OVERVIEW OF URBAN LAND AS A COMMODITY IN SOUTH AFRICA

Research Findings and Recommendations

Ros Gordon, Matthew Nell and Andreas Bertoldi

Urban LandMark

MAKING URBAN LAND MARKETS WORK FOR THE POOR

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MATTHEW NELL
& ASSOCIATES (PTY) LTD

Report submitted to Urban Landmark by Matthew Nell & Associates (Pty) Ltd.

Project Team:

Project Leader
Matthew Nell

Project Coordinator
Ros Gordon

Project Members
Andreas Bertoldi, Gemey Abrahams & Karen Hague

Specialists
Rudolph Willemse, Marius van der Merwe & Maurice Makhathini

Administration
Kim Foster & Gillian Pacheco

CONTENTS

LIST OF TABLES

LIST OF DIAGRAMS

LIST OF ABBREVIATIONS AND ACRONYMS

CD:S&M	Chief Directorate of Surveys and Mapping
CS	Community Survey
CSIR	Council for Scientific and Industrial Research
DEAT	Department of Environment Environmental Affairs and Tourism
DIS	Document Imaging System
DLA	Department of Land Affairs
DPW	Department of Public Works
DTI	Department of Trade and Industry
EA	Enumeration Areas
GIS	Geographical Information System
GVA	Gross Value Added
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
NHBRC	National Homebuilders Registration Council
SG	Surveyor General
SGT	Self-governing Territories (former homelands)
SME	Small and Medium Enterprises
SOESG	State Owned Enterprise Surveyor General
StatsSA	Statistics South Africa
UDF	Urban Development Framework
UDS	Urban Development Strategy
UDZ	Urban Development Zone

1 Introduction

The Urban Land Markets Programme (Urban LandMark) commissioned Matthew Nell and Associates (MN&A) in February 2007 to obtain an overview of the **urban land sector in South Africa** in a manner that focuses on the **qualities and elements of urban land as a commodity within the South African economy.** Urban LandMark would like to use the outcomes to pursue further research and advocacy in the sector.

The assignment seeks to respond to the following research objectives:

- Proposing useful categories for the categorisation of urban land in South Africa;
- Recording the current trends and patterns of land ownership in South Africa's towns and cities;
- Identifying the main actors influencing urban land transactions and engaging in discussion of the influence that they have; and
- Identifying individuals, institutions or groups that benefit from the current operation of the urban land market and those who do not, providing possible explanations of why this may be the case.

On the basis of the above, the assignment aims to formulate proposals on areas where:

- Urban LandMark can have a meaningful impact on improving the performance of the market for lower income households and individuals; and
- The State can intervene to render urban land markets more equitable and accessible to lower income households.

The research methodology applied was based on a strategic approach and qualitative review of available data sources, rather than a quantitative analysis of data. The reason for this is that it is currently extremely difficult to quantify and determine land ownership and changes to such ownership in South Africa in any meaningful manner, due to a lack of data (see Section 2). The assignment therefore used a documentation review and interviews with fourteen knowledgeable experts and specialists (a list of individuals interviewed is detailed in Annexure A attached) to formulate qualitative findings and to inform high-level strategic recommendations.

In addition to the above, the assignment formulated a methodology for analysing the extent and nature of urban land transactions in South Africa in terms of existing databases (see Annexure B).

This report sets out the findings of the research undertaken, as well as recommendations.

This report includes the following sections:

- Categorisation and quantification of urban land;
- Trends and patterns of land ownership;
- Urban property markets in South Africa ; and
- Recommendations.

2 Categorisation and Quantification of Urban Land

2.1 Definitions

There is no international standard or commonly accepted definition of **urban land.** Definitions used are often based on how and for what purpose the user wants this information[1]. For example, land use planners will focus on land use, sociologists on social indicators, demographers on concentrations of people and civil engineers on service delivery.

This section sets out definitions relating to **quantifying and measuring urban land**. Section 4.1 that follows sets out definitions of urban land as **a commodity and a right**. All of these definitions show that **urban land can be viewed from different perspectives. All of these perspectives are important** towards the quantifying, measuring and understanding of urban land.

Table 1 below sets out different dimensions that could be used to profile urban land.

Table 1: Urban Land Dimensions

Dimensions	Components	Definition
Geographic	Enumerator Area	Enumerator areas are the smallest spatial units of information populated during the census. For Census 2001, EA's covered the full extent of South Africa and amounted to 80 787.
	Sub-place	A sub-place is a geographical area for which census data is released and equates to a suburb, small town and in rural areas a small town with surrounding area. Sub-places are made up of Enumerator Areas.
	Main Place	A main place is geographic, made up of sub-places.
	Municipality	A municipality is a geographic area made up of main places - a town or district having local self government.
Status	Proclaimed	Land that has undergone a formal legal process to convert it from farm land to a land portion for the purposes of development, with identifiable cadastre and title deeds.
	Agricultural	Agricultural land subject to substantial land use and sub-division constraints.
	Tribal	Land owned by or subject to a tribal authority.
Density	Number of people per hectare	500 or 1000 persons per km2 (see below).
Amenity	Access to services, work, retail and recreation facilities, hospitals/clinics etc	Distance to specified facilities/opportunities.[2]
Formality	Formal	Settlement that is formally proclaimed and serviced, and generally developed with formal permanent structures.
	Informal	Settlement that is not proclaimed and is generally developed with informal units and no or limited services.

[1] It is noted that a number of the individuals interviewed [3] felt that the urban/rural distinction of land was not useful. However, for the purposes of this research urban land is defined.

[2] In this regard the existence of social infrastructure such as schools, churches, clinics, community halls, etc. is important indicator. Areas with the same number of housing units but with or without social infrastructure are often viewed differently than areas with those structures.

Ownership	Ownership patterns	State or Private.
	Level of tenure	Freehold, leasehold, use right or no rights.

Statistics South Africa (StatsSA)[3] defines urban land as being occupied by more than 1000 people with a density of 500 people per km². StatsSA further categorises urban land as being formal or informal whereby:

- Urban Formal is a formal settlement that is structured and organized. Land parcels (plots or erven) are clearly defined with formal and permanent structures. Services such as water, electricity and refuse removal are provided, and roads are formally planned and maintained by the council.
- Urban Informal is urban land with mainly informal settlements.

Other definitions differ from that provided by StatsSA in terms of:

- The number of people used to define an urban area;
- Use of population size to define an urban area or town; and
- Measure of population density.

Given the above, for the purposes of this study it is argued that urban land is differentiated by the **number of people living together in a place** and their **access to urban amenities**.

Accordingly**, urban land for the purposes of this research is defined as contiguous sub-places predominantly made up of proclaimed land[4], where there is a reasonably high density of people (more than 500 people per km²) and where they have access to urban amenities and opportunities (schools, hospitals/clinics, services, recreation, work etc)[5].**

2.2 Categorisation of Urban Land

Settlements in South Africa can be categorised into the following six categories[6] :

- Metropolitan areas;
- Secondary cities;
- Large towns;
- Small towns;

[3] Stats SA (2001)

[4] It is noted that due to apartheid there are parts of urban areas that are developed but not proclaimed. These areas are assumed to be part of the urban area.

[5] The reason the definition uses sub-place as opposed to municipality, is that the latter is a way of defining land for administrative purposes, whereas sub-place is a geographic measure used by Stats SA to collect data and can therefore be used as a more precise analytical tool in the future.

[6] There are many different ways to categorise settlements (for example the State of Cities Report 2006 refers to functional urban areas which vary in population size from 25 000 – 3 500 000, the Urban Foundation defined secondary cities as between 50 000 – 500 000. There appears to be no widely consistent or accepted hierarchy in South Africa. Even internationally, there are no specific definitions for different types of settlements across countries. Many countries use a combination of population size and density to define urban areas. In South Africa, the use of a combination of these two key criteria can cause difficulties in trying to categorise what is urban and what is rural, given our racially distorted spatial development pattern. There are many settlements that have urban densities (greater than 1 000 people per square kilometre) but are distinctly rural in character and are therefore not helpful for this study as the focus is on urban land. Hence, the use of the framework that uses population size as the main criterion has been used for this study.

- Rural villages; and
- Agricultural land.

These are defined in Table 2 below.

Table 2: Hierarchy of settlements in South Africa

Type	Hierarchy of settlement[7]	Defining Criteria	Examples
Pre-dominantly urban	Metropolitan Area	Population is greater than 1,000,000 individuals. Has a strong, diverse economic base.	Johannesburg, Cape Town, eThekwini, Tshwane, Ekurhuleni.
	Secondary Cities	Population is between 250,000 and 1,000,000 individuals. Has a strong, diverse economic base.	Nelson Mandela, Emfuleni, Bloemfontein, Buffalo City, Pietermaritzburg, Mogale City.
	Large Towns	Population between 25,000 and 250,000 individuals. Economic base is focused on limited products/services.	Rustenburg, Kimberley, Witbank, Middleburg, Stellenbosch, Sasolburg, Midvaal, Nelspruit, Richards Bay, Ladysmith.
	Small Towns	Population is between 2,000 and 25,000. Economic base is focused on limited products.	Ceres, Underberg, Port Edward, Uppington, Ficksburg, Vryburg, Cullinan, Bethal.
Rural	Rural Villages	Varying population, clustered or dispersed, with few urban amenities and formal economic activities, mostly in former homeland areas.	
	Agricultural Land	Farming areas, non-urban.	

Urban land can be found in each of these categories of settlements (except for agricultural land). However, the extent of it will vary. In addition, urban land within each settlement can be further categorised into different land uses as set out in Table 3 below.

Table 3: Categorize of land use

Land Use	Categorise	Description
Residential	Residential 1	Low density, individual erven
	Residential 2, 3, 4	Medium to High density, including sectional title
Industrial	Industrial 1	Light
	Industrial 2	Heavy including noxious
Office		Business 3 and 4 including medical suites
Retail		Business 1 and 2 – shops and including public garages
Institutional		Churches, social and community halls, including educational and amusement uses

[7] This categorization is based on the draft Urban Development Framework, taken from the State of Cities Report, 2006, Chapter 2, pg 12. It uses population size as the key measure of the type of settlement.

2.3 Quantification of Urban Land

2.3.1 Land Market Data

The nature and value of the urban land component within settlements differs as a result of:

- Land use;
- Nature and volume of transactions that occur on the land;
- Density;
- Quality of the improvements on the land; and
- Location - access to urban amenities.

In order to understand the extent of this, it is further necessary to profile each land use in respect of each settlement category in terms of the following factors:

- Land status - proclaimed, agricultural, tribal;
- Land transactions - value and number of transactions;
- Land ownership - public versus private and income categories;
- Land occupation - public versus private and income categories;
- Land use - residential, industrial, office, retail etc; and
- Improvement - quality.

Therefore, any urban land analysis must take into account urban settlement type, land use, land ownership and transaction status currently and over time, in order to effectively define the current status and emerging trends in that urban area.

There is, however, **no single data source** that can provide all the analytical dimensions on a national scale. Rather, a variety of data exists that provides elements in respect of the desired analysis. A problem, however, is that key transactional data is located at national level but does not provide settlement level data, while key land use data is found at municipal level and varies widely in quality, consistency and availability across local authorities. A consolidated picture that addresses as many of the variables as possible therefore requires the **construction of a consolidated database and a data model**.

Any comprehensive urban land model to be developed will need to address a number of key limitations, including the following:

- The uneven availability of data across the country;
- Varying levels of accuracy, e.g. statutory sources (deeds) versus physical maps;
- Inconsistent spatial boundaries adopted for different data sets;
- Data quantifying property rather than land per se; and
- Demographic data in respect of land/property ownership and/or transactions is unavailable.

2.3.2 Available Data

Summarised below is an overview of currently available data with certain known or potential bearing on the analysis of urban land in South Africa.

It must be emphasised that not all of these data sets could be reviewed and assessed as part of this assignment. Rather, the approach adopted was to assess what potential variables could be identified in each data set and what likely information in respect of urban land processes could be provided. The testing of the relevance of individual data sets, as well as the practicality of developing a land markets assessment database, will require a pilot project.

The following data sets were considered in this assessment:

- Surveyor General;
- Deeds Registry;
- Census Data;
- Community Survey Data;
- Eskom Data;
- Land Suitability;
- State Land;
- Land Cover;
- Valuation Rolls;
- Council Plans.

2.3.2.1 Surveyor General – Cadastre

The Surveyor General (SG), which falls under the Department of Land Affairs (DLA), comprises of three interrelated directorates:

- *Chief Surveyor General:* The Chief Surveyor General's mission is to provide quality services that ensure the integrity of surveyed real rights and to supply, maintain and provide access to spatially-related information for the people of the country. The key legislation that governs the Surveyor General's responsibilities are:
  - Administration of the Land Survey Act (Act 8 of 1997);
  - Regulations Promulgated in terms of Section 10 of the Land Survey Act, 1997 (Act no. 8 of 1997);
  - Administration of the Sectional Titles Act (Act 95 of 1986);
  - Regulations in terms of the Sectional Titles Act 95 of 1986; and
  - Sectional Titles Act, 1986: Amendment of Regulations.

  There are five Surveyor-Generals' offices in South Africa (Pietermaritzburg, Pretoria, Cape Town, Bloemfontein and Nelspruit).

- *The Chief Directorate of Surveys and Mapping:* The Chief Directorate of Surveys and Mapping (CD:S&M) is responsible for the official, definitive, national topographic mapping and control network system of South Africa.

- *Directorate Cadastral Spatial Information and Professional Support:* The mission of the Cadastral Spatial Information Directorate is to ensure the integrity of surveyed real rights

and to supply, maintain and provide access to spatially-related information for the people of the country. The specific functions undertaken include:

- Examining and approving diagrams and general plans prior to their being registered in a Deeds Registry;
- Preserving and keeping up to date all documents and records pertaining to caesural surveys;
- Preparing and keeping up to date cadastral maps and plans, both in paper and digital form; and
- Supplying copies of documents kept in the office in hard copy or digital form. The office also provides, to all who ask, advice and information pertaining to the cadastre.

