9-17)

Understanding the elements and determinants of the urban form provides the basis for investigating its relationship with housing development, that is, how housing exists as part of the urban form. A clearer picture is seen through the reflection of the evolution of housing and the urban form over various notable eras.

2.3 The evolution of housing and the urban form

The transformation of the urban form dates back to the earliest traces of human settlement formation. Williams (2014:6) notes that the urban form has been shaped since the beginning of human settlement, and is evolving continually in response to social, environmental, economic and technological developments.

2.3.1 From the Pre-historical Era to the First Urban Civilizations

The significance of shelter as a one of the major basic needs dates back to the Palaeolithic era (2.5million – 10000BC) where living beings relied on caves for protection from harsh weather conditions. However, there is no particular urban form attributed to this era due to the nomadic lifestyle and the absence of permanent shelter.

The emergence of a distinct urban form was a result of the advent of agriculture during the Neolithic age (6000-2000BC). The discovery of agriculture influenced the occupation of land near the rivers, forming what is known as the Fertile Crescent made up Mesopotamia, Egypt and Indus Valley (Mark, 2009). The houses were constructed along the fertile lands, while the rivers formed the spinal transportation system, which served as a model for the irrigation ditch and the canal (Mumford, 1961:28). The area was characterised by an organic urban form as a natural result of an informal and unplanned gathering of people. This era reflects how nature contributes to the interconnection between housing and transportation, thus determining the urban form.

2.3.2 The Earliest Cities

The earliest cities emerged around 7th and 8th Century BC (Fagan & Scarre, 2015:279). Of importance, are the Greek cities that originally evolved in an unplanned organic manner around an acropolis, that is, a religious and defensive structure (Fagan & Scarre, 2015:279). The expansion of the city influenced the emergence of the agora, that is, an exchange area which eventually became a market area, theatre place and a focal point of the surrounding residential areas. Though housing and accessibility are compatible elements of an urban form, the location of a focal point in close proximity to irregular residential areas inhibited mobility within the city during this era. This prompted the formulation and implementation of the Hippodamian Plan, which is also known as the Grid Model.

2.3.2.1 The Hippodamian plan

Proposed by Hippodamus of Miletus, the Hippodamian plan, also known as the Grid Pattern, is the epitome of formal planning. The plan introduced organised housing patterns in the form of a grid with ample space reserved for public activities within the city. The location of the temple on high ground indicates the significance of religion in determining the urban form. Boone and Modarres (2009:11) explain that the city was built with a focus on the movement, elevation, and placement of various morphological components in an awe-inspiring spatial arrangement. The grid pattern therefore promoted the interconnection

between housing, accessibility, layout and land use, taking into consideration the terrain. Figure 2-3 shows the planned urban form as illustrated by the Hippodamian Plan.

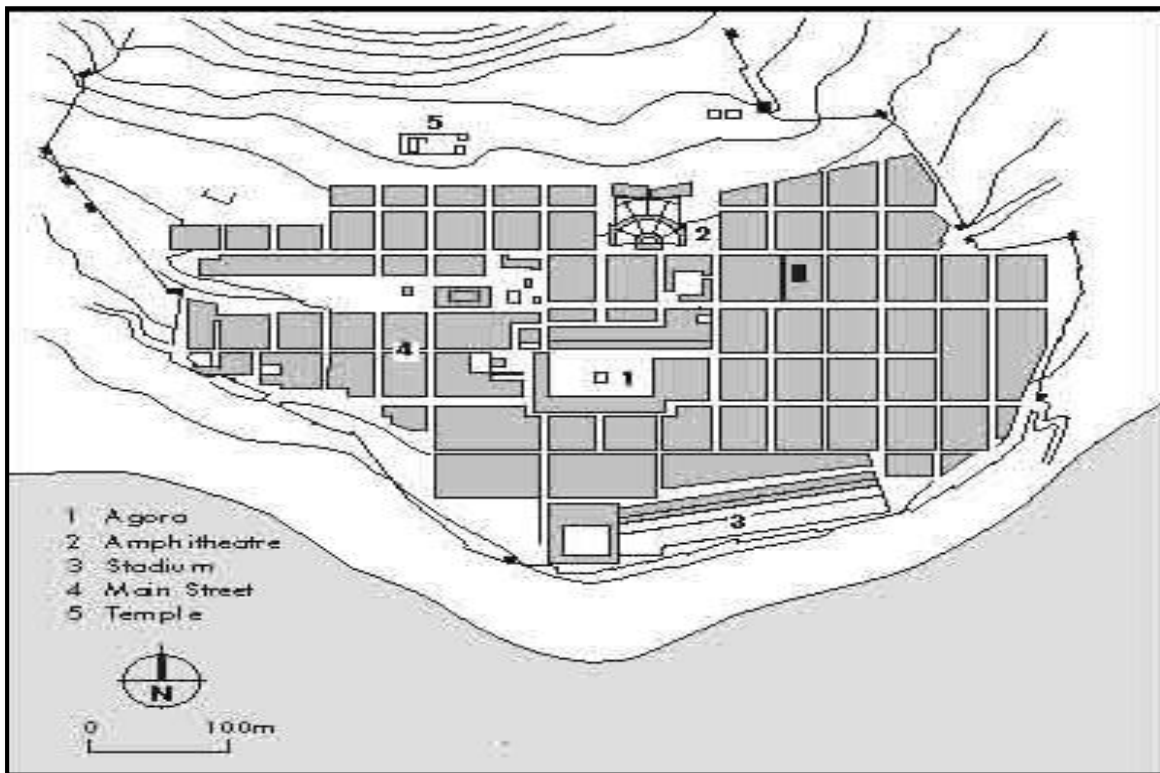


Figure 2-3: The Hippodamian plan

Source: Boone and Modarres (2009:14)

There is no evidence to link the impact of social class on housing development and the urban form within the earliest cities. Though not regarded as a major determinant of the urban form, social class has spatial impacts on housing development, and in turn on the urban form.

2.3.3 Medieval Era

The medieval era explains how politics and economics determine the urban form. According to Morris (2013:94) housing and the urban form in the medieval era were influenced by feudalism, the early revival of medieval commerce and the role of the church.

Feudalism influenced the location and density housing within the urban form. Land belonged to the king who leased it out to the nobility and the knights. According to Brimblecombe (2011:4) the peasants lived in small and dark homes very close to each other, on land rented out by the lord in return for economic labour. Thus housing for peasants indicated high density within the urban form.

The church is credited for modifying the urban form from an organic to a planned urban form. This era marks some of the earliest versions of urban containment and urban greening strategies. The building of a wall around the city was aimed at maintaining built forms within the moat, while the land beyond the wall was reserved for agricultural purposes. However, Mumford (1961:312) claims that often the wall would be torn down to extend the city's boundary hence it was not a real obstacle to town extension. Nonetheless, the building of the wall as part of the urban form indicates attempts to contain urban expansion.

The church also implemented the provisions of the grid plan based on geometry. This aided in the mobility and accessibility of activities within the urban form. The emergence of commerce influenced trade so that every street was turned into a market place. Following this, services and goods became easily accessible within short distances. Figure 2-4 illustrates a typical medieval urban form.



Figure 2-4: The medieval urban form

Source: Taylor (2013: 390)

Thus the medieval era is a demonstration of the role of politics and religion in determining what development goes where. The determination of the urban due taking into consideration the role of societal class and rank is further explained by the organisation of the industrial revolution era.

2.3.4 Industrial Revolution Era

An era branded by its innovations in technology, capitalism and economic boom in Britain, the era of the Industrial Revolution is regarded as the epitome of massive urbanisation in the world (Knox & McCarthy, 2005:46). During this era, industrialisation and capitalism played major roles in determining housing development, and in turn the urban form. Figure 2-5 illustrates the effects of industrialisation on the urban form.

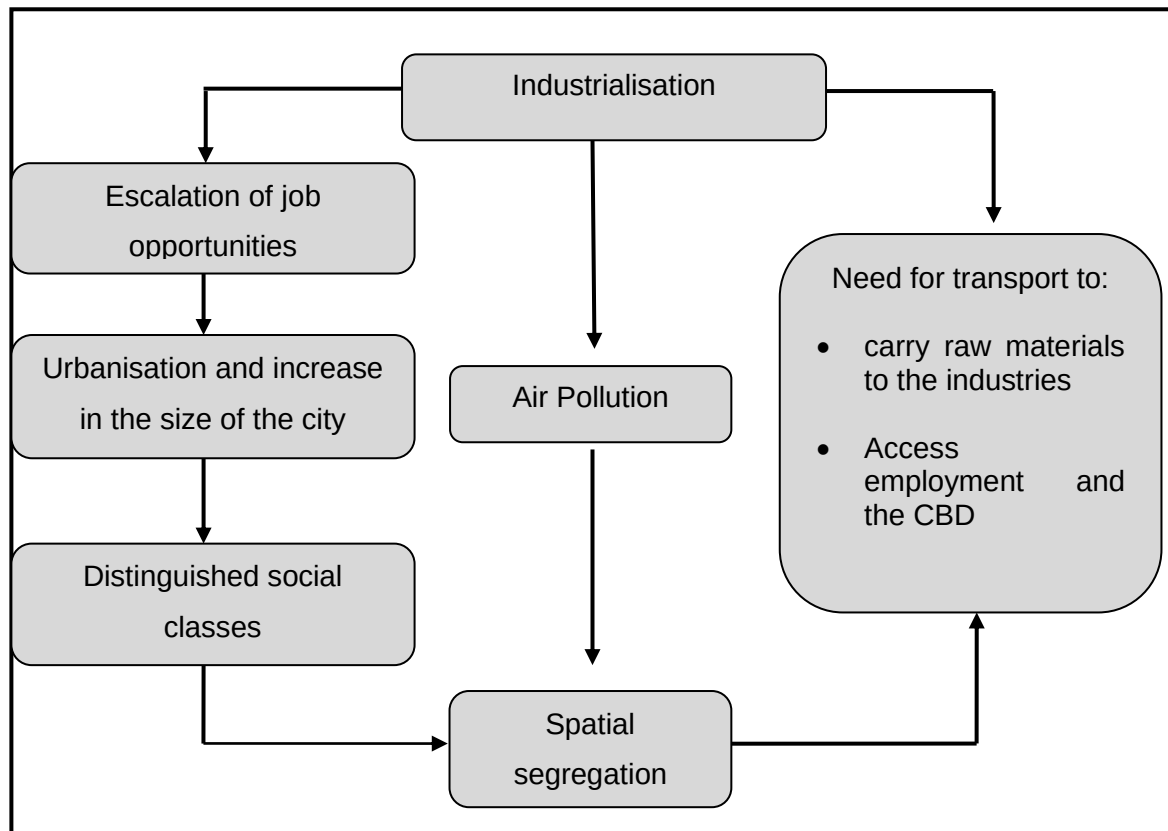


Figure 2-5: Effects of industrialization on housing development and the urban form

Source: Own Construction (2014)

The Industrial Revolution era depicts the 'form follows function' concept in spatial planning. The location of the industries was the major determinant of both housing development and urban form. The Central Business District (CBD) was located at the core of the city, that is, near the industries to reduce the cost of transporting the merchandise to the market. Railway lines were constructed to ensure the transportation of raw materials from their areas of origin. Accessibility was therefore a major element of the urban form (Williamson, 2002:234).

According to Pacione (2005:51), the industrial city was developed primarily to fulfil the needs to the capitalists, as evidenced by the socio-spatial segregation of the classes. To escape

the emission of smoke from the industries, the wealthier groups of society, the upper class, relocated to the outskirts of the city. The introduction of the automobile led to the accessibility of industries and places of employment for the upper class. Though some authors do not recognise the middle class, Hillstrom and Hillstrom (2005:120) claim that the dawn of industrialisation resulted in the formation of a middle class of professionals such as doctors and lawyers. Their income levels and lifestyles placed their homes away from the industries but immediately before those of the upper class.

The most inferior yet largest class in the industrial society was the working class. Unlike the upper and middle classes, the working class did not own any housing. According to Williamson (2002:234) the factory owners and employers provided their workers with accommodation close to the factories in order to exert more control over workers as well as minimizing transport costs and time. The homes of the workers were filled with smoke from the factories, threatening the health of the residents. These houses were in the form of two or three-storey terraced houses, whether through houses, back-to back, or built around courtyards (Pacione, 2005:57)

The prominence of the industrial sector had the effect of drawing the ever-increasing numbers of job seekers from the countryside leading to rapid urbanisation in the urban areas. The town councils and capitalist employers did not build more houses for the poor in order to maximise the use of land (Lloyd-Jones & Mervis, 2014:23). The terraced houses were overcrowded with as many as twenty people per house. Those who could not be accommodated in the houses were forced to stay in cellars beneath other houses (Williamson, 2002:236). The large density, cheap and substandard building materials and the unavailability of water and sanitary facilities prompted the coining of the term 'slums', which was used to describe the working class living conditions (Lloyd-Jones & Mervis, 2014:23).

Housing development during this era illustrates how the poor are forced by market imperfections to settle on marginal land. Regardless of the density of the settlements, the poor remain confined to the marginal land as access to other portions of land is beyond their affordability. The relocation of the upper class to the outskirts is a depiction of the urban sprawl and suburbanisation in the contemporary world. Figure 2-6 shows a typical urban form during the Industrial Revolution. In the image, medium class represents both the medium and upper classes of society.

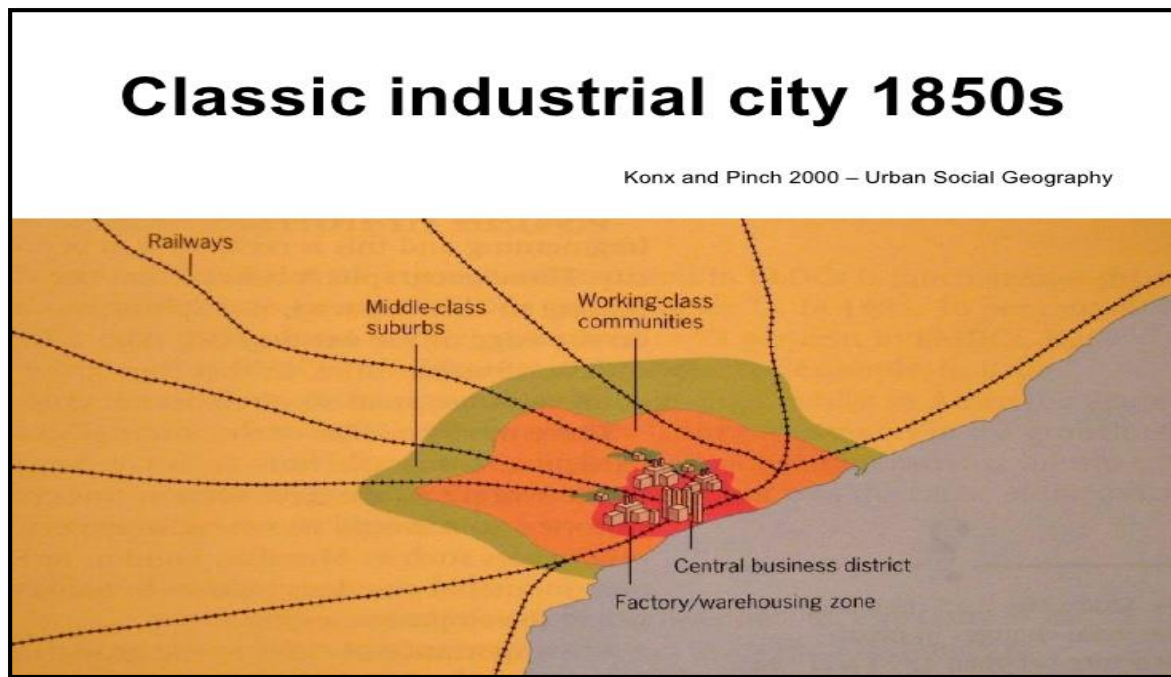


Figure 2-6: Industrial revolution urban form

Source: Tan (2014:2)

The urban form during the industrial revolution era mirrors the Concentric Zone Model propounded by Burgess, which will be discussed in detail in Section 2.4.2.

2.3.5 Contemporary world (20th -21st Century)

The contemporary urban form exists in both the organic and planned states. Social, economic, political and environmental factors have contributed to high densities, urban fragmentation and urban sprawl which define the urban form. The need to understand the causes and the solutions to these spatial challenges necessitates an analysis of the models of urban form. These include the Bid-rent model, Concentric Zone Model, Sector Model, Multiple Nuclei Model and the Apartheid City Model.

2.4 Models of Urban Form

2.4.1 Bid-Rent Model

The bid-rent model was propounded by Alonso in 1964. The model illustrates how price and demand for land, change as the distance from the CBD increases. The theory is based on the assumption that accessibility and profitability increase with centrality, hence the high cost of the land near the centre. Tenants who are willing and can afford to pay premium (rent) for such access, bid up the value of the land, driving away functions that cannot afford high priced locations (Alonso, 1964: 14). Figure 2-7 illustrates the bid-rent curve

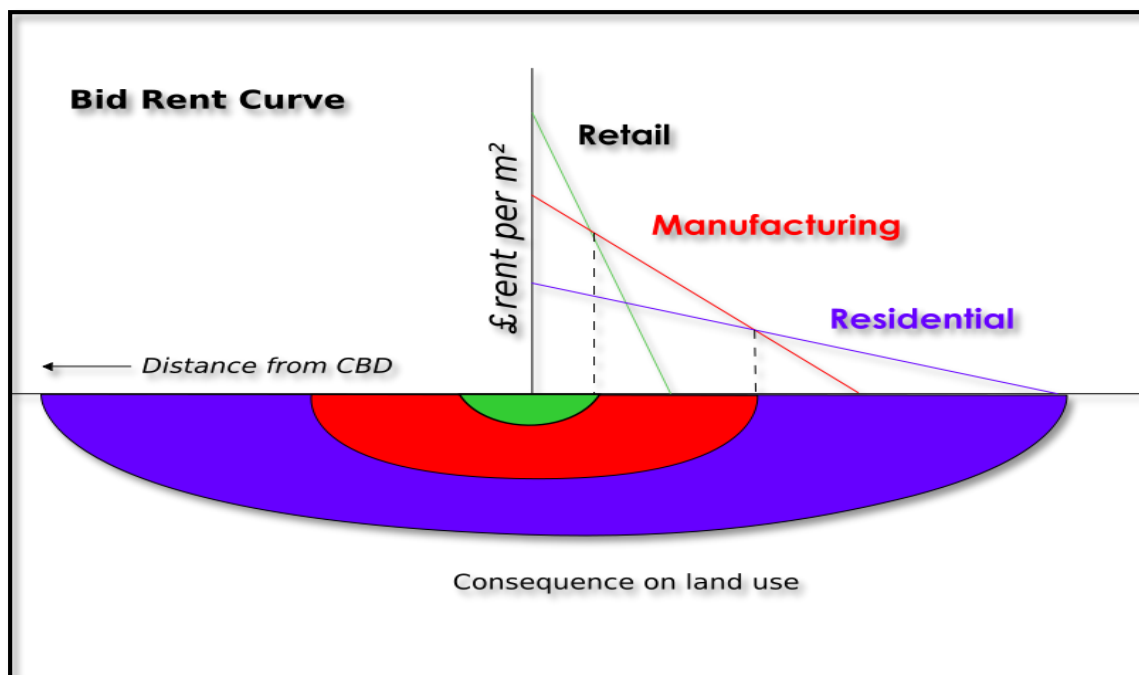


Figure 2-7: The Bid-rent Curve

Source: Alonso (1964:15)

The Bid Rent Model explains how the economic aspect of urban land uses influences the urban form. The location of housing development farthest from the CBD is influenced by the inability of the tenants to bid for the high land values against profit maximising activities such as retail and manufacturing (Narvaez et al. 2014:551). Thus, peripherisation of housing development is a consequence of the economic determinants of the urban form.

The model further illustrates the location of high income housing near the CBD, while low income housing develops on the urban peripheries and on marginal land. According to Alonso (1964:15) the poorest properties are found on the very outskirts of the city, as this is the only location that they can afford to occupy, while housing for the high income earners is located near the CBD. The urban form in colonial cities such as Harare and cities in South Africa illustrate the provisions of the bid-rent model.

However, Morelli and Salvati (2010:70) argue that the bid rent curve is barely applicable to modern times because many high income earners prefer sites at the edges of a settlement where they can buy larger parcels of land for the same amount of money they would have used in the CBD. Moreover, access to employment opportunities is the major determinant of low income housing hence the location near the CBD. Many North American cities conform to this arrangement and this is illustrated by the Concentric Zone Model. Nonetheless, the Bid Rent Model explains that the marginality of housing for the poor within the urban form is a consequence of the inability to pay for the consumption of land with greater value.

2.4.2 Concentric Zone Model

The Concentric Zone Model was propounded by Ernest Burgess in 1924. The model explains how cities develop in concentric zones based on the amount that people are willing to pay for land. Waugh (2002:420) explains that “Burgess attempted to identify areas within Chicago based upon the outward expansion of the city and the socio-economic grouping of the inhabitants”. Burgess identified five concentric zones illustrated in Figure 2-8.

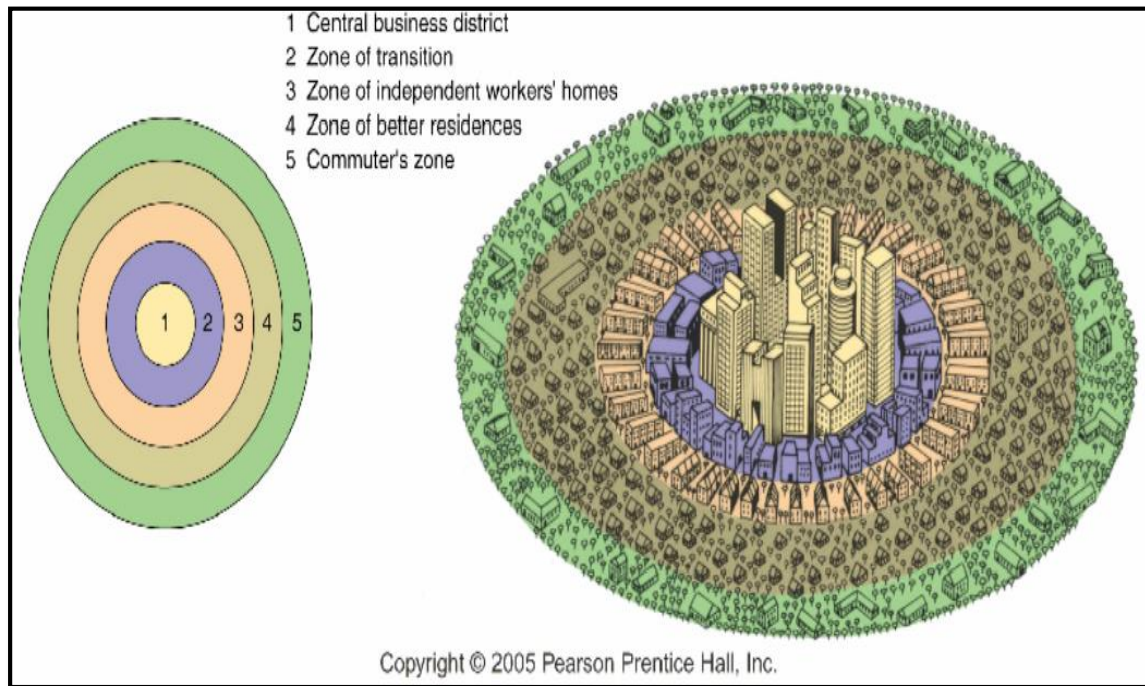


Figure 2-8: Concentric Zone Model

Source: Burgess (1924:85-97)

The Concentric Zone Model is greatly acclaimed for being the first to illustrate the impacts of social class on the urban form. The location of housing for the poor near the CBD depicts the positive correlation of socio-economic status and costs incurred to access goods and services. The poor often cannot afford transportation costs to access goods and services, hence the need for them to be located near the centres of provision (Everson & Fitzgerald, 1972:31). Thus housing for the poor should be located in close proximity with economic opportunities.

The model also illustrates the impacts of urban decay on the urban form and housing development. The decline in the living conditions of inner city centres influences the migration of the middle and upper class people to the countryside where there is a perceived higher standard of living and a closer contact with nature (Daniel & Hopkinson, 1991:119).

The urban poor are then forced to inhabit marginalised land because they cannot compete with the affluent groups of society, thus the spatial marginalisation of their housing.

However, in some developing countries the affluent residents settle in the centre of the city while the poor live in the outskirts of the city in squatter settlements (Miller, 2002:726). The peripherisation of low income housing developments is remnant to the colonial and apartheid laws which promoted spatial segregation and peripherisation of low income housing on racial grounds. Thus the theory rests on simplistic human behaviour but without taking into cognisance the role of politics and power and other forces that shape the urban form (Kaplan *et al.*, 2009:198).

Kaplan *et al.* (2009:197) further argue that the model, whether by omission or intent, failed to account for the growing impact of intra-transportation, that is, the impact of transportation routes on land use. The ring pattern structure does not conform to the normal urban setting where low income housing is influenced by the location of industries which in turn tend to be located along transport route such as rail, river valleys, water sites, lakes and sea fronts (Everson & Fitzgerald, 1972:34). Nonetheless, the model provides an insight on the general socio-economic ordering of housing development as part of the urban form.

2.4.3 Sector Model

The sector model, propounded by Homer Hoyt in 1939 was a modification of the Concentric Zone Model. The key elements of this model are the role of housing in determining the shape of the city and the impact of transport and social class on the choice of location for various settlements. Hoyt (1939: 30-36) also identified that similar land uses attracted other land uses, concentrating a function in a particular area and repelling others thus sector development.

Figure 2-9 illustrates the Sector Model.

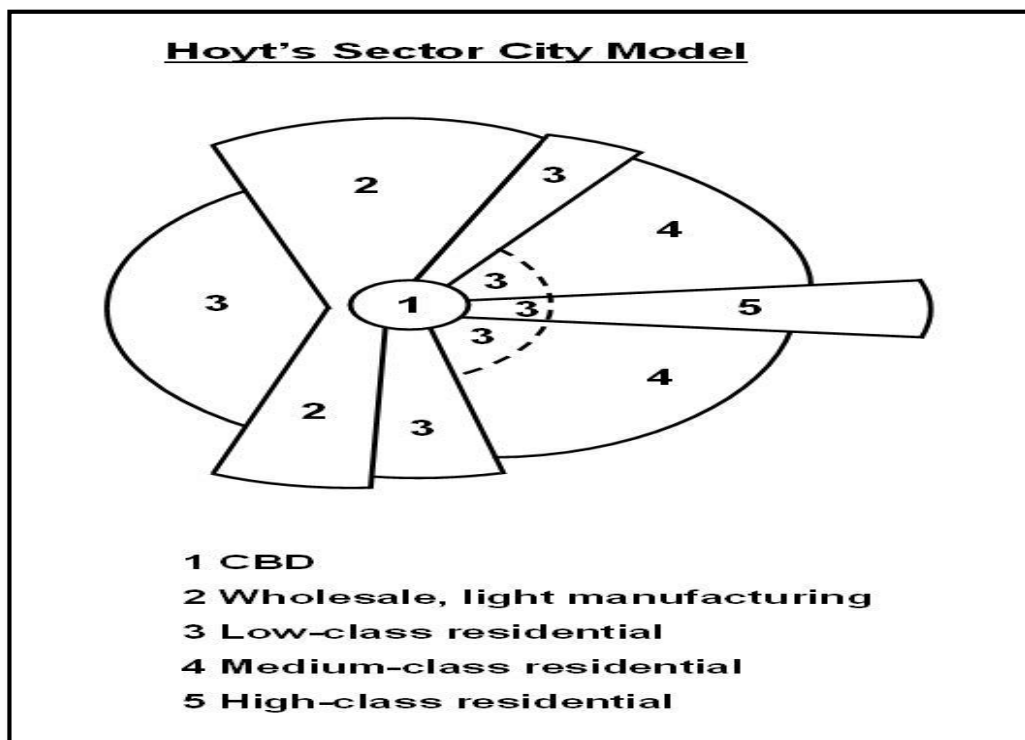


Figure 2-9: The Sector Model

Source: Hoyt (1939:30-36)

Transportation underpins the skeletal structure of the built form of the city (Besussi *et al.* 2009:15). The model explains how the urban form is determined by social class and mode of transport. The model recognises the transportation and land-use relationships along corridors, and works to integrate modes of transportation within the corridors (American Planning Association, 2006:405). The low income earners cannot afford transportation costs; hence they (should) locate near socio-economic opportunities to promote accessibility through non-vehicular modes of transport.

However, the model does not take into account improvement in the transportation system and nodal developments within the sectors, which may encourage the location of low income earners farther from the main CBD. Also, the relationship between land value and income which influences the location of low income housing is not explored.

2.4.4 Multiple Nuclei Model

Rather than the concept of a single CBD that was common to the concentric zone and sector models, Harris and Ullman propounded that cities develop multiple centres or nodes that shape land values and surrounding areas. Cities do not grow from one CBD but from

independent nuclei and each nucleus acts as a growth point with its own unique main function within the city.

The new business districts began to develop their own adjacent land use patterns either by replicating the historic CBD patterns or developing new patterns of office complexes, high density residential and retail combinations (Harris & Ullman, 1945:14). For this reason, this model became known as the Multiple Nuclei Model.

Figure 2-10 depicts the Multiple Nuclei Model

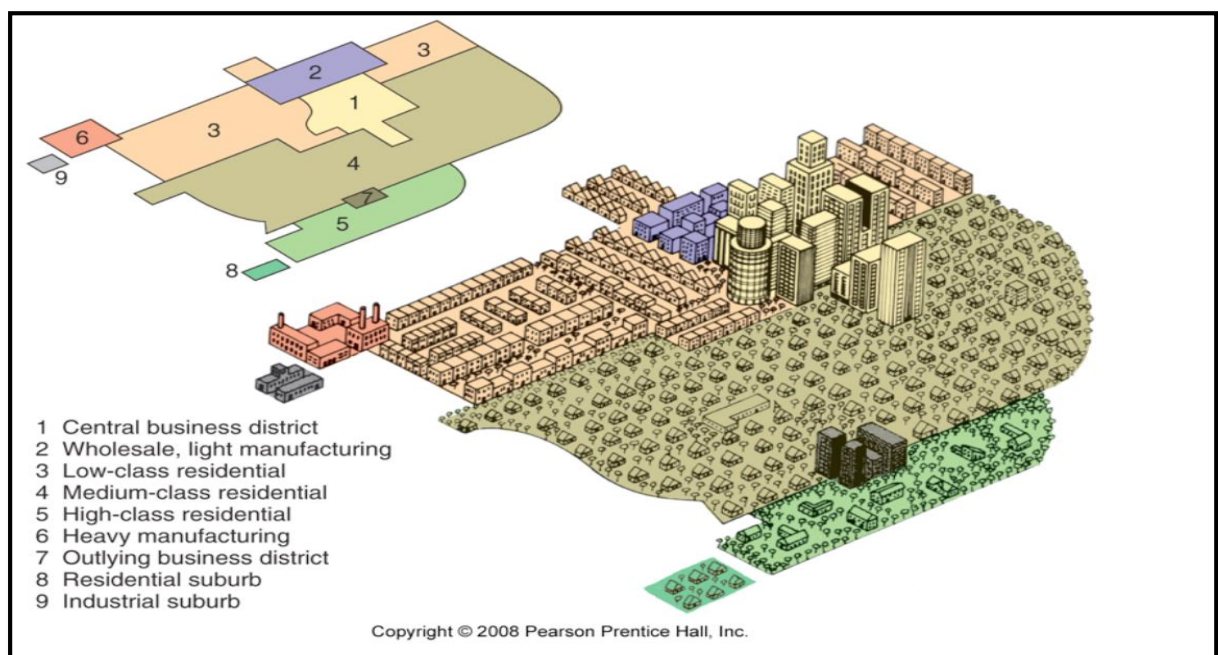


Figure 2-10: Multiple Nuclei Model

Source: Harris & Ullman (1945:47)

The model illustrates urban fragmentation through the focus on land use compatibility and incompatibility. According to Waugh (2002:423), the model was “developed as a response to the need for maximum accessibility to a centre, to keep certain types of land use apart and to indicate the differences in land values”, inducing the decentralisation of activities. The resultant urban form is characterised by high class areas served by a vast of high class service activities such as shopping malls, banks and retails shops while the incompatibility of such functions with low income housing farther marginalises residential developments for the poor.

The model also illustrates the significance of low income housing development in close proximity with socio-economic facilities and opportunities. According to Rodriguez *et al.* (2013) the location of heavy industry near the outer edge of the city, surrounded by lower

income households indicates employment opportunities, need for cheap labour and income level determine the location of low income housing thus the benefit of activities from adjacent distances.

The model further illustrates that residential developments do not necessarily have to rely on the CBD, but can access social and economic facilities within their precinct (Harris & Ullman, 1945:14). Therefore, the model encourages nodal developments within residential areas so as to reduce costs in accessing goods and services especially for the poor.

The major imperfection of the Multiple Nuclei Model is the assumption of homogeneity amongst the different zones (Torren, 2000:16). The model is based on the notion that certain land uses in low income areas may be incompatible with other land uses posing accessibility challenges on the residents. Thus, compatibility of activities should be promoted within the low income zone to reduce dependency on the main CBD.

2.4.5 Apartheid City Model

The Apartheid City Model illustrates how policies and legislation determine the urban form. The 'apartheid city' was the result of the 1950 Group Areas Act, which sought to separate various racial groups in South Africa into distinct areas (Christopher, 1984:77). Development during the apartheid era was characterised by “racially segregated suburbs, buffer zones separating suburbs, mono-functional land use, a dispersed city, racially divided urban growth patterns” (Donaldson, 2001:1).

The model describes the following areas:

- A white CBD, reserved for white business owners;
- An Indian CBD, which was an exception and usually located closer to the Indian residential zone;
- White residential areas of low, medium and high income situated around the CBD;
- An industrial zone, which developed in the direction of non-white residential areas and, in many cases served as a buffer zone between white and non-White residential areas;
- An African residential area or township located on the periphery of the city; and
- Indian and Coloured residential areas, which was adjacent to African residential areas (Christopher, 1984:77; Simon, 1989:191-192)

Figure 2-11 shows the Apartheid City Model:

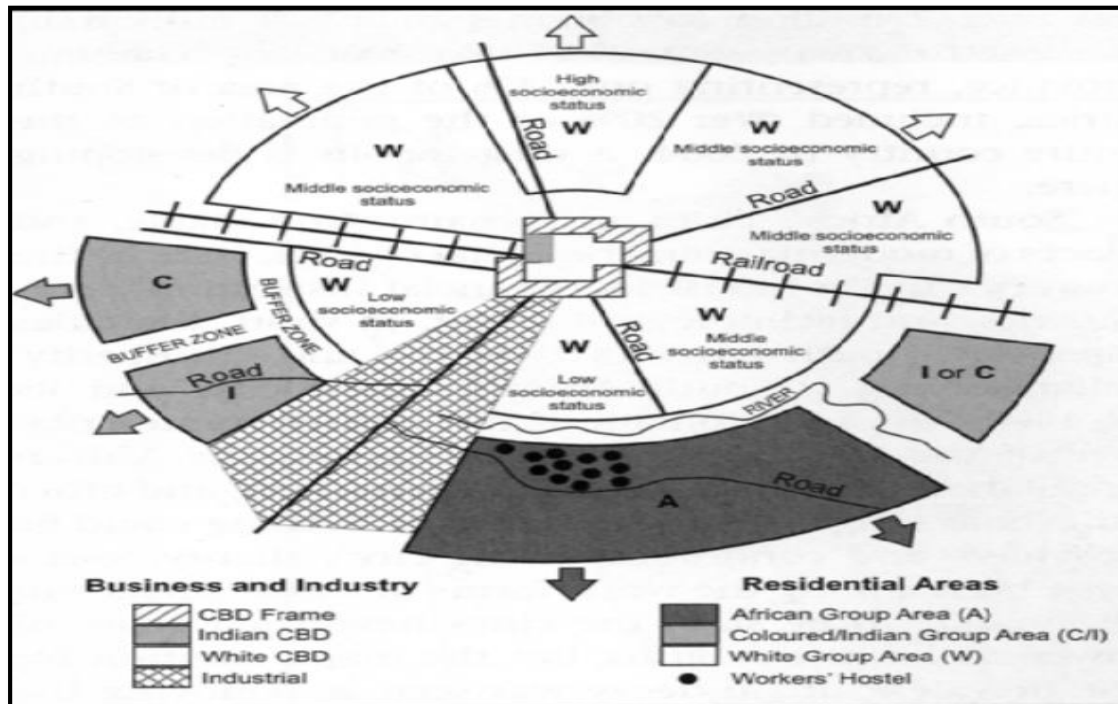


Figure 2-11: Apartheid City Model

Source: Simon (1989:192)

The consequence of apartheid spatial planning was a fragmented and distorted urban form. This is characterised by:

- Layout planning which provided for buffer zones between residential areas;
- Segregation of amenities based on race;
- Inaccessibility of social facilities to the poor;
- Great disparities in the levels of services provided to different area;
- Long distances between residential areas and places of employment; and
- Sprawling of informal settlements (Schoeman, 2003:102).

In this regard, the Apartheid City Model is the quintessential illustration of spatial disparities within the urban form. The model indicates how high income earners occupy the best land for residential development at the expense of the poor. The peripheral location of the low income housing for the Black African population echoes the assumptions from the Bid Rent Model regarding the value of land and the ability of the user to pay for the land. Although the

Concentric Zone Model contradicts the location of the housing for the poor, both models explain the marginalisation of land for housing developments for the poor. Dewar (2002: 210) explains that the location of the housing for the black people was based on the fact that “land prices were considerably cheaper on the peripheries of cities and towns”.

The models of urban form discussed above explain how income, social class, transportation networks and legislation determine the urban form. The outcomes of this are urban sprawl, marginalisation of low income housing, a fragmented urban form as well as prospects of improving the urban form through nodal development. This necessitates an urban form that maximises on the pros while thwarting the cons.

2.5 An ideal urban form

An ideal urban form is that which addresses all the components of the urban form to counter the effects of urban fragmentation, spatial, functional and social marginalisation. According to Rogers (1997:38) an ideal urban form, in accordance with design concepts, is that which has a high density and adequate diversity, compact with mixed land uses, and its design is based on sustainable transportation, greening, and passive solar energy. Thus, an ideal urban form is based on the principles of sustainable development.

Jabereen (2006:43-47) identifies the following types of sustainable urban form: Neo Traditionalism, Urban Containment, Ecological City and the Compact City Model. Taking into consideration the provisions and the benefits of the above mentioned four models, the Compact City Model is the most relevant to this study and will therefore be discussed exclusively in this chapter.

2.5.1 Compact City Model

A compact city is a high density, mixed use city, based on the efficient public transport system and dimensions that encourage walking and cycling, opposed to the car-oriented urban sprawl (Burton, 2000:1). The major principle of the compact city model is the provision of dense and concentrated housing developments within the city core accompanied by work places and other socio-economic facilities.

Figure 2-12 illustrates the principle of the compact city urban form

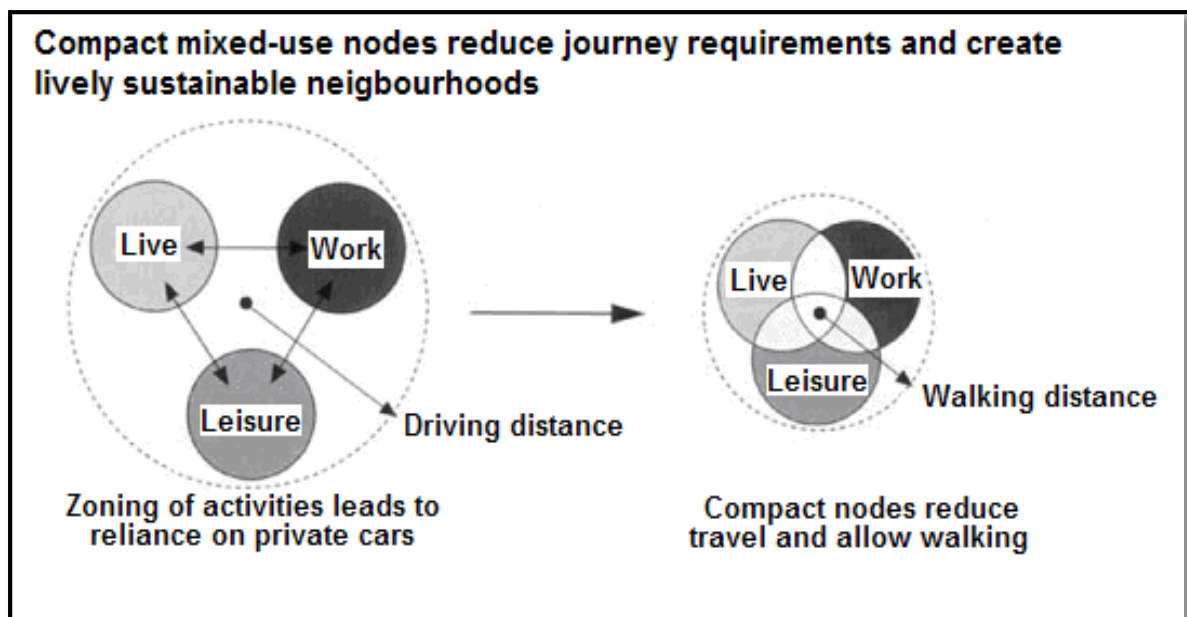


Figure 2-12: Principles of a compact city urban form

Source: Adapted from Cilliers (2015:11)

In this regard, the prime benefits of the compact city model include:

- Reduction in costs of travelling and carbon emissions due to the accessibility of economic opportunities and social facilities;
- Sustainable use of land through recycling urban land for increased densification while preserving land beyond the urban fringe;
- Economic sustainability through accessibility of employment opportunities and reduction in the costs incurred in the provision of infrastructure and basic services; and
- Social equity through mixed housing developments.