The fact that the Surveyor-General's office holds complete records of all cadastral surveys ensures that there is virtually no possibility of properties overlapping and, once registered, little chance of conflicting claims to ownership.

That having been said, it must be noted that from the perspective of tracking land markets, neither the SG nor the DLA view the building of a national layer of cadastral boundaries as a priority.

Key Components of the Cadastre

Cadastral surveying is concerned with the survey and demarcation of land for the purpose of defining parcels of land for registration in a land registry. Cadastral surveying in South Africa is undertaken exclusively by or under the control of professional land surveyors[8].

First of all, cadastral surveying is used to define the land to be granted. Later, should the owner then wish to sell off part of that land, the cadastral surveyor is again called in to sub-divide the land. Furthermore, the services of the cadastral surveyor are required whenever a boundary beacon must be found or replaced.

Once the positions of the boundaries have been marked and recorded, the cadastral surveyor and the conveyancer work together to record ownership in a public register. This action ensures that the rights of the owner can be upheld against false claims and that all persons may know who owns what.

The key components of the cadastre are set out below.

- *Rights Over Land:* The basic rights over land are:
  - Ownership: Includes the right to use it to its full potential, dispose of it or sell it, use it as security for a loan and exclude its use by others;
  - Lease: A lease is a contract whereby land is let to or hired by a person other than the owner for a specified period of time. A lease for ten years or more is a "long lease" and must be registered;
  - Servitude: A right vested in one person or deriving some advantage from another's property; and
  - Sub-Surface Rights: The rights to any minerals on a property may be included in the ownership of the property, or may be completely separated from the ownership of the land.

[8] In this report the terms professional land surveyor, land surveyor and cadastral surveyor are synonymous.

- *Survey Records:* When submitting the diagrams and general plans framed from the survey, a land surveyor is obliged also to lodge the records of that survey with the Surveyor-General. These records are used to support the examination process and are then preserved in the Surveyor-General's office. They are now being captured in the document imaging system (DIS) for easier access and to facilitate the supply of information to land surveyors.

- *General Plan:* In the case of the subdivision of a piece of land into a number of pieces, the land surveyor usually prepares a general plan instead of individual diagrams. This is a document showing the relative position of two or more pieces of land together with the same essential information in respect of each piece as is required on a diagram. It is also allocated a unique reference number by the Surveyor-General. It is compulsory to prepare a general plan for any subdivision into ten or more pieces of land and when required in terms of any law, usually for township establishment or the amendment of an existing general plan. General plans may comprise of many sheets and depict a very large number of erven (lots).

- *Diagram:* The diagram is the fundamental registerable document prepared by the land surveyor. The essential information shown on a diagram includes:
  - The unique designation of the property;
  - An illustration depicting the property;
  - The boundary description listing the corner beacons and the details of any curvilinear boundary;
  - Descriptions of the corner beacons;
  - A table listing the numerical data of the boundaries;
  - The area of the property; and
  - A unique reference number given by the Surveyor-General to the diagram.

The Cadastre provides data in respect of overall surveyed land parcels including the number of erven nationally, provincially and within specific municipalities.

However, a number of shortcomings need to be noted in respect of the cadastre:

- The cadastre includes all SG approved land surveyed and not necessarily only proclaimed or developed land. The implication is that the spatial cadastre includes land surveyed but not necessarily developed.

- As the cadastre includes only formally approved land surveyed, it excludes some areas such as the former homelands and tribal land. Examples of these include the former Transkei and Ciskei, and other tribal areas.

- Although the individual surveyed plans include a date stamp, these dates were not transferred to the national spatial dataset. As the approved surveyed plans became available they were simply included in the national spatial dataset, as well as the individual SG offices. Consequently, no historical trend data is available. It is also of concern that at present neither the SG nor DLA has an updated layer of cadastre available.

- The land use or zoning of the land parcels are not recorded in the SG data, and it is therefore not possible to query the data based on land use or zoning. At best it is possible to look at the breakdown of farms, erven, holdings and parks as an indication of formal land.

2.3.2.2 Deeds Registry

In South Africa, the law does not explicitly guarantee title to land and other real rights. The system of registration is based on a juristic foundation as well as long-standing practices and procedures. It is the system of registration that has the effect of "guaranteeing" title. The system's processes of examination and registration, its control and monitoring of standards, its public register and information systems, and its methods of preservation of records, all contribute towards providing security of title in the eyes of the law, financial institutions and the public.

The system is based on the principles of Private Law, accommodating and giving effect to statutory, case and common law in so far as it relates to vested ownership in land and other real rights. To regulate the system, the Deeds Registries Act and the Sectional Titles Act are applied. These Acts form the foundation of land registration in South Africa. The legal certainty provided by a title deed issued under the registration system is of great significance to financial institutions and township developers. It is the basis for the investment of millions of rands per annum in the development of housing for, amongst others, previously disadvantaged sectors of the population.

The Chief Directorate : Deeds Registration (Department of Land Affairs) is charged with the administration of the land registration system, including the registration of rights to land and other matters prescribed by the Deeds Registries Act (Act 47 of 1937), the Sectional Titles Act, (Act 95 of 1986), and other laws relating to land or rights to land. There are nine Deeds Offices in South Africa, situated in Pretoria, Cape Town, Johannesburg, Pietermaritzburg, Bloemfontein, Kimberley, King William's Town, Vryburg and Umtata. They are responsible for the registration of deeds and documents relating to real rights in land in respect of more than 7 million registered land parcels. These parcels represent what is known as "immovable property" and include township erven, farms, agricultural holdings, sectional title units and sectional title exclusive use areas.

The Deeds Registries Act and the Sectional Titles Act provide that deeds and documents be prepared and lodged in the Deeds Registries by a conveyancer or Notary Public. Thereafter these deeds and documents are subjected to three levels of examination by legally qualified personnel who scrutinise the contents for accuracy and compliance with common law, case law and statutory law. These examiners also ensure that appropriate effect is given to any Order of Court, caveat or other interdict recorded by the Deeds Registry and applicable to the transaction.

Contrary to the practice, which prevails in many countries throughout the world, security of title is not guaranteed by law in South Africa. Instead, the system of examination described above, together with the checks and balances which form an integral part of the registration system, provide the holder of a title deed registered in a South African Deeds Registry with an indisputable right which is recognised and respected by the Courts, financial institutions and the public at large.

The deeds registry provides critical information in respect of property transactions (currently available in respect of all proclaimed townships for the last 10 years).

Additionally some limited data in respect of property size (erf size) as well as settlement type (according to local authority name) can be analysed.[9]

There are, however, a number of problems and shortcomings in respect of the township register for the quantification of urban land:

- As the township register includes only formally registered erven, it excludes vast populated areas such as the formal home lands and tribal land. Examples of these include the former Transkei and Ciskei, and tribal areas;
- The land use or zoning of the registered erven are not recorded in the township register, and it is therefore not possible to assemble the data based on land use or zoning;
- The register does not capture any demographic data and consequently cannot be used to analyse any property ownership trends on, for instance, a racial basis; and
- Finally, it must be noted that the deeds registry records property transactions, not land transactions. In order to assess trends in respect of underlying land values some assumptions will need to be developed.

2.3.2.3 Census Data

StatsSA is the national agency tasked with developing and undertaking the national census every five years. The most recent census was conducted in 2001 across some 80,000 enumeration areas (EAs) each containing an average of 150 households.

In essence, the census is a survey of households across South Africa and provides valuable demographic and socio-economic data.

In respect of quantifying urban land, the census provides important historical trend data in respect of three key areas:

- ***Urban/rural households;***
- ***Settlement type; and***
- ***Demographics (race, age, education etc).***

There are, however, a number of critical limitations that must be noted. Firstly, the next Census will only be conducted in 2011 – a ten year gap – which will severely hamper any efforts to develop sound trend data. Secondly, the data for our purposes does not provide any insight into land ownership (actual rights) per se, land use or any transactional information. Furthermore, a critical limitation is that data cannot easily be mapped onto the cadastre and deeds registry (even at the aggregate level).

While the data from the deeds office corresponds with SG spatial boundaries, the Census 2001 data is based on sub-place name boundaries (an aggregate of EAs and currently the only publicly available data set). As there is no direct relationship between the SG and Census boundaries, the lowest common level of analysis is municipal level. The spatial hierarchy of Census boundaries is as follows: EA, small areas, sub-place names, place names, municipalities and provinces. The Census survey data is available spatially on a sub-place name level but again there is no relationship between these boundaries and municipal or SG boundaries. Thus, while it is possible to overlay the cadastre with sub-place boundaries, this is of limited value in respect of providing any trend data for an area.

[9] The deeds office started capturing data electronically in 1993, however it is generally accepted that pre 1997 data is of questionable reliability. Data prior to 1993 is available in paper and microfiche formats.

2.3.2.4 Community Survey Data

The Community Survey (CS) is a large-scale household survey conducted by StatsSA to bridge the gap between censuses. Historically, the census took place at a 5 year interval (1996 and 2001), but this has been extended to a 10 year interval. The purpose of the first Community Survey, conduced in 2007, is to collect information on the trends in demographic and socio-economic data, the extent of poor households, access to facilities and services, and levels of employment/unemployment. This data is being collected in order to assist government and the private sector in planning, evaluation and monitoring of programmes and policies.

For the survey a sample consisting of 17 098 Enumeration Areas (EAs) was drawn from the Census 2001 EA's such that each province has a representative proportion. A sample of ten percent of the listed dwelling units was drawn from the listings of each EA for survey. Questionnaires were administered in each of the selected/sampled dwelling units. Approximately 280 000 households nationwide were sampled.

While the Community Survey will provide some demographics and settlement information, it will be of very limited use in respect of tracking and understanding land trends and markets.

2.3.2.5 Eskom Data

Eskom has a Geographical Information System (GIS) database in Small World that incorporates a variety of information sets.[10] Since the predominant function of Eskom is the generation, distribution and reticulation of power, this is the focus of the information. Data sets that are incorporated include the following:

- Cadastral;
- Transport Networks;
- Environment;
- Town Planning; and
- Electricity Grids (existing and planned).

The data sets are used to support the planning and maintenance of the power system. The unique aspect of this dataset would be Eskom's infrastructure. The coverage of this is limited to the point of connection of Eskom customers. The level of detail that can be accessed varies according to the type of customer. The generic information that could be determined by the customer is:

- Site/position of connection;
- Type of customer; and
- Demand.

This may be useful in determining areas of activity, including growth and stagnation, as well as determining areas that are accessible and that may have infrastructure available to support growth.

[10] Eskom also has a layer of settlements across the country – there is also a similar set of data with DWAF. These are basically maps of human settlements as identified from satellite imagery.

In respect of quantifying urban land, the data may provide some understanding of land use, some demographics and urban/rural information. This will, however, be highly localised.

2.3.2.6 Land Suitability Dataset

The Council for Scientific and Industrial Research (CSIR) has been developing the South African Mesoframe and Geospatial Analysis Platform in order to better understand land use and land cover with a specific interest in supporting investment decisions such as housing development. Internationally, there have been rapid advances with earth observation and geospatial analysis technologies, as well as with the formulation of standard protocols for the exchange and combination of heterogeneous spatial data. However, in South Africa there is a surprising and serious lack of nationally comprehensive and comparable territorial indicators. The core problem is the widely differing analysis units and scales used for different sectors or scientific disciplines.

In essence, the CSIR project therefore involves overlaying a variety of data sets (such as the deeds registry or census population data) on satellite imagery as well as the determination of land use from such imagery. The current initiative financed by the Department of Trade and Industry demarcated South Africa into a grid of more than 25 000 mesozones, each approximately 50 km^2. As part of this application, a methodology was developed to derive indicators of economic activity (per sector), and to assemble demographic and other population census information.

Currently, this dataset comprises of the following:

- Land cover, extracted from satellite imagery and physical verification, utilised to determine broad economic activity and land usage;
- Cadastre (GIS) as the foundation; and
- GVA overlay to provide economic data.

In addition, the dataset utilises a rural/urban split based on the notion of functional urban areas, a notion in turn based on an index provided by StatsSA. Additionally, it considers household income levels and other factors such as density and economic activity.

Overall, this data set could provide a useful source in respect of land usage information, as well as a range of initial overlays in respect of other existing data. However, a key limitation is that this data cannot easily be taken to the individual erf level in order to develop appropriate transactional information.

2.3.2.7 State Land Database

The DLA has an audit of state land, which is essentially land in the former homelands and SGT areas and held by the DPW and DLA. However, this database does not include all individual state-owned land in urban areas and townships. Much of that land has been transferred to municipalities or provinces. In these areas, while much land is identified as state land, it has not all been vested with the various departments or provinces.

The current state land data could provide some insight into total state land holdings (extent) as well as possible urban/rural information. However, the limited nature of the dataset means that it will provide little in respect of a better understanding of urban land markets, although it may well be a component of a larger database.

2.3.2.8 Land Cover Data

The national Department of Environmental Affairs and Tourism (DEAT) manages a range of datasets and mapping tools in respect land cover. The primary focus is on the management of natural resources and environmental considerations such as water catchment areas, soil types etc. In addition, a number of key economic activity areas such as farming (agriculture) as well as mining are covered.

For the purpose of quantifying urban land this could provide some input in respect of understanding land use. The overall high-level (aggregate nature) as well as predominantly satellite image-based mapping is of limited immediate use in developing an analytical tool for urban land markets.

2.3.2.9 Valuation Rolls

Currently, all major municipalities manage a municipal valuation roll, which is utilised to provide rates assessments to both households and businesses within its area of jurisdiction. Typically, these record the erf, the land extent and valuation of the land, and note any improvements and usage. Rates are also typically linked to zoning.

The new Municipal Property Rates Act, 2004, seeks to reform the current system of levying property rates by municipalities and as such introduces fundamental changes to the current system of property rating provided for in the various local Government Ordinances. The Act seeks to enhance certainty, uniformity and simplicity in property rating, and provide local government with a sufficient and buoyant source of revenue to fulfil its development responsibilities and ensure economic and financial viability of municipalities without debilitating the poor. In particular, municipalities are required to do the following:

- Prepare a Rating Policy; and
- Establish a Property Rates Management Information System which should include property imagery, cadastral information, ownership details, land use management and zoning details for every property parcel with the area of jurisdiction.

With respect to developing an analysis model of land markets within municipalities, the valuation roll provides a very important source of data. However, the data will not provide any insight in respect of demographics or transactions. Additionally, it is noted that the development of a sound integrated valuation roll is very uneven across municipalities.

2.3.2.10 Council Plans

The final possible data source considered involves council building plans. By law, all municipalities are required to manage and approve all building plans within their area of jurisdiction. Critically, these plans record zoning rights in respect of each parcel of land. In more sophisticated local authorities, this is tied into the valuation roll and forms the basis of the rates assessment. In most instances, however, land zoning rights are merely recorded.

The potential value of this data is that it provides a means to quantify local land use by specific use (zoning) within a municipality. A considerable limitation, however, is

that little of this information is electronically available (including mostly paper-based plans or microfiche plans), and in many municipalities a comprehensive data set is non-existent.

The IDPs (Integrated Development Plans) and SDFs (Spatial Development Frameworks) could also supply some insight into current and future plans. Additionally, consideration should be given to town planning schemes in each municipality, since these indicate the zoning per area across the municipality.

2.3.2.11 Other Datasets

The datasets briefly reviewed above are by no means exhaustive. It is likely that in the course of further research and interaction with key data service providers, additional data sources will become evident. Some of the other potential data sources identified but not reviewed here include the following:

- Infrastructure plans/maps such as those depicting the national road network;
- Electoral wards data;
- Municipal open space frameworks; and
- The National Housing Department databases and the Housing Atlas (RDP housing and informal areas).

2.3.3 Applicability of Data Sources in Quantifying Urban Land

Indicated in Table 4 below is a summary of the key potential data sources (as detailed in Section 2.3.2 above), specifying the data that may be obtainable from each in respect of developing an urban land analytical tool.

Table 4: Data set overview

Data	Source	Description	Extent	Specific data available							
				Size (area)	Urban/Rural	Settlement	Usage/Cover	Transactions	Demographics	Trend analysis	Key Issues
SG Data	SG	Cadastre	95% of SA	●	◗						Un-surveyed land
Deeds Registry	Registrar	Property transactions	100% of SA	●		◗		●		●	10 year trend available; not land, no demographics
Census Data	StatsSA	Demographics, settlement type by EA	100% of SA		◗	●			●	●	No land
Community Survey Data	StatsSA	Demographics	Sample			●			●		No EA or sub place
Eskom Data	Eskom	Demographics, settlements (select) & infrastructure	National		●		●		●		

Data	Source	Description	Extent	Specific data available							
				Size (area)	Urban/Rural	Settlement	Usage/Cover	Transactions	Demographics	Trend analysis	Key Issues
Land Suitability	CSIR	Land cover (Meso layer), infrastructure, economic activity	National		●	●	●		●		Meso-level 50sqkm
State Land	DLA	All state, SOE & Tribal Land	National	●	●						Only state land
Land Cover	DEAT	Land cover/usage	National	●			●				Mostly high-level satellite imagery based
Valuation Rolls	Municipalities	Property values/use	Local (likely to be limited)	◗		◗	●				Few municipalities
Council Plans	Municipalities	Zoning rights	National				●				Not consolidated
● = Yes; ◗ = Partially											

Evident in the table above is that a number of data sets provide components of understanding in respect of land and property trends and issues. Perhaps most importantly, four data sets are identified as key to the development of any urban land assessment tool. These are SG data, Deeds Registry, Census data and Municipal valuation rolls.

Table 5 below provides an assessment of the data in respect of three key dimensions required to effectively analyse urban land markets, namely settlement hierarchy, land use and status.

Table 5: Potential data to categories and qualify land markets

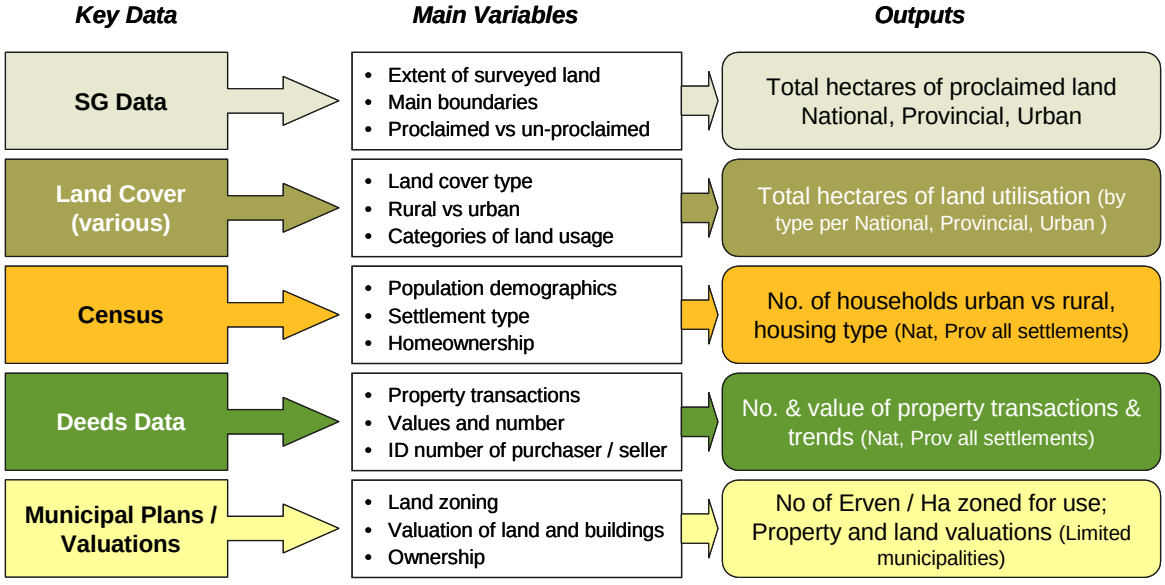
Data	Source	Description	Settlement Hierarchy	Land Use	Status
SG Data	SG	Cadastre	○	○	●
Deeds Registry	Registrar	Property transactions	○	○	●
Census Data	StatsSA	Demographics, settlement type by EA	●	○	○
Community Survey Data	StatsSA	Demographics	○	○	○
Eskom Data	Eskom	Demographics, settlements (select) & infrastructure	○	◗	○
Land Suitability	CSIR	Land cover, infrastructure, economic activity	○	◗	●

Data	Source	Description	Settlement Hierarchy	Land Use	Status
State Land	DLA	All state, SOE & Tribal Land	○	◗	◗
Land Cover	DEAT	Land cover/usage	○	◗	◗
Valuation Rolls	Municipalities	Property values/use	◗	●	●
Council Plans	Municipalities	Zoning rights	○	●	●
○ = No; ◗ = Partially; ● = Yes					

The various data provide partial indicators in respect of categorisation and quantification; however, no single consolidated data set exists. Consequently, a systematic process is required to analyse various data and develop an overall framework that could overlay data sets to provide a more comprehensive picture of urban land in South Africa.

Diagram 1 below provides an overview of the potential data sources, key variables and the possible outputs. A proposed process to develop a more comprehensive data base for urban land is scoped in Annexure B.

Diagram 1: Proposed approach to the development of an urban land database/model

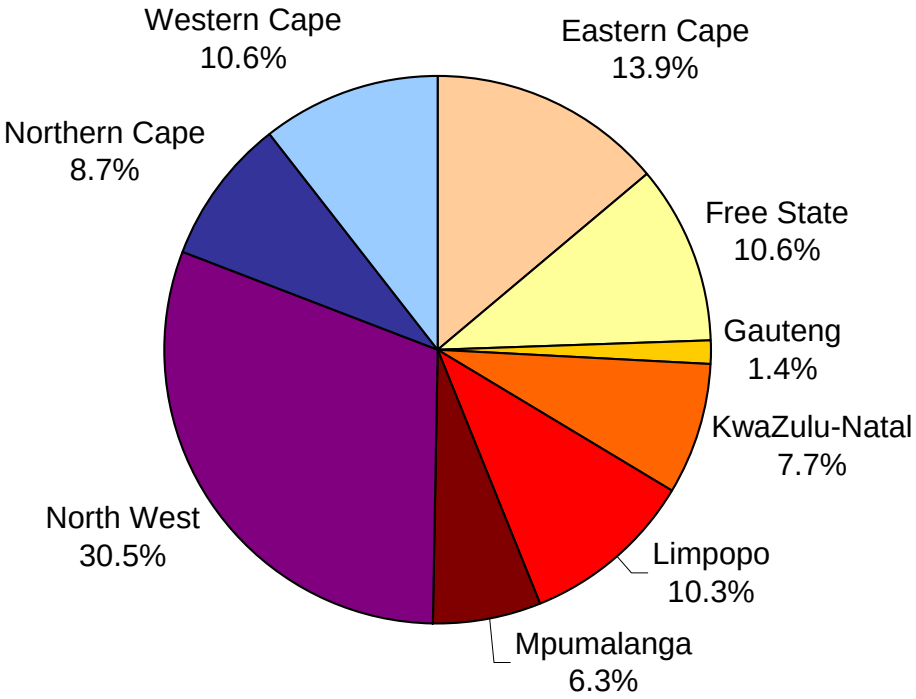


2.4 Land Statistics Based on Available Data

As detailed above, it is currently not possible to quantify the extent of **urban** land in South Africa or to analyse trends in respect of this land. However, during the course of this research, the following interesting facts were determined related to land in South Africa:

- *The amount of land in South Africa is estimated at some 1,220,813 square kilometres,* and there are vast differences in the size of provinces (see Diagram 2 below);

Diagram 2: Provincial land sizes



- According to the Surveyor General, the total extent of surveyed land (which excludes some portions of former homeland areas) is 59,985,312 hectares;
- *The number of people living in the provinces varies considerably,* and the variation between size and number of people also results in huge differences in population density and the province's slice of South Africa's economy;
- *There are approximately 6,107,227 erven in South Africa*, and the number of erven also varies considerably between provinces; and
- *State land comprises some 23,401,744 hectares. This is estimated to be 19,3% of the total land* in the country. This includes land held by national and provincial governments, national and provincial parks, nature reserves and other protected areas and land held by Water Affairs and Forestry and the South African Defence Force.

More details on the above information and other information identified or extracted as part of this research are provided in a separate data report. This report provides information on the following:

- Land statistics (land area, population, population density, economy);
- Cadastre (total land holdings, total farm portions and total erven);
- Deed registry data;
- Data from the Department of Land Affairs;
- Census and household survey data;
- Urbanisation and population trends; and
- Land price data.

2.5 Conclusions

On the basis of the research undertaken, the following is concluded with respect to the categorisation and quantification of urban land:

- **There is no international standard or commonly accepted definition of urban land**. Urban land for the purposes of this research is defined as contiguous sub-places predominantly made up of proclaimed land, where there is a reasonably high density of people (more than 500 people per km²) and where they have access to urban amenities and opportunities (schools, hospitals/clinics, services, recreation, work etc).

- **Settlements in South Africa can be categorised into six categories** namely: metropolitan areas, secondary cities, large towns, small towns, rural villages and agricultural land. All are predominantly urban with the exception of rural villages and agricultural land. Urban land within each settlement can be further categorised into different land uses, namely: residential, industrial, office, retail and institutional.

- **An urban land market analysis must take into account urban settlement type, land use, land ownership and transaction status and trends** in order to effectively define the current status and emerging trends in that urban area.

- **There is, however, no single data source that provides all the analytical dimensions of urban land on a national scale**. Rather, a variety of data exists that provides elements in respect of the desired analysis. A consolidated picture that addresses as many of the variables as possible will require the construction of a database and model.

- **A number of data sets were reviewed** as part of the research including:
  - Surveyor General;
  - Deeds Registry;
  - Census Data;
  - Community Survey Data;
  - Eskom Data;
  - Land Suitability Dataset;
  - State Land Database;
  - Land Cover Data;
  - Valuation Rolls; and
  - Council Plans;

- **All of the above data sets provide some data, but none provide a comprehensive data set.** Key transactional data is located at national level but does not provide settlement level data. Key land use data is available at municipal level but varies widely in quality, consistency and availability. Any comprehensive database/model developed will need to address a number of key limitations including the following:
  - The uneven availability of data across the country;
  - Varying levels of accuracy, for example statutory sources (deeds) versus physical maps;
  - Inconsistent spatial boundaries adopted for different data sets;
  - Key data, which quantified property rather than land per se; and
  - Demographic data in respect of land/property ownership and or transaction is unavailable.

- **A systematic process is required to analyse various data and develop an overall framework** that could overlay data sets to provide a more comprehensive picture of land in South Africa. The process should use five data sets which provide the best information, namely: Surveyor General Data, Land Cover, Census, Deeds Data and Municipal

Plans/Valuations. A terms of reference setting out a proposed process is set out in Annexure B.

This section sets out the basis by which urban land can be categorised and quantified. It does not, however, actually quantify urban land, as in order to do this an urban land model needs to be developed. A terms of reference for model is provided (**Annexure B**). In section 3.0 that follows, Census data is used to analyse ownership trends. Other data identified and extracted as part of this research are provided in a separate report. This data has not been analysed, but some interesting facts are noted in Section 2.4 above.

3 Trends and Patterns of Land Ownership

3.1 History of Urban Land Ownership in South Africa[11]

Urban land ownership patterns in South Africa have become entrenched over the last century. These patterns were taken to new levels of segregation during the apartheid era. The history of the apartheid city is one of active dispossession and prevention of ownership of land for black people, sustained through a variety of systems over many decades. The fundamental elements of segregation and dispossession had already been put in place in South African urban areas during Colonial (pre 1910) and post-Colonial (1910-1948) times through the native reserve system of the early colonial towns, the 1913 Land Act (which prevented African people from owning land outside the Native Reserves of the time) and the Native (Urban Areas) Act of 1923. The Group Areas Act of 1950, introduced by the apartheid government, extended the concept to other parts of life and entrenched it spatially.