Figure 2-13 illustrates a typical compact city urban form

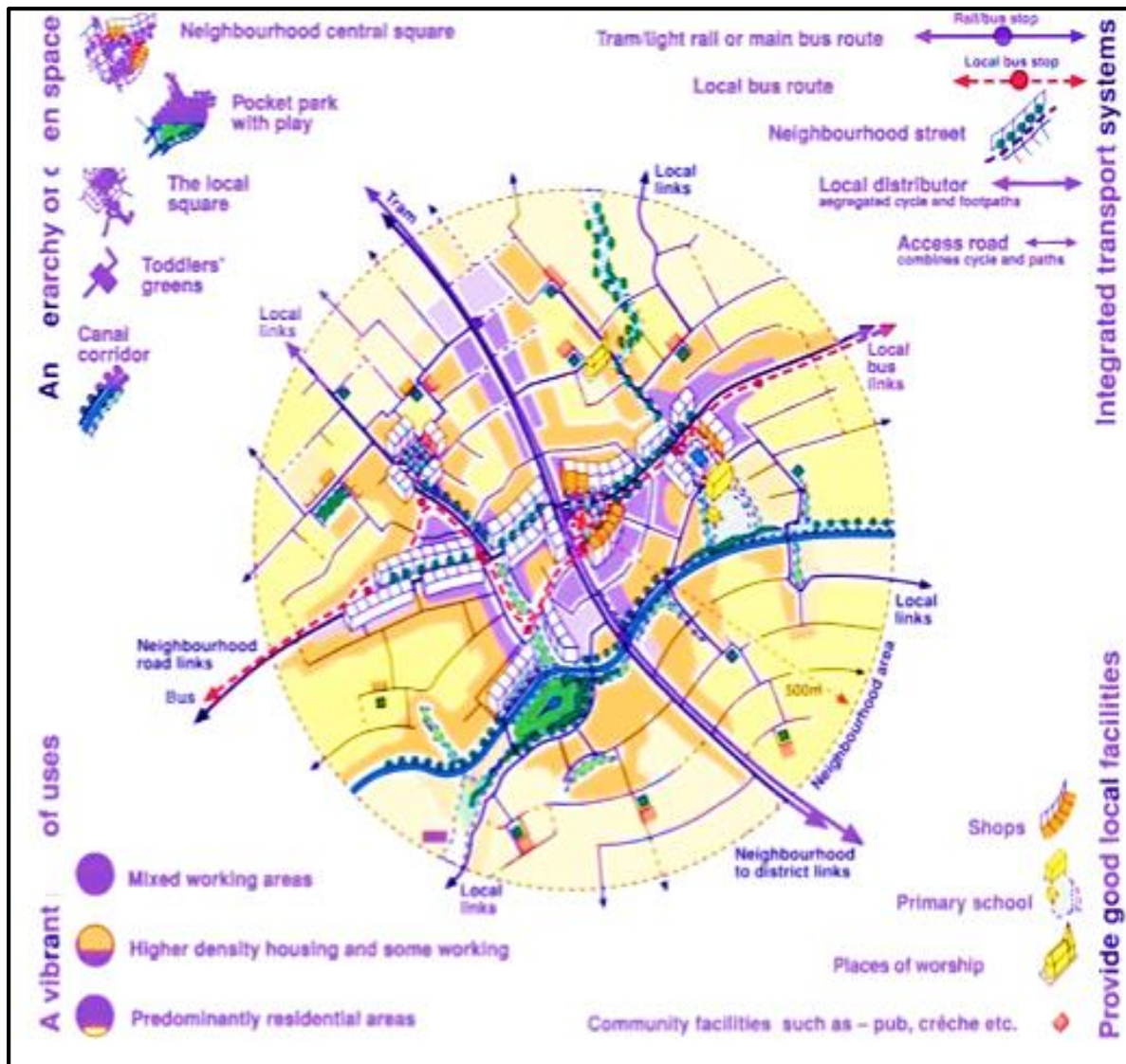


Figure 2-13: A typical compact urban form

Source: Jadhav *et al.* (2013)

Although the concept is lauded for removing the barriers of spatial, social and economic segregation, the compact city concept fails to take into account the social implications of mixed housing development on the poor. Poor households may not be able to afford the affluent costs of inner city living expenses and rentals. Burton (2001) agrees that the compact city model does not promote equity but promotes equality. This means that although both the poor and affluent groups in society may benefit from easy access to facilities and activities within a mixed development setup, social justice in acquiring these services is not definite. In this case, differentiation across class may be necessary to achieve sustainability.

Nonetheless, the compact city concept provides insight on how functional integration can be achieved through infill development for residential purposes and the implementation of socio-economic nodal developments which support the residential developments while reducing travelling.

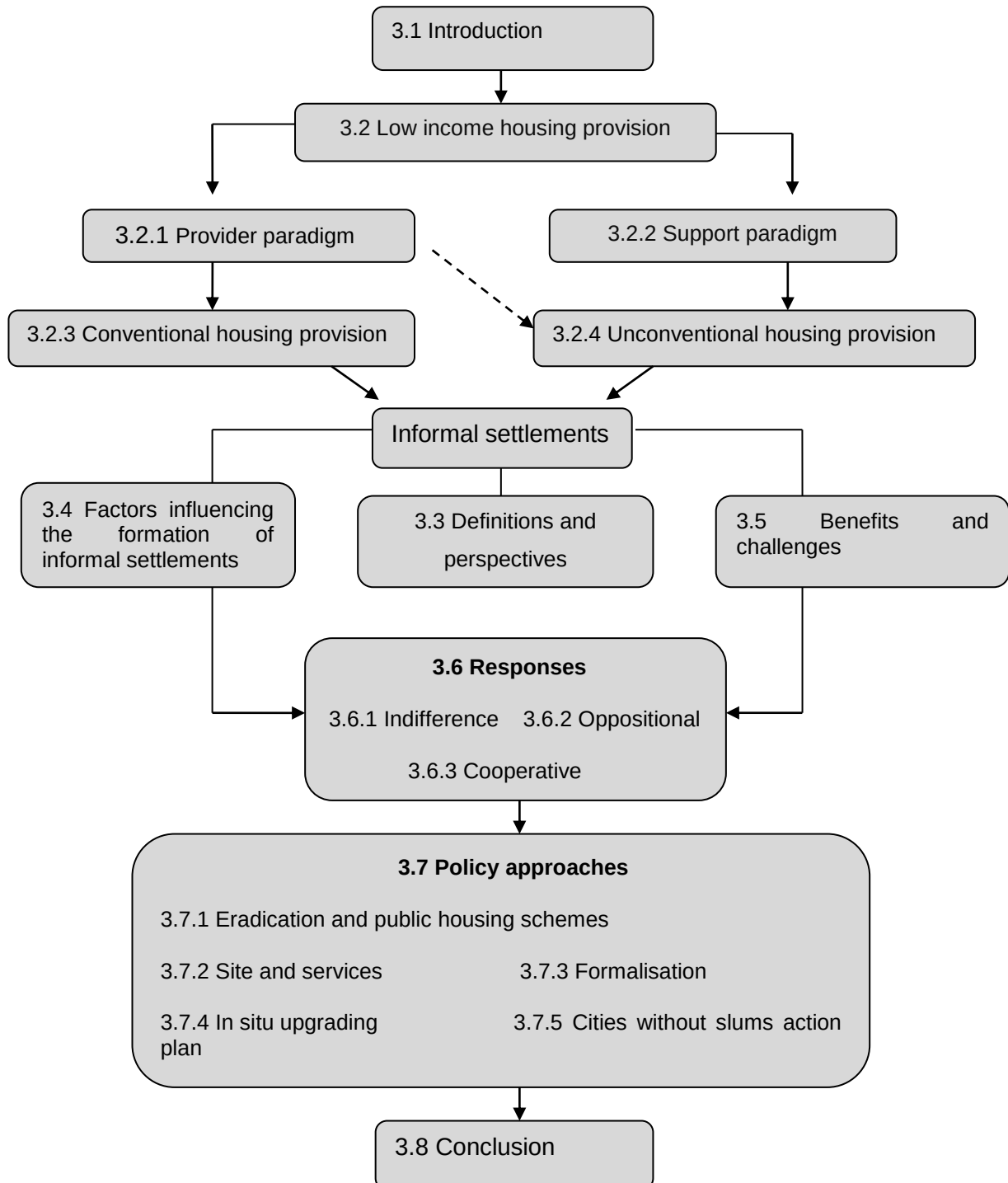
2.6 Conclusion

The chapter provides insight on understanding informal settlements in spatial terms through studying housing development and the urban form. An analysis on the historical development of housing revealed that over the years; income, social class, transportation and legislation have been the major determinants of the location of low income housing development as part of the urban form.

The Bid Rent Model and the Concentric Zone Model explain how land value and social class determine the location of housing within an urban form. The Sector Model and the Multiple Nuclei Model explain the role of transportation in determining the housing development and the urban form while the Apartheid City Model explains the urban fragmentation on the basis of race and class. The Compact City Concept provides insight on integrating low income housing and socio-economic opportunities while reducing transportation costs and preserving the ecological environment. Therefore, this chapter sets the tone for understanding how low income housing is delivered from a policy perspective, thus the focus of Chapter 3.

CHAPTER 3: UNDERSTANDING INFORMAL SETTLEMENTS

The diagram below illustrates the graphical overview of Chapter 3



3.1 Introduction

Informal settlements are a clear manifestation of a poorly planned and managed urban sector and, in particular, a malfunctioning housing sector (UN-Habitat, 2015a). In this modern day world which is characterised by excessive population growth rates and subsequently rapid urbanisation, the demand for housing has continued to skyrocket. The greater proportions of the urban population in need of basic shelter comprise of low income earners and the poor who, in most instances, cannot afford to own a dwelling or even rent property at market price (Fordham, 1998:5). It is therefore essential to analyse and understand the various ways by which housing is provided in response to the needs of the poor.

While the previous chapter focused on understanding the spatial aspect of housing development, the focus of this chapter is on understanding the socio-economic aspect of informal settlements. This is attained through an investigation of housing options that exist for the low income earners and the poor; the different perspectives regarding informal housing: the causes, benefits and challenges of informal settlements: and the responses to the existence of informal settlement.

3.2 An overview of low income housing provision

Low income housing is defined as any housing that is generally limited to occupancy by persons whose family income does not exceed certain pre-set maximum levels (Evans and Evans, 2007:252). Theorist Nabeel Hamdi reckons that housing provision can be explained in terms of two conflicting paradigms: the provider paradigm and the support paradigm.

3.2.1 Provider paradigm

The provider paradigm is the dominant and most practiced within the housing sector. The paradigm is based on the notion that public authorities and/ or formal or private developers should control the provision of houses if the goal is to reduce housing deficits and improve the quality of houses (Hamdi, 1995:26-32). The delivery of a large number of standard houses facilitates the management and control of standards while rapidly, efficiently and clearly reducing the housing backlog amongst the poor.

However, Hamdi (1995:28) also notes that when housing decisions are made by central policies, standardised housing meets the requirements of a few. The enforcement of unrealistic minimum acceptable standards worsens the housing conditions of the poor, that is, its meaning and value to the people. Turner & Fichter (1972:153) explain that the value of

a house is not in what it is physically, but in what it does for the household livelihood strategy. In this view, housing as a process is based on the needs and contributions of the beneficiaries.

3.2.2 Support paradigm

Ward (1976:69) explains that “a third of the world’s people house themselves with their own hands sometimes in the absence of government and professional intervention and sometimes in spite of it”. The support paradigm advocates for incremental building through the promotion of variety of improvisation, infill, sites and services. This way, housing deficits are reduced and shelter is provided to the poor who cannot access standard housing.

Turner (1976:6) claims that “When dwellers control the major decisions and are free to make their own contribution to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well-being”. The promotion of community autonomy through the allocation of resources for people to organise their own house building is fundamental to housing provision (Hamdi, 1995:28). Thus, the support paradigm emphasises on the shift away from central housing provision to partnerships between the government and the beneficiaries.

Following the discussions on both paradigms, the provision of low income housing is then classified as either conventional (formal) or unconventional (informal). Figure 3-1 illustrates classification and typologies as relates to low income housing provision.

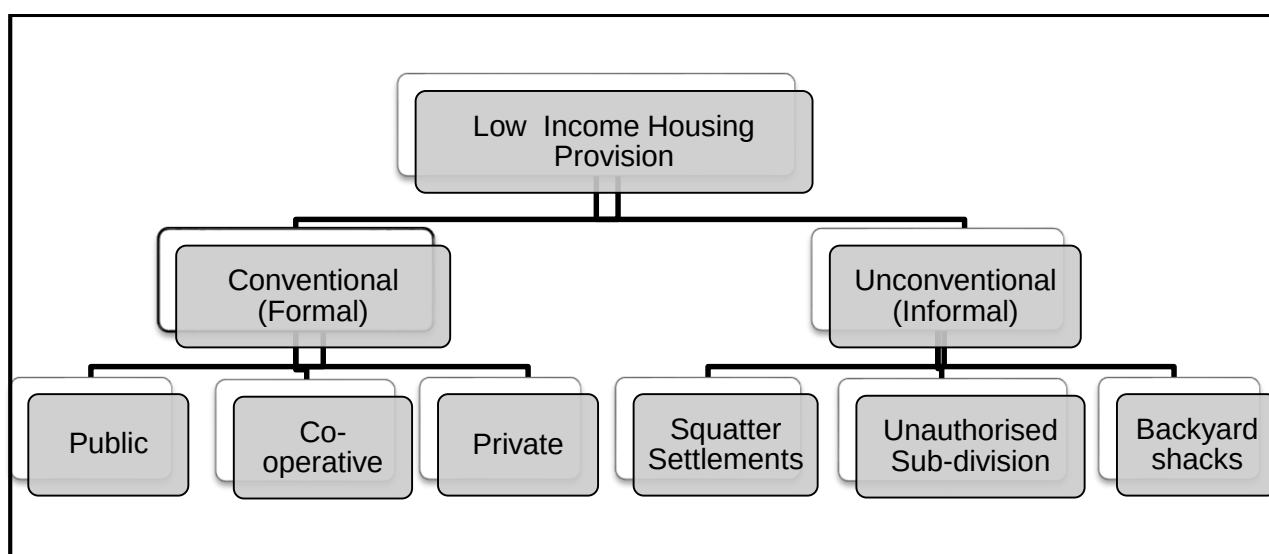


Figure 3-1: Low income housing provision

Source: Adapted From Keivani & Werna (2001:193)

3.2.3 Conventional (formal) housing provision system

Conventional housing provision is basically centred on meeting the stipulated planning and construction standards, the provision of the relevant infrastructure and services and ensuring security of tenure. This mode of production is carried out within the formal housing market where the major focus is on legal transactions which define the development, construction, sale and purchase, occupation and transference of the housing real estate (Inter-American Development Bank, 2004:42). The operations of the market are under regulatory measures of the government, hence the production of standard housing which complies with the principal laws. Consequently, the main actors within this sector are the public (the state), the private sector and partnerships between the government and the residents themselves.

3.2.3.1 Public housing provision

Housing has a major cost threshold and a significant part of the population for most countries cannot afford to own a dwelling or even rent one at market prices (Fordham, 1998:7-8). The primary responsibility of formal low income housing provision lies with the state, as it is mandated to ensure the realisation of shelter as a basic need to the people. The state moderates the cost burden on the poor through the promotion and funding of the contractor-built housing in the form of subsidies (Chipungu, 2014:133). However, economic constraints often hinder the public sector intervention prompting private sector intervention.

3.2.3.2 Private sector housing provision

The government often offers incentive schemes for the private real estate developers to move down market and produce low income housing. The private sector produces a vast of low income housing needs often in the form of independent rental housing (Gallent & Tewdwr-Jones, 2001:63). However, the private sector targets land and housing development at high and middle income earning groups with regular employment and have access to formal credit (Huchzermeyer, 2004:38). This exacerbates the housing challenge for the low income earners and the poor, thus the need for a partnership between the government and the community.

3.2.3.3 Cooperative housing provision

Cooperative housing provision allows for the integration of the government and the housing beneficiaries in housing provision, with greater autonomy placed on the beneficiaries. A cooperative is defined as a group beneficiaries or potential home owners who pool their resources together for the purposes of building their houses more cheaply (Mafico, 1991:78).

The guiding principles for housing co-operatives are: open and voluntary membership, democratic control, non-profit making, education and training in relation to building and other related skills and co-operation between the co-operative (Mafico, 1991:79). It is in this regard that cooperatives are regarded as substantial contributors to the broad social progress.

However, the level of involvement and members' control of activities and decisions (including design and construction) depend on socio-economic settings. Also, cooperative housing caters only for the beneficiaries and members of the group hence homelessness continues to threaten the lives of those who are not part of the group. Consequently, the urban poor resort to unconventional housing to access shelter.

3.2.4 Unconventional (informal) housing provision system

Unconventional housing provision comes into being when there is a gap in the market and the poor are unable to afford the kind of housing that is available, or there is not enough affordable housing to go around (Cross, 2006:5). According to Pacione (2005:492) the unconventional housing system is characterised by fewer building restrictions, lack of compliance with the established legal procedures and a large component of "self-help" in the construction process. The unconventional housing system manifests in the form of informal settlements which are the focus of this study.

3.3 Informal settlements: definitions and perspectives

UN-Habitat (2006:21) describes informal settlements (slums) according to their characteristics as contiguous settlements where inhabitants are characterised as having:

- Insecure residential status;
- Inadequate access to safe water;
- Inadequate access to sanitation and other basic infrastructure and services;
- Poor structural quality of housing;
- Chaotic design where a proper street outline cannot be defined; and
- Overcrowding.

Although the above mentioned provides a universal description of informal settlements, the definition of informal settlements differs from place to place. Jordhus-Lier and de Wet (2013:1) state that slums and informal dwellings across the world do not represent a homogeneous phenomenon but display varying levels of regularity and legality. In this

context, it is important to understand the different perspectives relating to informal settlements.

3.3.1 Informal settlement perspectives

Hansen and Vaa (2004:9-10) assert that the illegality or extra-legality of informal settlements takes four principal forms:

- Illegal occupation of land that infringes on communal or individual property rights;
- Illegal or clandestine subdivision of land in conflict with planning regulations;
- Illegally subdividing apartments and renting or leasing them at high market prices; and
- Construction or use of houses without permission and in contravention of building codes.

Although informal settlements are more pronounced in cities in the global south, sub-standard living conditions can also be found in developed countries. Informal settlements range from the squatters in South Asia, the favelas in Brazil, the Matapi flats in Zimbabwe and the granny cottages in Los Angeles. Table 3-1 illustrates the different types of informal settlements in different areas.

Table 3-1: Informal settlement perspectives

Type of informal settlements	Illegality/ extra-legality defined by
Favelas in Brazil	• Construction of houses in contravention of building codes
Matapi flats in Harare (Zimbabwe)	• Illegal subdivision of apartments renting or leasing them at high market prices
Aashwai in Cairo (Egypt)	• Illegal or clandestine subdivision • Construction or use of houses without permission •
Squatter settlements in New Delhi (India)	• occupation of land that infringes on communal or individual property rights
Granny cottages in Los Angeles (USA)	• Construction or use of houses without permission

Source: Own construction from Narayanan (2013:5); Chirisa (2008:8); GTZ (2009?: 96)

3.3.2 South Africa's perspectives on informal settlements

The 2009 National Housing Code identifies informal settlements on the basis of the following characteristics:

- Illegality and informality;

- Inappropriate locations;
- Restricted public and private sector investment;
- Poverty and vulnerability; and
- Social stress

Thus, informal settlements can be in the form of traditional rural dwellings, shacks in a backyard or a group of shacks not in a backyard (DHS, 2009b:16, HDA, 2013a:6). The informal settlements under study are those referred to as: shacks not in a backyard, in the South African context and squatter settlements or squatter camps in many parts of the world. It should be noted that, in many literary studies, the terms slum and informal settlement are often used synonymously.

3.4 Factors influencing the development of informal settlements

For effective and successful planning intervention in addressing informal settlements, it is essential to understand the factors which contribute to the existence and the proliferation of informal settlements. These are summarised as:

- The gulf between the unprecedented rate of urbanisation and the ability of the housing sector to cater for the large number of people;
- Income poverty which hinders the prospects of the poor in acquiring housing on the formal market;
- Unaffordable land and housing for the low income groups;
- Ineffective government policies which fail to address the housing challenge; and
- Invasion of land as a result of political dispute or influence from politicians who want to gain political support (UN-Habitat, 2006:9; Huchzermeyer, 2004:38; Davis, 2007:38).

3.5 Challenges and benefits of informal settlements

The problems of inadequately serviced and overcrowded urban housing have been recognised as undesirable aspects of urban living since humanity first began to dwell in cities (UN-Habitat, 2003a:5). On the other hand, there is generally limited understanding of the actual dynamics within informal settlements, the complex social and survival networks that characterise them (Misselhorn, 2008:4). The general negative perception of informal

settlements often negates the benign and positive role these settlements play in addressing the needs of the poor, influencing urban development and shaping existing cities. Table 3-2 shows the benefits and challenges of informal settlements to the residents, the state and non-residents.

Table 3-2: Benefits and challenges of informal settlements

Benefits to the residents themselves • Economic opportunities not found in the rural areas, that is, greater access to income earning opportunities • Housing to those who cannot access formal low cost housing • Easier access to the city • Socially imbedded, that is, a strong sense of community through staying in close proximities as relatives, having dense neighbourhoods and participatory practices • Integration of the poorer immigrant population into the area by creating openings for a community to evolve • The need for the public goods will result in agglomeration of large concentration of income-earning opportunities as well as small scale businesses and services	Challenges to the residents themselves • Poor sanitation and inadequate water supply • Disease outbreaks • Fire and disaster risks • Poor top-structures and building materials • Challenges in accessing social facilities such as clinics and schools • Threats of evictions due to lack of title • Crime and violence
Benefits to the state and non-residents • Their challenges provide opportunities to create better and functional cities for tomorrow through the use of evolving technology and knowledge • Could lead to the establishment of townships • The informal economic activity of informal settlement are closely intertwined with the city' formal economy • Bring about the idea of mixed uses/new urbanism as there are no zones to separate homes, shops and schools from each other • Leads to dramatically lower per capita rates of energy and water use • Low cost accommodation provided for a large labour pool (for example for retail and industry)	Challenges to the state and non-residents • Unsightly (mainly in the eyes of the privileged) • May create the impression that the state is not 'delivering' • May represent a leftist power base in opposition to the state should the state continue to be unable to provide meaningful development relief • May adversely affect property values in neighbouring areas, plus other concerns / perceptions like health, water pollution, and crime. • Perceptions of negative impacts on tourism

Source: Adapted from Misselhorn (2008:5-6)

3.6 Responses to the existence of informal settlements

The different perceptions towards informal settlements influence the different responses to their existence. While some governing officials perceive the existence of informal settlements as an indication of the dire need of housing amongst the poor, others view informal settlements as a nuisance or a crisis that appears to threaten the structure of

society, the people and institutions that govern them. In this respect, the responses can be classified as: indifference, oppositional or cooperative.

3.6.1 Indifference

This is when the government “pulls a blind eye”, that is, does not take any actions in response to the existence of informal settlements. It can be in the form of neglect, tolerance or simply ignoring them. Amongst the major contributing factors are:

- The existence of the informal settlements does not pose a threat to the principle of private property;
- The settlements are regarded as a temporary situation;
- The settlements are recognised as supporting the economic and social system, or
- The settlements are considered to be necessary for political support (Gilbert & Gugler, 1982:123-128).

This laissez-faire attitude has more often than not, fuelled the burgeoning of informal settlements. Arnott (2009:182) concurs that if governments turn a blind eye to the existence of informal settlements, it encourages the development of more settlements in future. Due to this shortcoming, governments have sought harsh means of addressing informal settlements

3.6.2 Oppositional

This is when the government responds negatively to the existence of the informal settlements. This is mainly due to the facts that:

- The existence of the informal settlements may be regarded as a nuisance and an eye sore to society;
- The informal settlements are perceived as a social threat to the dominant classes of society, or
- The informal settlements impose negative impacts on the competitiveness of the city; (Huchzermeyer & Karam, 2006:21).

Consequently, the responses to the informal settlements are hostile, repressive and exploitative. The hostility of the responses towards informal settlements is marked by the harsh evictions faced by the inhabitants. Thousands of households have been evicted in

countries such as Nigeria, Zimbabwe, South Africa and Uganda amongst others. Zimbabwe's Clean Up Campaign "Operation Murambatsvina" is the quintessence of the harsh evictions which left approximately 133 534 households (569 865 people) homeless (Tibaijuka, 2005:32). The brutality of these evictions is in contravention of human rights hence the majority of the evictions have been subject to review by state judicial systems and the UN.

Although forced evictions may also be implemented to protect the inhabitants from physical harm, the practicality of achieving the desired results in reducing informal settlements through forced evictions is limited. Davis (2007:38) notes that the emergence and existence of informal settlements is often a test of the will and endurance of the inhabitants against the repressive apparatus of the state. The inhabitants are often prepared for such evictions hence in many cases; the evicted inhabitants end up invading other pieces of land elsewhere hence this approach does not moderate the proliferation of informal settlements.

Following the outcry against the hostility of such measures and the futility of this oppositional approach, governments often resort to anti-repressive measures in addressing the challenge of informal settlements.

3.6.3 Cooperative

This approach reflects a positive move towards the acceptance of informal settlements to exist as part of society. This is based on:

- The recognition of the inhabitants' right to the city as forwarded by Lefebvre;
- The state's understanding of its mandate to address the housing challenges faced by the poor;
- Recognising that this part of housing delivery is not just anomalous but deeply embedded as and part of social, political and economic relations; and
- Avoiding threats of social and/ or political unrest if the government responds otherwise; and

The government's cooperative response is realised through the implementation of policies directed at informal settlement intervention.

3.7 Policy approaches towards informal settlement intervention

Over the years, intervention in addressing informal settlements has evolved from direct intervention from the governing authorities to addressing the root cause for the existence of informal settlements. Investigating the process by which informal settlement intervention has evolved aids in analysing the pros and cons, strengths and weaknesses of the current system. The policy approaches are a reflection of the shift from the provider to the support paradigm in informal settlement intervention.

3.7.1 Eradication and public housing schemes

During the 1950's and 1960's informal settlement intervention was characterised by evictions from the informal settlement sites to new areas provided with serviced housing units. According to Khalifa (2015:1153) "the official state reaction in this period tended toward the eradication of informal settlements and re-housing the people elsewhere, most likely in public housing and adopted policies emphasised land acquisition, land banking and conventional housing projects".

The failure of public housing schemes in addressing informal settlements is mainly attributed to factors such as cost, socio-economic discrimination and inappropriate design. Hamdi (1995:18) explains how the "provision of mass housing, a process historically argued as being fast and cheap due to economies of scale, became slow, expensive, and with little significant impact on what was perceived as a housing shortage". Therefore, it is evident that informal settlement intervention through public housing provision is not economically sustainable as it increases the burden on the government yet serving a small portion of the inhabitants.

3.7.2 Site and Services Scheme

One of the state's interventions during the 1970's was clearing the centrally located slums and relocation of the inhabitants to newly serviced plots outside the urban areas (van der Linden, 1986:18). The provision of sites and services was a move towards public authorities retaining formal control over land sub-divisions and housing process while mobilising the resources of the low income groups (UN-Habitat, 1987:174).

The Site and Services Scheme is acclaimed for recognising the significance of collaborative efforts between the government and the inhabitants in addressing informal settlements. The participation of the inhabitants in the development process enabled local governments to act more as facilitators than providers thus saving them some resources (Pugh, 2001:63).

However, the eviction and relocation aspect of the scheme aggravated the housing challenges faced by the inhabitants. Matovu (2000:4) notes how the serviced sites could not accommodate all the inhabitants leaving some of the evicted inhabitants without alternative housing. The relocation of the people to the peri-urban locations aggravated the accessibility of services and economic opportunities due to higher transportation costs.

The scheme did not take into account the socio-political aspects of informal settlement intervention. To a greater extent, the beneficiaries of the scheme were the land grabbing middle class who did not even reside in the informal settlements. Consequently, the poor inhabitants who did not benefit from the scheme would continue to invade other sites resulting in the continual proliferation of informal settlements. Thus, the scheme failed to address slum management issues in preventing and reducing the future expansion of slums. The shortcomings of the Site and Services Scheme necessitated the need to formalise the informal settlements.

3.7.3 Formalisation of informal settlements

A common approach in the post 1970s era was formalisation of informal settlements which essentially refers to making informal settlements formal. It is a process where informal settlement intervention is based acknowledging the existence of informal settlements as part of the broader urban framework. Primarily, formalisation of informal settlements is described as “the legal processes where townships are created (township establishment) with formal services through which residents obtain formal security of tenure and normally this includes the development of top structures” (Urban LandMark, 2009:4).

The formalisation process is based on the notion that the challenges relating to poverty, marginalisation and forced evictions faced by the inhabitants emanate from the absence of legal tenure. The capability of the inhabitants of the informal settlements to significantly improve their quality of life is enhanced by a sense of appropriation (Durrand-Lasserve & Royston, 2002). De soto (2011:5-11) explains the essence of individual ownership rights so that the people living in informal settlements, whose houses he refers to as dead capital, can start investing in housing improvements as well as collateral for a loan thereby providing access credit opportunities. This is based on the view that ownership contributes to the consolidation of informal settlements and their integration into the formal system of servicing, financing and regulating.

However, the formal process of township establishment is often criticised for being costly and having a lengthy implementation timeframe. Cousins *et al.* (2005:4) claim that

“formalisation of property rights through titling does not necessarily promote increased tenure security or certainty and in many cases does the opposite”. The lengthy process in pursuing ownership exposes the inhabitants to insecurity rather than security (Urban LandMark, 2010a:8). Nonetheless, governments should identify ways of reducing the township establishment process while following the legal process in order to secure full formalisation thus avoiding conflict over an informal right to the land.

The approach is also criticised for not recognising the sense of community which defines societies within informal settlements. Formal provision of stands and formal services often occurs in the form of de-densification resulting in the relocation of some households. Huchzermeyer (2011:199) argues that formal township establishment endorses possible removal of some households and the shifting of shacks for others without recognising the intrinsic value in informal settlements or minimising disruptions to people’s lives. Nonetheless, though this disrupts the social lives of the inhabitants, the de-densification of the settlements ensures that formal services are provided according to standards and therefore reducing the possibilities of malfunctioning services such as sewer outburst.

Due to the non-fulfilment of the formalisation approach, policy makers have resorted to an incremental approach to the formalisation of informal settlements.

3.7.4 In situ upgrading of informal settlements

In situ upgrading of informal settlements is an incremental formalisation approach whereby the process of making informal settlements formal is carried out in an incremental approach. According to Huchzermeyer (2011:199) in situ upgrading of informal settlements involves “incremental securing of tenure, rehabilitation of unsuitable land, meaningful community participation in decision making, permanent provision of infrastructure, service facilities with minimal disruption to people’s lives”. World over, this approach has gained support from planners and policy makers due to its potential to minimise the harmful social, economic and environmental impacts derived from eviction policies, as it maintains the existing social relationships and community cohesion where they exist.

3.7.4.1 Provision of basic services

Upgrading informal settlements normally entails the densification of the settlement to ensure that all the inhabitants are accommodated. Densification of the settlements also enables the delivery of basic services and facilities at least cost. In cases where informal settlements are located on marginal lands represented by spatial segregation, upgrading the informal settlements would continue to promote the segregation of these societies. Todes (2003:110)

notes that fewer informal settlements fall within the spatial framework accessibility footprint hence the upgrading of the informal settlements is likely to reinforce the marginalisation of these communities.

3.7.4.2 Community Participation

The participation of the beneficiaries is a critical component of the upgrading process. Moser (1983:71) emphasises on the distinction between development efforts which envisage participation as a means and those which view it as an end. As a means, the people are mobilised with the purpose of achieving a desired outcome. As an end, community participation is measured in terms of transfer of power (Moser, 1983: 73).

Acknowledging community participation as a process where the outcome itself is increasingly meaningful in the development process is critical for the upgrading process. Pieterse and van Donk (2014:158) concur that “empowering people to participate in their own development process enables citizens to become active partners in the development process, including the design, implementation and sustainable management of development interventions”.

However, the practicality of community participation in the upgrading of informal settlements is questionable. More often than not, the application of community participation in real case scenarios is often a contested task (Graham, 2006:241). In an urban context, it is likely that project managers, city officials, community leadership and ordinary residents have quite different views of what ‘participation’ means.

In this regard, it should be noted that the real objective is to increase the control of marginalised groups over resources and regulative institutions hence the need to go beyond community participation by ensuring community engagement from the inception to the completion of the upgrading project. The communities should be involved from the beginning throughout the whole process.

3.7.4.3 Incremental security of tenure

This approach is based on ensuring tenure security rather than ownership. The incremental tenure security allows land rights to be upgraded over time. This approach relies more on administrative and legal mechanisms such as the provision of services, registers and shack numbering to protect the inhabitants against evictions (Urban LandMark, 2010a:8). The incremental approach allows continuity in the improvement of tenure, services, structures and land-use management during the period between settlement and township

establishment (Urban LandMark, 2009). Figure 3-2 illustrates the incremental tenure approach.

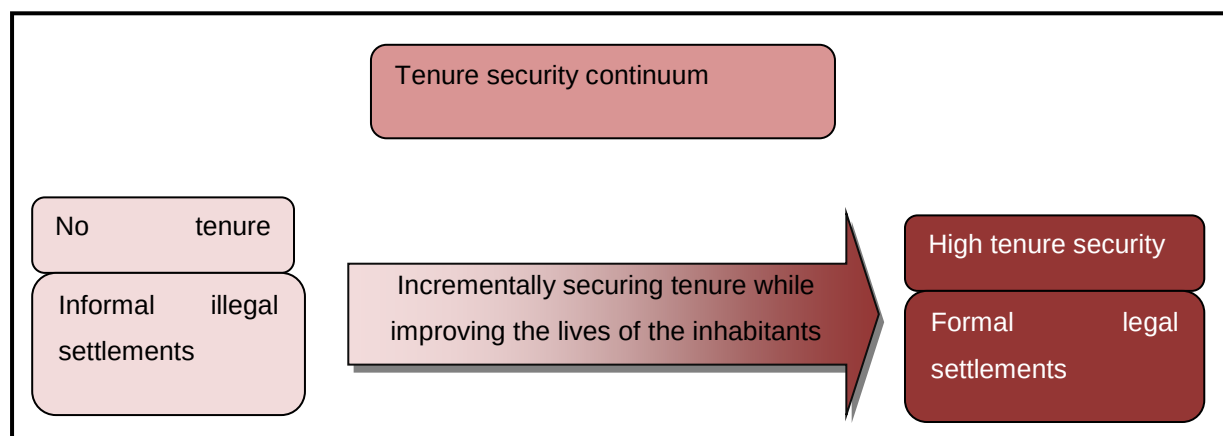


Figure 3-2: Tenure security continuum

Source: Adapted from Urban LandMark (2010b:7)

However, the incremental security of tenure approach contributes to uncertainty amongst the inhabitants. The fact that the inhabitants do not have full ownership of land they inhabit fuels their reluctance towards investing in the building of top structures or improving the conditions of the informal settlements they reside in. Implementation of security of tenure does not guarantee any long-term solution to the expansion of emerging and future slums. This is an important gap that the security of tenure policy has failed to address.

3.7.5 Cities without slums action plan

The cities without slums action plan is the brain child of the World Bank and UN-Habitat in their bid towards achieving MDGs Target 11. The policy is grounded on the notion that informal settlements are a manifestation of poverty thus successful intervention would be achieved through poverty alleviation. However, the Cities without Slums Action Plan does not articulate what measures should be taken or formulated to curb the emergence of new slum. The plan does not provide nor indicate the actions various urban 'stakeholders' at all levels (local, national and international) should undertake to reduce, if not stop, the mushrooming of new slums (Sietchiping, 2005:9).

3.8 Conclusion

The focus of this chapter is on understanding the phenomenon of informal settlements. Low income housing can either be provided through the provider approach or the support approach. Conventional housing provision as advocated for by the provider approach does not take into consideration the value of housing on the livelihood strategies of the poor and the standards set do not always meet the capabilities of the poor. This influences the

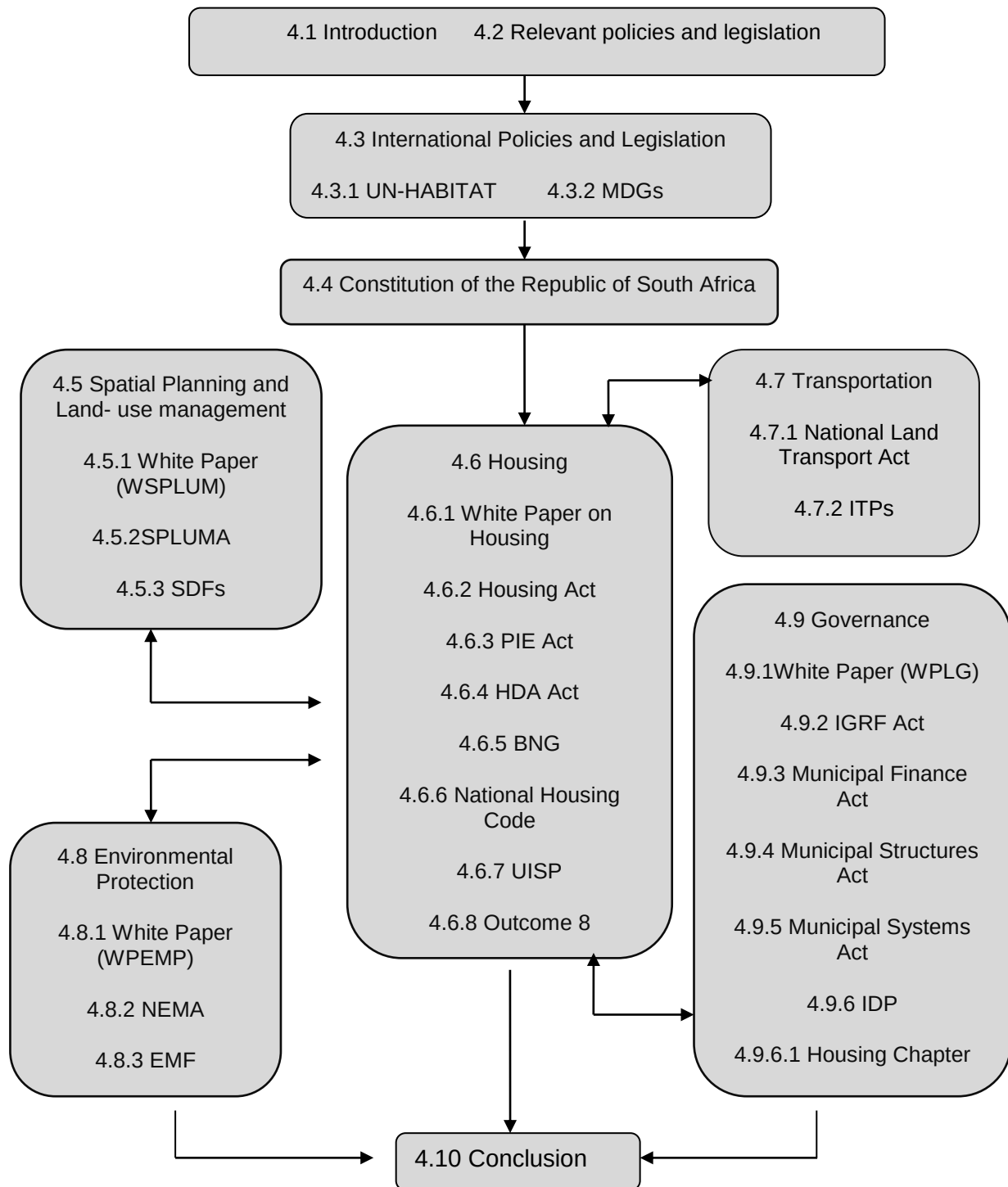
emergence of the unconventional housing system which manifests in the form of informal settlements.

Informal settlements are not only a challenge to planning, but they present housing and economic opportunities to the poor and those who cannot access housing through the formal market. The responses to the existence of informal settlements are influenced by the different perceptions which influence policy makers to either tolerate the existence of informal settlements with indifference, oppose their existence through evictions or cooperate with the inhabitants to address the challenge.

Policy responses to the existence of informal settlements have evolved from eradication and public housing schemes, site-and-services schemes, formalisation, upgrading to the confrontation of poverty. It is argued that the ideal approach to addressing informal settlements is to provide basic services, incremental security of tenure, promote community engagement and address poverty as the root cause of the existence and proliferation of informal settlements. This chapter provides the basis for analysing the policies, legislation, plans and strategies that govern informal settlement intervention in South Africa.

CHAPTER FOUR: LEGISLATION, POLICIES AND STRATEGIES

The diagram below is a graphical presentation of the concepts in Chapter 4.



4.1 Introduction

High levels of poverty and inequality followed by informality persist in democratic South Africa despite having more than a decade of government policies and legislative frameworks designed to address the legacies of apartheid (Cousins et.al. 2005:1). Chapter 3 presented a theoretical analysis on how low income housing is delivered and the different ways by which the government may respond to the challenge of informal settlements. This chapter investigates why the challenge of informal settlements is still in existence despite the policies, legislation and strategies that have been implemented to address the challenge. Therefore, this chapter reviews the legislation, policies and strategies which play a vital role in addressing the informal settlement challenges at international, national, provincial and local level.

4.2 Policies, legislation, plans and strategies relevant to informal settlement intervention

All the three spheres of government have responded to the challenge of informal settlements with the enactment and implementation of various policies, legislation, plans and strategies. Table 4-1 indicates the relevance of the policies and legislation which govern informal settlement interventions in accordance with their themes.

Table 4-1: Policies and legislation governing informal settlements intervention

Core Legislation	Housing provision for the informal settlement inhabitants	Community empowerment	Co-operative Government	Environment and Land Use Management	Integrated Development Planning
Constitution	X	X	X	X	X
SPLUMA	X	X	X		X
Housing Act	X	X	X	X	X
Pie Act	X			X	
NEMA		X	X	X	X
Intergovernmental Relations Framework Act	X		X		
Municipal Structures Act			X		
Municipal Systems Act		X			X
Housing Development Agency Act	X	X			
Core Policies					
Breaking New Ground	X	X	X	X	X
Upgrading of Informal Settlement Programme	X	X	X	X	X
National Housing Code	X	X			
White Paper on Local Government	X	X	X		X
White Paper on National Transport Policy	X			X	X
Core strategies, guidelines and plans					
Millennium Development Goals	X	X		X	X
Habitat Agenda	X	X			
Outcome 8	X		X		
National Upgrading Support Programme					
Integrated Development Plans	x	X	X	X	X
Spatial Development Frameworks	X	X	X	X	X
Housing Chapter of an IDP/ Housing Sector Plan	X	X	X	X	X
Environmental Management Framework					
Integrated Transport Plan					X
Medium Term Strategic Framework	X	X	X		

Core Legislation	Housing provision for the informal settlement inhabitants	Community empowerment	Co-operative Government	Environment and Land Use Management	Integrated Development Planning
Supporting Legislation					
Disaster Management Risk Act				X	X
Division of Revenue Act			X		
National Land Transport Act				X	X
Infrastructure Development Act	X				
Water Services Act	X				
National Water Act				X	X
National Environmental Management Waste Act			X	X	
Municipal Finance Management Act	X				
Supporting strategies, guidelines and plans					
Agenda 21				X	X
National Water Resource Strategy				X	
National Norms and Standards	X				
Integrated Residential Development Programme	X				X
Economic Development Strategy	X	X		X	X
Global Strategy for shelter	X		X		X

Source: Own Construction (2014)

Although all the policies, legislation and strategies listed above are relevant, the discussion will focus on those that are of core relevance to the study

4.3 International Policies and Legislation

4.3.1 UN-HABITAT

The United Nations Human Settlements Programme (UN-Habitat) was established in 1976 in Vancouver. The conference (HABITAT I) resulted in the coining of the term 'Human Settlements' which has provided a shift from the general use of the term 'housing'. The program acknowledged that adequate housing would entail the provision of basic services, access to health and education, social protection of the residents, socio-economic

development, restructuring of racial division among others (UN, 1976: 2-9). Habitat I thus formed the basis for addressing housing challenges at an international scale.

Habitat II (HABITAT Agenda) called for a global action plan for the development of sustainable human settlements. The Agenda recognised the need to improve the living conditions of people in developing countries to sustainable patterns of production, consumption, transportation and settlements development; pollution prevention, among others (UN-Habitat, 2003b:1-2). The HABITAT Agenda therefore influences the intervention in the challenge of informal settlements in a manner that will also accommodate the needs of future generations.