The Bantustan system enacted in 1954 resulted in most new African housing being built in "homeland" areas, often around "decentralised growth points" where tax and other incentives tried to stimulate the formation of centres for production and employment creation. Under the apartheid system, only some African people were given rights to stay in cities, and all were linked to a "homeland" area, which was meant to be a permanent, rural home. Some of the homelands were given quasi-independent status. The pass laws restricted the movement of African individuals, denying them access to areas outside of the homeland areas. During the early part of the apartheid era, many people were forcefully removed from existing formal and informal settlements. Within three decades this affected more than a million African people in urban areas and many settlements were destroyed in the process.

By the beginning of the 1970's, the almost complete separation of races had been organised within cities. African people had been forcefully removed to townships on the periphery where tenure was at best public rental, or to demarcated Bantustans or homeland areas. However, growing population pressure coupled with the State's refusal to build more housing within the cities for Africans, saw the beginning of the phenomenal growth of informal settlements on the homeland borders that were located near the major cities. This phenomenon was to become increasingly more severe over time, especially around urban Black township areas, and especially when the pass laws were removed thereby allowing Africans the ability to migrate freely into urban areas.

In the face of this growth, during the 1980's the State gradually realised the need to plan for movement to the cities and introduced policies aimed at promoting "orderly urbanisation". In the late 1980's and early 1990's low levels of low cost housing for Africans were developed (around 30,000 units per annum) again in township areas on the periphery of cities. During

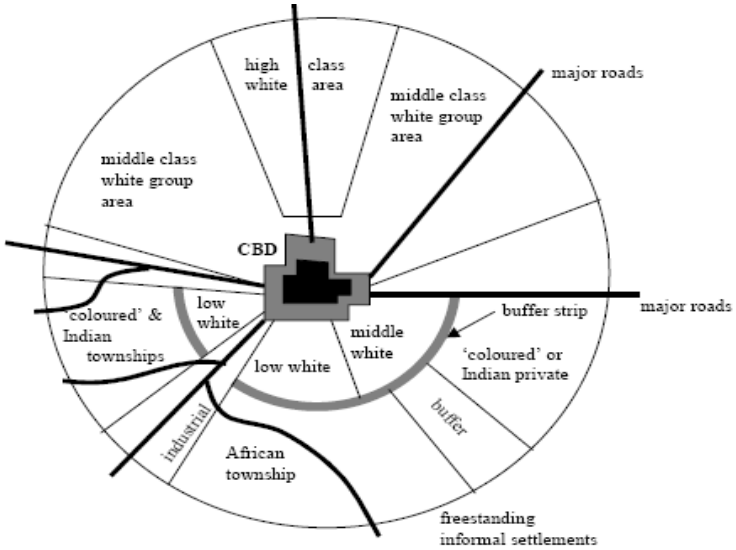
[11] This section adapted from Mark Napier (2007)

this period Africans were allowed ownership rights in urban areas for the first time since the advent of apartheid, through a new tenure form called 99 year leasehold.

Segregation and particularly apartheid distorted the urban land market in South African cities (see Diagram 2) in the following ways:

- The State denied ownership of land in most cities and towns to African people. Africans were allowed limited access to land and only on a rental basis, and from the 1970's onwards illegally through occupation of informal settlements.
- By limiting access to adequate education and economic opportunities, the income earning capacity of Africans (and to a lesser extent Coloureds and Indians) was limited, resulting in high poverty and unemployment levels for these racial groups.
- By dividing the city into group areas each with their own administration systems, the inherited land holding and land management systems became confused with competing arrangements and regulations. The highest degree of formal regulation (although not necessarily regulatory compliance) was in formal white areas and the lowest was in African townships and informal settlements, with effectively no formal regulation. The reduced levels of regulation impacted negatively on property prices in the affected areas.
- There was a higher investment in infrastructure in "White" areas and much lower levels of investment in "African", "Coloured" and "Indian" areas. The lower levels of infrastructure impacted negatively on property prices in the affected areas.
- Apartheid led to inefficient, inverted density patterns, with population densities in the outer part of the city much higher than in the "White" central neighbourhoods (see Diagram 3 below). This pattern perversely concentrates the city's population far from its employment centre[12] and led to a heavy reliance on transport systems. This led to a system of transport subsidies, which were required to underpin the system. These subsidies continue to this day, and in some cities cost double the housing budget.

Diagram 3: The Apartheid City



After R.J. Davies, "The spatial formation of the South African city", *GeoJournal* (Supplementary Issue 2, 1981).

[12] Jan K Brueckner (2007)

The distortions of the apartheid city resulted in the following general characteristics of cities in South Africa:

- The *separation of households* on the basis of race, income and in some instances culture.
- *Upmarket, formal residential areas* being owned and occupied by middle to upper income households who are largely "White".
- *Degraded formal residential areas* occupied by lower income households who are largely "Black". Some of the households own the properties in which they reside. Others rent the properties in a variety of different ways. There are often high levels of overcrowding.
- *Informal settlements* occupied by very low-income households who are largely "Black". These settlements are often located on the periphery of urban areas.
- *Upmarket, formal industrial and retail areas* predominantly owned by upper income individuals (the majority of whom are "White") or large corporates (predominantly owned by "White" shareholders).
- *Degraded formal industrial and retail areas* occupied by middle-income individuals and small and medium enterprises. Such individuals and enterprises will either own or rent the property they occupy.
- *Informal traders* who occupy land (usually illegally) to undertake light to medium industrial or retail activities. These traders particularly those in the retail sector often operate at a subsistence level.
- *High concentrations of ownership* of residential, retail, office and industrial properties by large insurance companies and property funds.

The **South African Government has, since 1994, been committed to reversing the trends of apartheid and the impact of the apartheid system on cities and the lives of individuals**. A number of significant programmes and policies have been implemented to this end, including the following:

- Building a million houses in its first term through the provision of a housing grant -the National Subsidy Programme - for low-income earners;
- The removal of apartheid legislation;
- A land reform programme that seeks to address land restitution, land redistribution and tenure reform whereby people disposed of land during apartheid can make a claim on the land;
- A range of policies and programmes aimed at stimulating the economy and creating a social net for the poor; and
- Policy statements and documents focused on shifting patterns of property ownership so as to change spatial patterns and densities of residential areas (e.g. the Breaking New Ground Housing Policy).

3.2 Urban Land Policy in South Africa

Despite Government's intent to reverse the trends of apartheid and the impact of the apartheid system on cities and the lives of individuals, there is currently no clear urban land policy for South Africa.

The Urban Development Strategy (1995) and Urban Development Framework (1997) set out government policies relating to urban development in the country. While dated now, they

remain government's position on urban strategy, until such time as the new revision is completed. This is expected by mid-2007. Drafts are not available to the public at present.

The Urban Development Strategy (UDS) sets out government's urban vision and seven strategic goals. It then spells out government's perspective on urban realties and provides key strategies to address these realities. The UDS proposes that urban settlements can be categorised into 4 different sizes, namely:

- Large metropolitan areas over 2 million people;
- Large cities between 500 000 and 2 000 000 people;
- Intermediate or medium-sized cities between 100 000 and 500 000 people; and
- Small cities and towns with populations of less than 100 000.

The UDS notes that there is nothing out of the ordinary (by international standards and norms) with the current structure/hierarchy of our settlements that would suggest specific interventions to artificially induce or restrain grown in any level. Interestingly, the UDS does draw some distinctions in the different levels of settlement above, by indicating that:

- Metropolitan areas are engines of growth in a region.
- Medium-sized cities tend to be dependent on a narrow, often natural resource-based, sectoral economic base and are therefore vulnerable to economic change; and
- Small cities and towns rely on an agrarian economy, which can be very unstable, or cannot absorb the impact of land reform.

The UDS also points to differences within urban areas, no matter what level they are at in the hierarchy. They single out the following:

- Well-maintained, well-serviced low-density suburban neighbourhoods in former "White" areas;
- Low-income neighbourhoods comprising townships and informal settlements where there is a lack of formal retail facilities and amenities;
- Metropolitan city centres which straddle the above urban worlds and are often in decline; and
- Smaller urban centres, which are more polarised spatially than other settlements, between former "White" and township areas.

In terms of trends, the UDS identifies the following:

- A shift from mono-centric cities to poly-centric cities provides more opportunities for work;
- Metropolitan and large cities are growing more rapidly and growing bigger;
- There is a spatial spread of cities to almost regional size (metro areas), often exacerbating spatial inequalities in access to jobs and amenities (urban sprawl); and
- Smaller cities and towns exhibit similar pressures, but the form of the cities (mono-centric usually) exacerbates poor access to industrial areas/retail as growth is often outside the central areas.

The strategic interventions proposed in the UDS are not specifically targeted at land markets. Essentially, the Development Facilitation Act is seen as a way to fast-track the release of land into the market and a new planning system is proposed to promote integrated development planning. Infrastructure investment is seen as a way to improve spatial inefficiencies, but is generally targeted at basic services. The housing subsidy programme is seen as the way to address access to housing and secure tenure (and tenure options). In essence, the solutions could broadly be seen as market-based.

Urban Development Framework (UDF) is an update of the UDS and is government's policy framework for urban development. The emphasis is more on implementing the vision and no new tools are introduced. However, there is a new recognition of land reform, as well as promoting land markets and protecting property rights.

3.3 Key Trends in Land Ownership Patterns in South Africa

Over the last ten years there have been shifts in land ownership patterns and the structure of the apartheid city**, some of which has been positive and others negative. This section sets out the most significant of these.**

3.3.1 Urbanisation

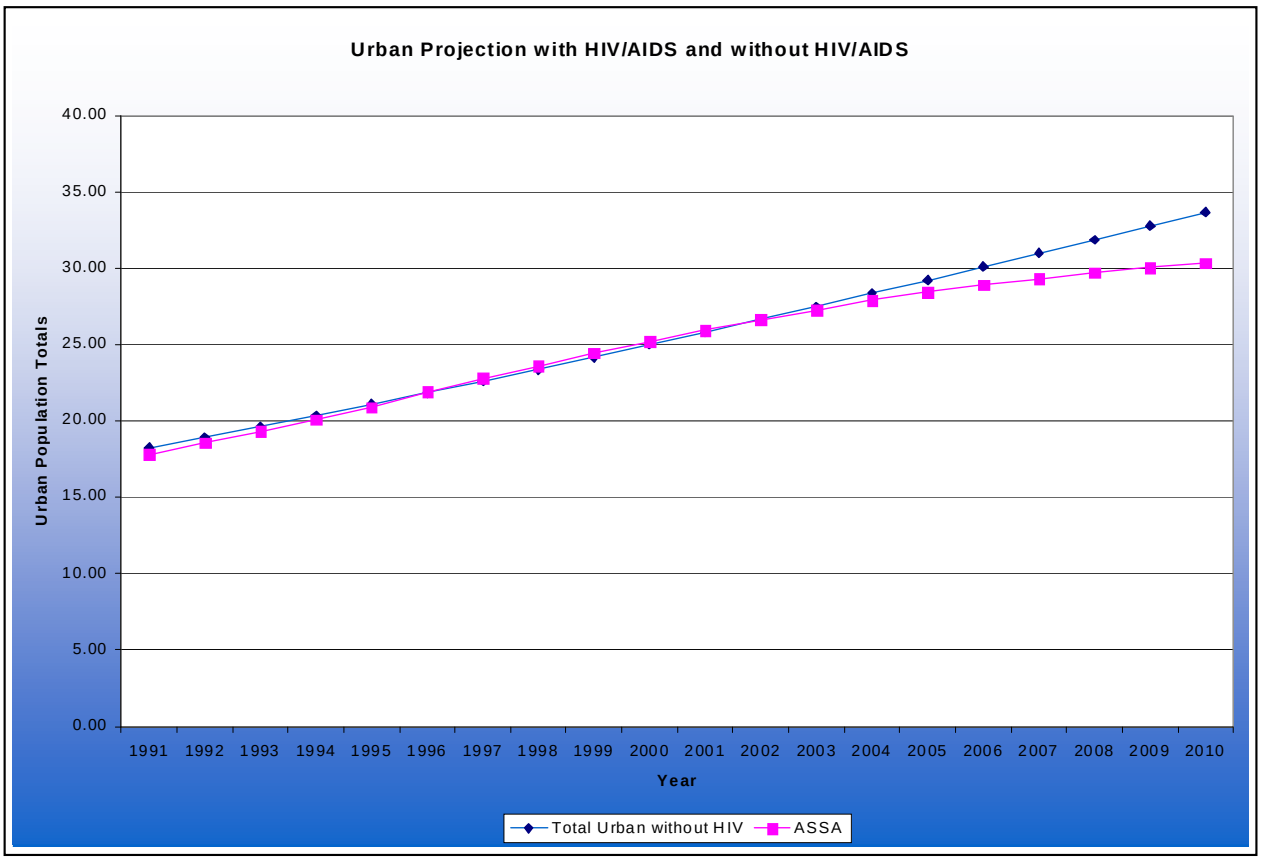
At the time of the last Census in 2001, **more than half** (57%) of South Africa's population were **living in urban areas**. The urban population comprised a total of **25 million people**. This is the result of a steady increase in urbanisation that commenced at the start of the 19th century and has increased in momentum over time. Most significantly, since 1991, the number of people living in urban areas exceeded the number living in rural areas[13].

This urbanisation trend is expected to increase. Taking into account existing historical trends, assumptions for future growth and the impact of HIV/AIDS, South Africa's urban population is expected to increase to 30 million by 2010 (see Diagram 4 below)[14]. This is in line with international trends.

Many people living in urban areas are poor[15]. In 2004, in the nine largest cities of South Africa (SA Cities Network), 27% of individuals were unemployed. In addition, of all people living in the 21 largest cities and towns of South Africa, 25% (5,8 million) live below the Minimum Living Level[16].

[13] National Department of Housing (2006)
[14] National Department of Housing (2006)
[15] Statistics quoted from South African Cities Network, 2006
[16] The Minimum Living Level (MLL) is the minimum financial amount that a household needs to maintain an acceptable living standard, which is above the Poverty Line. Sufficient quantities of relevant expenditure items based on minimum health standards are allowed for when calculating the MLL, but rational expenditure on them is assumed. The MLL is measured in monetary value.

Diagram 4: Projection of urbanisation between 2005 and 2010



3.3.2 Land Ownership Patterns

The number of households owning their own property increased significantly from 3,9 million households in 2005 to 5,62 households in 2002. This is an increase of 44%. This was largely a consequence of the roll-out of the National Housing Subsidy programme (see table 1 below)[17]. However, the ability of many of these households to generate wealth from such ownership has been limited. For example, a study by FinMark (2003) found that the extent of residential property secondary market in Black Townships, both overall and in terms of sub-markets like that of the subsidised housing market, is extremely limited with very few formal transactions occurring. The study found that there are **significant constraints in the process of transferring property** including, for example:

- There is a **lack of legal title** due in some cases to the informality of settlements and in others to the fact that township registers have not been opened in many areas;
- There are **delays in transferring first generation title** to deemed owners, mainly as a result of delays in valuing township properties and opening municipal accounts;
- There are **difficulties in obtaining municipal clearance certificates**, often because of significant arrears that accrued in respect of the payment for municipal rates and services, as a result of past payment boycotts;
- The **provision prohibiting the sale of property** having had the benefit of a government housing subsidy as specified in the Housing Act, 1997, fundamentally undermines the sale of housing in the Incremental sub-market;
- There are a **lack of service providers** including estate agents and conveyancers operating in “Black” townships; and

[17] All statistics quoted in this section relating to Table 1 from FinMark (2003)

- The **affordability of transaction costs is problematic** for low-income households, particularly when they are not able to access end user finance.

As shown in Table 6, there has been **an increase in the number of female headed households and a reduction in the size of households**. This is particularly significant in respect of female headed households who own their own home. This may indicate that more women have been able, required or compelled to set up households. Economic strategies and the effect of AIDS related deaths may play a role here. It has also been suggested that the roll-out of the National Housing Programme may have actually split households, so that while part of the household lives in the new state subsidised house, the rest continues to live where they were, so as to access work, schooling etc.

Between 1995 and 2002, **the number of households living in informal settlements increased dramatically** from 424,000 to 945,000 (an increase of 123%). This was largely due to the pace of urbanisation outstripping formal housing delivery.

Table 6: Ownership patterns of residential accommodation: 1995 -2002

TOTAL ACCOMMODATION	Owned	Formal rental	Informal rental	Informal	Total
1995					
Number of households	3900000	3200000	773000	424000	8297000
% of female heads	29	24	29	31	
No of h/h members (mean)	4.4	3.8	4.1	4.2	
2002					
Number of households	5626000	3194000	874000	945000	10639000
% of female heads	39	30	33	34	
No of h/h members (mean)	4.3	2.6	2.5	3.3	
Change in number of h/hs	44.3%	-0.2%	13.1%	122.9%	28.2%
Change in % of female heads	34.5%	25.0%	13.8%	9.7%	
Change in no of h/h members	-2.3%	-31.6%	-39.0%	-21.4%	

There is increasing evidence that suggests that **urban land ownership in the formal urban property market is changing to incorporate an African middle class**. Viruly suggests that broker estimates are that 20% to 30% of all property sales are to black households. In addition Reg Rumney (not dated) believes that racial ownership patterns did change after 1994, with some suburbs becoming quite mixed. However, the creation of an African middle-class, able to afford to leave the townships, did not happen overnight. He draws on data from Research Worldwide.com that attributes the 22.7% year-on-year increase in house prices to the emergence of a rapidly growing black middle class. The ABSA residential property market database for South Africa suggests that a black middle-class has sustained demand for properties in former “Whites-only” residential areas.

Inner cities have seen a significant change in ownership and occupation. However, due to the fact that urban management and development has not accommodated this shift, this has occurred within a context where these areas have also experienced significant degradation.

3.3.3 Urban Nodes

As cities expand and grow with an ever-increasing population, **areas that were once on the periphery are now becoming more centralised.** In addition, many large cities are seeing new nodes developing, for example Sandton in Johannesburg. Some areas that were once

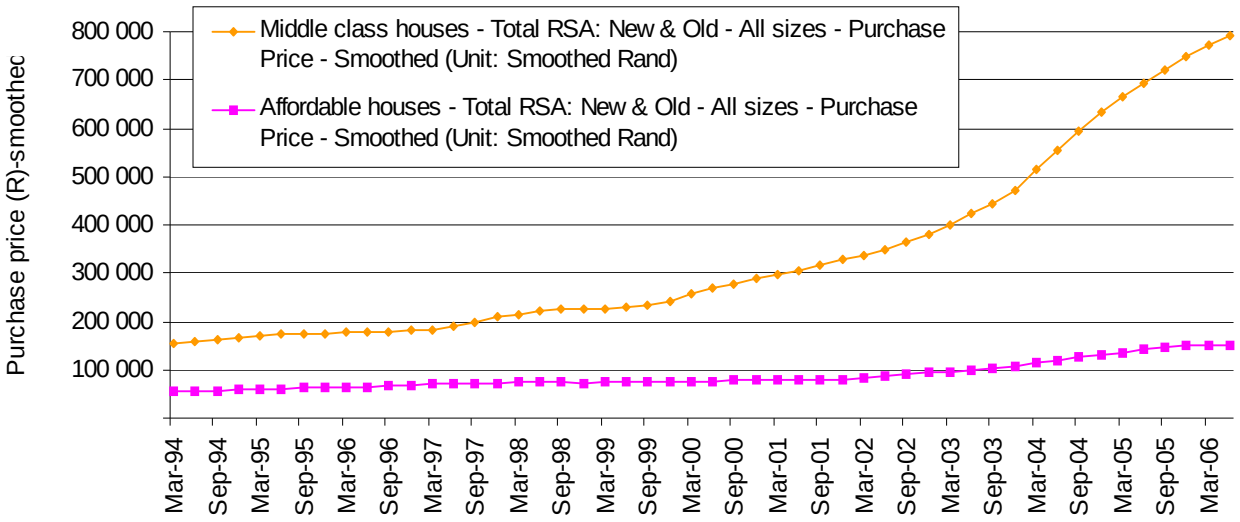
marginalized, for example Mamelodi and Soweto, now find themselves with greater access to urban amenities.

3.3.4 Property Prices

In the last few years South Africa's residential property market has seen **significant increases in property prices**. However, **these increases have not been distributed across all properties** with upper-market properties seeing greater increases than others. For example, on the residential resale market property prices at the upper end have doubled (and in some cases trebled) in as few as five years.

However, property price increases in what ABSA has classified as the "affordable" housing market – that is, houses between 40m² and 79m² – have been much more gradual, only increasing with any level of significance from the first quarter of 2005. This suggests a widening gap between the affordable housing market and the 80m² to 400m² housing market[18]. This indicates increasing difficulty to move from one segment to the next (see Diagram 5).

Diagram 5: Property prices March 1994 to 2006



3.3.5 Private Sector Participation in the Property Market

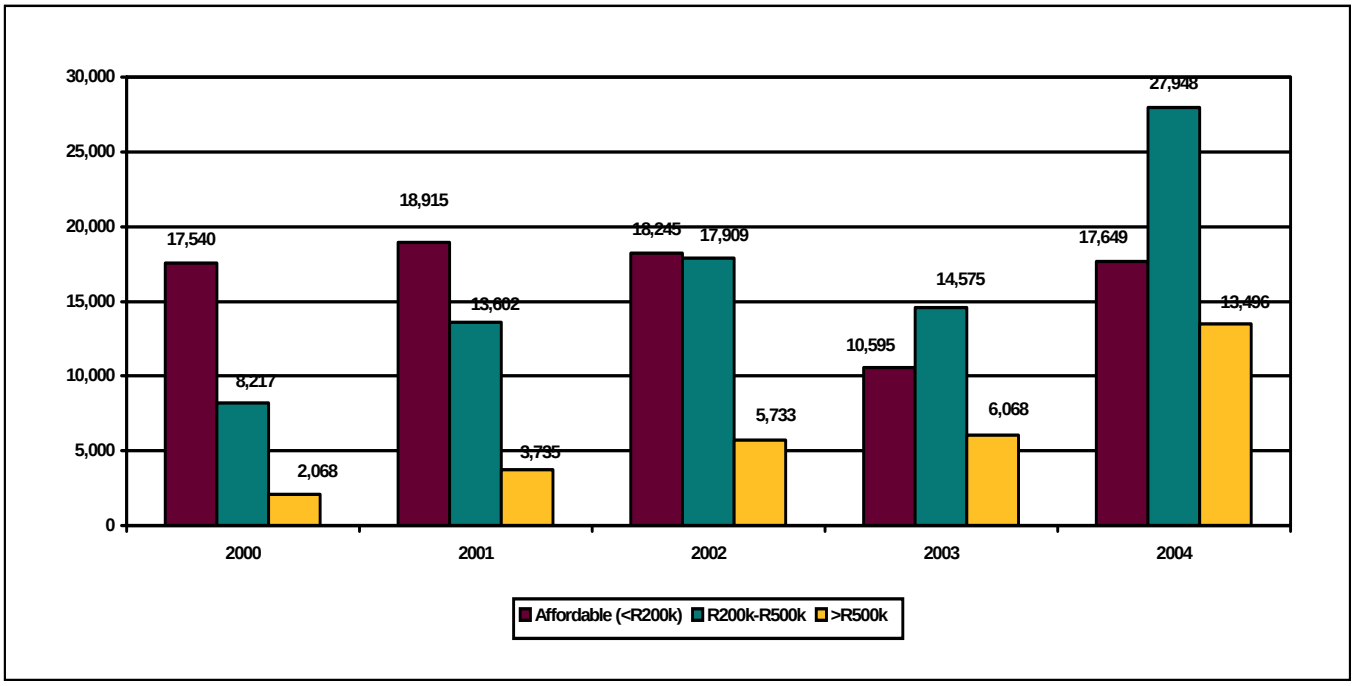
Private sector home builders are migrating out of the affordable housing market in favour of higher priced units. An analysis of data from the National Home Builders Registration Council (NHBRC) indicates that the private sector delivered a total of 196,206 houses between 2000 and 2004, with an overall increase in the total number of housing units being delivered from 28 000 in 2000 to 59 000 in 2004 (see Diagram 6)[19].

The affordable housing markets share (<R200k) over this period was 42,25% or 82,944 units. However, the proportion of affordable housing delivery has declined from 63% of total delivery in 2000 to 29% in 2004, even though actual unit numbers have remained almost constant at about 17,500 units annually. The decline in delivery is more significant for

[18] Banking Association of South Africa (2005)
[19] It should be noted that the inclusion of RDP units, while legally prescribed, is not consistent across the Provinces. However it is likely that a portion of the R50k and below units [only 637 delivered in 2004] are RDP units

housing units below R100 000, with a 40% decline in housing products in this category and below. The most dramatic growth in both numbers as well as overall delivery ratios has occurred in the R200k plus and especially the R500k plus segments. Between 2000 and 2004 delivery in the R500k plus category increased fivefold.

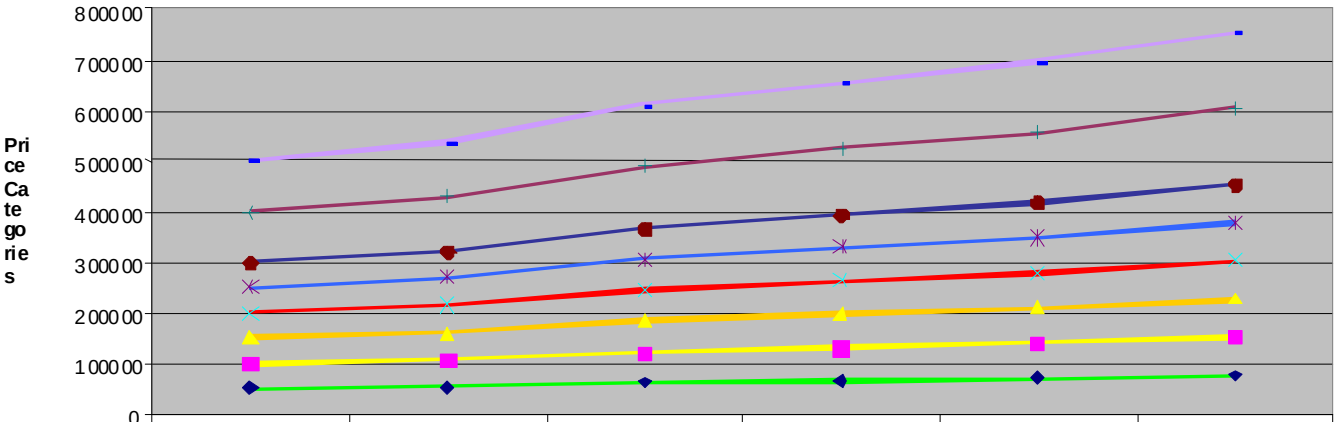
Diagram 6: NHBRC Enrolments: 2000-2004



The reason for this is partly the gradual increase in property prices as detailed above, but is also due to the following factors:

- **Limited access to well located and reasonably priced land** due to the fact that neither public nor private sector land is being shaped in favour of the affordable housing sector.
- **Increasing time delays and high risk** resulting from delays in obtaining clearance certificates from local authorities, delays in the registration of title and mortgages in Deeds Offices, and changing lending criteria being applied by the banks.
- **Price increases reducing product affordability** due to the fact that building and construction inflation is increasing more rapidly than average income increments**.** Over the period 2000 to 2005, building and construction inflation increased prices by just over 50% (see Diagram 7). This trend has accelerated over the last year.
- The increasing house prices detailed above, together with highly inflated stand prices due to land costs, shortages and municipal contributions, are **eroding value for money for housing products in the affordable housing sector when compared to a subsidised house**. This results in distorting demand and the willingness to invest, as many consumers are reluctant to pay a significantly higher price for only a slightly better product than that which they may be able to get for free.