HABITAT III to be held in Quito 2016 will focus on reviewing existing policies and legislation relating to the creation of sustainable human settlements. Attention will be paid to the “NEW URBAN AGENDA”, a new global pact to deal with urbanisation, climate change, insecurity, crime and rising informality within cities and human settlements (UN-Habitat, 2015b:2). The New Urban Agenda will address informal settlements, the causes and challenges related to informality with a focus on urbanisation.

4.3.2 Millennium Development Goals

Goal 7, Target 11 is the core of this study. The target focuses on “achieving by 2020 a significant improvement in the lives of at least 100 million slum dwellers”. The target is lauded for influencing policies and programme directed at addressing the challenge of informal settlements in South Africa. However, there is no clearly defined variable to measure the 'improvement of living conditions' of 100 million slum dwellers. There is no means by which 'improved living conditions' in different cities, realities and contexts and other city development strategies may be differentiated (Sietchiping, 2005:9).

4.4 Constitution of the Republic of South Africa (Act 108 of 1996)

The Constitution of South Africa (Act 108 of 1996) is the supreme law of the land forms the core of all planning carried out within the country. The preamble of the Constitution emphasises on healing the racial divisions, laying the foundations of a democratic society, improving the quality of life for all citizens, and building a united and sovereign country (South Africa, 1996). This study will focus on sections of the Constitution that address issues relating to housing, environmental sustainability and the roles of the various spheres of government.

4.4.1 Housing Provision

One of the most significant basic human needs is access to and ownership of housing. This is enshrined in Section 26(1) of the Constitution which states that everyone has the right to have access to adequate housing. Sub section (3) states that no one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances. Having a place of habitation has major impacts on the dignity and well-being of humans. It is in this regard that Tagg (2012:4) asserts that there is an intersection between sections 26 and 10. Section 10 states that “everyone has inherited dignity and has the right to have their dignity respected and protected”. Therefore preservation of dignity and the well-being of people are achieved by ensuring access to housing and prohibition of inconsiderate evictions.

4.4.2 Environmental Management

The living conditions in which a settlement exists affects the quality of life of the resident. Any development that is carried out has either a negative or positive impact on the environment. The overall role of planning is to achieve sustainable development and this includes environmental sustainability. Therefore, it is essential to take into account Section 24 of the Constitution which states that everyone has the right:

- (c) “to an environment that is not harmful to their health or well- being; and
- (d) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
 - (i) Prevent pollution and ecological degradation;
 - (ii) Promote conservation; and
 - (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development”

This brings about the aspect of the visible hand, where the government intervenes to address the challenges faced in the provision of housing while ensuring environmental sustainability. A failure to address informal settlements would be in contravention with this constitutional right.

4.4.3 Government Intervention

Section 26 (2) then provides that the state must take reasonable legislative and other measures, within its available resources, to achieve their progressive realisation of the right to adequate housing. This concurs with sections 152 and 153 which emphasise on the objects of the local government and the developmental duties of municipalities through their administration, budgeting and planning processes to promote social and economic development of communities. It is therefore the duty of the local government to ensure that the people have access to adequate housing using whatever ways within its means.

However, the local government does not and cannot work as a single entity in addressing planning challenges, hence the need for integration amongst all the spheres of government. The significance of unity amongst the spheres of government in addressing the challenges faced by the nation is enshrined in Section 40 of the Constitution states that:

- 1) "In the Republic, government is constituted as national, provincial and local spheres of government which are distinctive ,interdependent and interrelated
- 2) All spheres of government must observe and adhere to the principles and must conduct their activities within the parameters provided for in the chapter".

Due to the fact that one of the organs of the local government is the community, the Constitution makes provision for community participation.

4.4.4 Community Participation

Community participation is a critical component of social and economic development. . This is enshrined in section 152(1) (e) which states that the objects of the local government are to encourage the involvement of communities and community organisations in the matters of local government (SA, 1996). According to Pienaar (2011:120) subsequent policy and legislative frameworks place community participation at the centre of local government system and define the mechanisms and processes of promoting local democracy. Therefore, the Constitution recognises the significance of a people centred approach in achieving social and economic development.

4.5 Spatial Planning Policy and Legislative Framework

Having looked at the national policies and regulations, it is essential to understand the policies, legislation and strategies that govern the distribution of people and activities in spaces of various scales.

4.5.1 White Paper on Spatial Planning and Land Use Management, 2001

The White Paper on Spatial Planning and Land Use Management (WPSPLUM) was implemented to ensure an improved approach in ensuring integrated planning for sustainable management of land resources. The WPSPLUM builds upon the concept of the municipal integrated plan and will rationalise the existing plethora of planning laws into one national system that will be applicable in each province, in order to achieve the national objective of wise land use (DLA, 2001:2).

The essential elements of the White Paper are:

- “Principles aimed at achieving sustainability equality, efficiency, fairness and good governance in spatial planning and land use management
- Land use regulators who are the authorities responsible for making decisions regarding spatial planning and land use management
- IDP based local spatial planning indicating the minimum elements and operative plan for spatial development frameworks
- A uniform set of procedures for land development approvals
- National spatial planning frameworks as policy frameworks for sustainable and equitable spatial planning around national priorities”

The White paper thus forms the foundation for the Spatial Planning and Land Use Management Act (16 of 2013) and the subsequent Spatial Development Frameworks.

4.5.2 Spatial Planning and Land Use Management Act (16 of 2013) SPLUMA

From the inception of democracy, there has been a sharp increase in the number of official systems and legislation that have attempted to control spatial development and planning (DEAT, 1997). However, no primary legislation had been enacted in relation to the correlation that exists between spatial planning and land use management. The SPLUMA seeks to address the fragmented, unequal and incoherent spatial planning and land use management systems that exist in South Africa today (South Africa, 2013).

4.5.2.1 Objects of the Act

In terms of Section 3, the objects of the Act are to:

- (a) “Provide for a uniform, effective and comprehensive system of spatial planning and land use management for the republic;
- (b) Ensure that the system of spatial planning and land use management promotes social and economic inclusion;
- (c) Provide for development principles and norms and standards;
- (d) Provide for sustainable and efficient use of land;
- (e) Provide for cooperative government and intergovernmental relations amongst the national, provincial and local spheres of government; and
- (f) Redress the imbalances of the past and to ensure that there is equity in the application of spatial development planning and land use management systems” (South Africa, 2013).

One of the principles of the Act is to address the issue of informal settlements as an element of ensuring spatial justice. This entails:

- “Addressing inclusion of persons and areas that were previously excluded , with emphasis on informal settlements in spatial development frameworks and policies in all spheres of government;
- Ensuring that development procedures include provisions that accommodate access to security of tenure and incremental upgrading of informal areas; and
- Promoting land development in locations that are sustainable and limit urban sprawl”

4.5.2.2 Preparation of Spatial Development Frameworks

The SPLUMA also recognises the need for intergovernmental support in addressing all spatial related activities including housing developments. This is strengthened by the recognition of the categories of spatial planning, provisions of guidelines and contents for the preparation of Spatial Development Frameworks at national, provincial, and municipal levels. Section 17 of the Act outlines the legal provisions of the Provincial Spatial Development Frameworks. These will be discussed in detail under spatial development frameworks.

4.5.2.3 Land use management

The SPLUMA also takes into account the aspect of land use management and this is achieved through the adoption of a land use scheme by a municipality within five years of the commencement of the Act. The land use must, inter alia, indicate any development taking place in the area, any environmental management instrument and include provisions that permit the incremental introduction of land use management and regulation of areas under informal settlements and slums (South Africa, 2013). This scheme also includes the aspect of community participation where members of the public are consulted before the implementation of the scheme, as well as the amendment of the land-use scheme.

4.5.2.4 Land Development Management

Another important aspect of the SPLUMA is Chapter 6 on land development management. This includes the submission of development applications to the municipality and the establishment of a municipal tribunal as part of municipal land use planning. Additionally, for land development, the applicant/developer is responsible for the provision of internal engineering services while the municipality provides for external engineering services.

Furthermore, the Act stipulates that the development of land for residential purposes must be accompanied by the provision of land for parks and open spaces in close proximity to the development or somewhere within the municipality. However this may be a challenge in the formalisation of informal settlement as most of them are already located on land reserved for parks and open spaces. Also, there may not be land elsewhere to provide for parks and open spaces.

4.5.2.5 Integrated Development

The SPLUMA endorses the ways in which spatial planning and land use management can contribute to the attainment of sustainable human settlements. This owes to the fact that spatial planning is spread across housing, land use management, provincial and local governance, and the transport sectors with the aim of developing sustainable human settlements. Rohr and Fourie (2014:288) affirm that the promotion of integrated planning in the various sector departments in formulating planning documents at various levels of government is one of the key principles of the Act in the pursuit for sustainability. Therefore, the SPLUMA forms part of the core legislation in ensuring the addressing the informal settlement challenge.

4.5.2.6 Criticism of the Act

The SPLUMA is a recently enacted law hence not much that has been written about it yet. Though the Act has become the panacea to spatial planning and land use management, there is no clear distinction between land use and the use of land. Whereas the former refers to the statutory obligations on how the land should be used, the latter refers to the existing use of the land, and this may not necessarily be its designated purpose. Nonetheless, the Act provides guidance for the review of the existing guidelines and strategies related to spatial planning and these include the spatial development frameworks.

4.5.3 Spatial Development Frameworks

The spatial development framework (SDF) is an indicative plan which shows the desired patterns of land use, direction of growth, special development areas and areas for conservation (TCC, 2014b:5). All spheres of government are required to prepare a SDF for their jurisdiction, hence the existence of the National Spatial Development Perspective, the Provincial Spatial Development Framework and the Municipal Spatial Development Framework.

4.5.3.1 National Spatial Development Perspective (NSDP) 2006

The National Spatial Development Perspective (NSDP) was adopted by the Cabinet as a framework to guide policies and programmes regarding spatial planning within all spheres of government. The NSDP was implemented in response to the failure of development programmes to address the spatial distortions inherited from the apartheid system of planning. It was therefore an effort towards implementing spatial priorities that recognise the attainment of the constitutional obligations. Table 4-2 illustrates the principles and provisions as indicated in the NSDP:

Table 4-2: Principles and Provisions of the NSDP

Principles	Provisions
• Shared , inclusive and sustainable economic and human development will contribute to poverty alleviation • Government has a constitutional obligation to provide basic services to all citizens wherever they reside • Shared, inclusive and sustainable economic and human development will contribute to poverty alleviation • Efforts to address past and current social inequalities should focus on people , not places • Future settlement and economic development opportunities should be channelled into activity corridors and nodes to overcome apartheid spatial distortions	• A set of principles and mechanisms for guiding infrastructure invest and development decisions • A description of spatial manifestations of the main social, economic and environmental trends that should form the basis of a shared understanding or the national space economy • An interpretation of the spatial realities and the implications for government intervention

Source: Adapted from the NSDP (South Africa, 2007: ii-iii)

The NSDP provides a platform for investment in housing development projects, more specifically in informal settlement upgrading and relocation projects. The provisions made in the NSDP are useful in influencing how government spending may be spatially aligned to intervene in informal settlement challenges vis-a-vis the principles set in the Perspective. Also as pointed out by Oranje *et al.* (2008:1) the NSDP assists politicians in making hard investment choices within a world of growing resource scarcity. In spite of other interpretations, this means that the NSDP guides politicians in identifying potential economic growth and in investing in their development in order to gain support from the residents.

4.5.3.2 (North West) Provincial Spatial Development Framework (NWPSDF)

The NWPSDF is premised on the reconstruction of spatial distortion guidelines provided in the NSDP. In accordance with section 3 of the SPLUMA, provincial spatial development frameworks must coordinate, integrate and align provincial plans and development strategies with policies of national government, provincial departments and municipalities. In order to address spatial inequality, the NWPSDF acknowledges the existing and changing spatial patterns of population settlement, economic development and general potential within the province. This therefore forms the premise for the municipal Spatial Development Framework.

4.5.3.3 (Tlokwe Municipality) Spatial Development Framework (2008)

Municipalities are required to prepare a Spatial Development Framework (SDF) in terms of Section 26(e) of the Municipal Systems Act (32 of 2000). The SDF forms an integral part of the IDP, which provides high-level guidelines for development in the municipal area of Potchefstroom, and also serves as an enabling framework for development policies. The SDF is informed by the vision of the municipal area, the development objectives and the strategies and outputs identified by the IDP (TCC, 2014b:5). Ultimately, the purpose of the SDF is to provide the municipality with a long term spatial development strategy to:

- Ensure the proper application of scarce financial resources in space;
- Coordinate all actions of the municipality in the physical environment; and
- Guide the actions of private sector regarding land development (TCC, 2014b:5).

The SDF also stipulates that proposed housing and township development must be carried out in terms of an integrated land, housing and infrastructure programme and is reflected in the strategic scorecard of the IDP. Additionally the SDF provides the framework for the compilation of land-use policies and plans regarding land for expansion of housing, business development, industries and social infrastructure, urban integration and densification, open spacing and land use management. It therefore enables the prioritisation of development projects within a multi-sector approach, thus its relevance to the study. Understanding the regulatory frameworks relating to spatial planning and land-use management provides the backbone for housing provision and development.

4.6 Housing Policy and Legislative Framework

Housing provision in South Africa has evolved over the past 20 years since South Africa attained its independence. Various policies, legislation and strategies have been implemented and adopted in response to the housing challenges faced by the citizens. Though the Housing Sector Plan falls under housing strategies, it will be discussed as part of the Integrated Development Plan. Figure 4-1 illustrates the relationship that exists amongst policies and legislation addressing housing.

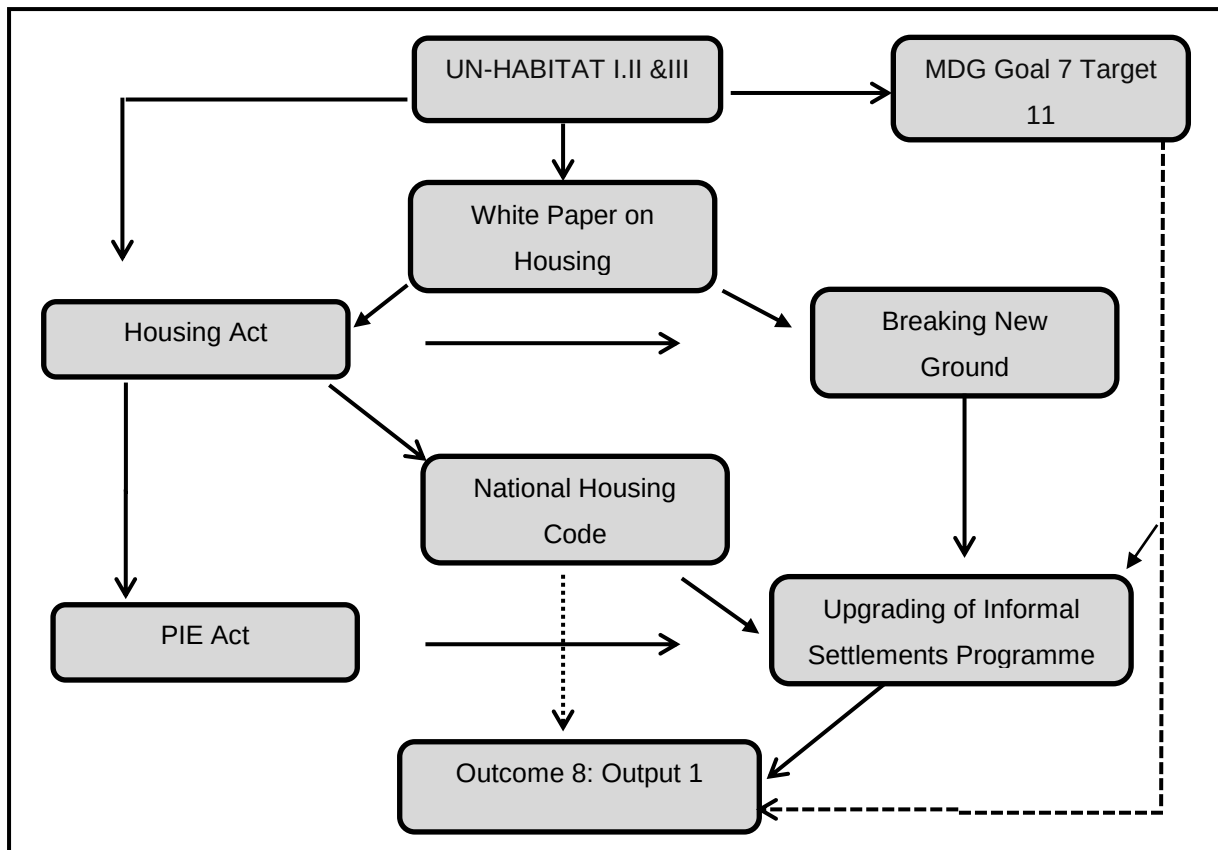


Figure 4-1: Housing Policy and Legislative Framework

Source: Own Construction (2014)

4.6.1 White Paper: A New Housing Policy and Strategy for South Africa 1994

The White Paper: A New Housing Policy and Strategy for South Africa was implemented in 1994 as one of the first policies directed at addressing the housing challenge in the Post-Apartheid South Africa. The significance of the policy is basically enshrined in its preamble which recognises that the housing challenge facing the government was inherent from the policies from the apartheid era (DoH, 1994:1).

4.6.1.1 Housing as a basic need

The policy acknowledged the importance of housing as a basic need, the role of the state and private entities in the delivery of housing, the need for a people centred development, the significance of everyone having the freedom of choice in the process of satisfying his/her own housing needs and non-discrimination in housing provision. Accordingly, the White Paper on Housing focused on assessing the relationship between housing and the macro-economy, the housing context characterised by a fragmented policy approach, grinding poverty, as well as ensuring economic growth and employment creation

The White Paper on Housing commits the government to the establishment of viable, socially and economically integrated communities situated in areas allowing convenient access to economic opportunities as well as health, educational and social amenities. It is in this regard that the policy recognises that the implementation of the concept of “adequate housing” would be through the provision of a permanent residential structure and with secure tenure, ensuring privacy and providing potable water adequate sanitary facilities including waste disposal and domestic electricity supply (DoH, 1994:12).

4.6.1.2 Financing housing provision

The White Paper on Housing declared that every effort would be made to realise the national housing vision despite the constraints in the environment and the limitations in the fiscus (DoH, 1994:19). According to Tissington (2011:21) the White Paper on Housing provided a framework for the country’s ambitious housing development target of building one million state funded houses as set out in the Reconstruction and Development Programme (RDP). The government’s goal was to increase the national budget allocation for housing to five percent thus increase housing delivery on a sustainable basis to a peak level of 338 000 units each year (DoH, 1994:20).

In order to meet this mandate, the policy aimed at the creation of an “enabling environment in which the state supported and facilitated the delivery of housing by the private sector or by community based organisations” rather than engaging indirectly in shelter provision itself (Charlton & Kihato, 2006:254). The White Paper on Housing was therefore grounded upon the fundamental pre-conditions for attracting private investment thus setting out a variety of programmes and mechanisms to assist households with access to secure tenure, services and starter housing (Landmark and Napier, 2010:299).

4.6.1.3 Subsidised housing

A cornerstone of this early policy was the National Housing Subsidy Scheme (NHSS), which, among other subsidy systems, provided capital subsidies for housing to qualifying beneficiary households to take full ownership (Tissington, 2011:21). The policy also advocated for the empowerment of black contractors while ensuring the delivery of uncompromised and proper standard products (DoH, 1994:27). The policy therefore described the government’s overall approach to the housing challenge aimed at mobilising and harnessing the combined resources.

4.6.1.4 Criticism of the policy

The housing policy however had a number of shortfalls, amongst them, the failure to supplement the subsidies offered by the state. Wilkinson (1998:226) explains that the policy framework should have adopted a state-assisted self-help approach, thereby supplementing state investment with efforts by people to house themselves by drawing on funds from financial institutions and their own resources, accumulated savings and social networks. A reminiscence of this shortfall in the policy provides an understanding on the continued proliferation of informal settlements as it developed a dependency syndrome amongst the citizens.

Bond (2003:47) also argues that the lack of focus on civic communities and other community groups throughout the policy indicates that the documents were mere lip service to people-driven development. Other shortfalls associated with mainstream analysis and policy appear in areas such as housing backlog measurement, rural housing, housing standards, cost recovery for services, interest rates and other aspects of the RDP mandate (Bond, 2003:47). Nonetheless, the fundamental principles, goals and strategies continue to guide housing development in South Africa. These influenced the enactment of the Housing Act (107 of 1997) and they guide the implementation of the Breaking New Ground Initiative.

4.6.2 Housing Act No. 107 of 1997

The provision of Housing in South Africa is governed by the Housing Act (107 of 1997). For this study, the Act mainly guides in ensuring that housing development is carried out in a sustainable manner, emphasising the provision of basic services and community participation as well as guiding in the identification of the distinct roles of the three spheres of government in informal settlement intervention.

4.6.2.1 Provision of basic services, security of tenure and community participation

In terms of Section 2(1) the three spheres of government must, in respect of housing development: “prioritise the needs of the poor and consult meaningfully with the individuals and communities that may be affected by the development”. The three spheres of government should ensure that: housing development provides wide housing and tenure options; is economically, fiscally, socially and financially affordable; is based on integrated development planning; and is administered in a transparent and accountable manner. Also, the government should encourage, support and empower individuals and communities in meeting their housing needs.

Additionally, Section 2 (1) states that there is a need for the three spheres of government to provide “education and consumer protection in housing development; racial, societal and economic integration of and within urban and rural areas”, as well as effective functionality of the housing market to ensure equality. Furthermore, the government is required to ensure that special housing needs for the disabled, marginalised women and other groups disadvantaged by unfair discrimination are met while ensuring the elimination and prevention of slums and related conditions (South Africa, 1997a).

The Housing Act therefore recognises the challenges faced by the poor and marginalised societies in accessing standard housing. Therefore there is need for government intervention in reducing the cost of housing, providing security to ownership of housing, ensuring anti-corruption tendencies in housing development, and empowering the locals in housing development practices, thus meeting their needs as well creating employment. Elimination of these challenges will aid in addressing the challenges of informal settlement nationwide.

4.6.2.2 The distinct roles of the three spheres of government

Though the ultimate roles and functions of the three spheres of the government have been discussed above, the distinct roles and functions of each sphere should be explored to provide better understanding of this study. In accordance with Section 3 (4) of the Housing Act, the national government should, through the Minister, allocate funds to the provincial government; and establish and finance national institutions for the purpose of housing development. The national government should take any steps reasonably necessary to create an environment conducive for enabling the provincial and local spheres of government, private sector, communities and individuals to achieve their goals in response to housing development (South Africa, 1997a).

Also, in terms of Section 4 of the Act, the Minister must publish a National Housing Code and guidelines that contains the national housing policy, and furnish it to the provincial and local government and keep them informed of any amendments. This will ensure that the policy governing housing is clearly documented and that all the spheres of government work towards achieving the exact same goal in terms of housing development. Ideally, should reduce conflict amongst the spheres of government.

Section 7 provides the functions of the provincial government which include coordinating housing developments in the province, supporting and strengthening the capacity of municipalities in effectively performing their duties, as well as intervening by taking the appropriate steps when a municipality cannot perform any duty relating to housing

development. The provincial government is also mandated to prepare the financing of a multi-year plan (South Africa, 1997a). This therefore indicates that the provincial government acts as the pillar and guide for municipalities in issues relating to housing developments.

Cohen (1997:139) then opines that while this Act creates a viable framework for the realisation of the housing development initiative, the success of this scheme will ultimately depend on whether provincial and local government are able to meet the challenges presented to them, within the financial constraints imposed by a diminishing budget and an ever increasing demand for housing.

The important roles and functions of the municipalities in housing development are enshrined in Section 9 (1) and (2) of the Act. Municipalities are required to ensure that: the inhabitants within their jurisdiction have access to adequate housing on a progressive basis, live in healthy and safe conditions and have access to basic services provided in an economically sufficient manner. Furthermore, municipalities are mandated to identify and designate land for housing development, plan and manage land use and development and promote the resolution of conflict.

Municipalities are therefore mandated to ensure housing provision for informal settlers. This, in some instances, entails relocation of the residents to other areas and building on land that was not initially designated for housing. It is therefore the responsibility of the respective municipality to identify and develop the prospective land. Moreover, the municipalities should resolve conflicts that may arise as a result of the tragedy of the commons between the parties interested in the former use of the land and the new inhabitants.

Section 9(2) (a) states that the municipalities may act as the developer by entering into joint venture projects with developers, and administer national programmes (Section 10). However, due to financial and political constraints the municipalities may not be able to directly participate as the developer of housing projects. It is in this regard that Cohen (1997:144) asserts that “while in theory the Housing Act paves the way for local government to become actively involved in the delivery process, the practical application of these powers is not quite as simple, with differing dynamics affecting every municipality”.

4.6.2.3 Support for the Act

Even though the Housing Act has not provided a complete solution to the current housing challenge, it provides the ideal basis for housing development. Phago (2010:202) asserts that multiple approaches, including strengthening the roles of municipalities, coordinating and harmonising the activities of the spheres of government and community participation,

will strengthen the ideas introduced by the Housing Act. The Act therefore provides the backbone for this study as it provides the basis for analysing the efficiency and effectiveness of all spheres of government in the formalisation of informal settlements.

The Housing Act also provides a platform where informal settlement intervention is approached in a 'tolerable' and indirect manner. The Act promotes an improved urban, economic and social development to the extent that informal settlements will no longer manifest, unlike the forced evictions during the apartheid era. However, Huchzermeyer (2008a:95) explains that while the direct approach of the apartheid era has been reversed by the Housing Act, forced evictions have leapt back into the current practises. Therefore, the shortcomings of the Act induced the drafting and implementation of the Prevention of Illegal Eviction from Unlawful Occupation of Land Act 19 of 1998.

4.6.3 Prevention of Illegal Eviction from Unlawful Occupation of Land (PIE) Act of 1998

The Prevention of Illegal Eviction from Unlawful Occupation of Land Act (19 of 1998) (PIE) aims to: provide for the prohibition of unlawful eviction; to provide for procedures for the eviction of unlawful occupiers; and to repeal the Prevention of Illegal Squatting Act 52 of 1951 (PISA), and other obsolete laws; and to provide for matters incidental thereto (South Africa, 1998). The Act supports the provisions made in Section 26 of the Constitution that emphasise on the right to basic housing for everyone and orders that no one may be evicted from their home or have it demolished without a court order.

4.6.3.1 Provisions of the Act

PIE provides that no individual may be evicted from his home, without an order of court which considers all relevant circumstances (Silberman, 2011). However, the Act also recognises the rights of landowners and accordingly seeks to regulate the eviction of unlawful occupiers from land in a fair manner by following certain procedures. Therefore the purpose of the Act is to protect both the occupier and the land owner simultaneously as reflected by the long title (DoH, 2003:12).

According to Stuurman (2002:51) PIE acknowledges the fact that there are many people without shelter; hence their eviction from land they occupied unlawfully should be carried out following just procedures. This is provided for in Sections 4(2) of the Act which states that the owner should give two weeks' notice of eviction to the 'unlawful' occupiers and to the municipality in whose jurisdiction the land is situated. Furthermore, an order of eviction may be issued by the court having considered all relevant circumstances, which include the rights

and needs of the elderly, children, disabled persons and households headed by women (South Africa, 1998).

Section 6 of PIE focuses on an organ of the state issuing evictions in the area under its jurisdiction. The court may issue an eviction order if it is just and equitable to do so, having taken into consideration the relevant circumstances. Such an order may be granted by the court if the unlawful occupier is occupying the land or building without the permission of the organ of state, or it is in the public interest to grant such an order. The court then has to consider the following in its decision to grant the order:

- (a) “The circumstances under which the unlawful occupier occupied the land and erected the structure;
- (b) The period the unlawful occupier and his or her family have resided on the land in question; and
- (c) The availability to the unlawful occupier of suitable alternative accommodation or land” (South Africa, 1998a).

In accordance with Section 6(3) (c), the organ of state should ensure the provision of suitable alternative accommodation or land for the unlawful occupiers. Though the Act does not specify the meaning of suitable accommodation, Stuurman (2002:61) employs the definition provided in the Extension of Security of Tenure Act (ESTA) 62 of 1997. The ESTA defines suitable alternative accommodation as “that which is safe and better than the previous situation, having regard to the residential accommodation available prior to the eviction, and suitable having regard to:

- (a) The reasonable needs and requirements of all occupiers in the household in question for residential accommodation;
- (b) Their joint earnings abilities; and
- (c) The need to reside in proximity to opportunities for employment or other economic activities if they intend to be economically active” (South Africa, 1997b).

The need for mediation in issues relating to illegal evictions and unlawful occupation is stated in Section 7 of the Act. The municipality has the responsibility to facilitate dispute resolution between parties in the event that it is not the owner of the land. In the event that the municipality is the owner of the land, the member of the Executive Council designated by the Premier of the Province concerned will ensure dispute resolution. This is a clear

indication that there is a need for intervention by a sphere of the government to reach a consensus in matters relating to evictions and unlawful occupation of land.

4.6.3.2 Offences in terms of the Act

Section 3 prohibits the receipt and solicitation of consideration in respect of unlawful occupation of land. Sub sections 3 (1) and (2) state that it is a criminal offence to receive payment for land without the consent of the owner or person in charge of the land. Section 8(1) then emphasises the significance of obtaining a court order before an eviction as any action contrary to this constitutes a criminal offence for which the owner could face a prison sentence if convicted.

4.6.3.3 Support and Criticism of the Act

The informality that exists today is in part an indication of the spatial disparities inherent in the apartheid land law and housing provision. The Act therefore proposes for a measure of tolerance and acceptance amongst the owners and persons in charge of land to accommodate those who are currently homeless (Van Der Walt, 2002:825). Furthermore, provisions in the Act concede the significance of the provision of infrastructure, services and employment in the relocation of the unlawful occupiers. Therefore, an all-encompassing approach should be clutched effectively to address the problem (Du Plessis et al, 2003:507).

Broadly, the significance of the Act lies in the recognition of the rights of the poor who cannot afford access to formal housing. This is realised in the calls for intervention in terms of mediation, between the unlawful occupiers and the owners of the land, ensuring that eviction is carried out in a just and equitable manner. The Act is also important for its mandate on government to ensure that there is suitable alternative accommodation before eviction can take place. It is in this regard that PIE is lauded for not being as draconic as the Prevention of Illegal Squatting Act No 52 of 1952 (PISA) that preceded it (Du Plessis et al, 2003:511).

Notwithstanding, the application of PIE has been argumentative on a number of grounds. For instance, the provisions in Section 4 do not seem to take into consideration the impacts of the unlawful occupations on the owner or person in charge of the land. Due to the fact that there are circumstances to be considered by the court, the owner is forced by law to accommodate the 'unwanted guests' until an eviction order is granted. Even worse is the fact that the illegal occupation of land is not regarded as a punishable offense. Moreover, the emphasis on the rights of the unlawful occupiers may encourage the further mushrooming of informal settlements and unlawful occupations.

Consequently, Pienaar and Muller (1999:371) assert that though there is need for legislation to curb homelessness, uncontrolled illegal occupation may have negative impacts on the property market, and indirectly on tourism, thereby damaging the local economy. Municipalities are then faced with the dilemma of enforcing legislation that reduces unlawful occupation yet they must provide amenities to communities irrespective of whether they are illegal or not (Du Plessis et al, 2003:507). Nonetheless, there is need for practical intervention to ensure that the rights of both parties are met, thus reducing the adverse effects of homelessness while reducing the impacts of informality.

The provisions of PIE allow for reactive measures in dealing with post hoc unlawful occupation of land, an approach not effective in ensuring orderly management of urbanization and development (DoH, 2003:4). The Act therefore is not effective in addressing the deep rooted problem of the continuous increase in cases relating to unlawful occupation.

4.6.4 Housing Development Agency Act No. 23 of 2008 (HDA Act)

The Act was enacted to “establish the Housing Development Agency, to provide for its functions and powers; and to provide for matters connected therewith” (South Africa, 2008:2). Section 7 (1) (k) mandates the Agency to “assist organs of the state with the upgrading of informal settlements”. This is carried out by:

- “Providing assistance as required and defined in framework for programme;
- Providing and/or enhancing capacity support in land assembly and project preparation and implementation;
- Delivering technical services;
- Developing good practices, templates, documentation and forms to support approval applications;
- Providing land and housing;
- Providing statistics of the informal settlements at provincial and national level; and
- The Act covers all the essential aspects of addressing informal settlements making it part of the core of the legislation regarding informal settlement intervention”.

4.6.5 Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlements (2004)

The Breaking New Ground (BNG) initiative was adopted by the Cabinet of South Africa as a strategy to address the backlogs and delivery problems within the housing sector. The BNG has its foundations in the principles set in the White Paper on Housing (1994) so that it reinforces the housing vision by promoting the creation of a non-racial, integrated society through the development of sustainable human settlements and quality housing (DoH, 2004:7).

The initiative outlines a 'Comprehensive Plan for Housing Delivery' as a mechanism to redirect and enhance the development of sustainable human settlements. Within this broader vision, the Department of Housing (DoH) was set to achieve the following specific objectives:

- “Accelerating the delivery of housing as a key strategy for poverty alleviation;
- Utilising the provision of housing as a major strategy for job creation;
- Ensuring that property can be accessed by all as an asset for wealth creation and empowerment;
- Leveraging growth in the economy;
- Combating crime, promoting social cohesion and improving quality of life for the poor;
- Supporting the functioning of the entire single residential property market;
- Utilizing housing as an instrument for the development of Sustainable Human Settlements” (DoH, 2004:7).

4.6.5.1 Sustainable Human (e) Settlements

The BNG initiative seeks to promote a shift from mere housing provision to the establishment of sustainable human settlements. One of the mechanisms identified in the documents is the progressive eradication of informal settlements by integrating them into the broader urban fabric to overcome spatial, social and economic exclusion. This includes in-situ upgrading of the informal settlements in desired locations, and relocation of households where development is not possible or desirable (DoH, 2004:12). According to Goebel (2007:297) the BNG initiative includes some positive signs for addressing a sustainable

habitats' agenda through support for in situ upgrades, accepting critiques of the green fields, massive delivery approach to housing and explicitly linking housing and health.

Significantly, the plan identified the provision of basic services, social amenities and secure tenure as essential component of upgrading informal settlements. Isaacson and Naidu (2006) assert that the BNG emphasised on the need to move away from provision of inadequate structures to a more holistic development of human settlements including the provision of social and economic infrastructure.

4.6.5.2 Government Intervention

Pieterse & van Donk (2008:59) critically affirm that the notion of sustainable human settlements is also meant to denote the government's determination in the next round of housing delivery, to address the perverse perpetuation of apartheid geographies that dogged its programme in the first decade. Consequently, the BNG concedes the significance of the intervention of the three spheres of government in association with the relevant government departments in the formalisation of informal settlements. The plan states that the upgrading projects will be implemented through the partnership between the national, provincial and local government with the support of the Departments of Home affairs, Education, Public Works, Environmental Affairs and Health (DoH, 2004:17).

4.6.5.3 Local government empowerment

The BNG also introduced an expanded and greater role for municipalities by enabling them to assume the overall responsibility for housing programmes in their areas of jurisdiction (Rust, 2006:11). Municipalities are therefore the key role players in the formalisation process. Therefore they should work in all their capacity to influence and ensure that sustainable formalisation of informal settlements is carried out. However, the success of the new approach hinges entirely on the ability of the DoH to secure the necessary funding and co-ordinate its investment across a range of spheres and tiers of government (Tomlinson, 2006:102).

4.6.5.4 Criticism of the policy

Though the comprehensive plan is acclaimed for introducing the new concept of sustainable human settlements, there are a number of flaws associated with the plan. The plan is mainly criticised for not providing a clear and direct path in addressing the issue of informal settlements. Huchzermeyer (2010:137) argues that the wording of the 'Informal Settlement Upgrading' instrument reinforces an exclusively indirect approach to doing away with informal settlements. The BNG assumes that a more responsive state-assisted housing

policy, coupled with delivery at scale is expected to decrease the formation of informal settlements. This approach does not take into account the input of the inhabitants, land ownership conflicts, land market as well as the rights around property values and therefore fails to address the challenge from the grassroots level. The plan does not offer a clear direction with respect to the difficult political issues of land ownership.

The 'progressive informal settlement eradication' approach indicates a derogatory nature in the implementation of the BNG. The BNG indicates preference towards upgrading informal settlements situated in desirable areas, reflecting a tendency to neglect the relocation of settlements located in areas that are 'not possible and desirable'. The question then remains, what will happen to those in undesirable areas, do they continue to exist without secure tenure and in fear of continuous evictions? Moreover, politically, informal settlements are associated with inferiority so that elimination of the settlements is regarded as the best solution.

4.6.6 National Housing Code of 2009

The National Housing Code 2009 sets out the underlying policy principles, guidelines, norms and standards which apply to Government's various housing assistance programmes introduced since 1994 and updated (DHS, 2009a:1). According to Phago (2010:93) the drafting of the National Housing Code (2000) was aimed at tightening and enhancing the housing policy strategy, bearing in mind that housing problems should not be interpreted as simply the need to build houses but an ongoing developmental problem.

The subsequent National Housing Code (2009) was aimed at simplifying the implementation of housing projects by being less prescriptive while providing clear guidelines. Table 4-3 illustrates the seven strategies of the national housing policy as stated in the National Housing Code.

Table 4-3: Strategies of the National Housing Policy

STRATEGY	EXPLANATION
Stabilising the housing environment	Creation of a stable and effective public environment and to lower the perceived risk in the lower income housing market thus creating a market place which is conducive to the provision of credit to the low income housing sector.
Mobilising housing credit	Unlocking of private sector housing credit in order to promote saving by the lower income housing sector so that they may contribute towards the improvement of their own housing
Providing subsidy assistance	Granting capital subsidy assistance to those who cannot independently satisfy their own basic housing needs hence enables them to access a minimum standard of accommodation.
Supporting the enhanced people's housing process	This involves the establishment of institutions and organisations that support communities who are unable to make any monetary contribution towards their housing needs through savings, or by accessing housing finance
Rationalising institutional capacities	Creation of a single transparent process and institutional system through the introduction of appropriate legal and policy frameworks the establishment of an effective and efficient workforce, and the installation of appropriate technology, equipment and systems for monitoring, evaluation and reporting purposes.
Facilitating the speedy release and servicing of land	The government's introduction of measures to simplify and speed up the processes of land identification, release and servicing. This is carried out (by the Housing Development Agency) in pursuance of the government's goal of social, economic and spatial integration.
Co-ordinating state investment in development	Focus is on the creation of public/private partnerships between developer and housing finance institutions and government indicating that investment in one aspect of development supplements another.

Source: Adapted from DHS (2009a:9-12)

The strategies set in the National Housing Code aid as guidelines to all spheres of government in the implementation of informal settlement formalisation programmes. This is provided for in Part 3 of the National Housing Code which focuses on informal settlement upgrading and other national housing programmes which support the upgrading of informal settlements. These are presented in Table 4-4:

Table 4-4: Housing programmes which support informal settlement upgrading

Programme	Brief explanation
Upgrading of Informal Settlements Programme (UISP)	• Seeks to upgrade living conditions by providing secure tenure & access to basic services & housing. • Recognises community engagement as a critical component of upgrading projects • Promotes socio-economic development by ensuring the access to social and economic amenities • Encourages in situ upgrading of the informal settlements and identifies relocation as the last option
Integrated Residential Development Programme (IRDP)	• Provides for the acquisition of more appropriate land to address the peripherisation of low income housing. • Provides for the servicing of commercial, residential, educational, health care and low- and middle- income housing stands. • Encourages land-use and income group mixes to be based on local planning and needs assessment.
Emergency Housing Programme (EHP)	• Provides temporary housing in cases where informal settlement upgrading requires relocation while services are installed or top structures erected. • Temporary housing for victims of natural or man-made disasters. • Land identified for emergency housing should be contained in the housing chapter of the Municipal (IDP).
Enhanced People's Housing Process (EPHP)	• Encourages households to participate in provision of their own homes thus saving labour costs, avoiding payment of a profit element to developers and optimising control and decision making. • Provides beneficiaries with organisational, technical and administrative assistance. • Beneficiaries are not drawn from housing registers/waiting lists but are self-selected. • Beneficiaries work with a housing support organisation to produce their own housing solution
Individual Subsidy Programme (ISP)	• Provides access to state assistance to qualifying households wishing to acquire an existing house/vacant serviced residential stand, linked to a house construction contract through an

Programme	Brief explanation
	approved mortgage loan. • Encourages growth of secondary residential property market. • Provides access to funding through credit linked subsidies and non-credit linked subsidies.
Rural Housing Programmes (RHP)	• Addressing the issue of tenure rights in areas of communal tenure in order for housing subsidies to be applied in these areas.

Source: DHS (2014a:14-15), DHS (2009a:13-47)

4.6.7 Upgrading of Informal Settlements Programme

The Upgrading of Informal Settlement Programme (UISP) forms Part 3 of the National Housing Code. The UISP is aimed at the in situ upgrading of informal settlements by financing the creation of serviced stands. In circumstances where the terrain is not suitable for human settlement, residents may be relocated and settled elsewhere. The UISP stems from the provisions made in the BNG Comprehensive plan and the fourth Business Plan.

4.6.7.1 The three pillars of the UISP

The three pillars of UISP are basic services (including water and sanitation), security of tenure and community empowerment (NUSP, 2012). The programme deals with the development of primary public, social and economic facilities within informal settlement upgrading projects in cases where municipalities are unable to provide such facilities. Consequently, the UISP provides capital funding for the following medical care facilities, community parks, taxi ranks, sport facilities, informal trading facilities and basic ablution for all these facilities (DHS, 2010:6). The UISP provides guidelines on the following aspects of an upgrading project:

- The roles of each of the three spheres of government
- Funding of projects;
- Community participation;
- Tenure options;
- Norms and Standards;
- Beneficiary identification;
- Project phases; and,
- Guidelines for the implementation of projects (DHS, 2009b: 1-4).

4.6.7.2 Support and Criticism of the programme

The UISP recognises the significance of community engagement from the onset of the project to ensure the provision of housing that meets the needs of the people. The programme provides details of technical assistance to provinces and municipalities in their efforts to upgrade informal settlements, thus strengthening their capacity to meet the outcome.

However, the programme is also criticised for not recognising constraints in the fairly unpredictable land tenure system. The programme suggests automatic implementation of the successive phases without taking into consideration technical, financial and political constraints. Huchzermeyer (2008:12) points out that “while it promotes leasehold or even collective rather than individual freehold titling, the UISP is still a once-off intervention, assuming that a stable-end state of formal housing is reached in its fourth phase”.

4.6.8 Delivery Agreement: Outcome 8

Outcome 8 is part of the Presidency Delivery Agreements implemented to address the major challenges faced in South Africa. The outcome addresses the housing challenges faced in the country with emphasis on the following outputs:

- Output 1: Accelerated delivery of housing opportunities
- Output 2: Access to basic services
- Output 3: Efficient utilisation of land for human settlements
- Output 4: Improved property market

Outputs 2, 3 and 4 play indirect roles in reducing the emergence and proliferation of informal settlement. However, the focus of this study is on Output 1 for its accelerated housing delivery which curbs the increase of informal settlements. The progress of this output is measured through the implementation of 4 Sub-Outputs.

4.6.8.1 Sub-Output 1: Upgrading 400 000 households

The first sub-output centres on “upgrading 400 000 households in well located informal settlements with access to basic services and security of tenure” (The Presidency, 2010:14). This target reflects the government’s efforts to contribute to the attainment of MDG Goal 7 Target 11. The UISP objectives to facilitate in situ upgrading, to ensure the provision of basic services and promote community engagement are core elements of sub-output 1. Table 4-5

indicates the instruments that can be utilised to finance that provide services in informal settlements.

Table 4-5: Funding opportunities for the provision of services in informal settlements

Funding Streams	Brief Description
Human Settlements Development Grant (HSDG)	Conditional grant to ensure the creation of sustainable human settlements through the provision of basic services
Municipal own funding	Funds set aside by the municipality to provide interim or emergency services to informal settlements that are not yet identified to be part of a housing programme.
Urban Settlements Development Grant (USDG)	Finances the provision of serviced land with secure tenure and bulk and internal services for informal settlement upgrading Issued to metropolitan municipalities.
Municipal infrastructure Grant (M.I.G)	Provision of grant finance fund municipal infrastructure serving low income households in non-metropolitan municipalities.
Rural Households Infrastructure Grant	Funds the provision of basic services (water and sanitation) to rural households

Sources: DPLG (2004:1), DHS (2014a:16)

The percentage of allocated conditional grants determined the contribution of each province to the attainment of the 400 000 target. This is illustrated by Table 4-6:

Table 4-6: Provincial contribution to the 400 000 target

Province	Provincial % Allocation formula	Number of informal households
Eastern Cape	14.86	59 440
Free State	6.60	26 400
Gauteng	24.19.	96 760
KwaZulu-Natal	19.05	76 200
Mpumalanga	7.80	31 200
Limpopo	6.62	26 480
Northern Cape	2.33	9 320
North West	7.21	28 840
Western Cape	11.34	45 360
Total	100	400 000

Source: The Presidency (2010:15)

4.6.8.2 Sub-Output 2: National Upgrading Support Programme (NUSP)

Lack of capacity within municipalities to implement in-situ upgrading emerged as a hindrance to the success of informal settlement intervention projects. Taking this into cognisance, the National Department of Human Settlements (NDHS) in collaboration with Cities Alliance established the NUSP in order to capacitate the municipalities in meeting the target of upgrading informal settlements. The role of the NUSP is to:

- “Provide technical, design and community engagement support to municipalities in upgrading informal settlements;
- Support municipalities in project development and implementation of more integrated planning; and
- Help to improve the knowledge base around informal settlement upgrading by highlighting best practices, creating networks of practitioners and undertaking research” (The Presidency 2010:18).

4.6.8.3 Sub-Output 3: Accreditation

In adherence to section 156 (4) of the Constitution (Act 108 of 1996) and section 10 (1) of the Housing Act (107 of 1997), housing functions can be devolved to the local government. The accreditation of a municipality involves the delegation and, subsequently, the assignment of certain clearly defined housing functions to the municipal sphere (DHS, 2009c:9). Municipal accreditation warrants the accelerated housing delivery as a result of the intergovernmental and interdepartmental integration. The devolution of the housing function to local government proves to be the way to integrate housing and infrastructure planning and delivery processes at local level (The Presidency, 2010:25).

4.6.8.4 Sub-Output 4: Provision of Affordable Rental Accommodation

The fourth sub-output is based on government and public sector interventions in the provision of affordable rental accommodation. The goal is to “increase the provision of well-located and affordably priced rental accommodation to 20 000 units per annum, that is, 80 00 units over 4 years” (The Presidency, 2010:30). Though the output does not directly address informal settlements, the provision of affordable houses may curb the emergence and proliferation of informal settlements. Providing housing at market prices that meet the income levels of the poor will mean that they do not have to resort to informality which is often the only option.

4.6.8.5 Support and Criticism of Output 1

The setting of the targets exerts pressure on the provincial and national governments to upgrade the informal settlements so as to meet the targets. Attempts to meet the targets by local and provincial municipalities will lead to the reduction in the numbers of households residing in informal settlements. The promotion of intergovernmental and interdepartmental coordination will result in quick delivery and improved quality of the housing to be provided

On the other hand, the setting of such a large target may lead to the provision of sub-standard housing, while the responsible authority attempts to meet the target. This, coupled with the lack of clarity on the definition of “well-located” informal settlements, contributes to the failure to measure success in meeting the targets. Therefore, the target may not be achieved in both quantitative and qualitative terms.

4.7 Transportation Policy and Legislative Framework

Mobility and accessibility are core component of housing development. The spatial marginalisation of informal settlements deters the accessibility of employment opportunities, services and facilities to the inhabitants (White Paper on National Transport Policy, 1996)

One of the goals of the policy is “to support the goals of the Reconstruction and Development Programme for meeting the needs, growing the economy, developing human resources and democratising decision making” (DoT, 1996:3). This is a clear indication of the linkage between housing provision and transport planning, as the transport system aids in accessibility to basic education, health and employment needs in an economically and environmentally sustainable manner (DoT, 1996:3).

4.7.1 National Land Transport Act (5 of 2009)

The objective of the Act is to transform and restructure the land transport system in South Africa. This entails integrating land transport planning with land use development and management. Consequently, section 36 of the Act mandates all planning authorities to prepare Integrated Transport Plans (ITPs) for their respective area. This is as a result of the realisation that “public transport has a significant role to play in enhancing urban mobility, reducing road congestion, decreasing the impact on the environment through harmful emissions and better serving the economy” (Walters, 2008:5).

4.7.2 The Integrated Transport Plan

The focus of the Integrated Transport Plan (ITP) is on the road network within the TLM municipal boundary with specific emphasis on private and freight transport (TCC, 2013:66). The fact that there is a need for accessibility and networking in any residential area while protecting the environment, makes the ITP an essential component of the study.

4.8 Environmental Policy and Legislative Framework

As mentioned earlier, the overall goal of planning is ensuring development that is sustainable. Sustainable development is achieved through the formulation and implementation of policies and legislation that guide any development within the physical and environmental space.

4.8.1 White Paper on Environmental Management Policy 1998

The White Paper sets out an overarching policy framework for environmental management in South Africa. The vision of the policy seeks to adopt a coordinated and integrated approach to sustainable development by addressing:

- “The quality of people’s lives;
- Equitable access to land and natural resources;
- The integration of economic development, social justice and environmental sustainability;
- The sustainable use of social, cultural and natural resources; and
- Public participation in environmental governance” (DEAT, 1998:13)

The White Paper is recognised for defining the environment as the conditions and influences in terms of which any individual or thing exists, lives and develops. These conditions and influences include social, political, cultural, economic, working and other factors that determine people’s place in, and influence on, the environment. The White Paper is thus acclaimed for recognising that people are part of the environment and are at the centre of sustainability (Ferreira and Lloyd, s.a:3). The concept of environmental justice, that is, acknowledging democratic objectives and social and economic issues into the policy framework, stimulated the creation of an environmental management legislative framework namely the National Environmental Management Act (107 of 1998) and related legislation.

4.8.2 The National Environmental Management Act (107 of 1998)

The enactment of the National Environmental Management Act (107 of 1998) (NEMA) was in accordance with the need to protect the environment as envisioned in Section 24 of the Constitution. One of the objectives of the Act is to establish principles for decision making on matters affecting the environment. Human activities such as housing development, formal or informal, legal or illegal, have an impact on the environment.

4.8.2.1 Environmental Implementation Plans

The principles are achieved through the preparation and adoption of Environmental Implementation Plans (EIPs) by those national departments and provinces that exercise a function that may affect the environment as set in Chapter 3 of the Act. In terms of Section 13(1), an EIP must contain a description of the activity that may significantly affect the environment, and the procedure by which the responsible authorities will ensure that the activity will be carried out in compliance with the national environmental management principles and the provisions set out in the Constitution. Upgrading or relocation of informal settlements in areas that were not initially designated for residential development requires preparation of EIPs by the NDHS.

Although the principles set out in the NEMA take into consideration the well-being of people, there should be a balance between socio-economic interest and environmental protection interests. Van der Linde (2009:200) then asserts that economic and social development is essential for the well-being of human beings, but development cannot subsist upon a deteriorating environment base. This brings about the aspect of Integrated Environmental Management (IEM) which according to Sowman *et al.* (1995:51) is a term used to indicate an approach that integrates environmental considerations into all stages of planning and development process, and requires post-impact assessment monitoring and management for policies, programmes and plans.

4.8.3 (Tlokwe Municipality) Environmental Management Framework 2010

The Environmental Management Framework (EMF) is a plan that guides the municipality in ensuring sustainable development while focusing on the natural resource base. The EMF gives a guideline on how the constitutional imperative can be achieved without compromising the natural resource base. Therefore, the EMF provides for planning intervention in the relocation of informal settlements which may pose threats on the ecology.

4.9 Governance Policy and Legislative Framework

Local government is the sphere that is closest to citizens and is constitutionally responsible for providing a range of services without which people would be forced to live in abject misery (Craythorne, 2006:37). It therefore plays a critical role in addressing the challenge of informal settlements.

4.9.1 White Paper on Local Government of 1998 (WPLG)

The WPLG elaborates on the role of local government by placing municipalities at the center of planning for better human settlements (DLA, 1997:3). This entails outlining the current reality, acknowledging the significance of co-operative government, highlighting the institutional systems, setting principles to guide municipal finances and forwarding an approach for municipal transformation.

The major significance of the WPLG in relation to this study is in its Section B which focuses on developmental local government, which involves working with local municipalities to identify sustainable ways to meet their needs and improve their quality of lives. This can be achieved through:

- “Exercising municipal powers and functions in a manner which maximises their impact on social development and economic growth;
- Aligning public (all spheres of government) and private investment within the municipal area;
- Empowering marginalised and excluded groups within the community;
- Provision of household infrastructure and services;
- Creating liveable integrated cities, towns and rural areas;
- Promoting local economic development and community empowerment;
- Implementing Integrated Development Planning as a mechanism to enable prioritization and integration in municipal planning process;
- Developing a performance management system for local government; and
- Ensuring citizen and community engagement in municipal affairs” (DPLG, 1998:3).

4.9.2 Intergovernmental Relation Framework Act (13 of 2005)

Malan (2005:228) defines intergovernmental relations as a set of formal and informal processes as well as institutional arrangements and structures for bilateral and multilateral co-operation within and among the three spheres of government. The Intergovernmental Relations Framework (IGRF) Act was implemented following debates and conflicts within and amongst the three spheres of government in South Africa.

4.9.2.1 Objects of the Act

Section 4 states that the objects of the Act are to: provide, within the principles of operative government set out in Chapter 3 of the Constitution, a framework for the national government, provincial governments and local governments, and, to facilitate co-ordination in the implementation of policy and legislation including:

- (a) “Coherent government;
- (b) Effective provision of services;
- (c) Monitoring implementation of policy and legislation; and
- (d) Realisation of national priorities” (South Africa, 2005).

4.9.2.2 The need for a co-operate government

Each spheres of government has its own duty, responsibility and area of speciality, hence the IGRF Act recognises the need for co-operation and interconnectedness amongst the three spheres of government in policy formulation, processing and implementation. Nel and Kotze (2009:20) explain the principle of a three-tiered relationship where each sphere and line of government retains its unique character while precluded from acting independently. The principles of the Act therefore recognise the interdependence and interrelatedness of government, and therefore emphasises on the duty of the spheres to empower one another, as well as monitoring or intervention in the activities of a dependent sphere (Malan, 2005:227).

4.9.2.3 Relevance to the study

The relevance of the Act to the study is reflected in its objective to ensure an integrated approach in addressing the challenges faced by marginalised citizens, thereby inducing the realisation of national priorities. Aluwani (2013:55) agrees that intergovernmental relations are intended to promote and facilitate co-operative decision-making and ensuring that

policies and activities of all spheres of government encourage service delivery and meet the needs of citizens in an effective way.

4.9.3 Local Government: Municipal Finance Management Act (56 of 2003)

The Municipal Finance Management Act was enacted to secure sound and sustainable management of financial affairs of municipalities and other institutions in the local sphere of government, and to establish treasury norms and standards for the local sphere of government (South Africa, 2003). The Act regulates procurement by service providers for the planning and implementation of national housing programmes and projects, thus playing a crucial role in housing delivery (NDHS, s.a:48).

4.9.4 Local Government: Municipal Structures Act (117 of 1998)

The Act commonly referred to as Municipal Structures Act (117 of 1998) provides for the establishment of municipalities in terms of categories and types of municipalities, as well as the division of functions and powers between the categories of municipality. The Act therefore outlines the duties and roles of each municipality. This assists in identifying the malfunctioning category in addressing the informal settlements challenge.

4.9.5 Local Government: Municipal Systems Act (32 of 2000)

The Municipal Systems Act regulates the provision of core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic empowerment of local communities, and to ensure universal access to essential services that are affordable to all. Broadly, the Act focuses on community participation, integrated development planning, performance management, local public administration and municipal services.

Section 3 of the Act emphasises the need for municipalities to exercise their executive and legislative authority in facilitating compliance with the principles of co-operative government. The Municipal Systems Act (32 of 2000), in terms of section 24 mandates municipalities to undertake planning that is aligned with the development plans and strategies of other organs of state, and to align with the implementation of the respective legislation. This, in accordance with section 25, is manifested in the compilation and adoption of Integrated Development Plans (IDPs) by all municipalities.

4.9.6 (Tlokwe Municipality) Integrated Development Plan (IDP) 2014/2015

An IDP is a five-year principal strategic planning instrument which guides and informs all planning, budgeting, management, investment, development and the implementation of decisions and actions in the municipality (Mohammed, 2006:41). According to Mathye (2002:29) the Integrated Development Planning process is meant for the promotion of local government and institutional transformation in a consultative, systematic, strategic and integrated manner. It is therefore the key tool for local government to cope with its role and function in terms of the Constitution of South Africa and other applicable legislation.

The process of arriving at objectives and strategies for each of the priority areas should allow for a strategic multi-sector discussion on ways of dealing with issues (NDHS, s.a: 59). The IDP is relevant to the study as it links, integrates and coordinates all plans, policies and programmes that have a bearing on development. This will contribute to the effective and efficient use of scarce resources in addressing the challenges of housing faced by marginalised people. Therefore, the IDP aims at developing a holistic, integrated and participatory framework to ensure speedy and more appropriate delivery of services. Figure 4-2 illustrates the multi-sectorial components of an IDP in relation to the study.



Figure 4-2: Multi-sectorial components of an IDP

Source: Own Construction (2014)

The Tlokwe IDP (2014-2015) aims at addressing poverty, past backlogs and spatial distortions by:

- Continuing with good quality housing with secure tenure as well as the upgrading of informal settlements;
- Prioritizing projects that focus on the plight of the poor and the marginalized;
- Ensuring that local government offices become more effective in meeting the needs of the citizens;
- Provision of free basic services to communities;
- Improving local services such as refuse removal;
- Ensuring that water and electricity are accessible;
- Preparing spatial frameworks that mainstream the poor into the economy; and
- Addressing landlessness through implementing appropriate land reform initiatives (TCC, 2014a:11-12).

Though one of the attributes of the IDP is the aspect of community participation in the formulation of the document, the process is criticised for remaining a top-down approach rather than the participatory approach that is stipulated in the legislation. Communities rarely participate nor contribute to the content of the IDP before and during its drafting, rather they are merely allowed to comment on the proposals that are developed (Mohammed, 2006:41). In the few instances that they are consulted, the participatory process seems to favour the voice of the prominent and influential figures in society (Lipietz, 2008:153). Therefore, the IDP may in practical terms fail to meet the needs of the people in an effective and efficient manner since their needs are not fully understood.

It should be noted that the IDP is supported by the North West Provincial Development Plan (NWPDP) and the National Development Plan (NDP) which also focus on addressing informal settlements as part of integrated development planning at provincial and national level respectively.

4.9.6.1 Housing Chapter of an IDP (Housing Sector Plan)

The Housing Chapter of the IDP also has a significant bearing in housing developments. The purposes of the Housing Chapter are to:

- Ensure effective allocation of limited resources;
- Provide guidance in the prioritisation of housing projects;
- Provide effective linkages between the spatial development locations and the project locations;
- Ensure a definite housing focus in the IDP and SDF with future housing delivery across all social and economic categories; and
- Ensure the contents and process requirements of planning for housing are adequately catered for in the IDP process (NDHS s.a:5)

These provide for the integrated planning and development of social, economic and environmental facilities at neighbourhood level concomitant with upgrading activities. The quality of project plans and IDP Housing Chapters needs to be improved to support progressive informal settlement upgrading.

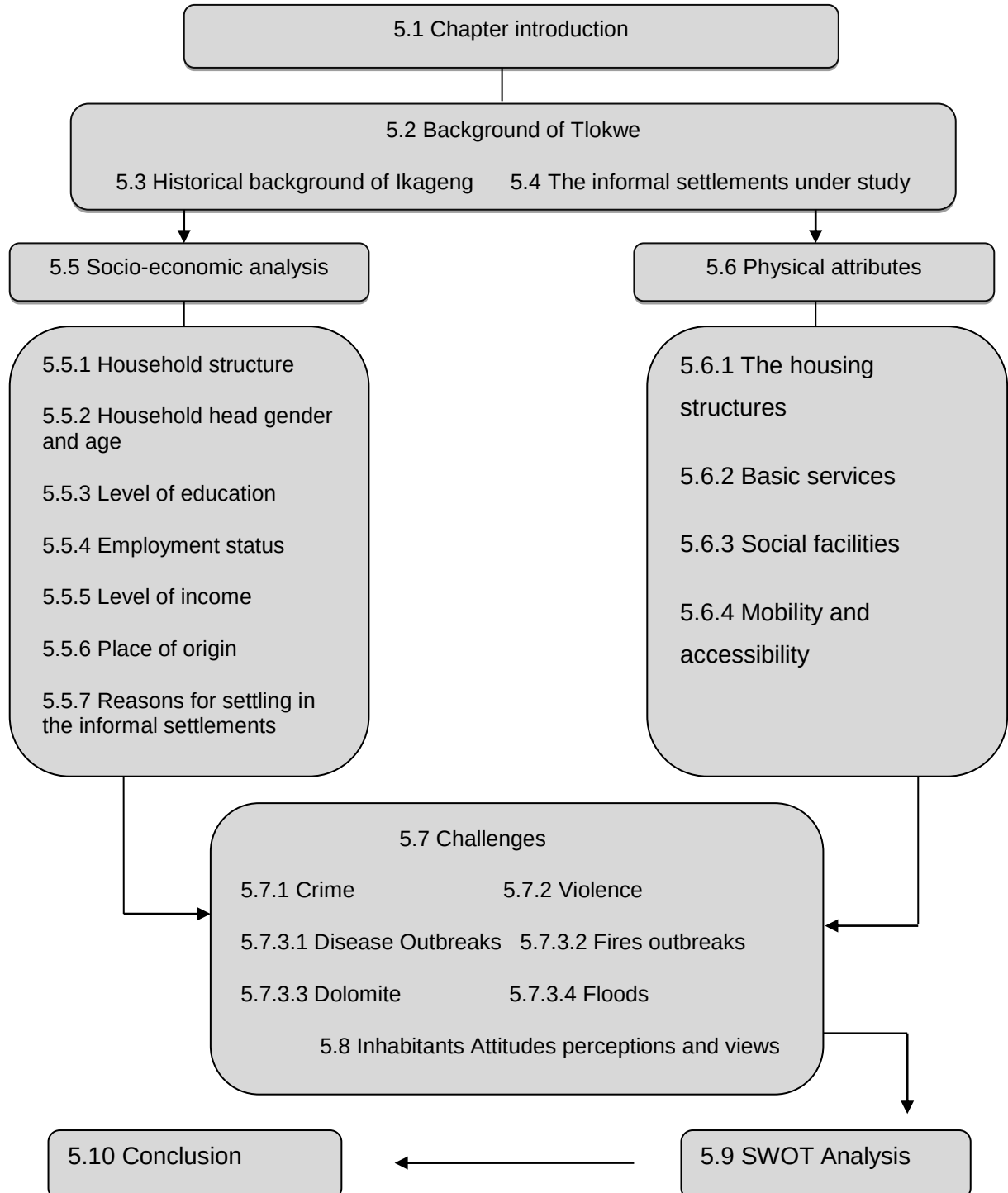
4.10 Conclusion

This chapter provides a basis for understanding the policies and legislation that have a bearing on the formalisation of the informal settlements under study. It is clear that the major issues regarding intervention in informal settlements are enshrined in the policies, legislation and strategy. These issues include: the mandate of the government to ensure the realisation of adequate housing as a human right, the roles and responsibilities of each sphere of government, promoting community participation, spatial transformations to address informal settlements and ensuring integrated development planning.

The policies, legislation and strategies are generally criticised for duplicating the same issues, in most instances, without providing a direct approach to addressing the issues contributing to the proliferation of informal settlements. Chapter 5 examines the physical and socio-economic conditions of the informal settlements in Ikageng where the policies and legislation discussed in this chapter are operational.

CHAPTER 5: A CASE STUDY OF THE INFORMAL SETTLEMENTS IN IKAGENG

The diagram below illustrates the graphical overview of Chapter 5.



5.1 Introduction

The previous chapter focused on the policy and legislation relating to informal settlements. A broader view of the analysis of planning intervention in the informal settlements in Ikageng is attained through an examination of conditions in these particular settlements. This chapter explores the background of TLM, the historic background of the Ikageng Township and the informal settlements existing in Ikageng. The chapter also presents the socio-economic characteristics of the informal settlements and how they measure against the households of TLM. The physical characteristics and the challenges of the informal settlements measured against the standards for human settlements as set in the CSIR Redbook and the CSIR guidelines for provision of social facilities in South African settlements are also presented in this chapter.

5.2 Background of the Tlokwe Local Municipality

TLM is a Category B municipality situated on the south-eastern border of the North West Province under the Dr. Kenneth Kaunda District Municipality (TCC, 2012a:29). The main urban area of the TLM is Potchefstroom which is located along the Mooi Rivier, which runs through the city (TCC, 2014a:30). Potchefstroom covers an area of approximately 2673 km² which includes: Potchefstroom, Ikageng, Mohadin, Promosa, as well as rural villages and commercial farming areas (TCC, 2014a:30). The area forms the primary regional node in the North West Province and has been identified as a Priority One investment area for economic growth and nodal development (NWPG, a:10). Figure 5-1 shows the location of the TLM within South Africa, the North West Province and the Dr. Kenneth Kaunda District Municipality.

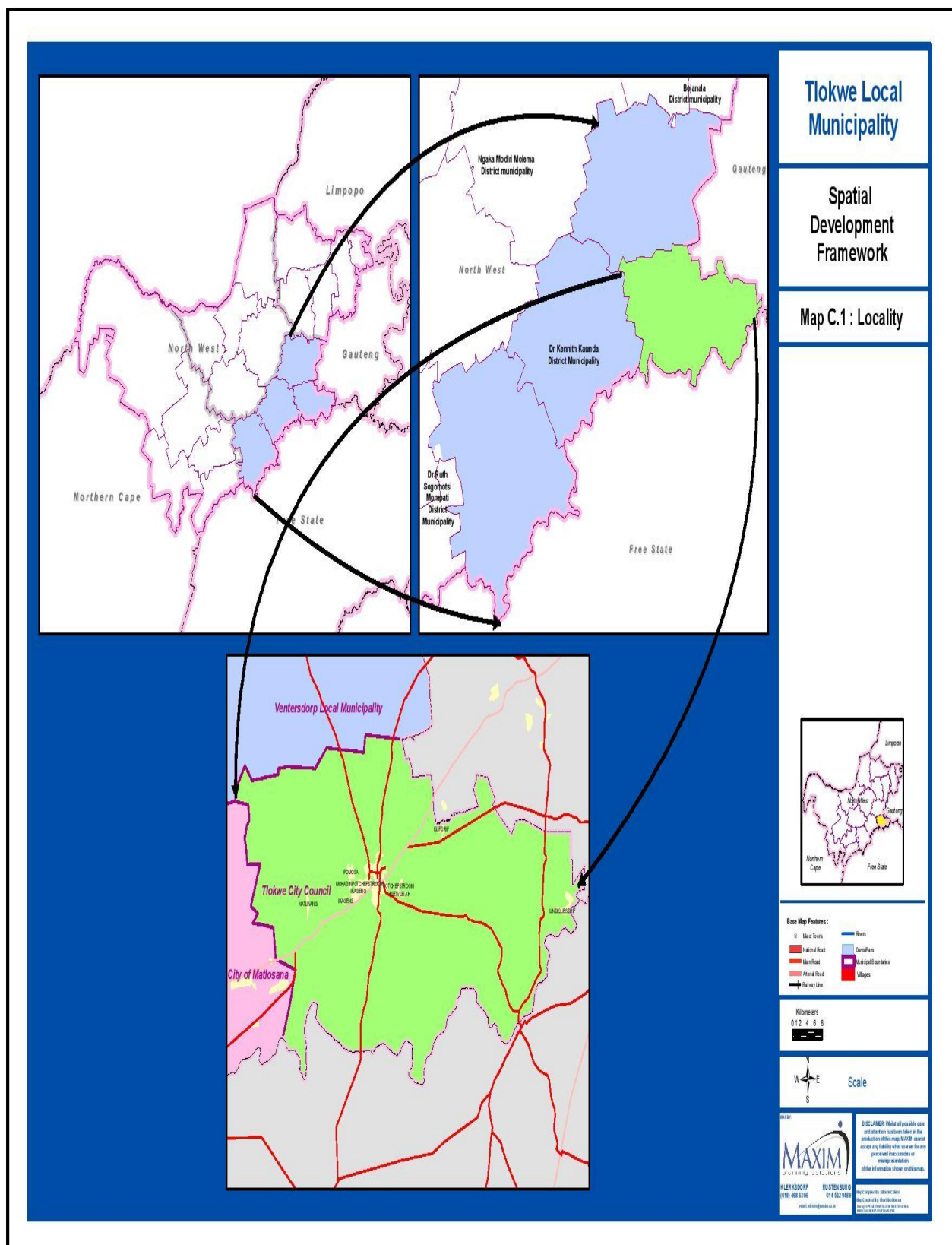


Figure 5-1: Locality Map of the Tlokwe Local Municipality

Source: TCC (2014b)

The total population of Tlokwe is 170 688. The total number of households within the Municipality is 57 306 with:

- 64.4% of the population living in a house or brick structure on a separate stand,
- 8.6% in a flat or an apartment in a block of flats,
- 7.4% in an informal dwelling (shack, in backyard) and
- 10.4% in an informal dwelling (shack, not in backyard) (TCC, 2014b:36-37)

There are currently 18 489 formal houses of which 9617 are subsidised / RDP houses; 2265 informal structures on stands, 6354 informal structures in backyards and 996 informal structures not on stands. (TCC, 2014b:47). Approximately 14 500 houses are on the waiting list (TCC, 2012:62). In order to address the housing challenges within the municipality, the TLM is currently operating multiple housing programmes including an ISUP in Ikageng which is the focus of the study.

5.3 Historical Background of the Ikageng Township

Ikageng (Northern Sotho for 'we built ourselves') is a township situated to the west of the Potchefstroom CBD. The township 'reserved' for the Black African population was established in 1963 at the epitome of the apartheid era in South Africa (Hoosain & Salili, 2005:119). The locality of Ikageng on the peripheries of Potchefstroom echoes the apartheid city model of planning; with the residential developments for the low income earners located to the west, while those for the high income earners are located to the east of the city.

The history of the township dates back to the inception of apartheid during the 19th Century when the original Sotho-Tswana people were relocated from their original residential areas to a 'native' location called Makweteng (Jansen van Rensburg, 2012:22). The passing of the Native Urban Areas Act (No. 25 of 1945) and the Group Areas Act (No. 41 of 1950) influenced separation of residential areas for the whites even farther from those for the blacks and the coloureds. Consequently, the period between 1958 and 1963 marked the removal of the blacks from Makweteng to Ikageng in order to 'tidy-up' the already highly segregated city (Mabin & Smit, 1997:206; Jansen van Rensburg, 2006:135).

The increase in population and in turn the need for more housing prompted the expansion of the original Ikageng to form eleven other areas referred to as Ikageng Extensions 1 to 11. Like any other township, all the extensions in Ikageng (including Ikageng proper) are characterised by both formal and informal housing; with the latter occurring mainly in the

form of backyard shacks. Moreover, Extensions 6, 7, 11 and 12 (Sonderwater) have been invaded by squatter settlements.

This study focuses on five informal settlements which form part of the areas identified by the government for upgrading (see Figure 1-2). The selection of these informal settlements is also based on the notion that each exhibits distinctive characteristics, which provide a broader reflection on the conditions of informal settlements in Tlokwe, and of informal settlements in general.

5.4 Background of the informal settlements under study

5.4.1 Extension 12 (Sonderwater)

Sonderwater is an extension of Ikageng which is going through the process of township establishment. The establishment of Sonderwater as a formal extension of Ikageng is pending owing to the ongoing Dolomite Disaster Risk investigations within the area (TCC, 2012:51). Though it has not been formally established as a township, Sonderwater is characterised by both formal and informal housing. Collectively, the portions of land invaded by shacks that are not in backyards form the largest portion of the informal settlements under study in terms of physical area and population. Figure 5-2 illustrates the informal settlements in Sonderwater



Figure 5-2: Informal settlements in Sonderwater

Source: Own Construction (2015)

5.4.2 Extension 11, Ward 19 (Open Stand Extension 11)

The existence of the informal settlement in Ikageng Extension 11, Ward 19 dates back to the apartheid era (Household Survey, 2015). The settlement is situated on parcel number 18415 which falls under high voltage electricity servitude (TCC, 2012:98). Of the five informal settlements, this settlement is the densest, with more than approximately 375 shacks sited on a piece of land covering 11 147m² (Google Earth, 2015). This has posed physical, social and environmental challenges to the residents as the structures are too compact. These will be discussed later in the chapter. Figure 5-3 shows the location of the informal settlement:



Figure 5-3: Open Stand Extension 11

Source: Own Construction (2015)

5.4.3 Extension 11, Ward 1

Located approximately 250 metres from the N12, this settlement is the most recent of the five under study. The informal settlement is referred to by the informal term 'Maipeng' which will be used to describe the informal settlement in the study. The emergence of the settlement dates back to the period between 2005 and 2007 when the first shacks were noticed (TCC, 2015a). Though not as dense as the settlement in ward 19, Maipeng is characterised by approximately 450 shacks on a 49 395m² portion of land. The portion covering the north of this settlement is sited below the 1:100 floodline (TCC, 2011: viii). The locality and characteristics of the informal settlement are illustrated in Figure 5-4



Figure 5-4: Maipeng in Extension 11 Ward 1

Source: Own Construction (2015)

5.4.4 Extension 6, Ward 20 (Sarafina Road Informal Settlement)

The informal settlement in Extension 6 is situated on a piece of land that was reserved for a park/ an open space (TCC, 2015). The settlement is bordered by Sarafina road to the north, Mogolodi road to the northeast and southeast, and the formally established residential area to the western side. Covering an area of approximately 46 270 m², the settlement is the home of approximately 450 households (Google Earth, 2015). The settlement has been in existence for more than 10 years (TCC, 2015). Figure 5-5 shows the location of the informal settlement.



Figure 5-5: Sarafina Road Informal Settlement

Source: Own Construction (2015)

5.4.5 Extension 6 and 7, Ward 26 (Park Extension 7 Informal Settlement or Zet – Zet)

The Park Extension 7 informal settlement comprises of portions from extensions 6 and 7. Due to the absence of a visible physical boundary between extensions 6 and 7 and their close proximity, the settlement is considered as one under this study. Like the other informal settlements, the exact period by which this parcel of land was invaded cannot be determined. Nevertheless, some of the inhabitants have been staying there for 15 years, indicating the approximate period that the settlement has been in existence.

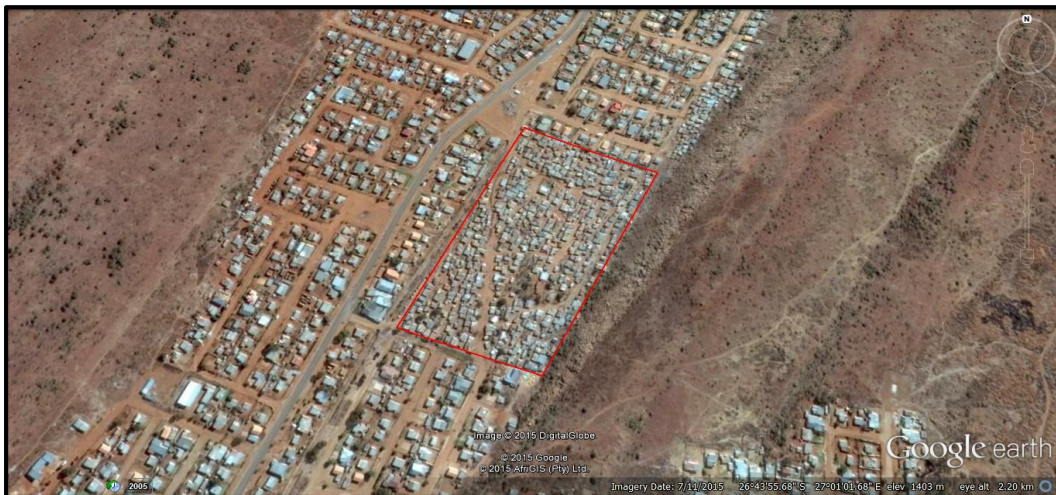


Figure 5-6: Park Extension 7 Informal Settlement

Source: Own Construction (2015)

5.5 Socio-economic analysis/ Household information

Due to the high costs of city living and the difficulties in securing sources of livelihood in urban areas, the majority of the urban population cannot afford adequate housing and live in poverty. A focus on the socio-economic aspects provides a better understanding of the fundamentals of the informal settlements and the inhabitants' living conditions.

5.5.1 Household Structure

From the household surveys, it was revealed that the number of people per household ranges between 1 and 8 with an average of 4 people per household. This, compared to the average household size of 3.0 within Tlokwe as a whole (Stats SA, 2014:22), indicates that the informal settlements are made up of larger households than the formal housing units. The findings also revealed that the average number of children per household is 3. The large number of children indicates the need for more social amenities and a prospective increase in the demand for housing. The cumulative percentage of households with one or more

members of the family aged 65 and above is 20%. Figure 5-7 represents the information relating to the number of people per household

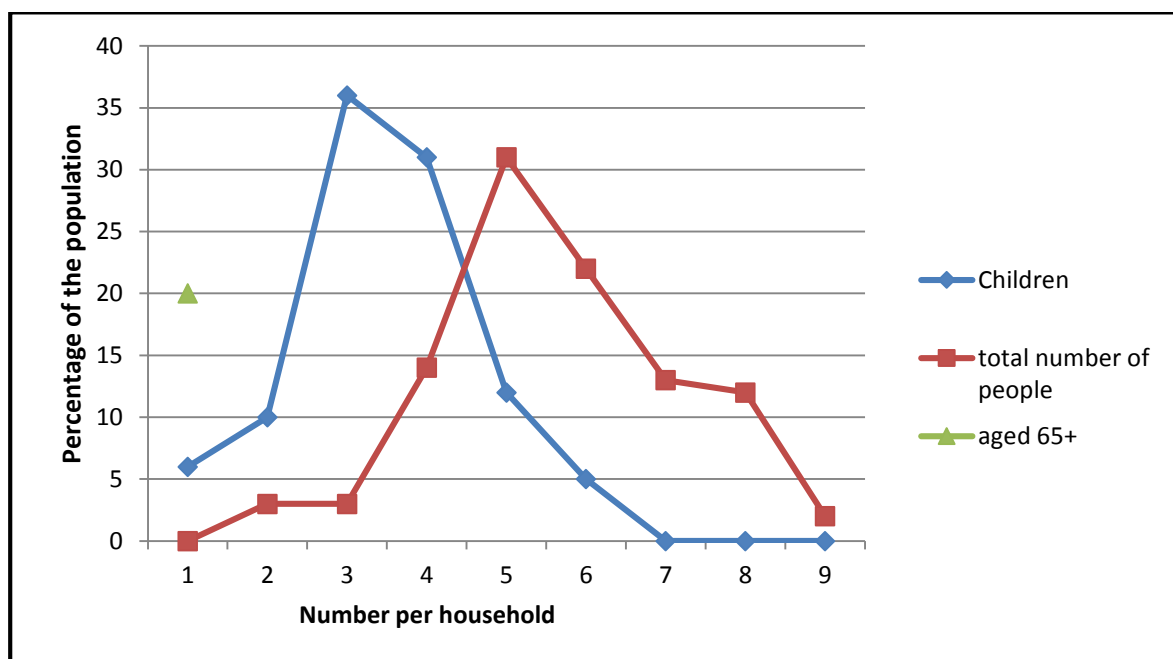


Figure 5-7: Number of people per household

Source: Household survey (2015)

60 % of the households are made up of nuclear families, that is, families which comprise of both parents, their children and in certain instances members of the extended families. 40% of the households comprise of single families and orphaned children. This necessitates an investigation into the information related to the household heads.

5.5.2 Household head gender and age

Information on how the households are headed is a critical component of the study which is at variance with the economic status and the income levels within the informal settlements. A household head is defined as the person (male or female) who assumes the responsibility of the household, that is, the chief economic provider, the chief decision maker, or the person designated by other members as the head of the household (Stats SA, 2014:22). For this research, household head also translates to breadwinner hence the terms will be used interchangeably. Figure 5-8 illustrates how the households are headed in relation to gender and age.

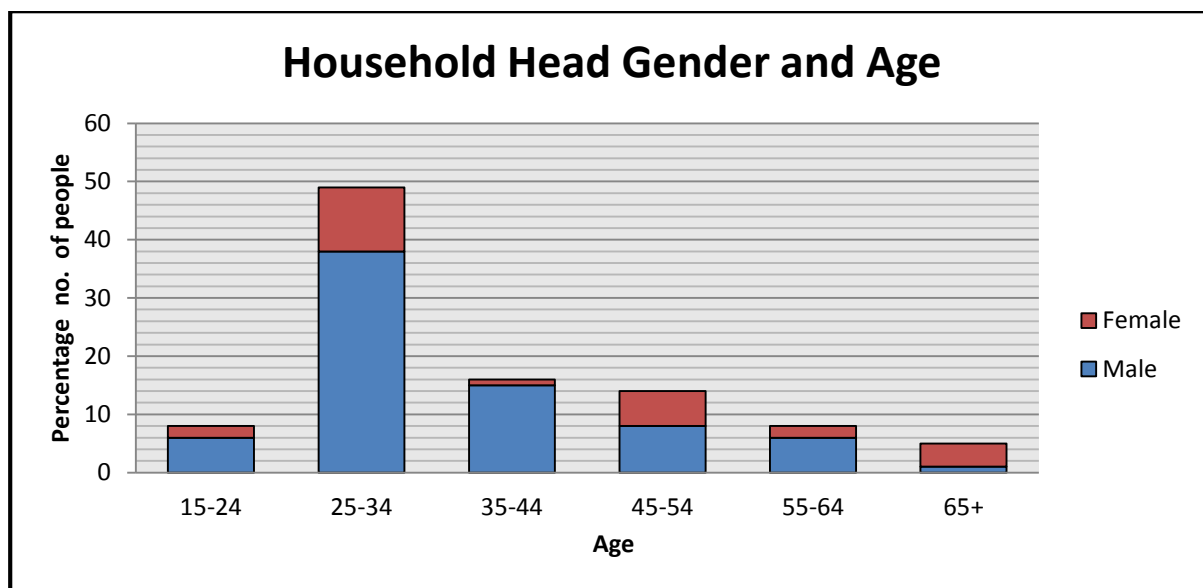


Figure 5-8: Household head gender and age

Source: Household survey (2015)

Although it is a common phenomenon within most informal settlements, only 1% of the households under study are child-headed. The largest number of household heads is within the 25-34 years age group. This, coupled with the number of households headed by the 15-24 years old category, indicates how the housing market has influenced the housing choices available for the youth. It is also an indication of how the youth are adversely affected by the planning challenges facing the world. Thus, addressing housing and planning challenges in general requires significant input from the youth.

Generally, the majority of the households are headed by males constituting 74% of the household heads. Though females constitute only 26% of the household heads compared to the 36.8% at municipal level, the fact that they hold such positions within the informal settlements is of significance to this study. Like their male counterparts, the economically active female population constitutes the greatest proportion of household heads. 4% of the female household heads are the elderly who, in most of the cases, have been left in charge of their grandchildren.

The women attributed divorce/ separation and death of either their partners or children as the major reasons that influenced them to become the de facto heads of the households. Therefore, addressing the challenge of informal settlements would entail taking into consideration the role played by women in heading the households and the circumstances which define their lives in the informal settlements. The level of education of the household heads provides the basis for investigating the factors that influenced informal settlements as a housing option.

5.5.3 Level of education

The level of education is an important economic indicator, impacting on the level of human development, employment opportunities and the level of disposable income; *ceteris paribus* Figure 5-9 indicates the levels of education reached by the breadwinners.

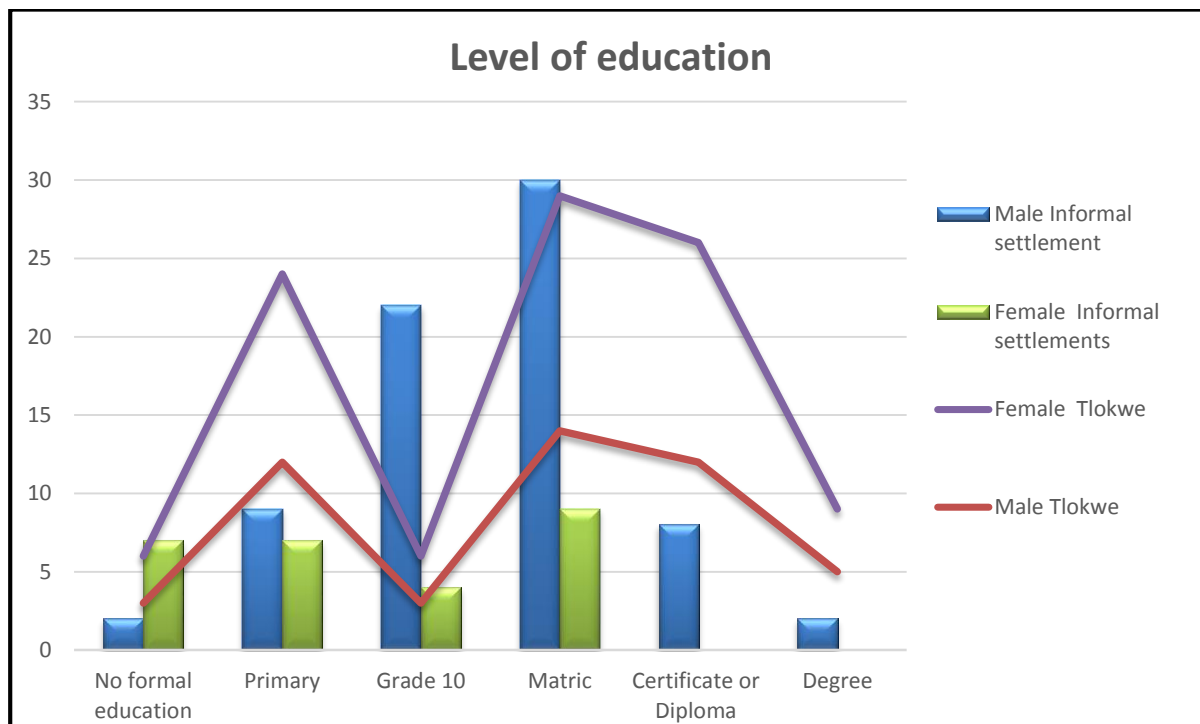


Figure 5-9: Breadwinners' level of Education

Sources: (Household surveys, 2015; TCC, 2014a:34)

The highest level of education attained by the heads of the households is the undergraduate level with only 2% of the population occupying this group. 39% of the breadwinners had access to basic education reaching matric level. On the other hand, 51% of the breadwinner did not reach matric level including the 9% who have not received any formal education. The results indicate that to a greater extent these informal settlements are inhabited by people who have low educational qualifications thus explaining their housing choices and their living conditions. However, the results follow the same trend with the level of education within TLM demonstrating that level of education is not necessarily the major determinant for households resorting to informal settlements.