Diagram 7: Construction cost inflation impact on house prices



	2000	2001	2002	2003	2004	2005 proj
50 000	50 000	53708	61079	65725	69646	75662
100000	100000	107417	122158	131450	139292	151325
150000	150000	161125	183238	197175	208938	226987
200000	200000	214833	244317	262900	278583	302650
250000	250000	268542	305396	328625	348229	378312
300000	300000	322250	366475	394350	417875	453975
400000	400000	429667	488633	525800	557167	605300
500000	500000	537083	610792	657250	696458	756625

3.4 Conclusion: Trends and Patterns of Land Ownership

- **Urban land ownership patterns in South Africa have become entrenched** over the last century and were taken to new levels of segregation during the apartheid era.
- **Segregation, and particularly apartheid, distorted the urban land market** in South African cities through:
  - Denying ownership of land to African people. This, together with inadequate education and economic opportunities, resulted in high poverty and unemployment for this racial group; and
  - Dividing the city into group areas with different administration systems and infrastructure investments, whereby some areas ("White") had high levels of formal regulation and investment in infrastructure and others (African townships) had low levels. Reduced levels of regulation and investment impacted negatively on property prices in the affected areas.
- Apartheid led to an **inefficient inverted density pattern** that concentrates the city's population far from employment centres and leads to a heavy reliance on transport systems.
- **The distortions of the apartheid city** result in:
  - The separation of households on the basis of race, income and in some instances culture;
  - Upmarket formal residential areas that are occupied by "White" households;
  - Degraded formal residential areas occupied by largely "Black" households; and
  - Informal settlements occupied by very low-income households.

- **The South African Government has since 1994 been committed to reversing the trends of apartheid and its impact on cities and the lives of individuals**. A number of significant programmes and policies have been implemented to this end.
- Despite Government's intention to reverse the trends of apartheid and its impact on cities and the lives of individuals, **there is currently no clear urban land policy for South Africa.**
- **Over the last ten years there have been shifts in land ownership patterns and the structure of the apartheid city**, some of which have been positive and others negative. The most significant of these are as follows:
  - In 2001, *more than half (57%) of South Africa's population were living in urban areas*, comprising 25 million people. This is the result of a trend that commenced at the start of the 19th century and is *expected to continue* with South Africa's urban population increasing to 30 million people by 2010.
  - Many people living in urban areas *are poor*.
  - The number of households owning their own property *increased significantly* from 3,9 million households in 1995 to 5,62 households in 2002. However, the ability of many of these households *to generate wealth from such ownership has been limited*, largely due to significant constraints in the process of transferring property.
  - There has been an *increase in the number of female headed households* and a *reduction in the size of households*, believed to be due to economic strategies, the effect of Aids and the roll out of the National Housing Programme.
  - The number of households living in *informal settlements has increased dramatically* from 424,000 (1995) to 945,000 (2002), an increase of 123%
  - There is increasing evidence that urban land ownership in the formal urban property market is changing to *incorporate an African middle class*.
  - Inner cities have seen a *significant change in ownership and occupation*, although this has occurred within a context where these areas have also experienced significant degradation.
  - As cities expand, areas that were once on the periphery are now becoming more *centralised*.
  - Many areas are seeing *new nodes* developing, for example Sandton in Johannesburg.
  - There have been significant *increases in property prices* over the last ten years. However, these have not been distributed across all properties with those in the "affordable" market increasing more gradually. This suggests a *widening gap* between the affordable housing market and the middle- to upper-income market, making it more difficult to move from one segment to the next.
  - Private sector home builders are *migrating out of the affordable housing market* in favour of higher priced units.

4 Urban Land Markets in South Africa

4.1 Definitions

This section sets out a definition of land in the context of urban land markets. In this regard, land is defined in two ways: firstly, as a commodity that is traded; and secondly, as a right

that is used to obtain access to urban amenities. Both are important components of urban land.

4.1.1 Land as a Commodity

Land is considered to be a "commodity" when it can be **bought and sold freely (i.e. exchanged for money)**. The basis on which land becomes a commodity is influenced by a range of economic and political factors. Jude Wallace and Ian Williamson (July 2004) describe five stages whereby people move from being land occupiers to participants in complex land markets (see Diagram 8). During this process, land changes from being a simple resource to a commodity. Each stage must be developed before the next is possible.

- **Preliminary Stage 1 - Land:** Land is a simple resource occupied by groups of people on the basis of social and personal relationships.

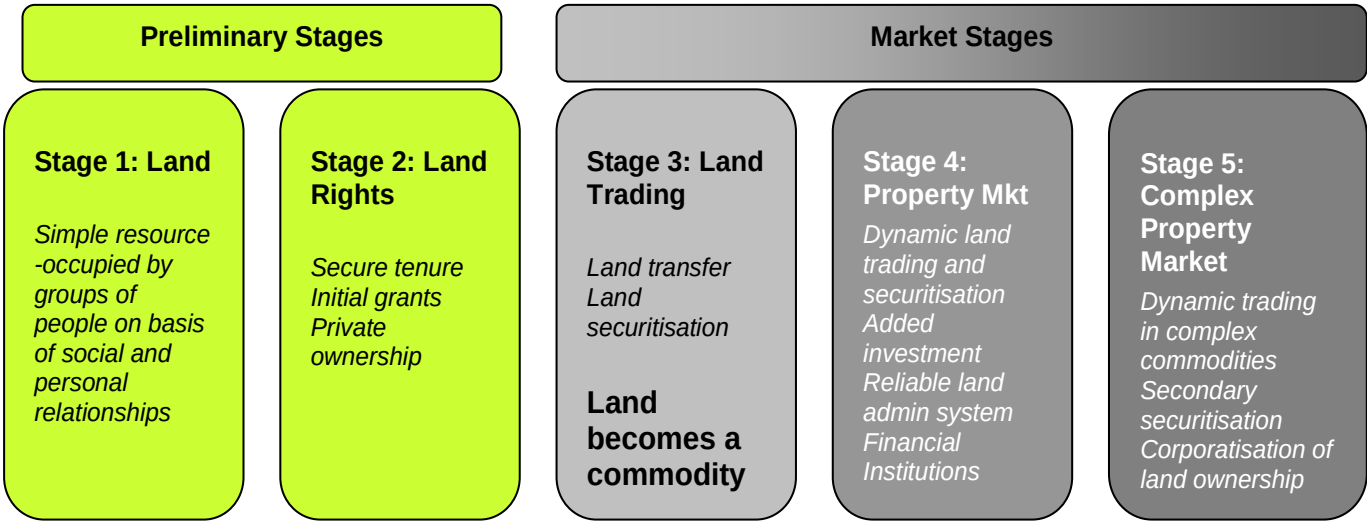
- **Preliminary Stage 2 - Land Rights:** The organisation of land is formalised whereby access and use are regulated through the setting up of administrative and legal systems. This includes clear forms of land tenure and a formal registration system, as well as management of this.

- **Stage 3 - Land Trading:** This involves the **commodification** of land, and happens when the social recognition of land is transformed from land as a physical thing to abstract concepts of rights and powers in relation to land-based activities. This is fundamental to developing a market. The trading of land is the common vision of a land market, but the presence of support systems to achieve this is what defines when a market exists. Formal documents that record these transactions are necessary as the market grows.

- **Stage 4 - Property Market:** Here the move is from occasional land trading to a property market. The scale is fundamentally larger and mass transactions develop among strangers. Importantly, there is dynamism through creating derivative interests (land owners can reduce their activities but take profit from land used by others) and using land as security for capital loans (securitisation). To do this one needs technical and social tools such as describing land accurately, defining rights, dispute adjudication, zoning restrictions, processes to collect revenue and information management.

- **Stage 5 - A Complex Property Market:** This stage involves developing highly specialised commercial facilities, in addition to everything up to stage 4. The complex commodities derived from land include the following: securitisation (complex financial instruments), corporatisation (allows companies to trade) and separation (of ownership and management capacities from profit and benefit).

Diagram 8: Stages of urban land markets



4.1.2 Land as a Right

In many societies, and particularly in South Africa with its legacy of apartheid, land is an emotional issue. It is not just seen as a commodity as defined above but as a historical and social right to which all members of society should have access, whether they are rich or poor. This concept is encapsulated in South Africa's Constitution, which includes the right of access to land. As indicated in clause 25(5) of the Constitution of the Republic of South Africa, *"The state must take reasonable legislative and other measures, within its available resources, to foster conditions which enable citizens to gain access to land on an equitable basis".* [20]

The right to land is seen as part of a national poverty alleviation strategy, whereby providing land to poor households is viewed as a means by which the poor can escape poverty in the medium-term, thereby relieving the welfare strain on both the state and cities. [21]

Urban land, as a right, can be defined as having three characteristics or dimensions:

- **Access:** whereby land provides access to amenities and opportunities in the urban area by virtue of its location within the urban form;
- **Tenure:** whereby access is provided to ownership of the land; and
- **Quality:** referring to the quality of the improvements on the land.

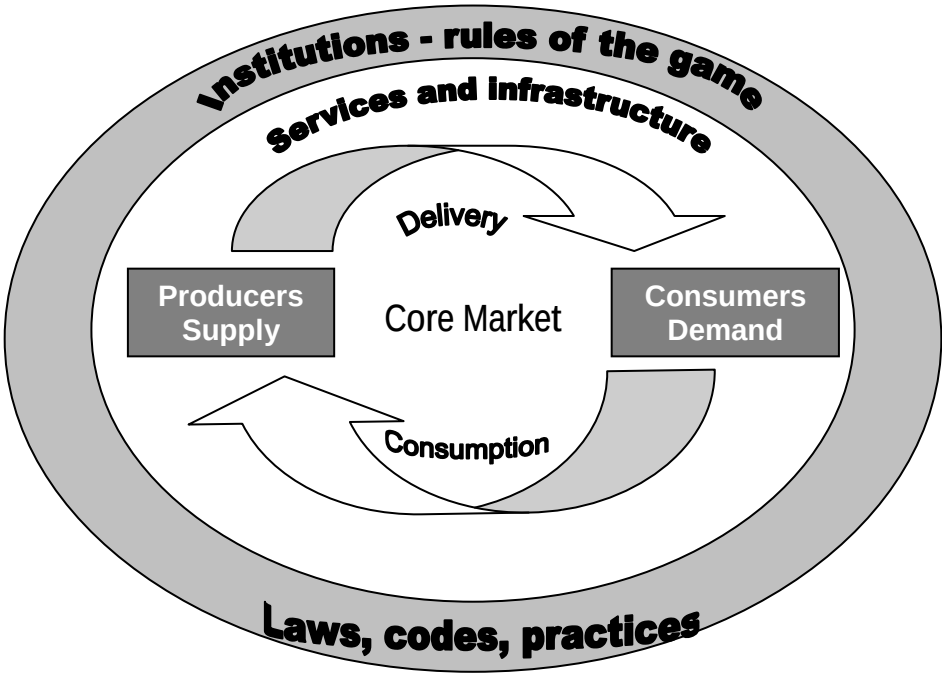
Households will attempt to maximise all three dimensions. The extent to which households are able to do this is a reflection of their wealth and contributes to their socio-economic development and sustainability in an urban context. Lower income households will generally maximise access as their first priority.

[20] Republic of South Africa, 1996
[21] S Charlton, 2006

4.2 Characteristics of Urban Property Markets

Markets provide for the exchange of goods and services between buyers and sellers. An important feature in all markets is their voluntary nature; neither buyers nor sellers are forced to sell or buy. Each decides whether to buy or sell based on the actual prices they would pay or receive. Urban land markets also follow this general pattern.[22] A typical market has four components as detailed in Diagram 9 below[23].

Diagram 9: Components of a typical market



As detailed in the diagram above, the components of a typical market are as follows:

- **Consumers:** Demand is driven by consumers who wish to buy products and have the means to do so. Consumers are likely to have differing levels of income and hence willingness to pay. In a well functioning market, all those who are able to afford to pay the minimum cost for an acceptable product are serviced by producers. In thin or distorted markets, only the needs of the better-off are met.
- **Producers:** The demands of consumers are met by producers who supply products to the market.
- **Services and infrastructure:** The core market is supported by infrastructure and services that provide the physical requirements of a market, as well as services to market players and regulators. Infrastructure and services include communications, transport, finance etc. The provision of infrastructure and services are critical to a functioning market.
- **Institutional context:** These are the rules and organisations that govern and regulate the market. The institutional environment must be inclusive and capable of picking up feedback and signals from diverse market players. It must balance interests by

[22] David E Dowall (May 1993).
[23] DFID compiled by Alan Johnson (February 2005).

negotiating change and facilitating agreement. And it must be able to implement solutions.