Regardless of gender, lack of education imposes a form of capability poverty on residents in any settlement. These circumstances are more prominent within the female population which is affected more than their male counterparts. The highest number of people who have received no schooling is the Black African female group at both the local and national level (Stats SA, 2012: par 2.12; TCC, 2012:19). This pattern is evident within the informal

settlements under study, where the proportion of female household heads with low educational qualifications is higher than that of the males.

Naturally, the majority of the female household heads in Ikageng were raised in the typical traditional African lifestyle where women were expected to perform defined traditional roles, sustained by cultural norms rather than attend school. United (2011:118) states that the higher the level of education, the more likely it is for women to participate in the labour market. As a result, employment opportunities which generate sustainable income are limited for this group of women, with the effect of minimising their opportunities to purchase housing on the formal housing market. Nonetheless, the level of education impacts on the economic statuses of both genders to a greater extent. This is illustrated by Figure 5-10.

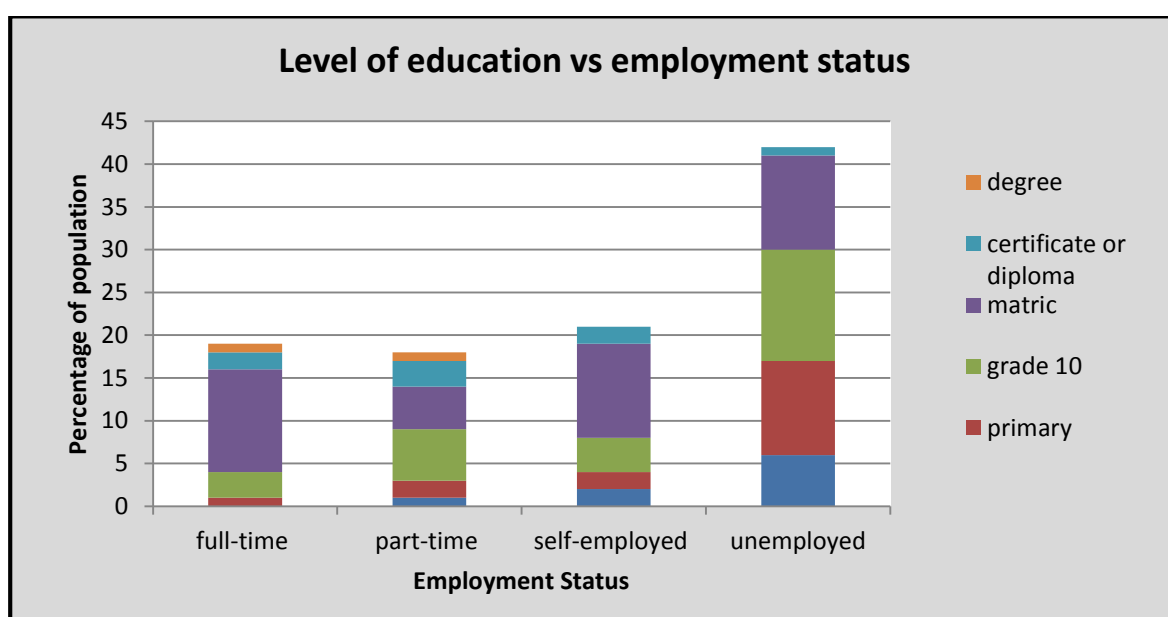


Figure 5-10: The correlation between level of education and employment status

Source: Household surveys (2015)

5.5.4 Employment status

The North West Province has a high rate of unemployment reaching up to 56.3% (Stats SA, 2014:96). Though the rate of unemployment in Potchefstroom is 21.6%, the challenges of poverty and unemployment faced in the city are attributed to the growing number of informal settlements on the peripheral of its townships (Stats SA, 2015; TCC, 2008:32). Figure 5-11 illustrates the employment statuses of the breadwinners within the informal settlements

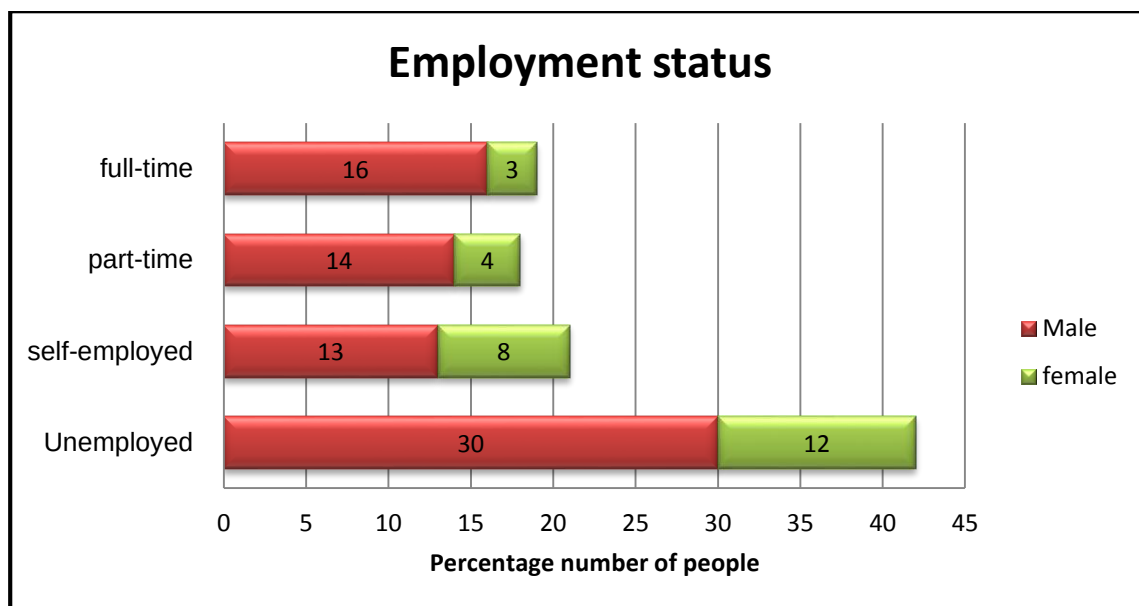


Figure 5-11: Breadwinners' employment status

Source: Household surveys (2015)

The rate of unemployment in the informal settlements is 42%. This has stimulated socio-economic ills such as poverty, crime and violence typically experienced within these societies. The statistics indicate that 19% of the inhabitants are employed on a full time basis with most of them employed in the industrial and service sectors. Amongst the inhabitants are the 18 % are employed on a part-time basis. 20% of the population have established small enterprises such as mini grocery shops often referred to as 'spaza' shops, salons and welding enterprises, while some engage in small scale trade.

It is evident that only 7% of the women are formally employed on a full-time and part-time basis. The majority of the female households are either unemployed or engage in small scale business to fend for their families. To a larger extent, the inability of the female household heads to participate in the labour force is attributed to their levels of education. However, to a lesser extent, social factors such as the role of women as care givers, deters their participation in the labour force

5.5.5 Level of Income

For this survey, the determination of the monthly level of income for the inhabitants is attributed to the level of employment. Thus, other means of survival such as remittances and social grants are not taken into consideration in this section. Figure 5-12 illustrates the monthly incomes earned by the breadwinners.

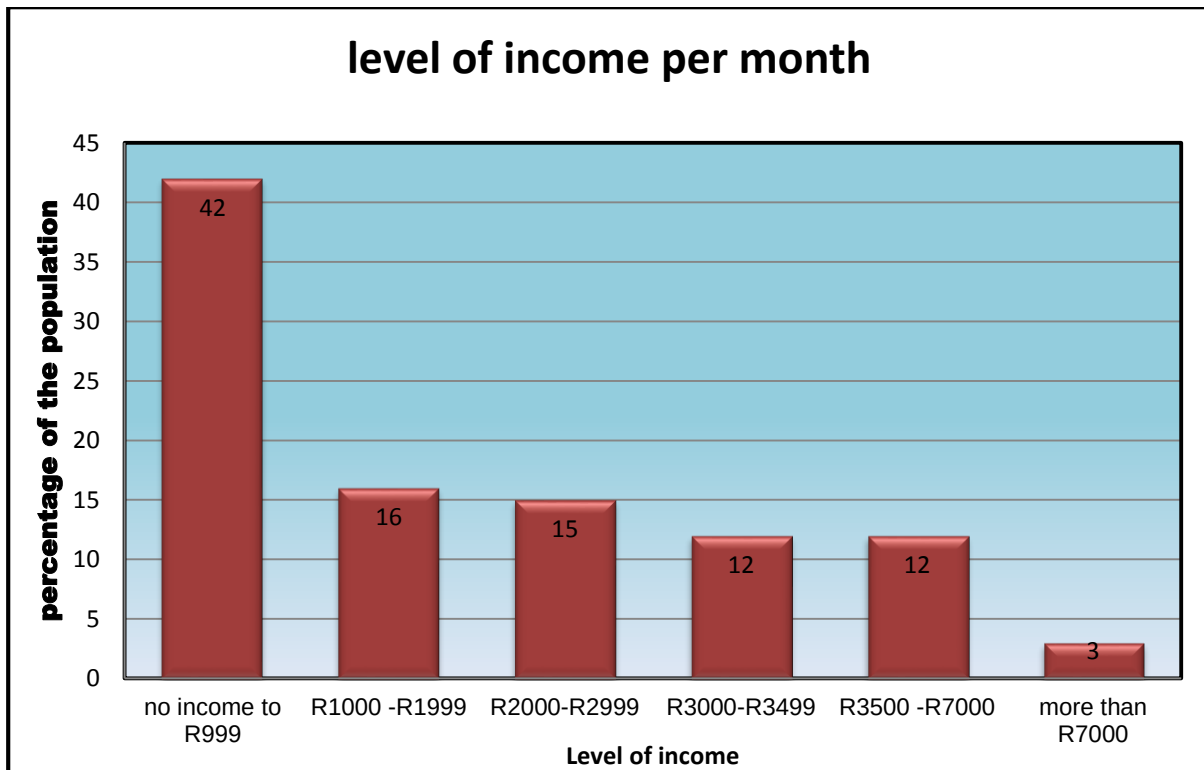


Figure 5-12: Level of income per month

Source: Household surveys (2015)

Approximately 42 % of the inhabitants live below the poverty line, which according to Stats SA (2012:320) is R524 a month per person. Only 3% earn more than R7000, an amount that is substantial enough to ensure a decent livelihood. Consequently, the majority of the inhabitants rely on social grants from the government for survival. These include the old pension fund (2%); the disability fund (1%) and the child support grant (77%).

By contrast, it is indicated that only 17.6% of the total population within TLM live below the national poverty line (Stats SA, 2015). Poverty within the municipality is therefore concentrated within the informal settlements. Therefore, the government should prioritise addressing unemployment within the informal settlements in order to alleviate poverty in line with the National Planning Commission's Vision 2030.

5.5.6 Place of origin

Migration plays a major role in the formation of informal settlements. This is generated from the information relating to the inhabitants' places of origin, as illustrated by Fig 5-13.

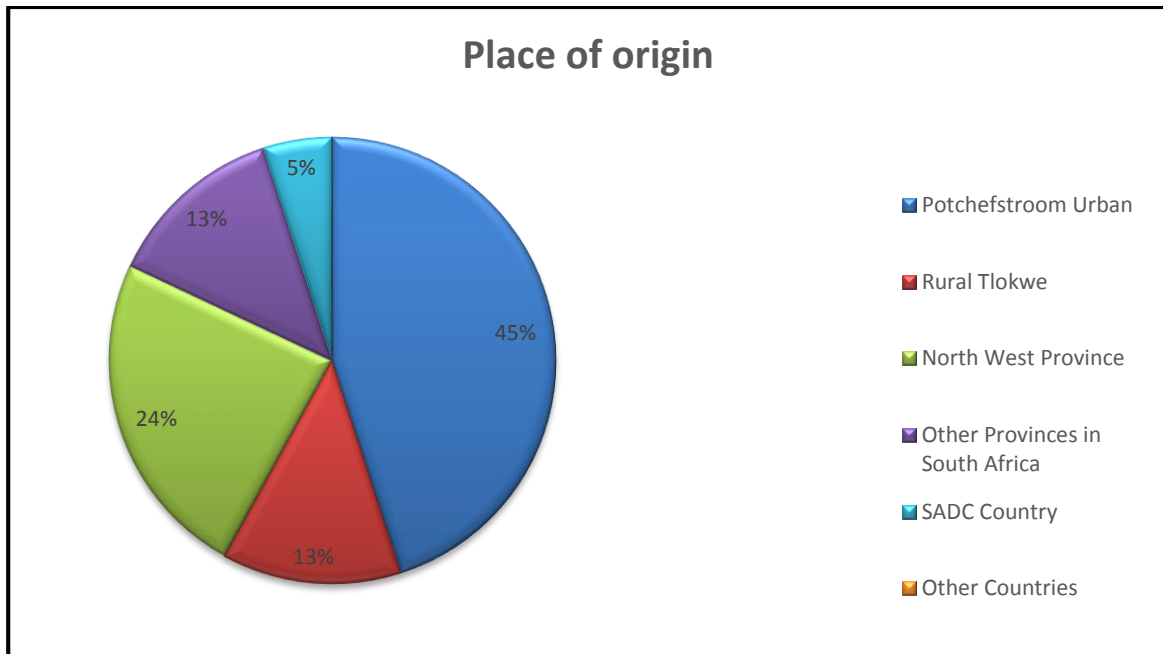


Figure 5-13: Inhabitants' places of origin

Source: Household surveys (2015)

45% of the inhabitants originate from the urban areas within Potchefstroom, while 13% migrated from the rural areas within Tlokwe. Migration from within the North West Province, other provinces and from SADC countries indicates a net migration of 89317 (14%) as reported in the mid-year population estimates (Stats SA, 2015:12).

5.5.7 Reason for settling in the informal settlement

Information relating to the places of origin is substantiated by exploring the factors that influenced the people to settle in the informal settlements. These are illustrated by Figure 5-14.

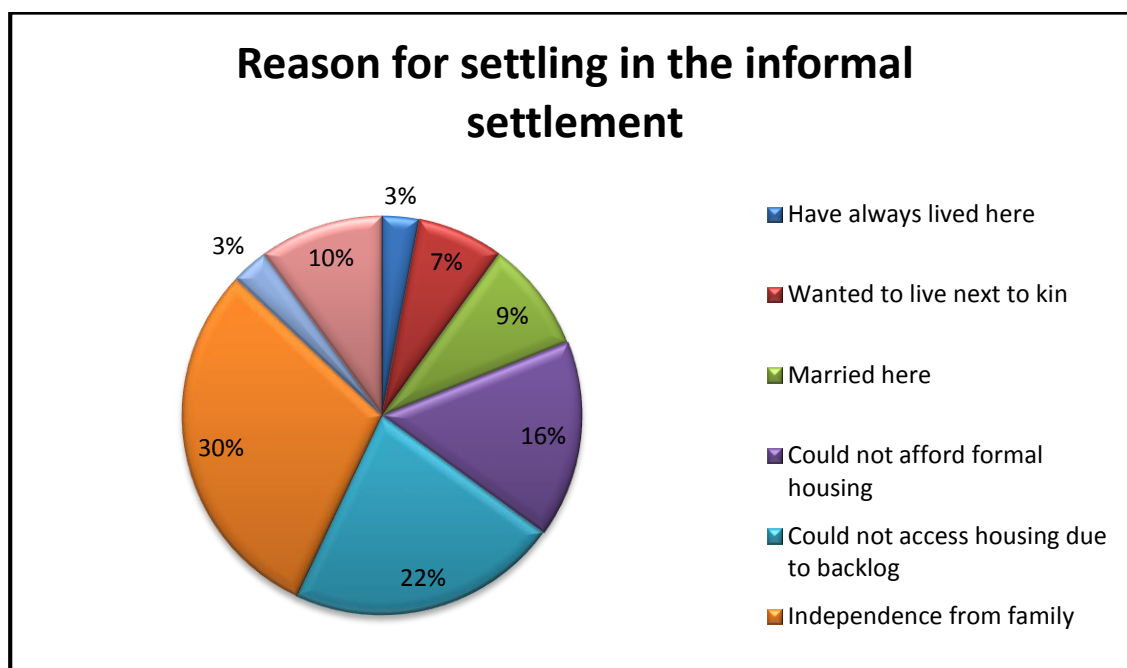


Figure 5-14: Reasons for settling in the informal settlement

Source: Household surveys (2015)

30% of the inhabitants of the informal settlements indicated that their relocation to the informal settlements was influenced by the aspiration to become independent from their families. The people, who stated this as the reason, are mainly the youth who left their family residences to start their own families and/or in search for employment opportunities. Having realised their incapability to purchase or access housing on the formal market they resorted to accessing housing in the informal settlements. On the other hand, it is also apparent that the existence of informal settlements has emerged as a pull factor to the younger populace who have been attracted by the cheap housing opportunities and decide to start their own families there.

The responses also revealed that 3% of the respondents had always lived in the informal settlements demonstrating the longevity of the existence of these settlements. The aspect of kinship also contributed to the migration of people from their former residences. 7% stated the need to live near their kin, and 9% relocating after marriage as the reasons for settling in the informal settlements.

5.6 Physical attributes of the informal settlements

The sub-standard nature of the informal settlements is established through a comparison of the physical attributes of the informal settlements to those set by the CSIR and the Norms and Standards.

5.6.1 The Housing Structures

Basically, the standards for stand-alone residential structures include the stipulation that the minimum size of permanent residential structures should be 40 square metres of gross floor area. Each house, as a minimum, must be designed on the basis of:

- Two bedrooms;
- A separate bathroom with a toilet, a shower and hand basin;
- A combined living area and kitchen with a wash basin;
- A ready board electrical installation where electricity supply in the township is available;
- Water resistant in the case of the floor of any kitchen, shower
- Any wall shall be so constructed that it will adequately resist combustibility and the penetration of water into any part of the building where it would be detrimental to the health of the occupants or to the durability of the building (DHS, 2009d:25-29)

However the informal structures do not conform to these standards. The following are the characteristics of the housing structures:

5.6.1.1 Materials, ventilation and flooring

The houses in the informal settlements can be classified either as transitory or durable but irregular structures. Though some of the structures are made from acquired or purchased materials, the majority of them are made from scavenged and recycled materials such as wood, asbestos and corrugated iron. The most common material used to build the housing structures is the corrugated iron, which, according to the people, is easily accessible. The use of these materials combined with the lack of heating and cooling facilities has contributed to the vulnerability of the people to unbearable temperature fluctuations during the winter and summer seasons respectively. Also, the structures are not durable, and 64% of the inhabitants have indicated that they have experienced collapsing of the structures.

The structures are characterised by openings representing windows. Although some are made of glass, the windows are usually made of cardboard material and are not constructed to scale. These windows often do not provide adequate ventilation within the housing structures. The floors within the housing structures are mostly covered in earth while a few have carpets and mats to cover the soil and serve as floors. Regardless of these coverings, the floors are prone to the ingress of water during the rainy season. Figure 5-15 shows the side view of a shack constructed using asbestos.



Figure 5-15: A housing structure in the informal settlements

Source: Household surveys (2015)

5.6.1.2 Room arrangements

The majority of the dwelling structures are mainly divided into two and in some instances three compartments, with one room representing the kitchen and living area, and the other one or two representing the bedrooms. It is apparent that the number of rooms per structure is determined, in most instances, by the level of income and, in fewer cases, by the number of people in the household

Often 2 to 3 members of the family have to share a room the kitchen/living area is converted into a bedroom at night to accommodate all the members of the family. From the data, sleeping arrangements do not necessarily influence the challenges faced by people. However, while administering the questionnaires, some of the residents revealed that one of the major causes of the child sexual abuse is the sharing of rooms amongst adults and children, as well as amongst young boys and girls. Also, these arrangements affect the

performance of children in school. According to Maarman (2009:326) the children who reside in informal settlements cannot freely do their school work within the small cramped spaces, thus affecting their performance in school.

5.6.2 Basic Services

5.6.2.1 Water Supply

According to the standards set in the CSIR handbook, the maximum distance to access a stand pipe should be 200m. 96 % of the inhabitants residing in the informal settlements have access to a water facility. 4% of the inhabitants cannot access water with the maximum prescribed distance hence some women and children have to walk long distances to fetch water for domestic use.

However, access to water from the stand pipes does not necessarily translate to adequate access to improved water. Although this would be theoretically correct, a number of people supported by these water facilities in Ikageng refute this assertion. Often, the inhabitants endure long queues to fetch water from the communal stand pipes. This calls for the attention of the government towards improving access to water supply.

5.6.2.2 Sanitation

Like many others, the informal settlements in Ikageng are faced with the lack of adequate sanitation services. The CSIR Redbook indicates that improved sanitation refers to the use of a Ventilated Improved Pit (VIP) latrine or alternative system provided within 75m from the house. While the informal settlement in Zet-Zet have been provided with ablution blocks, the rest of the inhabitants in the other four informal settlements have resorted to using the nearby open spaces.

Consequently, only 32% of the inhabitants have access to improved sanitation. The inhabitants rely on the use of open defecating areas. Some households in Extension 11 Ward 1 have constructed their own bathrooms while the majority use their shacks for bathroom purposes. Furthermore, the lack of laundry facilities has influenced the disposal of waste water on any open space within the confinements of the informal settlements. On a regional scale, an average of 86% of the people in Tlokwe have access to a flush toilet, accentuating the challenge of sanitation in the informal settlements.

5.6.2.3 Refuse Collection

Access to refuse collection refers to refuse removed by local authority or by private company once a week (HDA, 2013b.19). Refuse collection in the informal settlements is almost non-existent and the receptacles for rubbish are an exception rather than the rule. The inhabitants of Open Stand Extension 11 collectively dispose their garbage on designated dumpsites near the rear side of the informal settlement. This situation is dissimilar to that in the other informal settlements for example Extensions 6 and 7 where households dispose their garbage on their individual dwellings.

The unification of the aesthetic unpleasantness of the piles of litter and the odours that emanate from the waste indicate the dire need for solid waste management facilities in the informal settlements. Yet, 62.9% of the population in Tlokwe have access to refuse removal at least once per week. This indicates that the local municipality pays more attention to delivery of services in the formal housing areas and less attention to the basic needs of those in the informal settlements. Figure 5-16 shows the typical solid waste disposal within the informal settlements



Figure 5-16: Garbage accumulation

Source: Household surveys (2015)

The accumulation of garbage contributes to flooding within the informal settlements. This is exacerbated by the unavailability of storm water facilities.

5.6.2.4 Storm water drainage

A standard residential settlement should have lined open channels for storm water drainage purposes (DHS, 2009b:26). This service does not exist in the informal settlements in Ikageng. All of the settlements are characterised by running water along the streets, posing challenges such as flooding and disease outbreaks to the inhabitants, especially during the rainy season. Figure 5-17 illustrates the effects of the unavailability of storm water drainage on an ordinary day in the informal settlements.



Figure 5-17: Absence of storm water drainage

Source: Household surveys (2015)

5.6.3 Social Facilities

The standards for the provision of selected social facilities for a settlement are as follows:

Table 5-1: Provision of social facilities within a settlement

Facilities	Access distance	Population threshold range
Crèche/ Nursery school	2km	• 2 400 – 3 000 people
Primary schools	5km	• 7 000 people. • School size - 960 learners • Grade R - 20-30 learners per class • Other grades – 40 learners
Secondary schools	5km	• 12 500 people. • School size 1000 learners • 40 learners per class.
Primary health clinics	90% of population served within 5 km*	• optimal 40 000 people
Community hall	10-15km	• 10 000 -60 000 people
Parks	1km / 20 minute walk	• 1 000 people
Sports and recreation	3-10km	• 3 000 people

Source: CSIR (2012:59-111)

These standards are a guide in assessing the accessibility of social services to the informal settlements.

5.6.3.1 Educational Facilities

Educational facilities are a critical component of any residential area. The survey revealed that 2% of the inhabitants have crèches on their dwellings. 60% of the inhabitants have the educational facilities within walking distance while 38% have settled in areas where they have to walk long distances to access educational facilities. Figure 5-18 illustrates the accessibility educational facilities *vis-à-vis* the location of the informal settlements.

5.6.3.2 Health Facilities

Health facilities available for the inhabitants include Potchefstroom Hospital and other primary health clinics. 56% of the inhabitants have easy access to health facilities. Accessibility for the other 44% is hindered by the transport costs incurred in accessing these facilities (see 5.6.4.2). The household survey revealed that more often than not, the inhabitants are reluctant to visit health facilities due to the distance they have to travel. Figure 5-19 shows the availability of primary health clinics in relation to the location of the informal settlements.

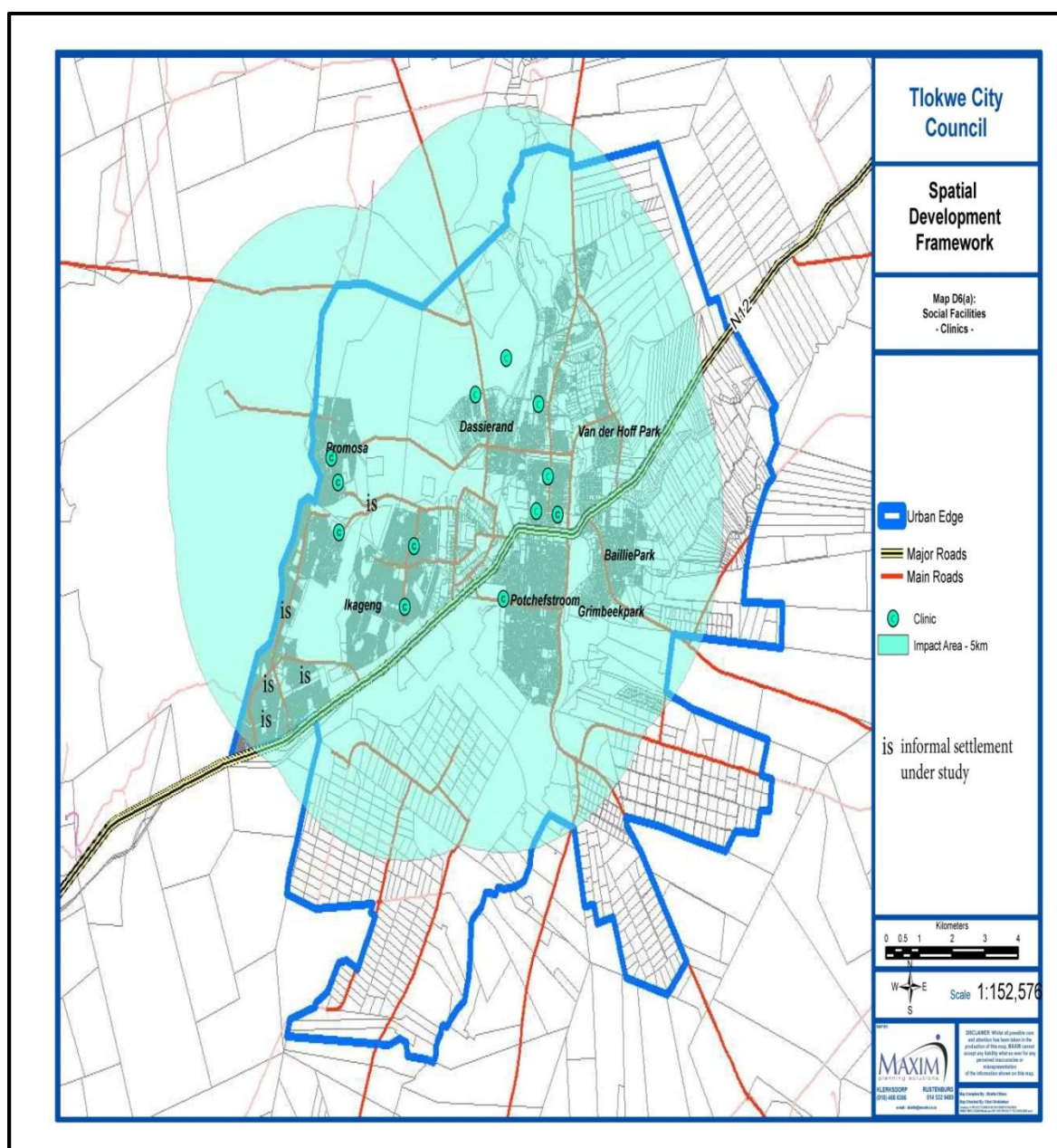


Figure 5-19: Location of primary health clinics

Source: Adapted from TCC (2014b)

5.6.3.3 Public open spaces

Access to public open spaces is one of the merits of the location of the informal settlements. Figure 5-20 shows the location of public open spaces accessible to the inhabitants

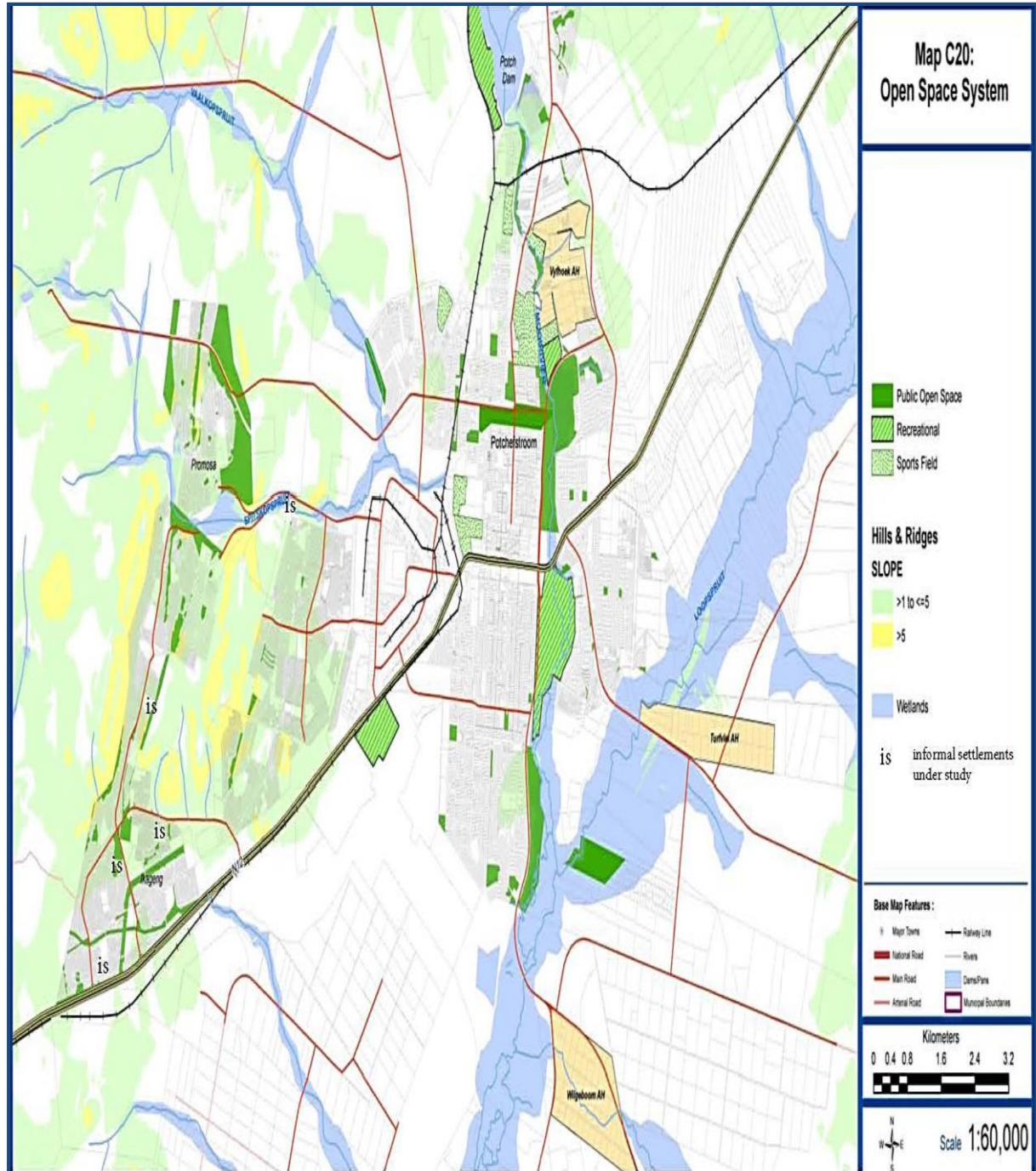


Figure 5-20: Public open spaces accessible to the inhabitants

Source: Adapted from TCC (2014b)

5.6.3.4 Community Centres

Community centres also provide recreational facilities making their locality an essential component of any residential area. While 22% of the inhabitants stay in close proximity to the community centres, 78% do not have ease of access to such centres. This is an indication that the majority of the residents do not have access to places of leisure. Like any normal township setting, the people then resort to 'shebeens' as sources of entertainment. The inadequacy of these recreational facilities also promotes some of the social ills prevalent in these areas.

5.6.4 Mobility and Accessibility

The majority of opportunities for employment, health care, retail and tertiary education are located either in the CBD or in locations far from the township and the subsequent informal settlements. Figure 5-21 depicts the means of transport used by the inhabitants of the informal settlements to access health and economic opportunities.

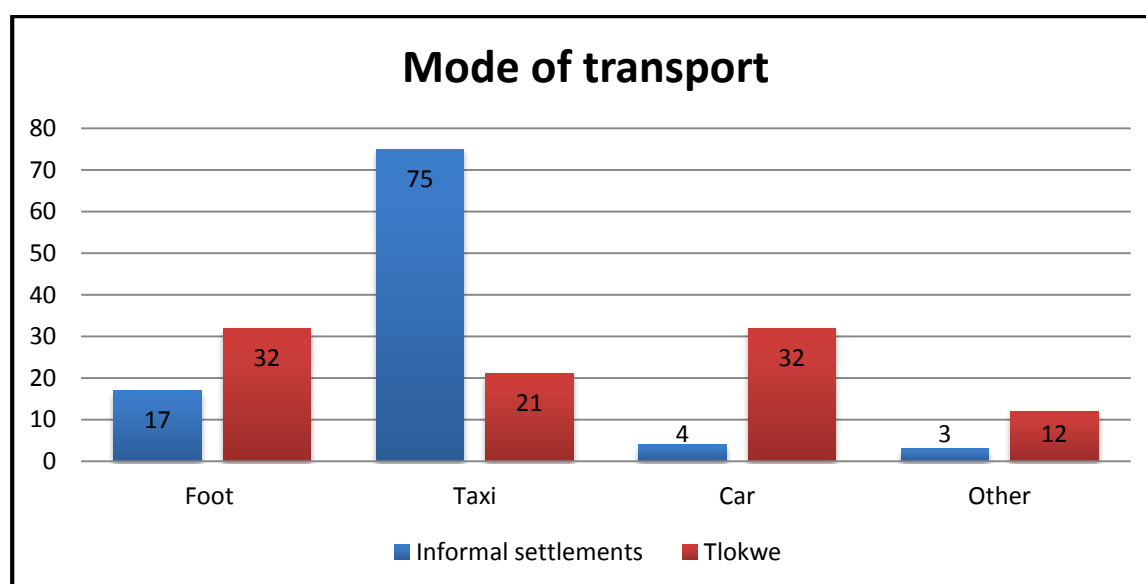


Figure 5-21: Mode of transport

Source: Household surveys (2015)

Public transport in the form of mini-bus taxis is the most common form of transport within the informal settlements. On the other hand, the majority of the people in Tlokwe access economic services on foot or by cars. The contrast between the use of taxi's, cars and walking reflects the spatial marginalisation of the informal settlements. The inhabitants rely on public transport which serves the formal Ikageng Township.

5.6.4.1 Access to public transport

The location of four of the informal settlements near major arterial roads provides better access to minibus-taxi services. Figure 5-22 illustrates the location of the informal settlements in relation to the major transport routes

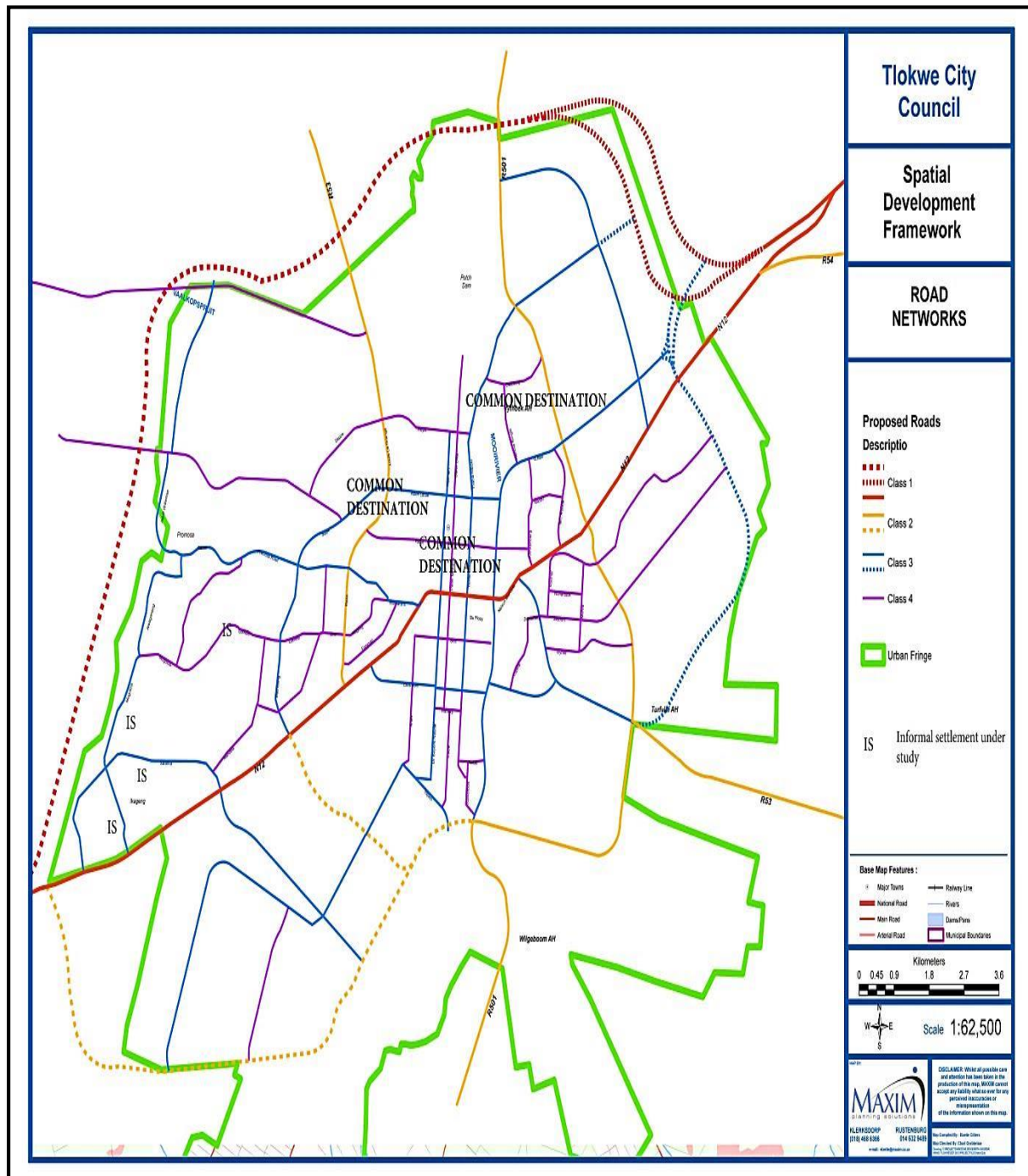


Figure 5-22: Transport routes and common destinations

Source: Adapted from TCC (2014b)

The locations of the informal settlements and the conditions of the road infrastructure have provided positive opportunities for the inhabitants to access public transport. However, the mini-bus taxis mainly operate during the peak hours, targeting passengers travelling to and from their places of employment, imposing accessibility challenges on the residents travelling during the day. The location of the informal settlements *vis-a-vis* the economic opportunities imposes large transport costs on the inhabitants.

5.6.4.2 Household spending on public transport

The number of trips from the origin to the destination ranges from 1 to 2. The cost of transport, at the time of the study, from one point to the urban Tlokwe is R10. Thus, the average cost on transportation for the inhabitants that rely on public transport every week day is R20 and R40 for those who make 1 or 2 trips respectively. This translates to approximately 22.85% of the income of an average formally employed inhabitant. The burden is more pronounced on the self-employed members of the community whose transport costs can amount to up to 32% of their income.

5.7 Challenges faced by the inhabitants

The informal settlements are marred by socio-economic, physical and environmental challenges. The focus of this section is on the major challenges, which include crime, violence, disease outbreaks, fire outbreaks and the existence of dolomite.

5.7.1 Crime

Crime is a serious challenge in the informal settlements. According to UN-Habitat (2011:4) informal settlements are more prone to crime and violence, and the inhabitants are often the main victims and perpetrators of violent crime. There is no evidence to suggest that the perpetrators are mainly the inhabitants of the informal settlements. Generally, the whole of Ikageng has a high rate of crime, constituting more than 80% of the crimes committed in Potchefstroom (Stats SA, 2015). This is an indication that the perpetrators could be from anywhere in Ikageng.

The survey revealed that 80% of the inhabitants feel vulnerable to and have oftentimes been victims of crime. 15% indicated that crime occurred frequently, while 5% indicated that crime seldom occurred within their areas of residence. The variations in the responses were mainly attributed to the differences in the rates of crime amongst the informal settlements.

Crime rates are highest within the Open Stand Extension 11 and the Zet-Zet informal settlements where crimes such as burglary, mugging and rape are most prominent. The

situation in Extensions 6 and 7 is mainly a result of the lack of occupation amongst the youth who have resorted to crime as a hobby as well as a strategy for survival. In Extension 11, crime is mainly due to spatial density and the compact yet sporadic arrangement of the settlements stimulating unnoticed and easy access to any lodgings. On the contrary, the rates of crime are relatively low in Sonderwater. This is mainly due to the presence of patrol officers guarding the area against further invasion of the land. Consequently, their presence has reduced the incidence of crime as the perpetrators fear their apprehension by these patrol officers.

On a macro scale, vulnerability to and the incidence of crime differs with the position of the housing structure within the informal settlements. Those on the peripheries of the informal settlements are less prone to crime, while those living in the central parts have experienced higher rates of crime. The absence of light illumination influences criminal activities as the perpetrators take advantage of the darkness.

Women and children are in most instances the victims of crime in these informal settlements. There have been several reported and unreported cases of women and girls that have been victims of rape within the informal settlements. The survey revealed that most of the perpetrators are related to the victims. This has augmented the risk of the spread of HIV/AIDS within the settlements especially where the cases are not reported.