4.3 Urban Land Markets in South Africa

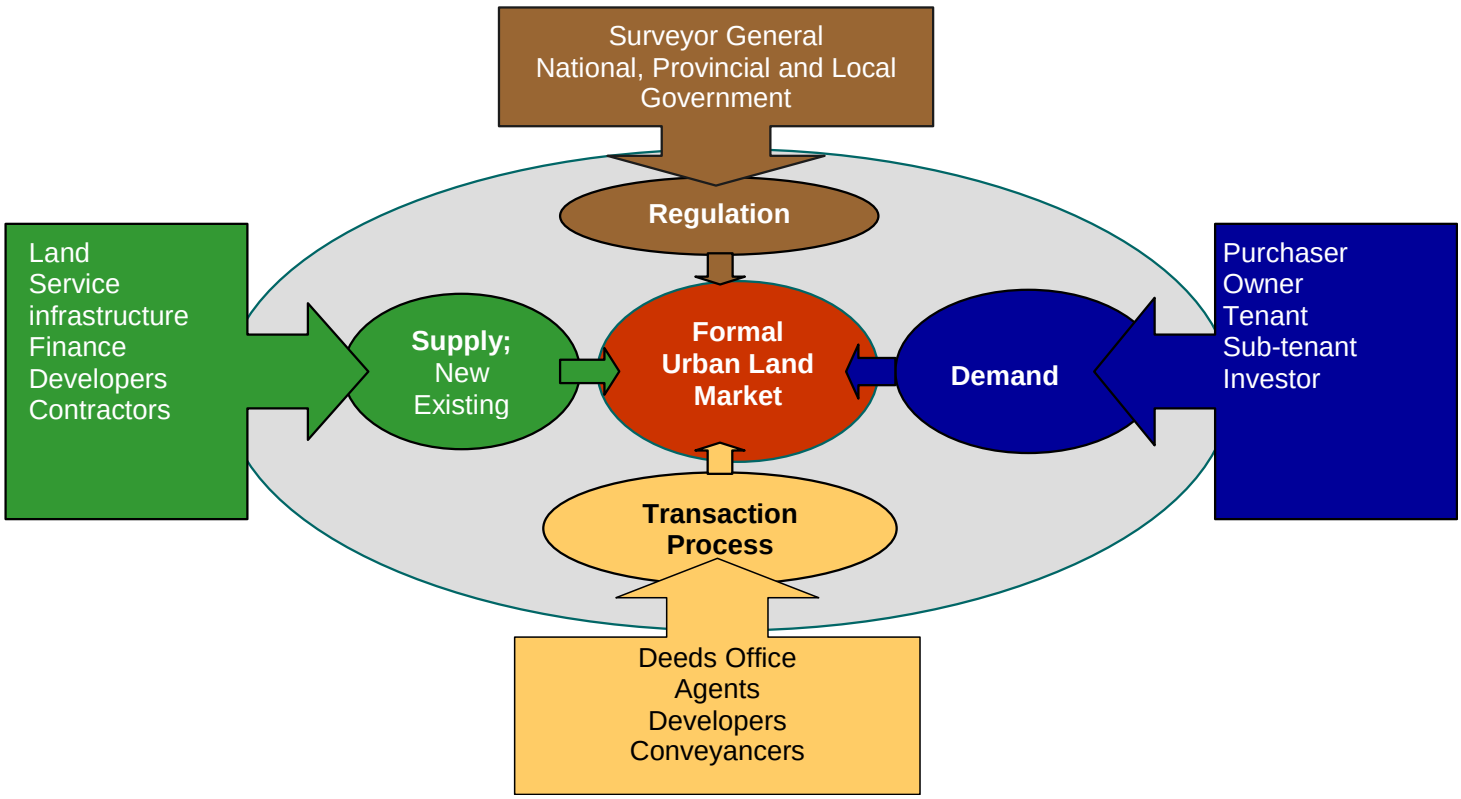
Markets operate on many levels, from the informal to the highly formalised. Market failures in the formal property market stimulate the size and extent of the informal market. In developing countries there are substantial failures in the formal market, which result in a pronounced informal market. This has occurred in South Africa and has been reinforced by the apartheid legacy, which resulted in economic, spatial and social distortions.

In South Africa there are many different urban land markets[24] including, for example, those that occur within settlements areas and around different land uses. These can be both formal and informal. The analysis that follows focuses generally on obtaining an understanding of formal and informal urban land markets, including their structure and relationship.

4.3.1 The Formal Land Market

Diagram 10 below provides an overview of the formal land market in South Africa.

Diagram 10: Formal Urban Land Market



[24] Urban Land markets refers to markets where both land and property are traded.

Table 7 sets out the key actors that operate in the Formal Land Market in terms of the different land uses that have been defined (residential, industrial, office and retail).

Table 7: Key actors that operate in the Formal Land Market

Actor	Residential	Industrial	Office	Retail
Supplier	Land owner, developer/ Contractor	Land owner Developer	Land owner Developer	Land owner Developer
Consumer	Upper and middle-income households and individuals	Small, Medium and large corporates	Small, Medium and large corporates	Small, Medium and large corporates
Transaction agent	Estate agents/ convayancer	Estate agents/ convayancer	Estate agents/ convayancer	Estate agents/ convayancer
Regulator	Register of Deeds Municipality	Register of Deeds Municipality	Register of Deeds Municipality	Register of Deeds Municipality

The extent to which any of these actors benefit from the operation of the urban land market will depend upon the investment decisions that they make within the context of their operating environment.

What is significant about the Formal Land Market is that, generally, low-income households are not able to enter and transact in the market. The reasons for this are wide ranging (see section 4.3.3 that follows) but the most important factor is that they do not have sufficient income or access to finance and therefore the market does not supply them with products.

The key influencing factor in respect of land prices and consequently access by the poor is the scarcity of suitable land - that is, land that is serviced and well located with respect to economic opportunity and urban amenities. Additionally, it should be recognised that zoning, i.e. rights, have a direct bearing on the value and price of land.

To address concerns in respect of access by poorer households, government has intervened in the market through the National Housing Subsidy Programme, Urban Development Zones and Urban Renewal Projects. All of these interventions have improved access to urban amenities for a limited number of poor households, but have not improved their use of urban land as a commodity or given low-income households greater access to the market. The benefits and failures of each of these interventions are outlined in Table 8 below.

Table 8: Government interventions into the Formal Urban Land Market: Benefits and Failures

Intervention	Description	Benefits	Failures
National Housing Subsidy Programme	This programme was introduced in 1994 and comprises a housing subsidy for households earning below R3,500 per month. The subsidy is a supply-focused intervention whereby funds are provided to Municipalities via the Provinces for the undertaking of housing developments, the units of which are then allocated to beneficiaries.	Over two million households have received a housing unit.	Due to the high cost of building and of well located land, the vast majority of houses are located on the urban periphery limiting access to urban amenities and opportunities. Households who have received a subsidised house are restricted from selling their houses. This significantly undermines the private sector urban land market as households are unwilling

Intervention	Description	Benefits	Failures
			to purchase a unit which they could get for free.
Urban Development Zones	Introduced in 2004 to encourage investment in designed urban areas through the provision of tax rebates.	Has encouraged investment in designated areas, thereby improving access to urban amenities and opportunities.	Limited to designated areas and profitable, tax-paying entities.
Urban Renewal Projects	Project-based initiative introduced in 1994 to upgrade designated areas.	Some ownership opportunities are offered and, depending on location, this could improve access to urban amenities and opportunities. Access to services and infrastructure in designated areas is improved.	Limited to designated areas.

4.3.2 The Informal Urban Land Market

Diagram 11 below provides an overview of the informal land market in South Africa.

Diagram 11: Informal Land Market

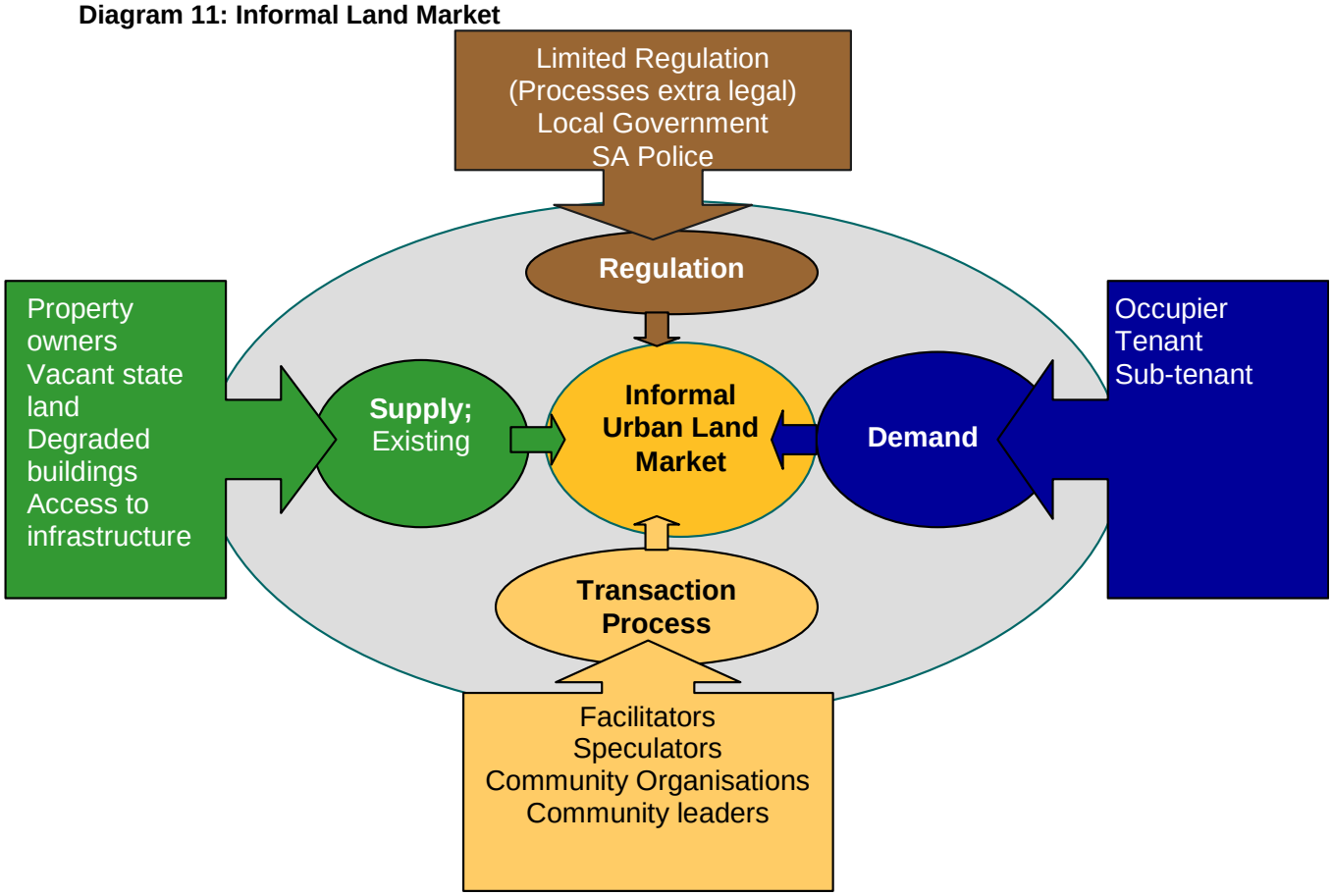


Table 9 sets out the key actors that operate in the market in terms of the different land uses that have been defined (residential, industrial, office and retail).

Table 9: Key actors in the Informal Land Market

Actor	Residential	Industrial	Office	Retail
Supplier	Property Owner Facilitator	Property Owner Facilitator	Property Owner Facilitator	Property Owner Facilitator
Consumer	Low-income households/ individuals	Low-income individuals Micro enterprises	Low-income individuals Micro enterprises	Low-income individuals Micro enterprises
Transaction agent	Facilitators, speculators, community organisations, community leaders	Facilitators, speculators	Facilitators, speculators	Facilitators, speculators
Regulator	Local Govt, SA Police	Local Govt, SA Police	Local Govt, SA Police	Local Govt, SA Police

The extent to which any of these actors benefit from the operation of the urban land market will, as in the case of the formal market, depend upon the investment decisions that they make within the context of their operating environment. Government intervenes in the market so as to formalise its activities. As in the case of the formal market, these interventions have both benefits and failings. These are detailed in Table 10 below.

Table 10: Government interventions into the Informal Urban Land Market: Benefits and Failures

Intervention	Description	Benefits	Failures
Upgrading of informal settlements	Projects undertaken by Provinces and Municipalities that upgrade informal settlements *in situ*.	Households generally receive ownership tenure and upgraded infrastructure and housing.	Limited number of successful projects undertaken.
Provision of SME industrial parks and informal trader markets	Projects undertaken by Provinces and Municipalities that move informal traders into formal retail and industrial facilities.	Traders operate in better quality accommodation.	Often results in higher operating costs and not necessarily linked to markets. Therefore it does not improve traders' economic circumstances.

4.3.3 Comparative Analysis of Formal and Informal Land Markets in South Africa

Table 11 below sets out a comparative analysis of formal and informal land markets in South Africa in terms of their functionality, efficiency and outcomes whereby:

- Effectiveness details how effectively the market functions;
- Efficiency details the costs and distortions or failures of the market; and
- Outcome details the social costs that result from market failure.

Each of these is outlined in terms of the following factors that impact upon the operations of urban land markets: [25]

[25] Finmark Trust (2003).

- *Sufficient supply of land and/or properties*: This is the process of bringing a sufficient supply of serviced, identifiable, registerable properties (either vacant or with improvements) onto the market for sale that are affordable to meet demand.

- *Ease of performing transactions:* This is the process which allows for the acquisition, servicing, development and transfer of properties.

- *Market access and participation:* There are few barriers to enter and exit the market, allowing suppliers and buyers to come and go easily.

- *Thickness:* The number of sellers, buyers and transactions. The more transactions, the greater the chance that prices will reflect the economic value of the good.

- *Good information:* Buyers and sellers have good information about the market, how it works and the products it offers.

- *Sufficient supply of finance:* This comprises finance to enable buyers to purchase the land and/or properties.

Table 11: Comparative analysis of Formal and Informal Property Markets

Factors	Formal Property Market			Informal Property Market		
	Effectiveness	**Efficiency**	**Outcomes**	**Effectiveness**	**Efficiency**	**Outcomes**
Supply of land/properties	• Generally sufficient land/properties supplied for middle to upper income sectors in respect of all land uses.	• Insufficient supply for low-income households in respect of all land uses.	• Middle to upper income households able to access affordable land/properties. • Low-income households "locked" out & forced to transact informally or to live/operate in poor conditions.	• Land/properties supplied, often well located, providing affordable access to urban amenities.	• Formal Security of tenure generally lacking. • Often poor quality improvements provided.	• Low-income households able to access affordable land and/or generally well located properties. • Quality of improvements poor (overcrowding, informal) resulting in ill health & social problems.
Ease of performing transactions	• Property rights and processes well defined. • Market underpinned by sound cadastre and deeds registry process. • Clearly defined development & property rights.	• Market highly regulated-often inappropriate. • High transaction costs. • Lack of Local Govt capacity- delays and high risks. • Poor enforcement of zoning rights-investor uncertainty. • Significant land controlled through customary/tribal authority. • Formality increases land/housing costs. • PIE undermines statutory property rights.	• Large proportion of households have no formal property rights. • Rural/peri-urban populations are subject to customary rights (impacting particularly on women). • Significant informal property market. • Creates space for extra-legal land use/occupation. • Negatively impacts on delivery of low-income housing.	• No formal property rights. • Processes informal but low in cost.	• Poor households are unable to utilise property as collateral or generate wealth (assets). • Poor households effectively excluded from any property market-related (Ownership or derived) benefits.	• High degree of informal settlements. • Property functions as a social/use-value asset. • Location, i.e. access to opportunities and amenities is primary. • Impacts on market thickness (fewer transactions). • Reduced levels of household investment in housing.