5.7.2 Violence

The rate of violence is very high in the informal settlements. Figure 5-23 illustrates the responses of the inhabitants in relation to the frequency of violence within the informal settlements.

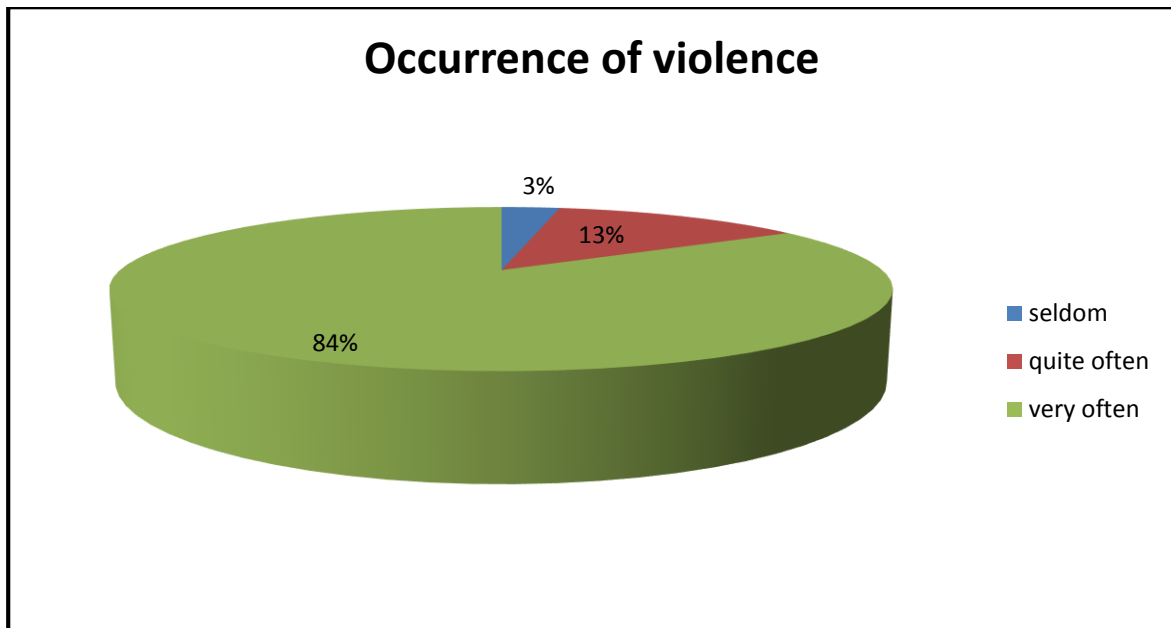


Figure 5-23: Frequency of the occurrence of violence within the informal settlements

Source: Household surveys (2015)

The illustration from the diagram indicates that violent behaviour occurs frequently within the informal settlements. The most common type is domestic violence with the male residents being more of perpetrators than the victims. Poverty, unemployment and lack of infrastructure and services heighten frustrations and the sense of exclusion, and these are often expressed through violent actions. It is in this regard that women and children have been subjected to assaults and homicide. Though the exact figures could not be attained, a number of shacks have also been set on fire as an act of domestic violence resulting in fatalities.

Though statistics indicate approximately 4 cases of public violence in Ikageng (Stats SA, 2015) there have been more unreported cases within the informal settlements. The inhabitants revealed that public violence is at its peak during weekends, inhibiting the free movement of people within the settlements. The challenge is aggravated by the existence of shacks which have been turned into 'shebeens'. The people that visit these drinking places often become violent when they are under the influence of alcohol and this has often resulted in assaults that cause grievous bodily harm and in some cases murder.

5.7.3 Disaster risks

Due to the locality of some of the informal settlements, high population and settlement densities as well as the lack of basic services and infrastructure, render these settlements susceptible to disasters. These include disease outbreaks, fire outbreaks, flooding and

sinkholes as a result of the existence of dolomite. The focus of the section is on understanding the risks and vulnerabilities faced by the inhabitants, the underlying root causes, the effects and the consequences of these disasters.

5.7.3.1 Disease outbreaks

The lack of proper sanitation facilities and portable water poses threats of water borne diseases such as Cholera, Dysentery and Typhoid. The squatter camps are also susceptible to the outbreak of air-borne infections such as Tuberculosis due to the lack of proper ventilation and the earth flooring which characterise the housing structures. Though the areas have not experienced such outbreaks, individual cases of diarrhoea often cause concern amongst the inhabitants. From the results, 73 % of the inhabitants indicated that they experienced cases of diarrhoea, tuberculosis, asthma and other related diseases. Due to the dense nature of the informal settlements, contagious diseases will be easily transmitted from one household to another leading to epidemics. The situation is exacerbated by the absence of health facilities within the vicinity (refer to Figure 5-19).

5.7.3.2 Fire outbreaks

Fire outbreaks are a common occurrence in many informal settlements including those in Ikageng. Though there has never been a fire huge enough to consume the whole camp, 62% of the inhabitants have had their shacks destroyed by fire. The fires are mainly attributed to the sources of energy used for lighting, cooking and heating. Figure 5-24 depicts the major sources of energy used for the above mentioned purposes.

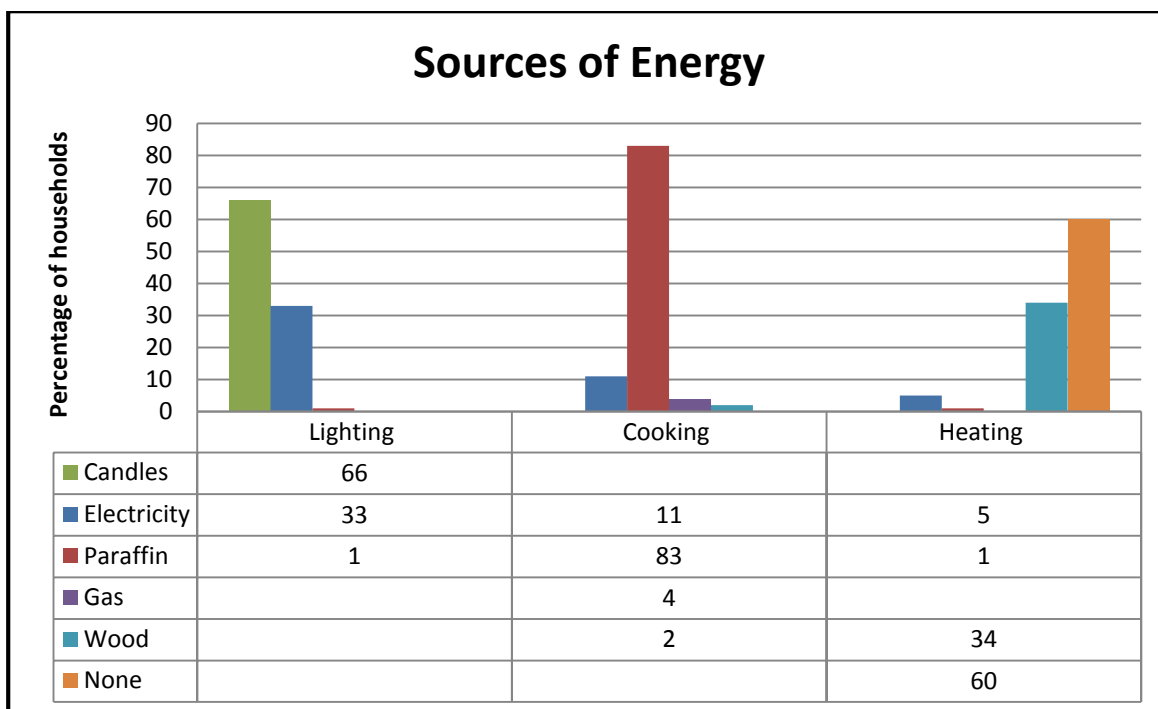


Figure 5-24: Sources of energy used

Source: Household surveys (2015)

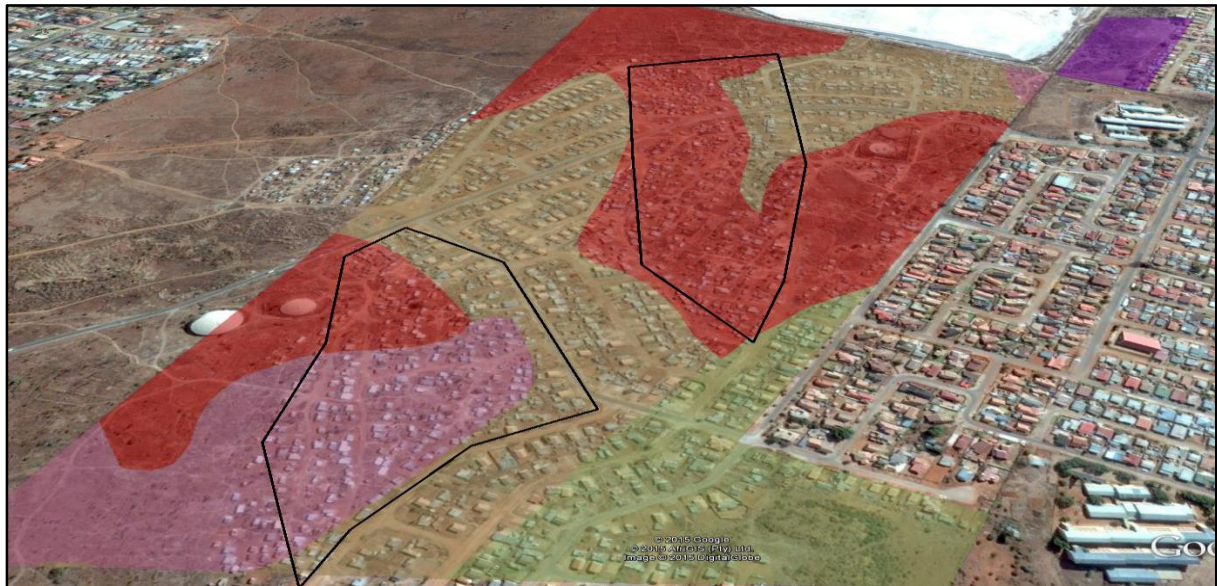
The diagram indicates that the inhabitants mainly rely on candles for lighting, paraffin for cooking and wood for heating. These sources of energy are highly flammable and the leading causes of fires within the informal settlements. The combination of highly combustible sources of energy and the compact arrangement of shacks poses the threat of fire outbreaks in the informal settlements. More than three cases were reported of families becoming victims of fatal fires after retiring to sleep in a candle lit house.

The use of improperly harnessed electricity is another cause of fires within the informal settlements. While approximately 33% of the households acknowledged their use of electricity, more than 40% of the households in the informal settlements have television aerials connected to their shacks. The electricity is harnessed from the formal residential areas and transmitted using copper/ wire cables which are joined together by adhesive taps or plastic material. These illegal collections pose the dangers of fire outbreaks and have been responsible for three reported cases. On a macro scale, the whole camp in Extension 11, Ward 19 is prone to a fire outbreak. The informal settlement is located on high voltage electricity servitude unsuitable for human habitation.

5.7.3.3 Dolomite

The existence of dolomite underlying the area is one of the major disaster risks faced by the inhabitants of Sonderwater. It is estimated that approximately 847 informal settlements

which are not on stands are underlain by dolomite, amongst them those in Sonderwtaer (TCC, 2014b:48). Though the greater part of Sonderwater falls under a low risk zone, part of the informal settlements under study are in a high risk zone area not suitable for residential development. This poses a threat of loss of life in the event of a sinkhole formation. Figure 5-25 indicates the informal settlements within Sonderwater which are directly affected by the dolomite risk.



Legend:

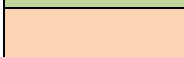
	Informal settlements in Sonderwater directly affected by dolomite
	Area in buffer zone , not recommended for development
	Zone 1: May be utilised for residential development, commercial, light dry industrial or agricultural purposes
	Zone 2: May be utilised for residential development, commercial, light dry industrial or agricultural purposes
	Zone 3: May be utilised for, commercial, light dry industrial or agricultural purposes. No residential development
	Zone 4: No residential development

Figure 5-25: Informal settlements and Dolomite stability risk zones in Sonderwater

Source: Adapted from Potgieter (2012:42), Buttrick (2005:19); TCC (2012:51)

The incidence of sinkholes is related to human activity, with 96% of the cases as a result of water ingress which in itself is a result of leaking pipes, storm water runoff and leaking gutters (SANS, 2012:1). The lack of storm water drainage systems in the informal settlements has resulted in the development of stagnant water puddles. These allow the ingress of water into the ground, aiding in dissolving the dolomitic rock. This in turn will accelerate the formation of cavities thus encouraging the occurrence of sinkholes.

The informal settlements are also at risk due to their close proximity to the Ikageng West reservoirs. The reservoirs are situated on land underlain by dolomite and their structures and the associated infrastructure do not comply with the minimum development standards for development on dolomite (TCC, 2014a:57). The age and structural status of the reservoirs have instigated continuous water leakages from inside the reservoirs as well as the pipes leading to and from the reservoirs (TCC, 2014a:57). This may result in calamitous sinkhole formation which may affect the area at a larger scale.

The level of threat is exacerbated by the low levels of underground water which can support the underground cavities. As the name Sonderwater suggests, the area is indeed without water thus encouraging the formation of sinkhole. Cavities are supported by hydrostatic pressure provided by a saturated surface. The deficiency of underground water to support the cavities will cause the ground to collapse leading to the formation of sinkholes (AGES, 2015).

Buildings on dolomitic land have to be designed and constructed in accordance with the provisions of the SANS 1936:2012 to resist the impact of dolomite related geo-structural failure. On the contrary, informal settlements do not have the stipulated supportive foundations and infrastructure exposing them to higher risks of collapse as a result of sinkhole formation. The dense nature of informal settlements may also cause instability in the strata, further contributing to the vulnerability of the people living in that area.

Along with the exposure to the dolomite hazard, the communities inhabiting these areas are the most economic and socially vulnerable people. The ostracism of these poor households and their inability to access 'appropriate' housing forces them to resort to marginal land. Regardless of the knowledge of the risk, more people have continued to occupy the very high risk zone to meet their immediate needs for housing. Also, the disregard for the consequences of a disaster, which may or may not occur, encourages the further invasion of the land. Consequently, the probability of sinkholes occurring is heightened as more pressure is exerted on the strata along with the other consequences of informal settlements.

5.7.3.4 Floods

The informal settlements are also prone to flooding. The dense nature of the settlements and the unavailability of storm water facilities promote the inundation of land in the event of high rainfall. The situation is further aggravated by the fact that most of the informal settlements lack storm-water drainage channels that are designed and built to engineering standards. Consequently, as densification increases, water run-off from the roofs of buildings alters the urban land cover and land surface, including blocking existing natural storm-water drains.

The problem is further complicated by poor solid waste management practices in the settlements as some of the garbage inhibits the natural flow of water. Most prone to this disaster is the informal settlement in Extension 11 Ward 1 which is located in a 1:50 flood plain.

5.8 The inhabitants' attitudes, perceptions and views

All the inhabitants interviewed during the household surveys indicated displeasure for the conditions they are living in. The inhabitants expressed primary concern over the unavailability of basic services which threaten their health and the lack of security within the informal settlements. The responses revealed that the inhabitants feel neglected by the government.

While 51% of the inhabitants have had the opportunity to present their concerns to the ward councillors, 49 % have never had an opportunity to meet with their ward councillors. Of the 51% that have presented their pleas to the ward councillor, 28% indicated that the provision of water and ablution facilities as well as paraffin is a way of addressing their challenges. However, the rest of the inhabitants are not satisfied with the responses and some consider this to be the government's way of avoiding protest from the inhabitants.

The inhabitants expressed varying views in what they considered the best solution in addressing the informal settlements under study. Figure 5-26 displays the inhabitants' perception of the ideal solution to their housing challenge

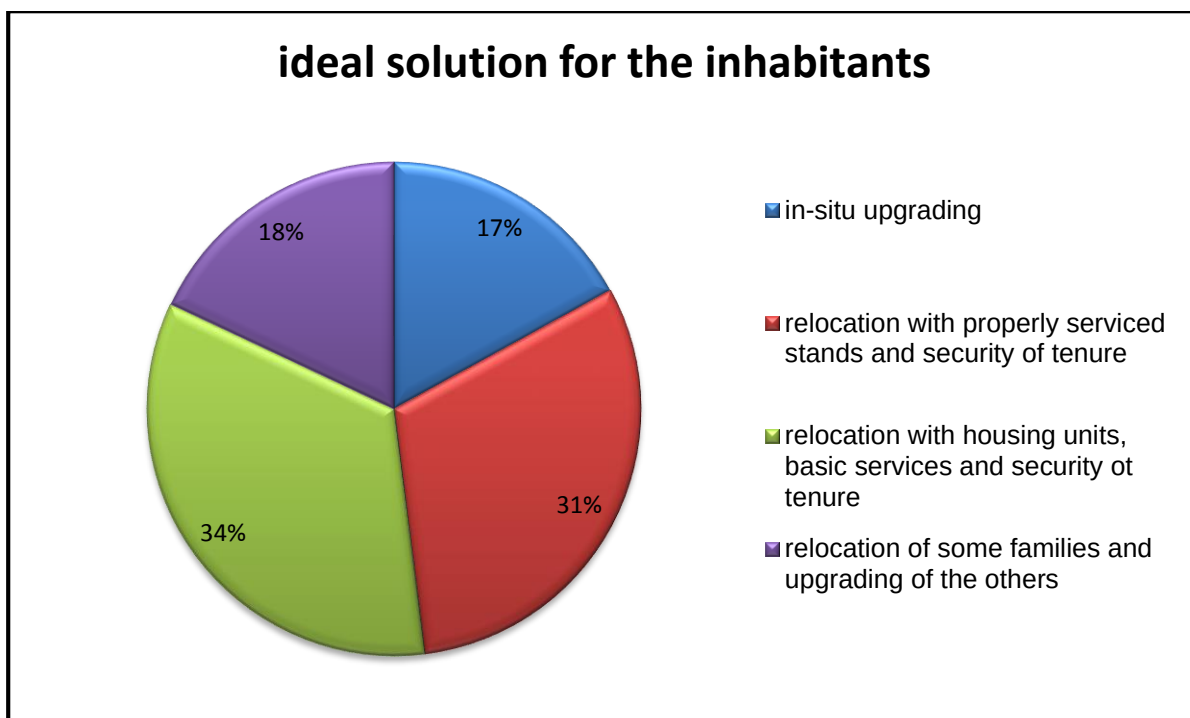


Figure 5-26: The inhabitants' perception of the ideal solution

Source: Household surveys (2015)

As shown by the diagram, the majority of the inhabitants prefer to be relocated to other areas citing overcrowding, crime and violence as the major factors influencing their choices. The inhabitants consider their lives to be better off away from their current settlements. It is clear that tenure security is the major consideration in addressing the informal settlements. The inhabitants stated that security of tenure will provide them with a sense of security against forced eviction as well as providing a sense of ownership.

Of much significance is the fact that 66% of the inhabitants consider an incremental approach to their housing needs as the best solution. On the other hand, 34% of the inhabitants would prefer to receive housing units, basic services and security of tenure. Some of the inhabitants indicated that they could not afford to build houses even if they were provided with services; while others clearly stated that they are entitled to receiving the 'whole package' on the basis that housing provision and their well-being is the responsibility of the government.

83% of the inhabitants expressed their willingness to participate in the upgrading of the informal settlements, if given the chance. Amongst the responses provided by the inhabitants are: participation in any way possible, assisting in the excavation and physical construction of houses, information dissemination and organising workshops to provide awareness on the upgrading of the informal settlements.

Therefore, the government should seek ways of addressing the grievances of the inhabitants, while maximising on their willingness to participate in the programme and therefore ensuring community engagement.

5.9 S.W.O.T Analysis

Taking into consideration the background, characteristics and the challenges faced in the informal settlements, Table 5-2 provides the strengths, weaknesses, opportunities and threats associated with the five informal settlements under study.

Table 5-2: SWOT Analysis of the informal settlements

Strengths	• Housing provision for the poor • The use of available resources provides ideas for recycling materials while constructing sustainable housing structures • Sense of community within the groups • Willingness amongst the inhabitants to participate in the intervention programme
Weaknesses	• The dense nature of the informal settlements • Open Stand Extension 11 is located on a high voltage power line servitude • Resistance to resettlement for those residing within the high risk dolomite zones, exacerbating their vulnerability • Shortage of space for social amenities • Lack of effective awareness concerning the risks of settlements in the dolomitic areas • Crime and violence
Opportunities	• Spaza shops provide opportunities for local economic development • Maipeng is located near the N12; hence an opportunity to maximise on nodal development • Local skills in construction, carpentry amongst others offer opportunities to invest in people rather than in places
Threats	• Increased fatalities as a result of fire and disease outbreaks • Occurrence of dolomite and vulnerability to the formation of sinkholes • Protests for service delivery

Source: Own Construction (2015)

5.10 Conclusion

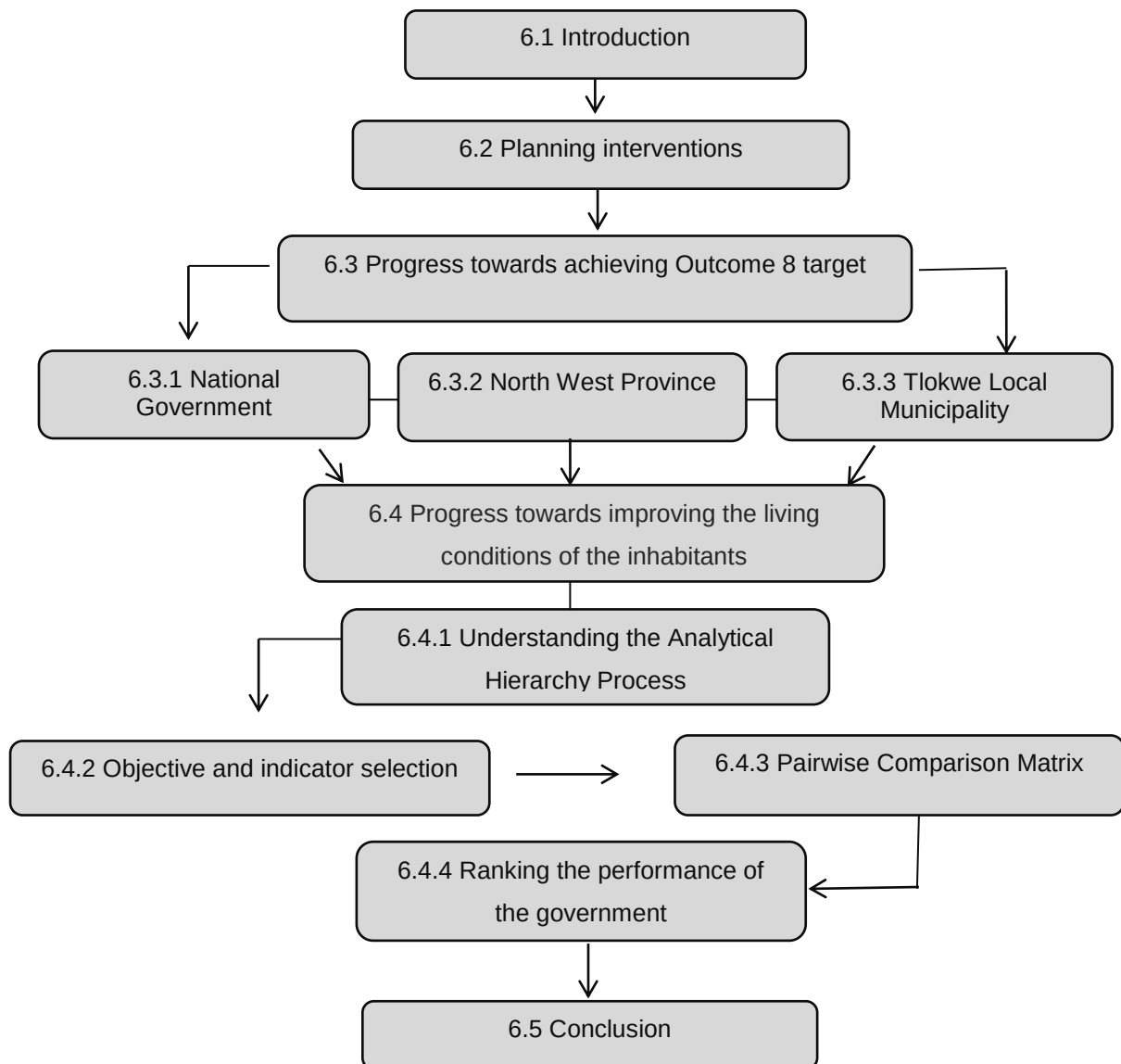
This chapter provides a situational analysis on the informal settlements under study. Details from this chapter indicate that level of education is low and the rate of unemployment is very high in the informal settlements, as compared to the regional rate in Tlokwe. Unconventional housing structures, large family units, poverty, lack of access to basic services and social facilities are the major causes of crime, violence, fire outbreaks and disease outbreaks within the settlements.

The locality of the informal settlements on the peripheries of Potchefstroom and the transport costs incurred in accessing economic opportunities also constitute the major challenges faced by the inhabitants. The occurrence of dolomite in Sonderwater is a serious threat to the lives of the inhabitants settled in the area. The inhabitants indicated the failure of the government to effectively respond to their challenges, yet they are willing to participate in the upgrading of the informal settlements.

All the positive and negative attributes of the informal settlements are summarised in the form of a SWOT analysis. Therefore, this chapter forms the base for the analysis of government intervention in addressing the informal settlements in Chapter 6.

CHAPTER 6: AN ANALYSIS OF PLANNING INTERVENTION IN ADDRESSING THE INFORMAL SETTLEMENTS

The diagram below is a graphical presentation of Chapter 6.



6.1 Introduction

The continuous proliferation of informal settlements is a manifestation of the failure of government policies in addressing the challenge. The previous chapter focused on the attributes of the informal settlements in Ikageng and provides a clear picture of the conditions in which the informal settlements exist. This chapter focuses on analysing the responses of the three spheres of government in addressing the challenges of informal settlements in Ikageng.

This entails an examination of the roles of each sphere of government in the upgrading of the informal settlements under study. An investigation of the progress that has been made towards upgrading 400 000 households by 2014 provides insight on the performance of the national and provincial spheres of government, and this has a bearing towards the success of the upgrading of the informal settlements in Ikageng.

This chapter goes further to analyse the current living conditions of the inhabitants vis à vis the intervention programmes at local, provincial and national level. The Analytical Hierarchy Process is used to assess progress that has been made by TLM against the overall progress at provincial and national level.

6.2 Planning interventions in the formalisation of informal settlements

Successful intervention in the formalisation of informal settlements is based on the commitment of all spheres of government. Understanding the roles of each sphere of government and the instruments that guide and aid each sphere provides the basis for assessing the progress in informal settlements intervention. Table 6-1 shows how each sphere of government could intervene and the instruments that can be employed.

Table 6-1: The planning interventions by the three spheres of government

Government Sphere	Intervention strategy	Instruments
National	• Actively participate in the conceptualisation of upgrading programmes • Clearly document all the policies and legislation relating to housing development • Negotiate the apportionment of funding for the programme and allocate such to provinces for project • Provide implementation assistance to provincial departments	• UISP • Outcome 8 • HSDG • USDG • HDA • NUSP • NDP

Government Sphere	Intervention strategy	Instruments
Provincial	• Collaborate with and assist municipalities in the initiation, planning and formulation of applications for projects under this programme • Assume the development responsibility of the municipality in cases where the municipality is clearly not able to fulfil its obligations under the programme • Reserve, reprioritise and allocate funds from its annual budget allocation and manage, disburse and control funds allocated for an approved project, in accordance with an agreement with a municipality; • Assist municipalities with the use and implementation of accelerated planning procedures; • Monitor the implementation of a project by a municipality	• North West Provincial Business Plan • UISP • Outcome 8 • HSDG • HDA • NUSP • Sector plans • NWPDP
Municipalities	• Initiate, plan and formulate applications for projects relating to the in situ upgrading of informal settlements; • Implement approved projects in accordance with agreements entered into with Provincial Departments; • Provide basic municipal engineering services such as water, sanitation, refuse removal services and other municipal services; • Provide materials, assistance, and support where necessary to enable the in situ upgrading project to proceed; • A district municipality must provide inputs and assistance to a local municipality, and vice versa in appropriate circumstances	• Ikageng Business Case • UISP • Outcome 8 • HSDG • NUSP • Sector plans • IDP

Source: Own construction adapted from South Africa (1997), DHS (2009b:20-22)

6.3 Upgrading 400 000 informal households by 2014

As documented in Chapter 4 of this study, the government implemented various policies and strategies aimed at addressing informal settlements. While the implementation of the UISP indicates the national government's initiative in the conceptualisation of the upgrading programmes, Outcome 8 provides a platform for the assessment of the progress made by the national and provincial government in the upgrading of the informal settlements. Examining the progress towards upgrading the informal settlements also highlights the

successes and the flaws of the three spheres of government in performing its roles as depicted in Table 6-1.

6.3.1 National Government

The NDHS contracted and collaborated with the HDA and NUSP towards achieving the 400 000 upgraded households target. The HDA carried out workshops on informal settlements trends and definitions in various municipalities and provinces including the Free State, Limpopo, City of Johannesburg, North West and Northern Cape. The workshops resulted in updated reports on the informal settlements status at provincial and national levels (HDA, 2014a:24).

The NHDS in conjunction with Cities Alliance appointed the NUSP to provide technical support to 62 municipalities. This included rapid assessments and categorisation of selected informal settlements, development of municipal upgrading strategies and providing detailed informal settlement upgrading plans. 597 settlements were assessed and categorised while 800 upgrading plans were in the process or completed (DHS, 2015a:11). Following this, a total of 447 780 households in informal settlements were upgraded, exceeding the target by 11.9% (DHS, 2015a:11). Figure 6-1 depicts the upgraded households according to their categories.

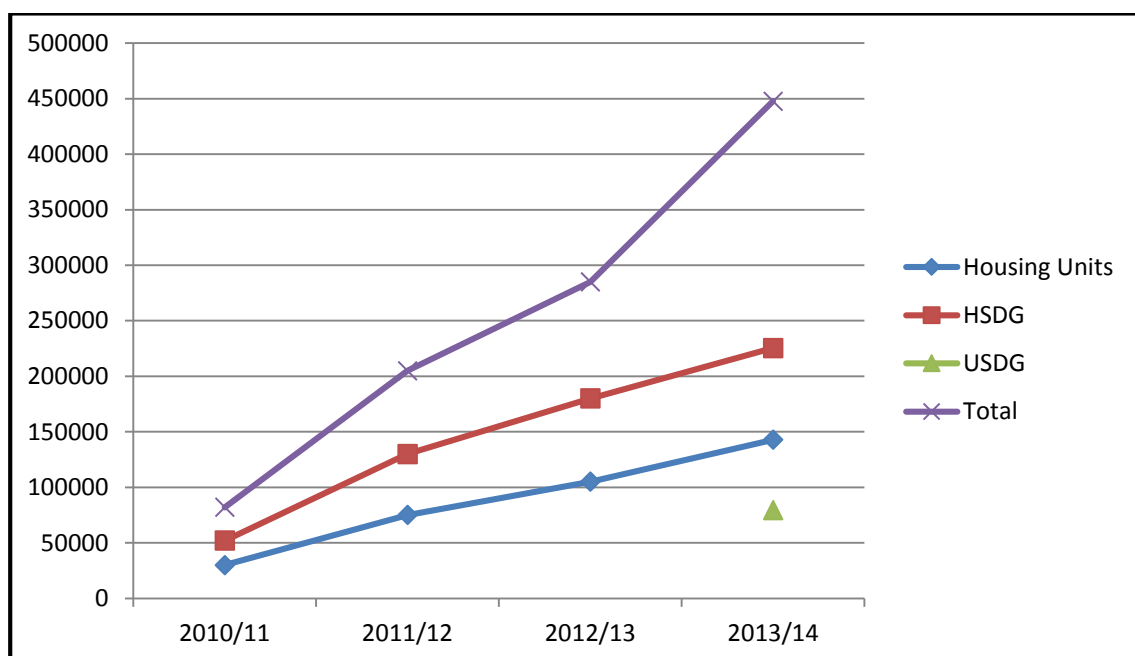


Figure 6-1: Aggregate national upgraded households

Source: DHS (2014a:58)

The graph indicates a constant increase in the total number of upgraded households as a result of the various initiatives and strategies implemented by the NDHS. It is evident that the allocation of the HSDG and the USDG contributed significantly to the provision of basic services for the upgraded households. The sharp increase in the upgraded households during the 2013/2014 year is a result of the introduction of the USDG which was operational in the 8 metro municipalities. The graph also indicates that the initiatives by the national government resulted in the provision of approximately 32% of the households with top structure housing units as well as basic services and security of tenure.

Though the 400 000 target was exceeded, the contributions of each province vary from exceeding the target to underachievement. Overall, the target may have been achieved, but the imbalance in the performance between the provinces that were lagging and those that were leading is critical in the analysis of the performance of the programme at national scale. Figure 6-2 represents achievements of the provincial municipalities against the set targets which were presented in Table 4-6.

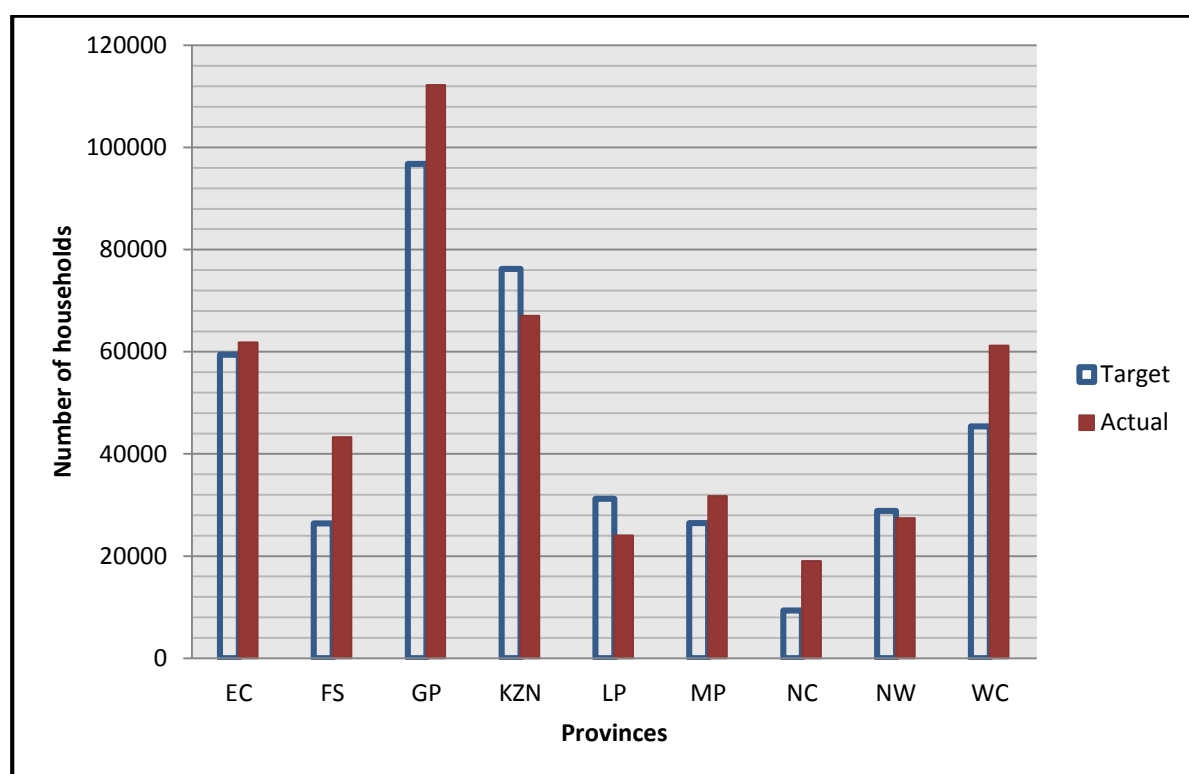


Figure 6-2: Households in upgraded informal settlement at National Level

Source: DHS (2014a: 57)

While the majority of the provinces managed to exceed their targets, North West, Limpopo and KwaZulu-Natal underachieved. The underperformance of the North West Province was mainly a result of the financial constraints faced by the provincial departments

(Parliamentary Monitoring Group, 2015a). This is attributed partly to the budgetary allocations by the national government which could not sufficiently fund the upgrading programmes within the province. In turn, this had a negative bearing on the upgrading of the informal settlements in Ikageng.

6.3.2 North- West Provincial Government

The overall goal of the province is to “eradicate informal housing from 21.2% to 0% by 2030” (North West Planning Commission, 2013: xxv). The NWPG worked in collaboration with SANSA (CSIR's Satellite Application Centre at the time) on a 5 year investigation on the mushrooming of informal settlements in the province. The main objective of the project was to collaboratively develop an informal settlements’ database which would assist departments and municipalities in the planning and implementation of the UISP (SANSA, 2012; South Africa, 2012).

The prioritisation of informal settlements upgrading as a housing strategy is evidenced by the revision of the Provincial Business Plan to divert funds for the rectification programme to fund the UISP. The province identified mining towns as areas of priority with major focus on Rustenburg, an area characterised by the rapid mushrooming of informal settlements due to the large influx of people (Parliamentary Monitoring Group, 2015b). Subsequently, the HDA has provided support to Rustenburg Local Municipality which, with the aid of the HDA, is developing support programmes for the remaining municipalities in the province (HDA, 2014:24).

The success of the NUSP in providing support in upgrading informal settlements is reflected in:

- The assessment, categorisation and budgeting for 10 informal settlements in Rustenburg;
- The appointment of a service provider in Madibeng;
- The development of terms of references as part of a single contract in Tlokwe, Kgetelengrivier and Maquassi Hills; and
- The signing of the Service Level Agreement (SLA) for 8 more municipalities (DHS, 2014b:30).

Ultimately, 27 439 households in informal settlements have been upgraded within the province, constituting 95.14% of the Outcome 8 Target (DHS, 2014b: 155). Figure 6-3 illustrates the categories of the households which were assisted.

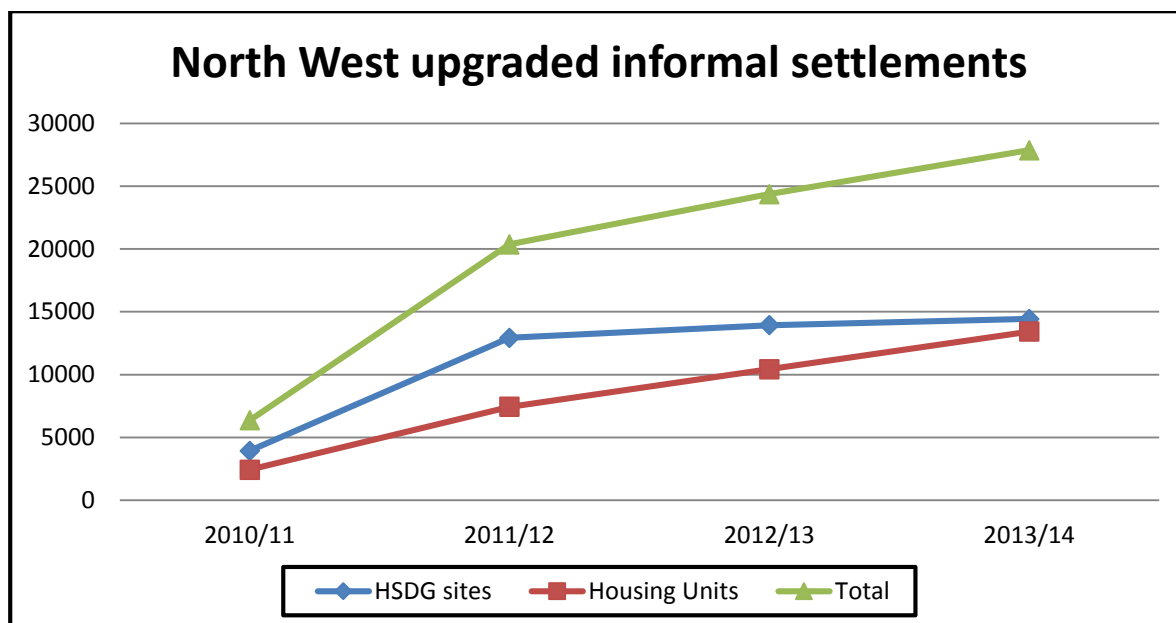


Figure 6-3: Upgraded informal settlement households in the North West Province

Source: DHS (2014b: 155)

The majority of the households received sites and services funded by the HSDG. Though the USDG is not an option for the funding of the programme, other sources of funding such as the MIG and municipal own funding have contributed to the provision of basic services in the informal settlements (DHS, 2014b:154). The decline in the provision of serviced sites between 2011/12 and 2013/14 is attributed to the unavailability of bulk infrastructure to be connected to the sites. In response, the province established a “provincial crack team” to influence issues around bulk services, looking at catalytic projects and bulk infrastructure, which would encourage accelerated informal settlement upgrading (Parliamentary Monitoring Group. 2015b). The progress of the upgrading programme at provincial level has impacts on the formalisation of informal settlements in Ikageng.

6.3.3 Tlokwe Local Municipality

TLM is in the process of upgrading the informal settlements within its jurisdiction. The programme emerged as a response to the government's goal to eradicate informal settlements by 2014 (TCC, 2011:iv) and has been operating in line with the national and provincial programmes. The municipality identified 7 informal settlements for upgrading in Ikageng and these are shown in Figure 6-4:

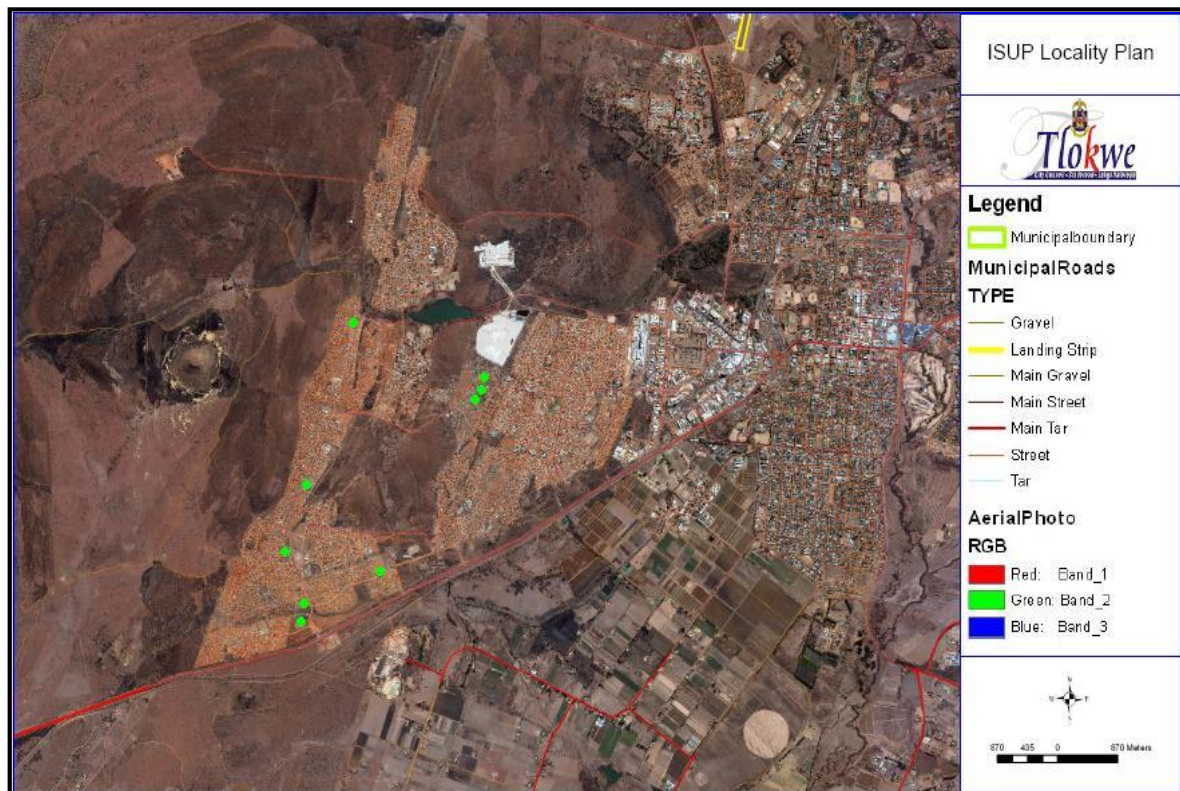


Figure 6-4: Sites identified for informal settlement upgrading in Ikageng

Source: TCC (2011: v)

The municipality prepared a business plan in 2011 in adherence to the provisions made in section 3.1 of Part 3 of the National Housing Code. The business plan aids the municipality in assessing the feasibility of the potential projects.

6.3.3.1 Tlokwe Local Municipality ISUP 2011: Project Business Case

The business case focuses on the following key development elements:

- Land Suitability;
- Land Availability;
- Status regarding Engineering services;

- Beneficiary availability;
- Social Compact Arrangements; and
- Current development initiatives/status

Table 6-2 illustrates the information relating to the feasibility of the sites identified for the locality of the informal settlements under the ISUP. The ISUP numbers highlighted in grey indicate the informal settlements investigated in this study.

Table 6-2: Ikageng ISUP Land Suitability and Development Status, July 2011

LAND SUITABILITY				BENEFICIARY ASSESSMENT	DEVELOPMENT STATUS
ISUP Nr	Erf Number	Name of Settlement	Upgrading Strategy	No. of possible houses	
402-11	10994	Ward 17 Informal Settlement	In situ	117	Subdivision has been done. Surveying in process. No internal services reticulation. Connection to bulk services is possible. Site is not affected by dolomite.
402-2	Sonderwater	Sonderwater	In situ & relocation	1249	Site is in process of township establishment. Proclamation held back pending GFHS-2 (Phase 2) investigations regarding dolomite. Area will only be able to house approximately 600 households. Approximately 500 households must be relocated. Survey and installation of services completed. Upgrades to services might be necessary pending the GFHS-2 (Phase2) results.
402-3	12552; 9813	Zet-zet	In situ	181	No subdivision has been done yet. No internal services reticulation. Connection to bulk services is possible. Site is not affected by dolomite.
402-4	Portion of 18415	Open Stand Extension 11	Relocation	165	This portion forms part of a high voltage power line servitude in which no buildings are allowed. The people will have to be relocated.
402-5	10569; 10857; 10580; 10858	Sarafina Road Informal Settlement	In situ	367	Subdivision has been done. Surveying in process. No internal services reticulation. Connection to bulk services is possible. Site is not affected by dolomite.
402-6	15581	Ikageng X 11	In situ	Number not provided	Subdivision has been done. Surveying in process. No internal services reticulation. Connection to bulk services is possible. Site is not affected by dolomite. Part of the site is below a 1:100 year flood line.
402-7	16653	Ikageng X 11	In situ	Number not provided	Subdivision has been done. Surveying in process. No internal services reticulation. Connection to bulk services is possible. Site is not affected by dolomite. Part of the site is below a 1:100 year flood line.

Source: TCC (2011: vii-viii), TCC (2012:98)

6.3.3.2 Progress in the Ikageng ISUP

Since the official inception of the programme in 2011, little or no evidence exists to show the progress in upgrading the informal settlements. While Ward 17 (informal settlement) has been upgraded, the rest of the informal settlements continue to exist in squalor conditions. The municipality received Level One accreditation and has successfully carried out subsidy budget planning, beneficiary identification and priority programme management (TCC, 2014a).

However, the delivery of basic services within the informal settlements has been hampered by the performance of and the responses from provincial government. The lack of institutional capacity and funding within the NWPG has prompted the delays in the IUSP programme in Ikageng (TCC, 2014a). Moreover, the provincial government has not facilitated the accreditation of the TCC to Level Two in order to retain the housing function at provincial level (TCC, 2015). While the upgrading programme is stagnant, the number of households in the informal settlements has continued to increase.

The success of planning intervention is not only measured in quantitative terms but also requires an exploration of the qualitative aspects of the intervention programmes. A true reflection of planning intervention in addressing informal settlements is attained through assessing the living conditions of the inhabitants of informal settlements. An analysis of the socio-economic lives of the inhabitants in Chapter 5 indicates that much has to be done as regards planning intervention. Following this, it is necessary to investigate if the same applies to the planning interventions at provincial and national level.

6.4 An analysis of government intervention in improving the lives of the inhabitants

The focus of this section is on providing a detailed analysis of how the government has intervened in improving the living conditions of the inhabitants to create sustainable human settlements. The AHP is used to assess intervention at local, provincial and national level, and how the upgrading of informal settlements in Ikageng measures against upgrading at provincial and national level.

The AHP is the best method for this analysis because it aims at assigning weights to tested elements which helps to prioritize (rank) elements so that the key elements can be determined and identified hence it is useful in making more accurate planning decisions (Cheng, 2001:62).

6.4.1 Understanding the Analytical Hierarchy Process

Saaty (1990:9) defines the AHP as a flexible and yet structured methodology for analysing and solving complex decision problems by structuring them into a hierarchical framework. The AHP procedure is employed for rating/ranking a set of alternatives or for the selection of the best in a set of alternatives (Saaty, 1990:9). The AHP ranking procedure is carried out by breaking down the overall goal into criteria (objectives) and sub-criteria (indicators). The AHP procedure involves three major steps:

- Developing the AHP hierarchy, which for this study entails the identification of objectives and indicators for informal settlement upgrading
- Pairwise comparison of elements of the hierarchical structure
- Constructing an overall priority rating (Saaty, 2008:83).

6.4.2 Identifying objectives and indicators for intervention in informal settlement

The objectives and indicators for the formalisation of informal settlements are based on the notion of creating sustainable human settlements. These emanate from the principles, guidelines, objectives and indicators set by the Commission of Sustainable Development (CSD), United Nations, the NDHS, the North West Provincial Government and TLM. Tables 6-3 and 6-4 illustrate the applicable objectives and indicators for the formalization of informal settlements

Table 6-3: Objectives for assessing informal settlement intervention

Objective	Derived from:
1. Utilising housing delivery as a key strategy for poverty alleviation	BNG Comprehensive Plan, ISUP, Outcome 8
2. Improving access to basic services	NDHS, MDGs, Outcome 8
3. Promoting socio-economic development and safety/ security	BNG Comprehensive Plan, ISUP
4. Ensuring more efficient utilization of land	North West Provincial Development Plan, ISUP, Outcome 8
5. Fostering communication, community participation and awareness building	ISUP

Sources: Adapted from DoH (2004:7); North West Planning Commission (2013: xxv); UN (2003:64-66); The Presidency (2010:8-13); NDHS (2015)

Table 6-4: Indicators for assessing informal settlement intervention

Theme	Sub- theme	Indicators	Derived from:
Poverty	Income poverty	Percentage of people living below the national poverty line	MDG Target 1, HDA (2012)
	Living conditions	Percentage of households living in shacks not in backyards	HSP 2012, HDA (2012)
		Number of persons per room	NWDP
	Energy	Proportion of people with access to electricity as a source of energy for cooking and lighting	MDG Indicator 29 , HDA (2012),UN (2007),
	Security of Tenure	Percentage of households with security of tenure	UISP, MDGs, HSP Review
		Percentage of women and youth with security of tenure	MDG Targets 4 and 11,
	Equality	Proportion of women participating in the programme	MDG Indicator 12
		Ratio of girls to boys in primary, secondary and tertiary education	MDG Indicator 9
		Accessibility of services to the disabled	Own
	Housing finance	Percentage of households listed for subsidised housing	UISP, TCC(2012)
Health	Improved water	Number of households provided with easy access to improved drinking water	MDGs, UN (2007), UISP, NWDP
	Sanitation	Percentage of households with access to improved sanitation	MDG I.31, UN (2007), UISP, NWDP
		Percentage of households with access to removal per week by local authority or private company	HDA (2012)
	Health (care delivery)	Percentage of the population with easy access to primary health care	UN (2007)
		Morbidity of Malaria, Diarrhoea, Tuberculosis and other related major diseases	MDG GOAL 6, UN (2007)
Education	Net enrolment	Percentage of children attending primary and secondary school	MDGs, UN (2007), NDP, NWDP
	Literacy	Adult literacy rate	MDG Indicator 10
	Educational facilities	Percentage of learners with easy access to educational facilities	HDA (2012)
Demographics	Population dynamics	Population growth rate	UN (2007),
		Dependency ratio	UN (2007),

Theme	Sub- theme	Indicators	Derived from:
Security	Crime and violence	Number of deaths as a result of crime and violence per 1000 population	UN (2007), HDA (2012)
Land	Land use and status	Proportion of land used for open spaces and parks and recreational activities	MDG Indicator 25, UISP
Natural Hazards	Vulnerability to natural hazards	Percentage of people living in high disaster risk areas	UN (2007), HDA (2012)
	Disaster preparedness and response	Investment in the dolomite risk management to avoid economic and human loss	UN (2012)
Economic Development	Employment	Employment population ratio	UN (2007)
		Percentage of women employed in the non-agricultural sector	MDG Indicator 11 , UN (2007)
	Information and communication technologies	Number of internet subscribers per 1000 inhabitants	MDG G8, UN (2007)
	Transportation	Percentage of income spent on transport to access employment opportunities	UN (2007), IDP 2014/2015
		Modal split of transportation	UN (2012)
Governance	Community participation	Frequency of briefing sessions between community representatives and ward councillors	HSP Review, IDP, Housing Chapter

Source: Adapted from UN (2007:9-13), UN (2003:3-4), DHS (2009b:12), TCC (2014a:11), TCC (2012:89-91)

The indicators provided in Table 6-4 represent the indicators that are ideal for the analysis of planning intervention in addressing the challenge of informal settlements. However, data relating to some of the indicators is not readily available, some of the indicators are not directly relevant to this study, and those that may be relevant have missing data. This necessitates the use of an Indicator Selection Matrix.

6.4.2.1 Indicator Selection Matrix

The Indicator Selection Matrix is used to assess the suitability of indicators and their need for adjustment (UN, 2007:32). The matrix makes use of the availability and relevance dimensions to assess the applicability of indicators to a study. Figure 6-5 illustrates the components of the Indicator Selection Matrix.

Availability	Relevance
- Fully available – data are readily available - Potentially available – Data could be made available within reasonable time frame and reasonable cost. - Related data available – important data are missing but could be used to compute related indicators. - Not available – No data relating to the indicator is available	- Relevant – the indicator is directly relevant to the study - Related indicator relevant - indicators that are not themselves directly relevant for the purpose, but are closely related to relevant indicators. - Relevant but missing – issues that are not covered because they are not available to all areas under study - Irrelevant - issues that do not necessarily apply in the context of the study

Figure 6-5: Component of the Indicator Selection Matrix

Source: Adapted from UN (2007:32-35)

Taking into consideration the components of the Indicator Selection Matrix, Table 6-5 depicts the application of the matrix in assessing the suitability of the indicators. This will aid in identifying the indicators that will be used for this study.

Table 6-5: Indicator Selection Matrix

	Relevant	Related indicator relevant	Relevant but missing	Irrelevant
Fully Available	- Percentage of people living below the national poverty line - Percentage of households living in shacks not in backyard - Proportion of people with access to electricity as a source of energy for cooking and lighting - Percentage of households with security of tenure - Percentage of households listed for subsidised housing - Percentage of households provided with easy access to improved drinking water - Percentage of households with access to improved sanitation - Percentage of households with access to refuse removal - Percentage of children attending primary and secondary school - Percentage of the population with easy access to primary health care facilities - Number of people living in high dolomite and flood risk areas - Employment population ratio - Number of internet subscribers per 100 inhabitants - Average percentage of income spent on transport to access employment opportunities - Percentage of learners with easy access to educational facilities	- Increase in the proportion of people feeling safe to walk alone , during the day or at night - Investment in the dolomite risk management to avoid economic and human loss		
Potentially Available	- Frequency of briefing sessions with relevant stakeholders - Number of persons per room - Number of deaths as a result of crime and violence - Proportion of land used for open spaces and parks and recreational activities - Adult literacy rate		- Percentage of women and youth with security of tenure - Proportion of women participating in the programme - Percentage of women employed in the non-agricultural sector - Population growth rate - Dependency ratio	Morbidity of Malaria, Diarrhoea, Tuberculosis and other related major diseases
Related Data Available			- Modal split of transportation - Ratio of girls to boys in primary, secondary and tertiary education	
Not Available			Accessibility of services to the disabled	

Source: Own Construction (2015)

The Indicator Selection Matrix is then interpreted as follows:

- The black boxes contain those indicators that can be incorporated without any changes.
- The dark grey boxes are for those indicators that have to be modified, either because there are related and more relevant or specific indicators or because data for the original indicator cannot be made available.
- The light grey boxes contain those indicators important for informal settlement upgrading but cannot be included for this study due to data limitations.
- The unshaded boxes contain indicators that are not relevant to the study.

From the above, the selected indicators are presented in Table 6-6.

Table 6-6: The selected indicators

Objective	Indicator
Utilising housing delivery as a key strategy for poverty alleviation	1. Percentage of households living in shacks not in backyards
	2. Number of persons per room
	3. Proportion of people living below the national poverty line
	4. Percentage of households listed for subsidised housing
	5. Portion of households with security of tenure
Improving access to basic services	6. Percentage of households with access to electricity for lighting and cooking
	7. Percentage of households with easy access to improved drinking water
	8. Percentage of households with access to improved sanitation
	9. Percentage of households with access to refuse removal
Promoting socio-economic development and safety/ security	10. Percentage of children attending primary and secondary school
	11. Adult literacy rate
	12. Employment per population rate
	13. Number of deaths and injuries as a result of crime and violence
Ensuring more efficient utilisation of land	14. Percentage of learners with easy access to educational facilities
	15. Percentage of the population with easy access to primary health care facilities
	16. Average percentage of income spent on transport to access employment opportunities
	17. Percentage of population with easy access to parks, community centres and other recreational facilities
	18. Number of households faced with the risk of loss of human life and/ or property
Fostering communication, community participation and awareness building	19. Number of internet users per 100 inhabitants
	20. Frequency of briefing sessions between TLM and the ward councillors

Source: Own Construction (2015)

The identified objectives indicators are based on different principles and they use different units of measurement. Assessing them on equal level would result in a biased representation hence the need to weight the objectives and indicators. This is achieved through the use of a Pairwise Comparison Matrix.

6.4.3 Pairwise Comparison Matrix

The Pairwise Comparison Method is utilised to “judge the entity which has a greater amount of some quantitative property” (Saaty, 2008:85). The method makes use of a scale of numbers that indicate how many times an element is more important or dominant over another element with respect to the overall goal and subsequent objectives (Saaty, 2008:85). This fundamental scale for comparison is presented in Table 6-7 below.

Table 6-7: The fundamental scale for comparison

Scale	Degree of preference	Explanation
1	Equal importance	The two activities contribute equally to the objective
3	Moderate importance of one factor over another	Experience and judgement favour requirement A over B
5	Strong or essential importance	Experience and judgement strongly favour requirement A over B
7	Very strong importance	Requirement A is strongly favoured and its dominance over B is demonstrated in practice
9	Extreme importance	The evidence favouring A over B is the highest possible order of affirmation
2,4,6,8	Intermediate values between two adjacent judgements.	When it is difficult to determine between two scales hence a compromise is required.
Reciprocals	Values for inverse comparison	When requirement A is lower than B

Source: Saaty (1990:15)

Following this, the starting matrix for comparing the objectives to determine their respective contributions to the main goal is represented by Table 6-8 below.

Table 6-8: Pairwise comparison matrix for the Objectives

	Ob. 1	Ob. 2	Ob. 3	Ob. 4	Ob.5
Ob. 1	1	1/2	3	3	1/2
Ob. 2	2	1	3	3	1/2
Ob. 3	1/3	1/3	1	1/2	1/2
Ob. 4	1/3	1/3	2	1	1/2
Ob.5	2	2	2	2	1

Source: Own construction (2015)

Explanation:

- **Objective 1** – Formalisation of the informal settlements is a priority of the DHS in an attempt to alleviate poverty amongst the inhabitants. It precedes socio-economic development and efficient utilisation of land in the UISP procedure, making it more important than the two. Community participation and access to basic services precede the delivery of housing, making them more important than the latter (DHS, 2009b)
- **Objective 2** – The major challenge faced by the inhabitants is a lack of basic services which has negative impacts on the health and safety of the inhabitants. Access to basic service is the second most significant component of informal settlement upgrading and is one of the three major objectives of the UISP (DHS, 2009b).
- **Objective 3** – Socio-economic development is a core component of housing development but it exists as a consequence of the other objectives.
- **Objective 4** – The marginalisation of informal settlements is a hindrance to the attainment of sustainable human settlements. While it induces socio-economic development, ensuring more efficient utilisation of land is preceded by access to basic services, formalisation of the settlements and ensuring community engagement in the programme.
- **Objective 5** – Community participation is the key strategy for improving living conditions of the urban poor and contributing to the social, economic and environmental sustainability of cities. This is the first recognised stage in the informal settlement upgrading process. Thus, fostering communication, community participation and awareness building dominate all the other four objectives (UN-HABITAT, 2015a)

Table 6-9: Pairwise comparison matrix for Objective 1

	Indic 1	Indic 2	Indic 3	Indic 4	Indic 5
Indic 1	1	3	1	2	1
Indic 2	1/3	1	1/4	1/3	1/4
Indic 3	1	4	1	1/2	1/2
Indic 4	1/2	3	2	1	1
Indic 5	1	4	2	1	1

Source: Own Construction (2015)

Explanation:

Indicator 1 reflects on the effectiveness of government programmes in reducing the numbers of people living in informal settlements. It is also a reflection on how poverty and policies have influenced the housing decisions of the poor. The indicator is equally important to Indicator 3 and indicator 5 as there is a causal relation between informal settlements, poverty, and lack of security of tenure (Durrand-Lasserve, 2006:2). Indicator 2 is the least important due to the fact that reducing overcrowding is not a major component in the informal settlement upgrading process.

Table 6-10: Pairwise comparison matrix for Objective 2

	Indic 6	Indic 7	Indic 8	Indic 9
Indic 6	1	1/3	1/3	3
Indic 7	3	1	2	3
Indic 8	3	1/2	1	3
Indic 9	1/3	1/3	1/3	1

Source: Own Construction (2015)

Explanation:

The values are based on the relevance of each component in achieving universal access to basic services.

The targets set in Outcome 8 focus on the increase in:

- Water from 92% to 100%;
- Sanitation from 69% to 100%;
- Refuse removal from 64% to 75%;
- Electricity from 81% to 92% (The Presidency, 2010: 34).

Access to improved drinking water (Indicator 7) is almost equal to, but slightly more important than access to improved sanitation (Indicator 8). This owes to the fact that improved sanitation conditions are complementary to adequate supply of water. The TCC Medium Term Revenue and Expenditure Framework (MTREF) points the increase in sanitation tariff to be based on the cost assumptions related to water (TCC, 2014c:13).

Table 6-11: Pairwise comparison matrix for Objective 3

	Indic 10	Indic 11	Indic 12	Indic 13
Indic 10	1	5	3	3
Indic 11	1/5	1	1/2	1/2
Indic 12	1/3	2	1	2
Indic 13	1/3	2	1/2	1

Source: Own Construction (2015)

Explanation:

The values are based on the proportional budgetary allocations for each component in the 2015 Budget Review. Basic education is allocated the largest portion followed by employment, then defence, public order and safety. Adult literacy is a smaller component of basic education, hence it is valued lowest (National Treasury, 2015:iii-v).

Table 6-12: Pairwise comparison matrix for Objective 4

	Indic 14	Indic 15	Indic 16	Indic 17	Indic 18
Indic 14	1	2	2	1	1/5
Indic 15	1/2	1	2	1/3	1/4
Indic 16	1/2	1/2	1	1/3	1/5
Indic 17	1	3	3	1	1/3
Indic 18	5	4	5	3	1

Source: Own Construction (2015)

Explanation:

The values are based on the provisions made in Chapter 5 of the CSIR Red book. Access to educational facilities and access to recreational facilities are complementary activities, while health facilities can be located further than educational and recreational facilities. Education and recreation are immediate components of socio-economic development. Access to health is slightly more important than the income spent on transport due to the fact that the health inhabitants is at a higher risk than anything else, as a result of the poor conditions of the informal settlements. Indicator 18 dominates the other 4 indicators due to the fact that households residing in disaster risk areas are given first priority in accordance with the provisions of the UISP (DHS, 2009b:25-26).

Table 6-13: Pairwise comparison matrix for Objective 5

	Indic 19	Indic 20
Indic 19	1	1/3
Indic 20	3	1

Source: Own Construction (2015)

Explanation:

Indicator 19: Access to the internet enables expeditious information dissemination encouraging community participation. However, this is dominated by indicator 20 (frequency of briefing sessions) which enables more interaction between the authorities and the representatives from the communities.

The Priority Comparison Matrices are then used to calculate the weights. These (normalised) weights form the basis for the construction of the priority ranking. The normalised weights are provided in Annexure B.

6.4.4 Ranking the performance of the government spheres in improving the living conditions of the inhabitants

This section follows the third stage of the AHP, which focuses on the construction of the priority rating. For this study, this represents the ranking of the three spheres of government according to their individual performances. The ranking is presented on a scale of 1-3, where 1 denotes the best performance and 3 denotes the least performance. The ranking (presented in Table 6-15) is a product of the normalised weights (Annexure C) and the statistics relating to each indicator. The statistics are provided in Table 6-14

Table 6-14: Informal Settlement Statistics

Objectives	Indicators	TCC	NWP	SA
Utilising housing delivery as a key strategy for poverty alleviation	1. Percentage of households living in shacks not in backyard	14%	15%	11%
	2. Number of persons per room	3.3	3.9	3.6
	3. Proportion of people living below the national poverty line	42%	48%	45.5%
	4. Percentage of households listed for subsidised housing	45%	24%	39%
	5. Portion of households with security of tenure	40%	51%	39%
Improving access to basic services	6. Percentage of households with access to electricity for lighting and cooking	33%	47%	36%
	7. Percentage of households with easy access to improved drinking water	88%	66%	73%
	8. Percentage of households with access to improved sanitation	32%	27%	32%
	9. Percentage of households with access to refuse removal	7%	25%	48%
Promoting socio-economic development and safety/ security	10. Percentage of children attending primary and secondary school	80%	84%	92%
	11. Adult literacy rate	75%	77.8%	93%
	12. Employment per population rate	58 %	64%	60%
	13. Number of deaths and injuries as a result of crime and violence	1.56%	4.16%	5.93%
Ensuring more efficient utilisation of land	14. Percentage of learners with easy access to educational facilities	62%	88%	85.5%
	15. Percentage of the population with easy access to primary health care facilities	56%	63%	79%
	16. Average percentage of income spent on transport to access employment opportunities	18%	15%	20%
	17. Percentage population with easy access to parks, community centres and other recreational facilities	18%	13%	23%
	18. Number of households faced with the risk of loss of human life and/ or property	40%	15%	12%
Fostering communication, community participation and awareness building	19. Number of internet users per 100 inhabitants	28.3	31.5	40
	20. Frequency of briefing sessions between the TLM and the ward councillors	12	12	12

Source: Own construction from Household Surveys (2014-2015), HDA (2013a:12-45), HDA (2013b:13-26), Stats SA (2015)

Table 6-15: Ranking in terms of the indicators

Indicator	TLM		NWP		SA	
	Score	Ranking	Score	Ranking	SA	Ranking
1. Households living in shacks not in backyard *	-0.04075	2	-0.05433	3	0	1
2. Number of persons per room *	0	1	-0.01359	3	-0.00679	2
3. People living below the national poverty line *	0	1	-0.03801	3	-0.02217	2
4. Households listed for state subsidised housing	0.047328	1	0	3	0.033805	1
5. Security of tenure	0.004595	3	0.055143	2	0	1
6. Households with access to electricity for lighting and cooking	0	3	0.044979	1	0.009638	2
7. Households with easy access to improved drinking water	0.118394	1	0	3	0.037671	2
8. Households with access to improved sanitation	0.084352	1	0	3	0.084352	1
9. Households with access to refuse removal	0	3	0.011272	2	0.025675	1
10. Children attending primary and secondary school	0	3	0.015298	2	0.045893	1
11. Adult literacy	0	3	0.001302	2	0.008371	1
12. Employment per population rate	0	3	0.019332	1	0.006444	2
13. Deaths and injuries as a result of crime and violence *	0	1	-0.00809	2	-0.0136	3
14. Access to educational facilities	0	3	0.01704	1	0.015402	2
15. Access to primary health care facilities	0	3	0.003336	2	0.01096	1
16. Income spent on transport *	-0.0047	2	0	1	-0.00784	3
17. Access to recreational facilities	0.011069	3	0	1	0.022138	2
18. Households faced with disaster risk *	-0.05632	3	-0.00603	2	0	1
19. Internet users per 100 inhabitants	0	3	0.021655	2	0.079175	1
20. Frequency of briefing sessions	0.237525	1	0.237525	1	0.237525	1
Aggregate	0.40149	2	0.306823	3	0.566639	1

Source: Own Construction (2015)

* denotes the indicators for which the penalty function was used due to the negative impact on the goal of improving the living conditions of the inhabitants of the informal settlements

Interpretation:

Intervention in improving the living conditions of the inhabitants in informal settlements ranks highest at national level, but is second best at local level and ranks the least at provincial level. This indicates that though the living conditions of the inhabitants in Ikageng are poor, TLM outperforms other municipalities within the North West Province. However, more attention should be paid in improving the living conditions in Ikageng, to reach and exceed those at national level. Table 6-16 provides the comprehensive ranking of the three levels of government based on the objectives.

Table 6-16: Ranking in terms of the objectives

Objectives	Ranking		
	TLM	NWP	SA
1: Utilising housing delivery as a key strategy for poverty alleviation	1	3	2
2: Improving access to basic services	1	3	2
3: Promoting socio-economic development and safety	3	2	1
4: Ensuring more efficient utilisation of land	3	2	1
5: Fostering communication, community participation and awareness building	3	2	1

Source: Own construction (2015)

The table shows that TLM ranks highest in ensuring poverty alleviation through housing delivery and improving access to basic services. Though the Ikageng statistics are low, the performance of the municipality exceeds that of other municipalities at provincial and national level.

TLM ranks the lowest in addressing Objectives 3 to 5 while the provincial level ranks second best and national level ranks highest. It is therefore evident that socio-economic development and safety, efficient utilisation of land and fostering communication, community participation and awareness building increase as the level of government increases. It is deduced that lack of financial support from NWPG, and the resultant stagnation in the progress of the upgrading programme, hinders TLM from meeting the 3 objectives.

A radar chart can also be used to indicate the ranking of the three spheres of government in terms of objectives. A radar chart is a chart type that is used to illustrate the relationship between separate data and to compare the relative contribution of each category to a

defined goal (Blattner, 2004:495; Gross *et al.*, 2014:196). The chart, represented by Figure 6-6, is used to illustrate the performance of each level of government vis-à-vis the achievement of the informal settlement upgrading objectives.

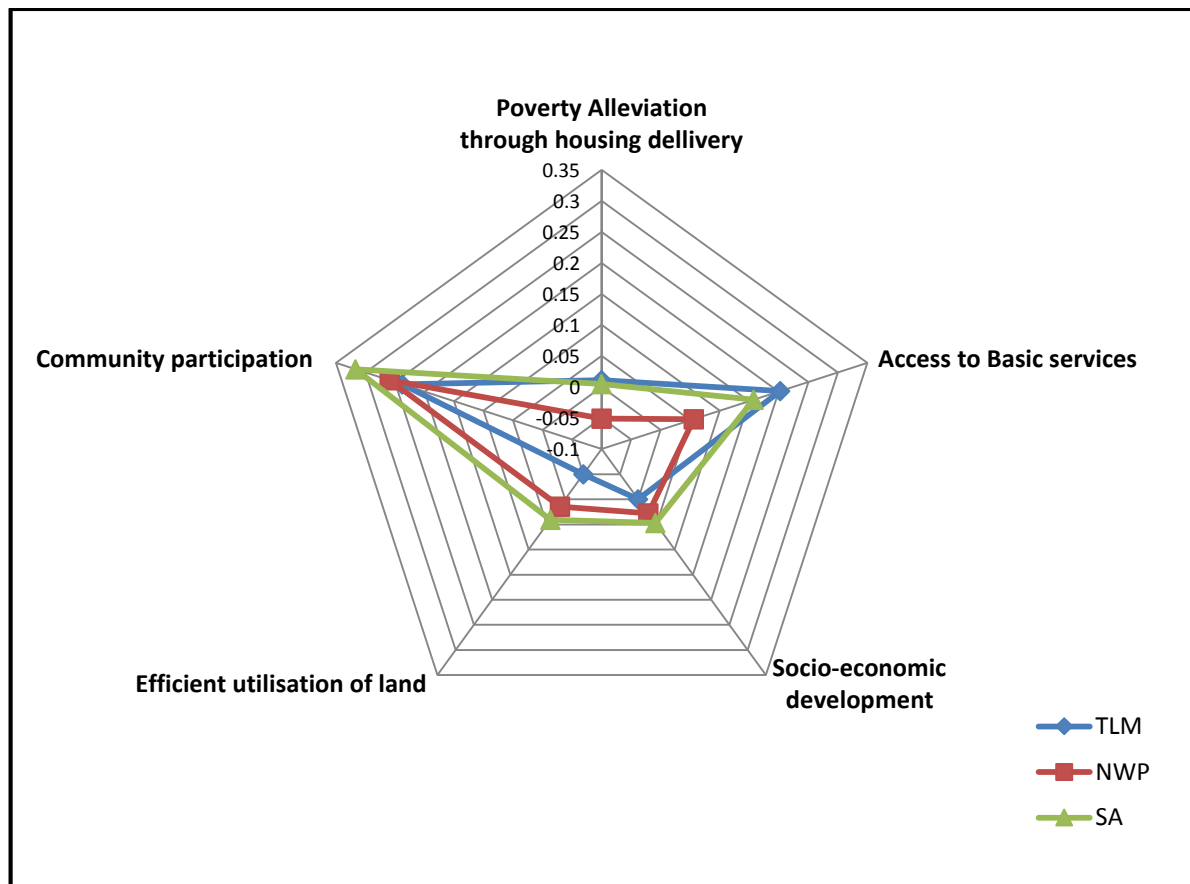


Figure 6-6: Performance of the three spheres of government

Source: Own construction based on Table 6-16 (2015)

6.5 Conclusion

This chapter provided an analysis of planning intervention in the formalisation of informal settlements. Taking into consideration the roles of each sphere; the national government has, to a greater extent, succeeded in the conceptualisation of the upgrading programme and organising implementation assistance to the provincial government through engaging the HDA and NUSP.

However, to a lesser extent, the national government did not successfully stimulate the performance of the NWPG through the budgetary allocations for the development grants. Despite the efforts of the provincial government, the target set in Outcome 8 was not reached. The provincial government also did not provide sufficient financial support to TLM and hence the stagnation in the ISUP in Ikageng. The reluctance of the provincial

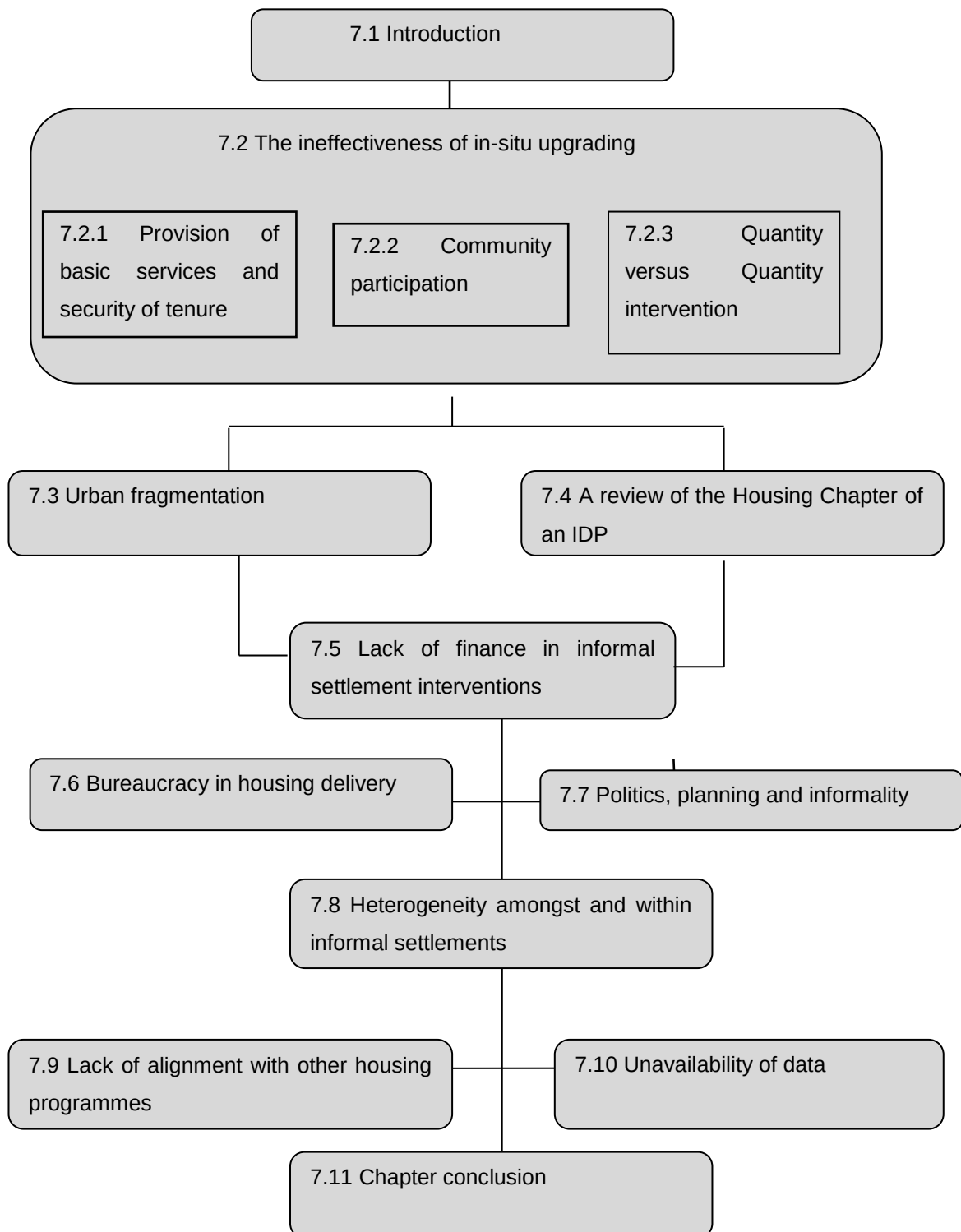
government in delegating the housing function to TLM also contributed to the stagnation in the progress towards successful intervention in upgrading the informal settlement.

The results from the AHP reflect that progress in improving the living conditions of the inhabitants is within the same range at all three levels of government, with the national government performing the best while the provincial government performed the least. It is also clear that socio-economic development and safety, efficient utilisation of land and fostering communication, community participation and awareness building increase as the level of government increases. Despite the low statistics, TLM ranks the best in utilising housing delivery as a key strategy for poverty alleviation and improving access to basic services. This is a clear indication that this is a component of the upgrading programme that has not been successfully addressed at local, provincial and national level.

Nonetheless, planning intervention in the formalisation of informal settlements is more inclined to meeting targets in terms of quantity than the quality. Therefore, there is need for all levels of government to focus more on improving the living conditions of the inhabitants. Thus, the findings from this chapter set the platform for the conclusions and recommendations that can be drawn from this study as a whole.

CHAPTER 7: CONCLUSIONS

The diagram below is a graphical presentation of Chapter 7.



7.1 Introduction

This chapter presents the conclusions derived from the study. The major conclusions reached are based on the aim and objectives of the study which in turn are translated into the chapters constituting this study. A comprehensive analysis of these aims and objectives is attained through an analysis of the link (or lack thereof) between theory and practice. Thus, the focus of this chapter is to evaluate the connection between literature and empirical in relation to government intervention in addressing informal settlements, as presented in the previous chapters.

7.2 The ineffectiveness of the upgrading approach

The study revealed that, theoretically, the upgrading of informal settlements is regarded as a more favourable response in addressing informal settlements rather than following the long legal processes which may be necessary to secure full formalisation of informal settlements. While the upgrading approach indicates an appreciation of how incremental housing protects the inhabitants from exposure to external shocks, the formalisation of informal settlements is regarded as a long procedure which disrupts the lives of the inhabitants. However, it is apparent from the empirical study that the upgrading approach directed at addressing informal settlements at local and provincial level was not successful.

7.2.1 Provision of basic services and security of tenure

Literature indicates that in situ upgrading is regarded as the ideal solution to addressing the challenges faced by the inhabitants because it allows for incremental provision of basic services and security of tenure. However, it is evident from the empirical results that the upgrading approach has not been successful. Since the inception of the programme, the majority of the informal inhabitants in Ikageng do not have access to water, sanitation and refuse removal. The fact that the inhabitants do not have tenure to the land they occupied has promoted the further invasion of the land as it is regarded as public land.

The AHP ranks Tlokwe as the best in terms of improving access to basic services and security of tenure yet the statistics from the municipality are low. This indicates that on the overall, the government has not been successful in the provision of basic services and security of tenure.

This shows that the upgrading approach as implemented in South African has given room to reluctance towards addressing informal settlement within the government. The progressive realisation of the housing right through the upgrading process has either: promoted delayed

action by the government based on its capacity to address the informal settlement crisis or has not successfully addressed the needs of communities residing in the informal settlements. Therefore, there is need to consider the formalisation of informal settlements which reinforces the government's responsibility to address informal settlements.

7.2.2 Community participation

As discussed in Chapter 3, community participation is a key component of planning intervention in addressing informal settlements. Following this, the majority of the policies, legislation and strategies relevant to this study indicate the importance of community participation as a key developmental tool.

However, the practicality of community participation in the upgrading program in Ikageng is questionable. The municipality's reluctance towards community participation is reflected by the absence of a detailed account of the how communities will participate in the programme within the Ikageng Business Case. The absence of actual community participation in the upgrading of the informal settlements is evidenced by the non-existence of informal settlements' strategic community committees. The empirical results indicated that while the majority of the inhabitants are willing to participate in these committees, it is either that their set up has not been facilitated by the relevant authorities, or there has not been enough effort to raise the awareness to the committees, and hence the people are unaware of the existence of such committees.

Literature points out the significance of community participation as a means of reaching the desired goal and a tool for poverty alleviation through the empowerment of communities. Regardless of the policy and legislative imperatives, the top-down approach in addressing informal settlements has over the years perpetuated the burden borne by the government of South Africa. At the attainment of independence, the then elected government was motivated by the desperate need to do away with the effects of apartheid hence housing provision for the poor was solely the responsibility of the government. To a certain extent, this created a dependency syndrome even amongst those who did not necessarily have to rely on government assistance.

To date, the majority of people in the country are over-reliant on government support to meet their housing needs. As indicated in Chapter 5 (refer to paragraph 5.8), 35% of the inhabitants are not willing to participate in the upgrading of the informal settlements as they consider this to be the responsibility of the municipality. Amongst them are some inhabitants whose incomes are far above the poverty line but are not willing to seek other housing

options in anticipation of receiving state assisted housing. This situation, if unabated, breeds protests aimed at housing delivery for which the local municipality may not be able to provide immediately. Whether genuinely poor or not, community engagement reduces the burden on the government, while speeding up the housing process.

Although it is revealed in Chapter 6 (refer to Table 6-4) that TLM frequently conducts briefing sessions with the ward councillors, it is evident that there is communication breakdown between the municipality and the inhabitants. Failure to effectively engage communities in the upgrading programmes has augmented the conflict in the relocation of the inhabitants that are settled on the dolomite high risk zone in Sonderwater. The resistance to relocation is a consequence of the lack of comprehensive knowledge relating to the risks associated with dolomite. Though various workshops have been carried out with the respective ward councillors, the inhabitants are not completely aware of the risks associated with the dolomite. The long chain of communication hinders effective transmission of information instigating uncertainty amongst the inhabitants. This was exacerbated by the government's lack of appreciation of the role that politics has in positively addressing informal settlements.

7.2.3 Quantitative versus qualitative intervention

As indicated in Chapter 3, addressing poverty as the root cause of the proliferation of informal settlements is a critical component of informal settlement intervention. However, government response to housing needs is often directed towards the provision of large quantities of standard housing without taking into consideration the needs of people.

Although the BNG Comprehensive Plan provides an imperative shift from mere housing provision to the creation of human settlements, the goal of eradicating informal settlements by 2014 indicates a quantitative approach to addressing informal settlements. The provisions of Outcome 8 indicate the drive towards reducing the number of informal settlements without necessarily improving the lives of the inhabitants.

Findings from Chapter 5 and 6 indicate that the inhabitants continue to be plagued by socio-economic challenges irrespective of the on-going upgrading programmes. The rate of unemployment is high and a significant number of adults are illiterate. Many children cannot attend school and those who can have their academic performance affected by their circumstances. Crime and violence continue to threaten the lives of the inhabitants. Moreover, the provision of basic services only may not be sufficient as the people may not afford to build top structures in accordance with the stipulated standards. Thus, there

remains a need to assess opportunities for qualitative improvements in the lives of the inhabitants.

7.3 Urban fragmentation

Arguably, the urban form performs a major role in the determination of housing provision, which provides the platform for understanding spatial anomalies in housing provision and evaluating the possible solutions in addressing housing challenges. An assessment of the models of urban form aids in reaching this goal.

The effects of the Apartheid planning continue to influence spatial planning and the urban form in South Africa, particularly in Potchefstroom. The locality of the township of Ikageng and in turn the informal settlements on the periphery of the city conforms to the Apartheid City Model. During the apartheid era, the location of low income housing was influenced by the political regime which aimed at separation of residential developments based on race.

The post-apartheid government, though aiming at rectifying these spatial distortions has continued to promote the segregation of low income housing. Cost considerations in the provision of human settlements continue to promote the peripheral location of low income housing where the land is much cheaper. This, in turn conforms to the provisions of the Concentric Zone Model, Sector Model and Bid Rent Model which reflect the marginal location of housing for the poor as a result of value of the land.

Consequently, the location of these housing developments hinders accessibility to social facilities and economic opportunities. Ideally, government intervention should ensure the accessibility of all facilities and services. However, the inhabitants of the informal settlements and the communities residing in formal Ikageng continue to incur exorbitant transport costs in accessing socio-economic facilities as well as employment opportunities.

The recent construction of the Ikageng Mall was intended to promote the accessibility of retail and commercial facilities to residents in the Ikageng Township. However, the challenge remains for the communities residing in Ikageng Extensions 1, 2, 3, 6, 7 and 11 who still have to pay the same R20 for public transport to reach the mall. The prospects of an ideal urban form based on the concept of the compact city is the panacea to spatial challenges.

7.4 A review of the Housing Chapter of an IDP

The Housing Sector Plan (Housing Chapter of an IDP) is the key planning instrument which specifies all housing developments within a municipality. The Housing Chapter is a critical component of the IDP which builds linkages between housing delivery, spatial planning and

infrastructure systems. The IDP serves as the main tool for local government to consult with their residents, and to identify developmental priorities. The IDP process is intended to arrive at decisions on issues such as municipal budgets, land management, promotion of local economic development and institutional transformation in a consultative, systematic and strategic manner.

Practically, the Tlokwe Housing Sector Plan provides details on the location of the informal settlements under the ISUP, information regarding the land suitability and development status as well as details on the provision of basic services. However, the Tlokwe IDP does not provide a detailed account of the informal settlements and the ISUP. Regardless of the fact that the proliferation of informal settlements is one of the major housing challenges faced within the municipality, the IDP only provides a few paragraphs defining the ISUP. On the other hand, the IDP provides full details on the development projects from the other sector plans such as the EMF, ITP and the WSDP.

This reflects a lack of appreciation for the need to integrate informal settlements into the broader planning framework through the provision of linkages between the ISUP project and the other components of the IDP. This also confirms that the Housing Sector Plan and the IDP are implemented as separate documents yet the Housing Chapter is meant to be part of the IDP process.

7.5 Lack of finance in informal settlement intervention

The study sought to explore the various ways by which low income housing is delivered in response to the needs of the poor. As indicated in Chapter 4, the major funding streams applicable for the upgrading of informal settlements in Ikageng are: the HSDG, Municipal own funding and the MIG. In chapter 6, it was revealed that one of the major factors that stalled the progress of the ISUP in Ikageng was lack of finance from the provincial government.

Also, it is not clear on whether the TLM had funds set aside for the upgrading of the informal settlements or not nor are there indications of the use of MIG in providing infrastructure in the informal settlements in Ikageng. Regardless of the fact that informal settlement upgrading is funded by the provincial government, the Medium-term Revenue and Expenditure Framework (MTREF) for the year 2014/ 2015 and that for 2015/2016 do not indicate budgetary allocations for the provision of interim or emergency services to informal settlements.

It is therefore evident that there is no alignment between the budget and the plans falling under the TLM. It is also evident that private mechanisms are not recognised as possible sources for financing informal settlement upgrading programmes. Both these issues are not articulated in literature regarding the informal settlement intervention.

7.6 Bureaucracy in housing delivery

In addition to the above and as noted from the literature, development projects relating to informal settlements and housing in general are best carried out by the local government because it is the sphere closest to the people. Notwithstanding, effective informal settlements intervention is a product of interrelations and cooperation amongst all spheres of government. Both these facts are clearly enshrined in the policies and legislation such as the Constitution, Housing Act, IGRF Act, Municipal Structures Act and the UISP, among others.

However, the long chain of command involving all three spheres of government in development projects is one of the major causes of delays in housing delivery in South Africa. Retaining the housing delivery function at the provincial level of governments moderates the responses to the needs of the people due to the fact that, more often than not, the provincial government cannot address housing needs in all municipalities at once. Using the AHP model of analysis, it has become evident that the provincial government may also fail to fully undertake situation analysis.

The accreditation of municipalities based on their performances has promoted bureaucracy in the delivery of housing. Findings in Chapter 6 revealed that stagnation in the upgrading of informal settlements in Ikageng is a result of the failure of the NWPG to successfully stir the upgrading programmes in all the municipalities under its jurisdiction. It is also evident that there is no clear coordination between the NWPG and TLM. Furthermore, informal settlements in Ikageng are not on the list of priority areas within the NWPG jurisdiction yet the situation is dire.

7.7 Politics, planning and informality

Literature indicates that politics plays a crucial role in the emergence of informal settlements. However, literature studies and policies relating to the upgrading of informal settlements do not offer a clear direction with respect to difficult political issues. Although the UISP is regarded as a deviation from a doctrinaire approach where housing is delivered in return for political support, politics maintains a noteworthy role in the proliferation of informal settlements in Ikageng.

Some of the inhabitants have been allocated the land by the ward councillors in a bid to gain political favour. Also, politicians influenced the continuous invasion of the land in Sonderwater, pressuring for the formalisation of the area before disaster risk assessments have been completed. This has caused conflicts between the local government and the politicians, while the danger of sinkhole formation continues to intensify.

It is clear political expediency seems to override strategic planning in a number of instances, and causes tension between technical staff and politicians, and between the different spheres of government. Evidently, politicians and community leaders have a critical role in policy implementation and resolving problems affecting policy implementation and the vice-versa is true. Thus, the reluctance of the officials to actively engage grassroots politics in addressing the informal settlements in Ikageng negates the potential influence of the politicians in addressing the challenge of informal settlements.

7.8 Heterogeneity amongst and within informal settlements

As reflected in the literature study, planning intervention is a complex task which requires better understanding of the settlements under study. Informal settlements vary greatly in terms of physical layout and design, locality, the reasons for their existence and the degree of poverty and vulnerability even within one settlement. Policy initiatives should therefore recognise the significance of the diversity of the informal settlements to ensure efficiency in the programme and thwart inequality.

In South Africa, the policy initiatives in addressing informal settlement seem not to take into account the differences amongst informal settlements. The consequences of this approach are reflected by the differences in the achievement of the nine provinces in South Africa in meeting their respective upgrading targets. While all provinces received proportional funding and technical assistance, some provinces exceeded their targets whilst other underachieved.

The empirical study also revealed that the informal settlements in Ikageng have, to a greater extent, similar socio-economic structures. However, there is a degree of social differentiation amongst the inhabitants. The differences in the income levels, household structures and in some cases, the housing units, indicates that while some of the inhabitants live in abject poverty, there is a certain portion of the inhabitants that is regarded as better off. The failure to incorporate these disparities into the Ikageng upgrading programme is likely to produce dissatisfactory and inequitable results.

7.9 Lack of alignment with other housing programmes

It is clear that upgrading the informal settlements will not provide accommodation for all the inhabitants in the settlements earmarked for in-situ upgrading. The UISP indicates that de-densification should be considered in the cases where the number of the inhabitants exceeds the number that can be accommodated for that area. However, there are no explanations (in theory and in practice) on the choice of action regarding those who do not qualify for the ISUP in Ikageng. It is also evident that the ISUP is not operated in relation to other housing typologies which may provide housing for some of the inhabitants.

7.10 Unavailability of data

The major challenge in the analysis of government intervention is the limited availability of informal settlements data. Data relating to some of the indicators applicable for informal settlements intervention cannot be attained, hampering the assessment of the conditions of the informal settlements (refer to paragraph 6.4.2). The informal settlement statistics at national and provincial level are based on 2011 census results, which, considering the spontaneity of informal settlements, inhibits an accurate assessment of the conditions of informal settlements.

7.11 Chapter conclusion

This chapter provides the conclusions to the study based on literature review and the empirical analysis. The study reveals that the upgrading of informal settlements approach has not been completely successful in addressing the challenge of informal settlements in Ikageng and in general. The quantity driven approach has failed to improve the lives of the inhabitants community engagement is not fully explored. Urban fragmentation still persists in Potchefstroom and has induced functional segregation of the informal settlements.

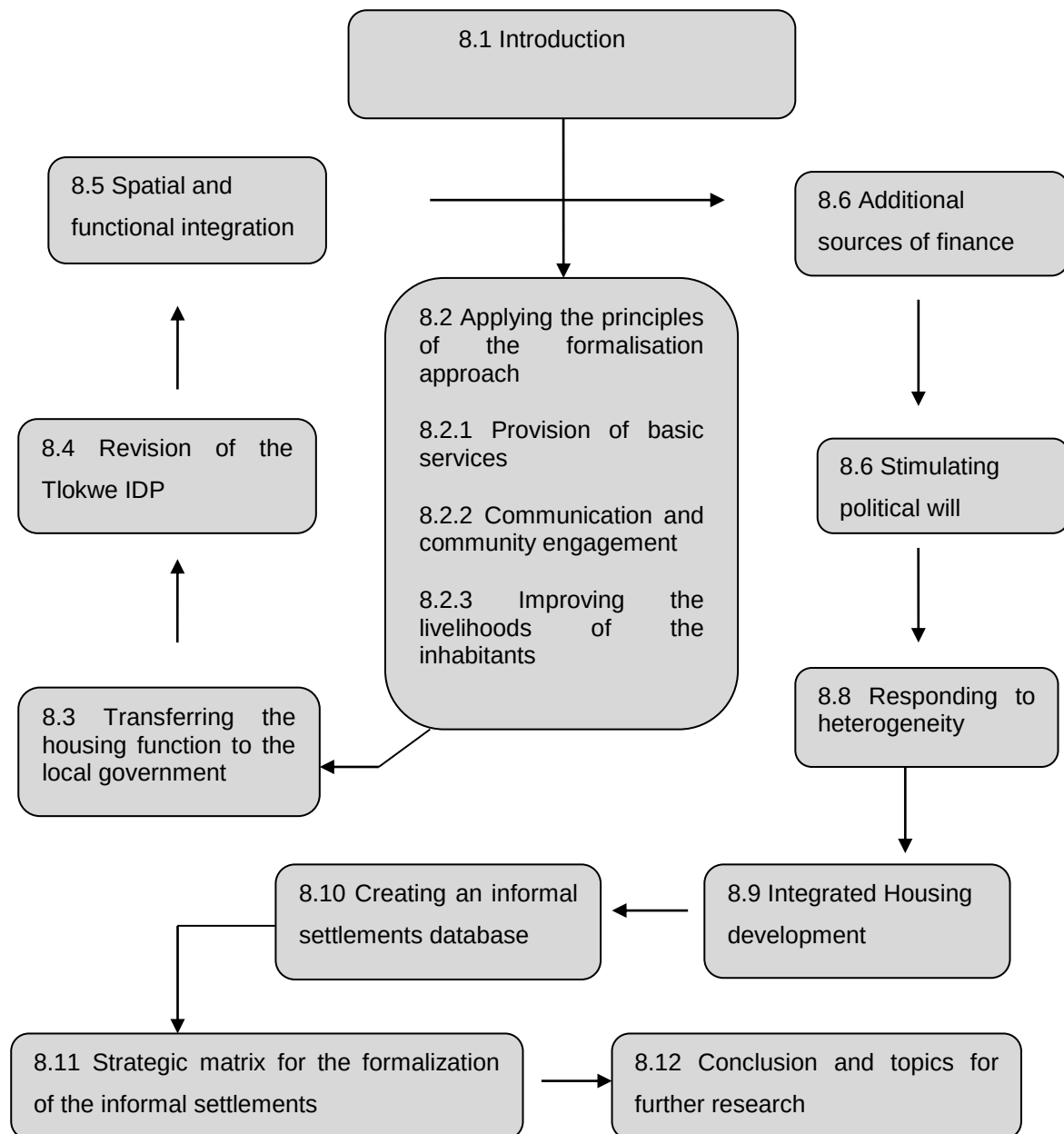
The Housing Chapter of the IDP is merely a philosophy in terms of integrating informal settlements interventions into the broader planning framework. Bureaucracy in housing delivery is thwarting the progress on upgrading programmes and the failure to integrate budgets and plans as well as exploring other finance mechanisms have contributed to the delay in upgrading the informal settlements. The unavailability of data continues to disrupt the assessment of government intervention.

Conclusively, the conclusions reached in this study support the basic hypothesis that the government has not been successful in formalising informal settlements through in-situ upgrading. To a greater extent, the study is supported by a well-funded theoretical base

guiding government intervention in addressing informal settlements. The nonfulfillment of the informal settlement intervention is a result of the ineptitude of the government in the practical implementation of the planning instruments to address the challenge of informal settlements. Therefore, there is need for more research on how TLM, NWPG, the National Government and all the relevant stakeholders can successfully implement these planning instruments. Thus, this chapter informs the recommendations proffered in Chapter 8.

CHAPTER 8: RECOMMENDATIONS

The diagram below shows the graphical summary of Chapter 8.



8.1 Introduction

This chapter proposes recommendations for planning intervention in addressing informal settlements based on the conclusions drawn from the study in Chapter 7. At the centre of these recommendations is a pragmatic shift from the normal upgrading approach to the formalisation of informal settlements. Due to the fact that an upgrading programme is already underway in Ikageng, township establishment processes aimed at in-situ upgrades continue. However, the application of the principles of formalisation should accelerate progress.

Thus, the focus of this chapter is on providing suggestions on: accelerating the provision of basic services and security of tenure, ensuring community engagement in the entire process, qualitative improvement in the lives of the inhabitants, spatial and functional integration into the broader urban fabric, revision of the Tlokwe IDP, transfer of the housing function to the local government, alternative strategies for financing the upgrading programme, adoption of different formalisation strategies, stimulating political will, establishing integrated housing developments and the creation of an informal settlement database. This chapter also provides a proposal for the strategic implementation of the informal settlement formalisation programme that can guide the TLM in implementing these recommendations as well as topics for further research.

8.2 Applying the principles of the formalisation approach

The general principles of the formalisation of informal settlements validate the recognition of the inhabitants of an informal settlement as full citizens of the city, town or village with which they are associated. The formalisation approach recognises that responses to informal settlements are a constitutional mandate, which instigate the realisation of fundamental rights: of movement, of creating shelter, of organising, access to water and sanitation, access to education, amongst others, by the government. Thus, formalisation of informal settlements creates duties, rights and responsibilities, and improves on the accountability and transparency amongst the three spheres of government, as well as amongst the departments within the TCC.

8.2.1 Provision of basic services and security of tenure

Taking into consideration the uncertainty of the incremental systems of providing secure tenure, the municipality should consider providing full title ownership to the residents. This will motivate the residents to invest in the formalisation process and encourage them to contain the internal growth of the informal settlements. The municipality should engage the

inhabitants to determine what tenure arrangement they deem ideal in addressing the needs of the community. In the event that there is no consensus, the municipality makes the final decision based on the criteria that best serves the needs of the inhabitants.

The TLM should accelerate the delivery of sanitation facilities and additional water facilities to the informal settlements. The residents of the Sonderwater informal settlement and Maipeng, for instance, should be provided with temporal toilet facilities since they are going to be relocated. To achieve this, there should be coherence and cooperation amongst the Departments of Housing and Planning, Infrastructure and Community Services. The Departments of Housing and Planning should perform the intermediary role between the above mentioned departments and the inhabitants, to agree on the terms of delivery of the services. Furthermore, the inhabitants should be encouraged to participate in refuse removal and not rely on the government to do it. Though not discussed within the scope of this study, formalisation of the informal settlements should also take into consideration the provision of services and facilities that cater for the disabled and the elderly.

8.2.2 Community engagement and communication

The TLM should ensure that the community is engaged at every stage of the formalisation process. The first step is to create a committee comprising of informal settlement leadership to explore and address the community's socio-economic needs. The following can be implemented to foster improvement in the communication channels:

- Improving communication between municipal officials and community leaders at local level as communication through ward councillors has proved to be ineffective;
- Community mapping which imparts community members with knowledge on how to identify and analyse various problematic issues through prioritisation and problem solving;
- Enhancing peer learning platforms;
- Introducing participatory e-planning through the use of social media platforms and texts messages; and
- Developing an Ikageng informal settlements planning forum for discussions of issues relating to the informal settlements in general or the upgrading programme. Videos, audios and news bulletins on the progress of the programme can also be posted on the platform for progress checks, record keeping and promoting accountability.

8.2.3 Improving the lives of the inhabitants

By adopting the formalisation approach, the municipality can induce improvements in the lives of the inhabitants by concentrating on: education and employment, alternative building materials as well as crime and violence prevention and reduction.

8.2.3.1 Education and employment

Community committees should investigate and address issues deterring school attendance for children who are of school going age. This can be carried out in conjunction with the Department of Social Development, Women, Children and Persons with Disability. Issues relating to child abuse and violence can also be addressed through these assessments.

In response to the fact that a significant portion of the inhabitants are illiterate, the municipality can influence the use of social facilities such as community centres as adult learning centres. The existing primary and secondary schools can be used to cater for young children during the day and adults during the evening. Community committees should make enquiries on members of the community who can conduct the lessons.

To reduce dependency on government support and create sustainable livelihoods, it is essential to ensure employment creation through:

- Establishing a community builder's programme which promotes the use of members of the community in the construction of the housing structures. However, this is a short term employment opportunity which only lasts for the duration of the project;
- Supporting informal sector enterprises such as the operation of spazas, panel-beaters and early childhood development centres. The government and the inhabitants need to discuss and agree on practical developmental agendas which can be sustained over time; and
- Equipping the inhabitants with entrepreneurial skills to start Information Communication Technology (ICT) related projects such as internet cafés.

8.2.3.2 Alternative building materials

The idea of formalisation is often criticised on the grounds that emphasis is placed on the provision of top-structures. To reduce the costs of providing the standard top-structures, the municipality may engage the inhabitants in rebuilding the housing structures using alternative building technologies. The municipality can encourage the use of locally

produced building materials such as burnt brick. Recycled materials can be used to insulate walls and ceilings, as well as innovative layered wall constructions offering cooling in the daytime without the use of air conditioning, improving the indoor environment.

Thus, the process of formalisation can maximise on the existing materials of construction while ensuring “standardised” housing products. However, this approach may be faced with resistance, and if not properly implemented, may duplicate the existing informal housing structures. Therefore, there is need to carry out education and training programs to equip the inhabitants. In this regard, further research is necessary in order to improve the living conditions of the inhabitants.

8.2.3.3 Crime and violence

Crime prevention within the informal settlements is attained through community engagement, the creation of employment/ day-time activities and most importantly urban design. TLM and the community committee should implement the following activities:

- Community engagement in mapping all the common crime spots;
- Provision of street lighting to illuminate the dark spots where crime often occurs;
- Locating public spaces and school facilities for occasional activities to distract the youth and the unemployed
- Establishment of a neighbourhood watch which operates at night and during weekends
- Creating support groups for victims of crime and violence, as well as HIV/AIDS.

8.3 Transfer the housing function to the local government

The delays in the formalisation of informal settlements and the delivery of housing in general, can be addressed through the transfer of the responsibilities from the provincial government to local municipalities. This is critical for ensuring accountability, promoting innovative thinking and escalating the pace at which formalisation and housing delivery is carried out.

Both the NWPG and the TCC should promote the accreditation of the housing function of the TCC to Level 2. Although this may be faced with some resistance especially from the provincial government, the NWPG should delegate the bulk of the tasks and responsibility to the TCC, while supporting the implementation of the formalisation programme. The NWPG can also promote networks between the TLM and other municipalities such as the

Rustenburg Local Municipality, which have succeeded in the formalisation of informal settlements, thus strengthening the capacity of the municipality.

In this regard, the municipality should create coordination and technical committees to ensure successful formalisation of the informal settlements. The municipality could also establish a platform for collaboration with the School of Geography and Geo-Spatial Planning and the Centre for Disaster Risk Management from the North West University – Potchefstroom Campus, AGES and Maxim Consultants which will form the Triple Helix Partnership (THP). This will aid in:

- Providing opportunities to brainstorm other strategies which can aid in effectively address the challenge of informal settlements in Ikageng; and
- Conducting workshops and outreach programme to educate the inhabitants on the formalisation programme as well as the Dolomite Risk Management Strategy.

8.4 Revision of the Tlokwe IDP

One of the factors determining the approval of an Informal Settlement Business Plan is the alignment of the project with the IDP. In this regard, the TLM should add a section focusing on details of the informal settlements and the formalisation programme into the IDP as part of the Housing Chapter. The details provided in the existing Tlokwe Housing Chapter and those relating to community engagement should be incorporated into the IDP. The IDP should also indicate how the formalisation programme relates to the other sector plans such as the Infrastructure Master Plans. The IDP should enforce and promote effective cooperation, alignment and ultimately implementation.

8.5 Functional and spatial integration

The municipality should adopt principles of the compact city model which focus on infill nodal developments to improve accessibility of services and facilities to residents while reducing travelling. Functional and spatial integration of the informal settlements extends to addressing the effects of segregation in the township of Ikageng as a whole. In this regard, the municipality should consider the following:

- Endorsing the construction and the operations of the activities which will operate on erven identified for neighbourhood and local nodal development. These areas will provide daily consumables and social services such as clinics;

- Providing transport infrastructure which accommodates cycling as a mode of transport; and
- Establishing Bus Rapid Transportation (BRT) to reduce the costs incurred by using taxis.

8.6 Additional sources of finance

The municipality should acquire funding from the MIG to provide infrastructure for the informal settlement. Another alternative is to investigate the utilisation of an “external service mechanism”. The municipality can facilitate public private partnerships with private service providers directed at the provision of bulk infrastructure. A Service Delivery Agreement (SDA) should be signed between the municipality and the private entity to clearly indicate the terms of the partnership. The municipality should consult the community before entering into the SDA and broadcast its contents and conditions.

The municipality can also consider applying for loans from commercial banks to finance the cost capital required for the project development. The municipality would have to repay the loan with interest when funds from the HSDG become available. Often banks are reluctant to finance programmes such as the formalisation of informal settlements as they are associated with financial, operational and political risks. The municipality can reduce the amount of risk capital involved by eliminating the effects of controllable uncertainties and transferring the risk to the government.

The municipality in conjunction with the inhabitants can create project initiatives which may draw the attention of Non-Governmental Organisations such as the World Bank, thus providing funds for the formalisation of the informal settlements. The beneficiaries should be encouraged to save funds to support the delivery of top structure housing units.

At a national scale, the government should consider incentivising the existing commercial banks to establish building societies which can aid inhabitants in attaining funds for the construction of top structure housing units.

The Department of Finance should ensure the alignment between budgetary allocations, the funds available and the progress of the project to circumvent misappropriation of funds. Independent auditing entities should conduct regular audits to prevent corruption.

8.7 Stimulate political will

Taking into consideration the fact that politicians play an important role influencing policy decision making, it is critical to come up with strategies to stimulate political will in the

formalisation of the settlements. The success of the programme is based on entrenching the idea of formalisation as a political mandate with high level political support from the Executive Mayor. Furthermore, political will can be stimulated through engaging political and community leaders in the formalisation programme and making sure they understand the need for a paradigm and policy shift.

8.8 Recognition of heterogeneity in informal settlements

The community committee should carry out an audit to identify the different needs of the inhabitants based on their social differentiation. This will aid in identifying measures to improve the livelihoods of genuinely disadvantaged households and ensure that they are prioritised.

8.9 Integrated housing development

The formalisation of the settlement should be supported by other housing programmes. In the case of the current situation, the inhabitants who have been affected by de-densification but qualify for housing subsidies and formalisation programmes, can be relocated to a temporal location 'transit camp' accompanied by emergency basic services. The inhabitants can be allocated numbers that can be used as addresses in future.

All spheres of government should come up with programmes to validate housing structures in backyards to accommodate those inhabitants who may not qualify for subsidy programmes. Programmes aimed at validating backyard housing also curb the proliferation of land invasions by shacks not in a backyard. Formal low income housing designs should cater for stands larger than 300 square metres be provided to accommodate backyard structures (Lategan, 2012:226). However, this area requires further research to understand the policy implications and the viability of such measures.

Planning can also encourage mixed housing typologies to cater for the different income groups. This includes the provision of fully subsidised units, partially subsidised units, credit linked and flat apartments for rental purposes. It is also necessary to consider the provision of multi-storey housing for future formalisation projects. Although this has been disregarded due to costs involved, further research has to be carried to provide a cost-benefit analysis for this housing typology.

8.10 Create an informal settlements database

To ensure availability of data for future purposes, the TLM should create a database with all the information relating to the informal settlements. This entails the preparation of a township

register with the all the socio-economic profiles on the inhabitants. This will help in assessing progress on the planning intervention as well as predicting trends relating to possible informal settlements invasions. The database can also be used to identify inhabitants who have been beneficiaries for informal settlement or other housing programmes. The database should be constantly updated and these updates can be aligned with the five year IDP cycle as well as the National Housing Database.

8.11 Strategic Matrix for the formalisation of the informal settlements

Based on the literature study, empirical findings, conclusions reached and the recommendations provided, this study proffers an Informal Settlement Formalisation Strategy to guide the TLM in the formalisation of informal settlements. This is presented in the form of a Strategic Matrix (Table 8-1) which shows the project focus, the activity, the planning instruments that will be employed as the intervention tools, the timeframe for implementation as well as the sphere of government, department and/or groups responsible for the implementation of that activity. The project focuses are prioritised according to the strategic manner by which the formalisation can be carried out.

Table 8-1: Strategic Matrix for the formalisation of the informal settlements in Ikageng

Project focus	Activity	Intervention	Timeframe	Implementation responsibility
Review of the current policies and legislation	Alignment of strategies, policies and implementation	- Employ the contributions from the SPLUMA to guide all the policies and legislation - Incorporate informal settlement formalisation as part of the IDP - Review the implementation of the NUSP	2016 - 2020	- NDHS - NWPG - TLM: all departments
Transfer the housing function to the local government	Application and qualification of the municipal accreditation of the TLM and capacitate the DKKDM	- Amend Sections 7,8 and 9 of the Housing Act, - Revision of the UISP - Clearly stipulate the role of local government in the Ikageng Business Case	2016 - 2019	- NDHS - NWPG - TLM: Department of Housing and Planning (DHP)
Integrated housing development	Development/ implementation of policies that promote mixed use residential developments Improving access to housing finance	- Engage the HDA in land identification - Implementation of the IRDP, EHP, EPHP and ISP - Revise the HSP (reviewed annually), SDF, EMF, ITP and IDP	2016 - 2020	- NWPG - TLM: DHP
Ensure spatial and functional integration	Channel economic activities into the broader activity nodes as part of the intervention zones supported by transport facilities	Employ the: - NWSDP - SDF - EDS - ITP - IDP - Ikageng Business Case	2016 - 2020	- NWPG - TLM: Economic Development
	Provide more public transport facilities at schools, hospitals and clinics	- Employ the Passenger Transportation Plan - Revise the ITP, IDP, Ikageng Business Case	2016 - 2020	- DoT (National) - TLM Infrastructure

Project focus	Activity	Intervention	Timeframe	Implementation responsibility
		Employ Rational Plans (RATPLANS)		
	Reduce public transportation costs and ensure safety within this means of transport	Incorporate this into the : - White Paper on National Transport Policy - NWSDP - ITP	2016 - 2020	- DoT - TLM: ➤ Infrastructure ➤ DHS - Taxi organisations
	Provide infrastructure for a non-motorised transport and encourage safe walking and cycling.	Incorporate into the ITP and the IDP	2016 - 2018	TLM: Infrastructure
Financing the formalisation project	Facilitate the development and submission of business plans to access funding	- IDP - MTREF	2016 - 2018	TLM: Finance
	Improve on the sources of finance	Employ: - Provincial and national funding - Regional Bulk Infrastructure Grant 2014/2015 - MIG - MTREF allocations - Municipal own funding	2016 - 2020	- National Treasury - North West Treasury and Enterprise Development (NWTED) - TLM: ➤ DHS ➤ Finance
	Alignment between budgets and plans	- MTEF - Framework for strategic plans and annual performance plans, - Balanced Scorecard of an IDP	2016 - 2020	- National Treasury - NWTED - TLM: Finance - Executive Mayor (TCC)
Civic engagement	Community engagement and communication	Should be clearly stated and implemented according to USIP	2016 - 2017	- Community committee - TLM:

Project focus	Activity	Intervention	Timeframe	Implementation responsibility
		- Ikageng Business Case - HSP - IDP		➤ Corporate Services ➤ Economic Development ➤ Community Services
	Create a steering committee with the TLM Heads of Departments; Municipal Manager and the Performance Management Strategy Manager	Include this as part of: - the Ikageng Business Case, - HSP - IDP	2016 - 2017	TLM: DHP
	Stimulate political will	Employ the principles of the IDP	2016 - 2017	Executive Mayor TLM: DHP Coordinating committee; Community committee
Provision of basic services and security of tenure	Water and Sanitation (free of charge for the first year)	- USIP - Water Services Delivery Plan (WSDP) - IDP - MTREF	2016 - 2018	TLM: - Infrastructure - DHP
	Electricity	Revise the USIP Include as part of the: - HSP - IDP - MTREF	2016 - 2018	- TLM: Infrastructure; - ESKOM
	Refuse removal	Revise the USIP Include as part of the: Integrated Waste Management Plan (IMWP)	2016 - 2017	DKKDM TLM: Community Services; Community committee

Project focus	Activity	Intervention	Timeframe	Implementation responsibility
		IDP		
	Roads and Storm Water Drainage	Include as part of the: - ITP - HSP - IDP	2016 - 2018	TLM: Infrastructure
	Security of tenure	Revise the USIP Include as part of the - HSP - IDP	2016 - 2019	TLM: DHP
Promoting socio-economic development	Opportunities for children and illiterate adults to attend school	Include as part of the: - HSP - IDP	2016 - 2018	TLM: - Department of Social Work - Community Services
	Employment creation and support for Small Medium and Micro Enterprises (SMMEs)	Include as part of the EDS IDP	2016	TLM: - Corporate Services - Economic Development
	Alternative building materials and standards	- Revise the Norms and Standards - Ikageng Business Case - HSP - IDP	2016 - 2020	TLM: DHP
	Ensure that combating crime and violence are regarded as major components of the formalisation of the intervention programmes	Incorporate this into: - the Ikageng Business Case - HSP - IDP	2016-2018	- South African Policy Services (SAPS) - TLM: ➤ DHP

Project focus	Activity	Intervention	Timeframe	Implementation responsibility
				➤ Community Services; • Community committee • Religious organisations
	Ensure that all spheres of government develop and implement integrated disaster risk management plans	• Disaster Risk Management Plan • HSP	2016-2017	• National Government • NWPG • DKKDM • TLM: All departments • Africa Centre for Disaster studies • Community organisations
Keeping records of the informal settlements	Create an informal settlement database	Include as part of the: • HSP • IDP	From 2016 (updated after every 5 years)	• HDA • NWPG • TLM: DHP

Source: Own Construction (2015)

8.12 Conclusion and topics for further research

In conclusion, the study offers a holistic approach to analysing government intervention in the formalisation of informal settlements through the implementation of planning instruments. The research questions have been responded to and all the objectives have been addressed. In this regard, further research from this study can be carried out with the guidance of the following topics:

- Holistic approach to informal settlement intervention focusing on the settlements in rural Tlokwe.
- The role of public transportation on the formalisation of informal settlements.
- The role of environmental management in the formalisation of informal settlements
- Addressing the special housing needs for the disabled, those infected by HIV/AIDS, marginalised women and other groups of disadvantaged people through informal settlement intervention.
- How can governments effectively use innovative and preventive planning instruments not only curative actions in addressing the challenge of informal settlements?

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ANNEXURE A: QUESTIONNAIRE



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

*Hello my name is Takudzwa Charisse Taruza. I am a student at the NWU Potchefstroom Campus and I am conducting a research survey for my study titled: **An analysis of Planning Intervention in the formalization of informal settlements**. I have randomly chosen you as a respondent to help me understand more about the inhabitants of this settlement. Let me assure you that you are allowed not to respond to any question you are not comfortable with and all the information you provide is confidential.*

Questionnaire Number:

Date:

Location:

Section A: Biographical Information

1. Gender

Male	1	Female	2
------	---	--------	---

2. Age

--

3. Ethnicity

Black	1
Colored	2
Asian	3
White	4

4. Marital Status

Single	1
Living Together	2
Married	3
Divorced/ Separated	4
Widowed	5

Section B: Household information

5. How this is household headed?

Gender	Age	Explain the circumstances
Male (1)		
Female (2)		

6. Household structure

a) Number of families on residing on stand	
b) Total number of people employed	
c) Total number of children	
d) Total number of people residing on the stand	

7. Breadwinners Level of Education

No formal education	1
Primary	2
Grade 10	3
Matric	4
Certificate or Diploma	5
Degree	6
Post Graduate	7

8. Employment Status (Breadwinner's)

Unemployed	1
Self- employed	2
Part-time	3
Full time	4

9. Breadwinners' approximate monthly income level

R0 to R999	1
R1000 to R1999	2
R 2000 to R2999	3
R3000 to R3499	4
R3500 to R 7000	5
More than R7000	6

10. Approximately how many people share a (bed) room in your household?

Relation	Total Number
Separate rooms for adults and children	
Adults sharing with children	
Young boys and girls sharing the same room	
Separate rooms for young boys and girls	

11. Formal Housing Ownership

a) Does this household own any other (formal) dwelling elsewhere?	Yes 1	No 2
b) Have you registered to become eligible for formal housing	Yes 1	No 2

12. Has this household ever received any financial assistance from the government

Grant	Old age pension (1)	Child support (2)	Disability grant (3)	Care dependency (4)
Housing Subsidy	Individual (5)	Institutional (6)	PHP (7)	Rural (8)
Other (specify)				

Section C: Migration Data

13. Place of origin

Potchefstroom/ Tlokwe	1 Urban	2 Rural
North-West Province	3	
Other Province in South Africa	4	
SADC Country	5	
Other (specify)	6	

14. What prompted you to settle here

Have always lived here	1
Wanted to live near kin	2
Married here	3
Could not afford formal housing	4
Could not access housing due to the backlog	5
Independence from family	6

Intend to move to another place (in transit)	7
Eviction from another settlement	8
Land allocated by ward council	9

- b) If it was allocated by the ward council, who was/ were the registered as the occupant(s) of the land and what was the reason for the allocation of the land?

15. How long have you been staying here?

First Occupant (s)	
The rest of the family	
Other (specify)	

16. Do you consider this as a. temporary (transit) or permanent shelter/ situation?

Temporary	1	Permanent	2
-----------	---	-----------	---

- a. If it is temporary, when do you intend to move?

Section D: Informal Settlement Details/ Planning Information

17. What are the materials used to construct your house?

Corrugated Iron	1
Wood	2
Brick	3
Other (please specify)	4

18. What is the main source of energy for you household for:

	Electricity	Gas	Paraffin	Wood	Candles	None
a) Lighting	1	2	3	4	5	6
b) Cooking	1	2	3	4	5	6
c) Heating	1	2	3	4	5	6

19. How do you access the following basic infrastructure and services:

	On dwelling	Nearby / Communal	Very far	Not aware	None Available
Water					
Sanitation (toilet)					
Waste disposal					
Street Lighting					
Parking Facilities					
Education					
Place of worship					
Libraries					
Spaza Shops					
Parks and Recreational Facilities					
Community Hall					
Health Facilities					

20. What mode of transport do you use to get to your place of employment and other activities?

Mode	Distance	Time To	From
Foot			
Bicycle			
Private car			
Taxi combis			
Community joint transport			
Other (specify)			

21. Are you a member of the following groups in your community?

a) Housing Cooperative	Yes	No
b) Community Development Group	Yes	No
c) Church Organization	Yes	No
d) Youth Group	Yes	No
e) Other (specify)	Yes	No

22. Has your group initiated and taken part in any development projects?

Yes	1	No	2
-----	---	----	---

a. If yes describe the project and the progress

23. What are the challenges you (as an individual and as a community) have faced as a result of being settled here?

Challenge	Never	Seldom	Quite often	Very often
a) Crime	1	2	3	4
b) Violence	1	2	3	4
c) Disease outbreaks	1	2	3	4
d) Fire outbreaks	1	2	3	4
e) Electrocutions	1	2	3	4
f) Destruction of shelter due to harsh weather	1	2	3	4
g) Forced evictions	1	2	3	4

24. Have you ever communicated with your municipality, ward councilor or a representative about your challenges?

Yes	1	No	2
-----	---	----	---

a) If yes, who and when? If no explain the circumstances.

25. Has the municipality indicated any attempts in addressing your challenges?

None	
Challenges addressed	
Promises	
Out of range attempts	

26. Has the municipality indicated that your input is valuable in addressing these challenges?

Yes	1	No	2
-----	---	----	---

a) Why do you say so?

27. What would you consider more beneficial?

In situ upgrading	1
-------------------	---

Relocation to another area with properly serviced stands only	2
Relocation with houses and basic services provided	3
Relocation of some of the families and upgrading for remaining families	4

Give reasons

28. Would you want to participate in the upgrading/ relocation of the settlement?

Yes	1	No	2
-----	---	----	---

b) In what way would you want to participate/ what role would you want to play?

29. Do you have any comments and / or recommendations?

THANK YOU VERY MUCH FOR YOUR TIME AND CONTRIBUTIONS

ANNEXURE B: KEY INFORMANT INTERVIEWS – TLM



Name: Takudzwa Charisse Taruza

Department: Urban and Regional Planning

Title: Planning intervention in the formalisation of informal settlements

Aim: Understanding the role and the influence of the Local Government in addressing the challenges faced by informal settlers in Ikageng Extensions 6,7,11 &12.

Questions

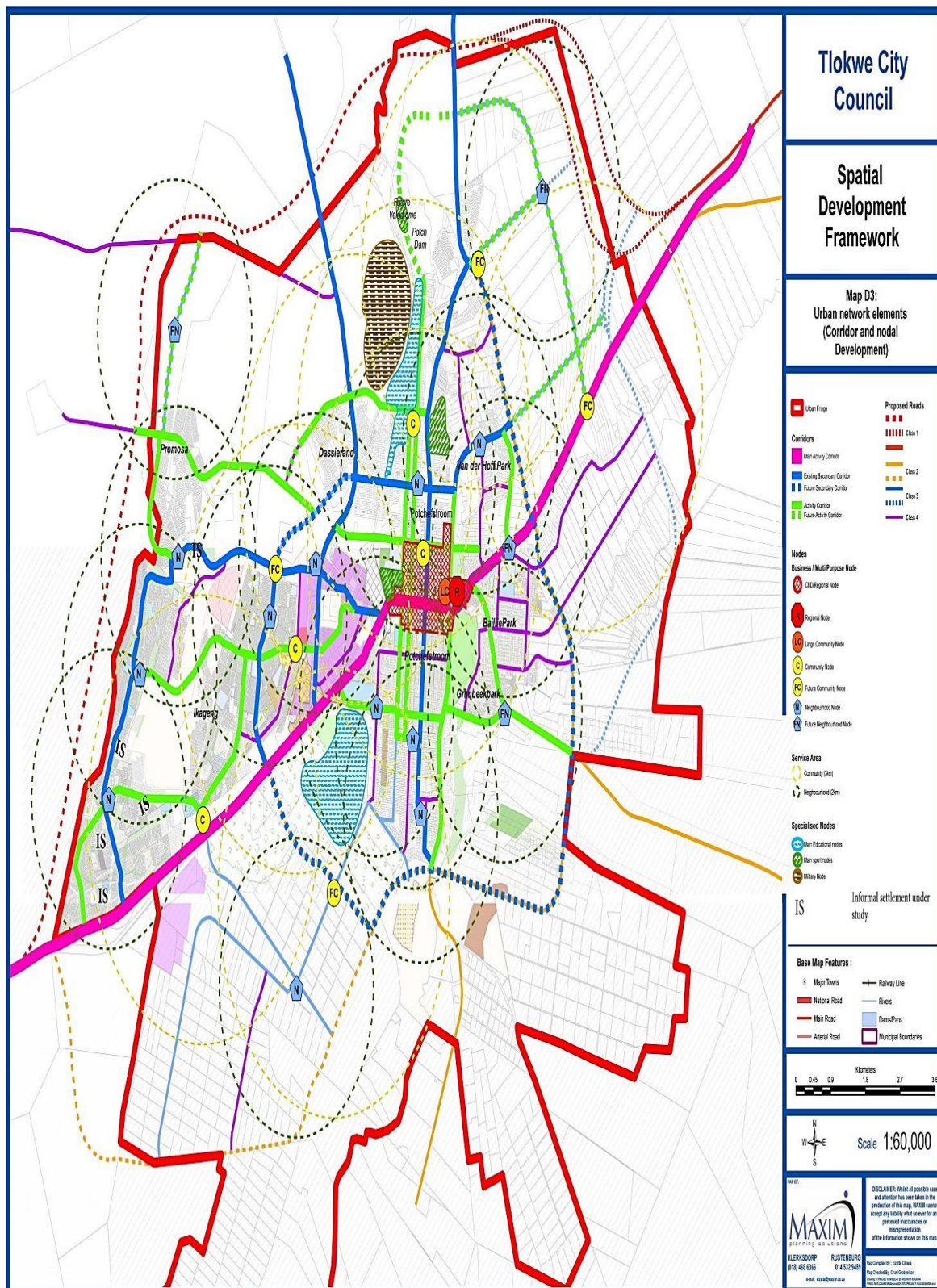
1. What are the challenges that the department faced as a result of the existence of these settlements?
2. For how long have they been in existence?
3. The settlements have been in existence for a long time, what has the department done to address this issue?
4. Apparently the Department of Human Settlements embarked on a Informal Settlement Upgrading programme (ISUP) project in Ikageng:
 - a. What does the program entail
 - b. What was the role of the provincial government?
 - c. What is the current position of the program?
 - d. What have been the successes and challenges?
 - e. What are the future plans?

5. What is the way forward for the people in Extension 12, Sonderwater?
6. What are the general requirements for one to qualify for a housing subsidy from the Provincial Department of Human Settlements?
7. Are the subsidies also directed at prospective home owners who are currently inhabitants of informal settlements?
8. There are people in Extension 12 who have been relocated, what was the selection criterion that was used?
9. Where are the people from Extension 11, erf number 18415 going to be located? Ward
10. How feasible is the idea of formalisation, economically, socially and environmentally?

ANNEXURE C: NORMALISED WEIGHTS

OBJECTIVES	Weights
Obj 1	0.2084
Obj 2	0.2734
Obj 3	0.0872
Obj 4	0.1143
Obj 5	0.3167
INDICATORS	
Objective 1	Normalised Weights
Indic 1	0.05433
Indic 2	0.013588
Indic 3	0.038012
Indic 4	0.047328
Indic 5	0.055143
Objective 2	
Indic 6	0.044979
Indic 7	0.118394
Indic 8	0.084352
Indic 9	0.025675
Objective 3	
Indic 10	0.045893
Indic 11	0.008371
Indic 12	0.019332
Indic 13	0.013603
Objective 4	
Indic 14	0.01704
Indic 15	0.01096
Indic 16	0.00784
Indic 17	0.022138
Indic 18	0.056321
Objective 5	
Indic 19	0.079175
Indic 20	0.237525

ANNEXURE D: NODAL DEVELOPMENT WITHIN TLOKWE



ANNEXURE E: PROOF OF LANGUAGE EDITING



T/A AS BETHEL LANGUAGE SERVICES

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CERTIFICATE OF ENGLISH LANGUAGE EDITING

THIS IS TO CERTIFY THAT THE FOLLOWING DISSERTATION/THESIS HAS BEEN LANGUAGE EDITED:

Name of candidate: Takudzwa C. Taruza

Student number: 25654586

Title of dissertation thesis: *An analysis of planning intervention in formalisation of informal settlements in Ikageng Township within the Tlokwe Local Municipality*

Institution: North-West University (Potchefstroom Campus South Africa)

Date Issued: 24 January 2016

SIGNED

WILLARD T MUGADZA (Associate Member of the Professional Editors Group (South Africa), Master of Laws (NWU-South Africa), Bachelor of Laws – Honours (UNAM-Namibia), B Juris (UNAM-Namibia)