Factors	Formal Property Market			Informal Property Market		
	Effectiveness	**Efficiency**	**Outcomes**	**Effectiveness**	**Efficiency**	**Outcomes**
Market Access & Participation	• Access is defined by wealth and access to finance. • Entry and exit to the market unrestricted. • No formal government restrictions on property ownership. • Restrictions on subsidized housing. • Restrictions on land restitution claims.	• Limited affordability for a significant proportion of households – result in them being excluded from the market. • Land restitution processes limit entry and exit. • High concentrations of land and property ownership (esp. government). • Limited serviced land available - government is single largest landowner.	• Poor households cannot access affordable, well located land. • Participation is restricted to households and firms with access to capital. • Government has a disproportionate impact on the market through its control of land as well as rights and servicing. • Informal/illegal trading of government subsidized housing products resulting in limited asset realization and distortion of property values.	• Informal market is effective in respect of providing some access to land for poor households.	• Significant transaction/social costs such as squatting, extra-legal enforcement and corruption.	• Access is through informal networks and extra-legal means. • Poorer households are vulnerable to eviction as well as criminal activity.
Thickness	• In most sectors (office, retail, industrial, upper and middle-income residential) market is “thick” with many buyers and sellers.	• Low-income residential market is “thin” – limited buyers (lack of affordability) and limited sellers resulting in insufficient supply.	• Thin low-income property, markets reinforces property as social asset and limits household investment. • Low-income households are unable to realize property value.	• Thick market with many buyers and sellers.	• Thickness is a consequence of failure in the formal property market.	• Organized land and building invasions. • Informal settlements. • Relatively high transaction and rental costs (e.g. inner city – high demand for limited space). • Slum lords and shack farming.

Factors	Formal Property Market			Informal Property Market		
	Effectiveness	**Efficiency**	**Outcomes**	**Effectiveness**	**Efficiency**	**Outcomes**
Information	• In most sectors (office, retail, industrial, upper and middle-income residential) good information is available. • Formal market is effective in responding to market signals.	• Extremely limited information available in low-income housing market. • Government land and housing policy significantly distorts signalling and pricing at low end of market.	• Middle and upper income buyers have sufficient information to make investment decisions. • Lower income buyers not able to transact in the market effectively.	• Word of mouth and networks used to identify and access opportunities.	• Extremely limited information available.	• Buyers not able to make informed investment decisions.
Access to finance	• In most sectors (office, retail, industrial, upper and middle-income residential) finance is available.	• Extremely limited finance available in low-income housing market.	• Poor households reliant on savings and/or cash to access property – reliant on rental or informal settlements.	• No formal property finance available.	• Reliant on informal finance. • Poor households must limit housing investment – stimulates informal settlements.	• Buyers limited in terms of the quality of land/properties they can access.

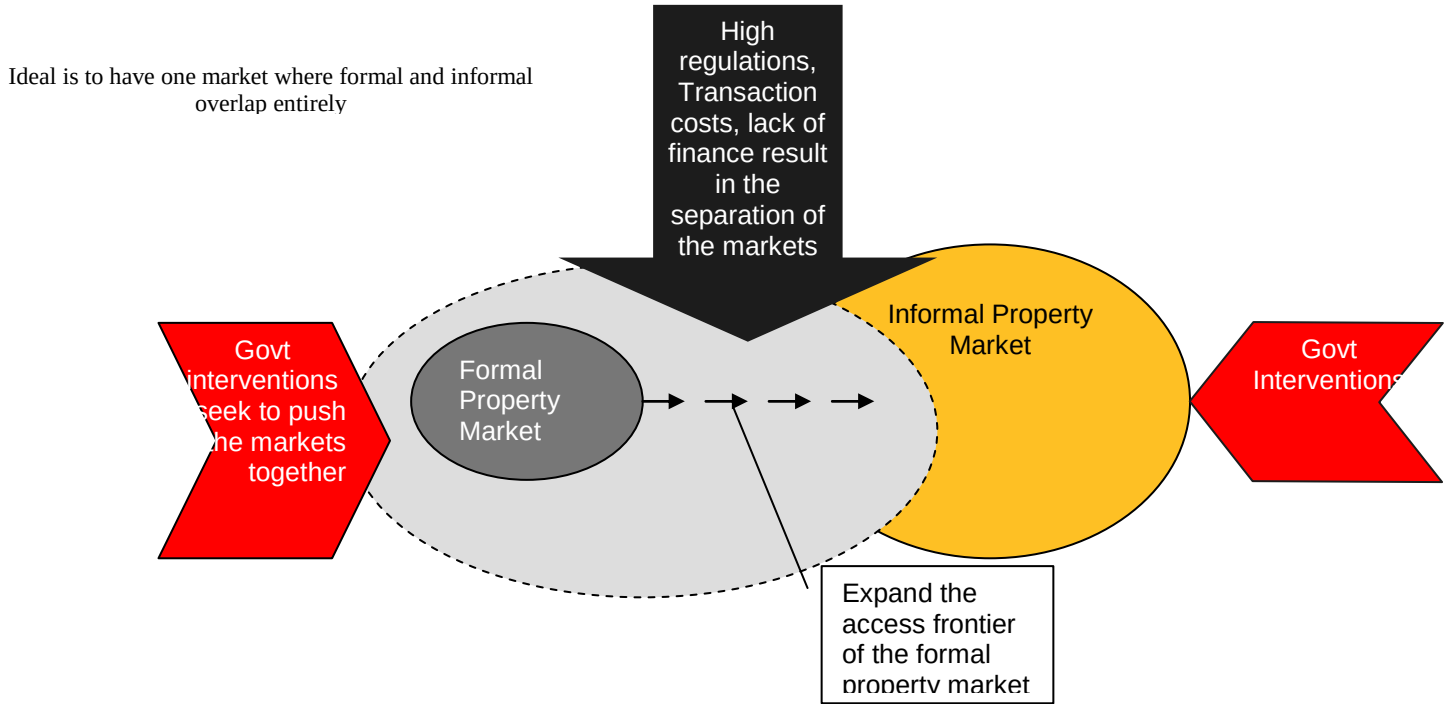
As detailed in the table above, the formal urban land market in South Africa is generally a complex property market (see Diagram 8, 4.1.1 above), where the **primary focus is the accumulation of assets**. The informal land market in South Africa is generally a land trading market without formal land rights, where the **primary focus is use**.

These markets operate side by side with the informal land market, being a direct result of the failure of the formal land market to provide for low-income households/emerging businesses. Formal urban land markets favour those with the resources who can afford to compete for land and with resources to invest in land. Low-income households and emerging businesses are accommodated as supplementary participants (if at all), as tenants, sub-tenants and users of facilities and amenities. As a result, they are pushed into the informal market. Generally, the quality of facilities available to low-income households and emerging businesses in this process is of a lower standard. High levels of regulation, high transaction costs and lack of access to finance increase the separation of the formal and informal markets.

While the informal market provides access for low-income households **it is desirable to expand the access frontier of the formal property market to include as many low-income households as possible**. The reason for this is that, while the informal market provides access to urban amenities, it fails in allowing low-income households to generate wealth. Unless such households are able to own and trade their land assets within a legal framework that protects their rights, their ability to generate wealth is undermined.

Accordingly, interventions in the land market should therefore focus on reducing the polarisation between the two markets and on increasing symbiosis by addressing mechanisms through which low-income households can participate in the formal market, as well as increasing the formality of the informal property market. The latter must be done in a manner that does not squeeze the very poor out of the informal market (see Diagram 12). The ideal is to have one market where formal and informal overlap substantially.

Diagram 12: Relationship between the formal and informal land markets



4.4 Conclusions

- **Urban land can be defined as a commodity that is traded or as a right that is used to obtain access to urban amenities.** Both are important components of urban land.
  - Land is considered to be a commodity when it is bought and sold freely.
  - Land is considered to be a right to which all members of society should have access whether they are rich or poor.
- Markets provide for the exchange of goods and services between buyers and sellers. **A typical market has four components,** namely, **consumers** who wish to buy products, **producers** who supply products, **service and infrastructure** that allows for the interaction of buyers and sellers and an **institutional context** which comprises the rules and institutions that govern and regulate this interaction.
- **Markets operate on many levels from the informal to the highly formalised.** Market failures in the formal property market stimulate the size and extent of the informal market.
- **The formal land market comprises the following actors**:
  - Suppliers: Developers, Land Owners and Contractors.
  - Consumers: Upper and middle-income households and individuals.
  - Transaction agents: Estate agents and conveyancers.
  - Regulators: Register of Deeds and Municipalities.

  The primary focus of the formal property market is the accumulation of assets. The extent to which any of the actors benefit from the operation of the market, depends upon the investment decisions that they make within the context of their operating environment. **Generally, low-income households are not able to enter and transact in the market due to the fact that it favours those with the resources to compete for land and with resources to invest in land.** Government has intervened in the market to increase access by low-income households through a range of interventions that have both benefits and failures.
- **The informal land market comprises the following actors**:
  - Suppliers: Property owners and facilitators.
  - Consumers: Low-income households and individuals.
  - Transaction agents: Facilitators, speculators, community organisations & leaders.
  - Regulators: Local Government and the police.

  The primary focus of the informal property market is use. The extent to which any of the actors benefit from the operation of the market depends upon the investment decisions that they make within the context of their operating environment. Government intervenes in the market so as to formalise its activities. Such interventions have both benefits and failures.
- **The formal and informal markets operate side by side**. While Government interventions seek to push the markets closer together, high regulations and transaction costs and a lack of access to finance increase the separation of the markets.
- While the informal market provides access for low-income households, **it is desirable to expand the access frontier of the formal land market to include as many low-income households as possible.** The reason for this is that the formal land market allows low-income households to generate wealth.
- Accordingly, **interventions** in the land market **should focus on reducing the polarisation** between the two markets and increasing symbiosis. This should be done by increasing the basis by which low-income households can participate in the formal

market and increasing the formality of the informal property market. The ideal is to have one market where formal and informal overlap substantially.

5 Recommendations

Both the formal and informal urban property markets can contribute to providing access for the poor to urban land and/or property:

- The formal urban property market allows the trading of urban property as a commodity for a range of uses. The market functions adequately, but with some problem areas that should be addressed. **Generally, this market provides limited access to the poor** except where there are dysfunctional areas**. Interventions to increase access for the poor need to be implemented.**
- The informal urban property market is a competitive market. The **market provides access to low-income households, individuals and enterprises to urban amenities and opportunities**. However, there is limited access **to legally defensible tenure and generally quality is inadequate**. As a result, the ability of this market to generate wealth or offer security of tenure is limited.

Regulation and urban management are key factors influencing the effectiveness of both the formal and informal property markets. Accordingly, appropriate regulations need to be implemented and the quality of urban management should balance the needs of investors with those of the poor.

To understand urban property markets and the efficacy of interventions implemented, it is **critical that there is consistent and reliable information on both formal and informal property markets.** Accordingly, a **consolidated data set and data model for analysing and monitoring the urban property/land market** should be developed by government. **Government interventions should seek to expand the access of formal urban land market to improve accessibility by low-income households**. In this regard, the following interventions should be considered:

- **Housing subsidy: A demand side subsidy is recommended.** This will increase affordability, will allow beneficiaries to access opportunities where they exist and will encourage a broader based supply of housing.
- **Regulation:** A review of regulations pertaining to the formal land market should be undertaken to determine where regulations constrain supply. Care should be taken to identify the right level of regulation, so as not to further restrict access for low-income households.
- **Release of state land:** Well located state land should be released so as to deliver appropriate sustainable products to the poor.
- **Household rental: Subletting should be encouraged** to ensure that properties are sustainable and can therefore be retained by the poor.
- **Upgrade informal settlements**: **Informal settlements** in good locations **should be upgraded**. In this regard, it is critical that ongoing costs of living for the poor in that location are sustainable so that low-income households are not squeezed out.
- **Financial interventions**: Financial interventions that **enhance the ability of low-income households to participate** in the market should be encouraged, for example, shared equity products. Such interventions will require underpinning by the state.
- **Tax incentives:** Tax incentives should be offered to **encourage investment in properties in targeted declining areas** in respect of both new and existing stock. This

should include a requirement to provide land/property for lower income households and merging businesses. The ability to monitor compliance in this regard is critical.

- **Appropriate land zoning:** Laws should be revised to accommodate the needs of poorer households and emerging businesses, e.g. inclusionary housing zoning. This will require both a greater degree of differentiation in respect of types of zoning applied as well as increased and effective monitoring and enforcement.
- **Review the Urban Boundary:** Consideration should be given to reviewing and mending the urban boundary (edge) where this created market distortion pushes up the price of land. In this regard, consideration should given to specific areas on the urban edge that should be incorporated to provide additional land for low-income households.

Government interventions with respect to the informal market should **seek to formalise this market in a sustainable manner** whereby services and levies are appropriate and affordable. Activities to be undertaken should include the following:

- **Informal settlement upgrading:** As detailed above.
- **Upgrading of existing household rental:** A programme that incentivises the development of new household rental should be implemented.
- **Sub-letting:** Households should be encouraged and supported to sub-let units in and on their properties.
- **Home based enterprises:** Households should be encouraged to use their houses as a base for entrepreneurial activity.
- **Upgrade informal trading areas:** Informal trading areas should be upgraded in a manner that promotes access to markets.
- **Emerging business premises and support:** Innovative models that provide premises for emerging businesses with appropriate business and linkage supports should be developed.

In order for the above to occur, entrenched policies and mindsets will need to be changed. Urban LandMark's role is to provide a strategic and catalytic role to effect this change. This must occur through the thorough promotion of a better understanding of the local situation and a focus on particular issues and market segments (for example, the rental market segment, informal settlements etc). The kind of activities to be undertaken should include the following:

- **Communication:** Urban LandMark should improve the understanding of urban property markets, their role and how they operate. In addition, they should work towards improving the understanding of the impact of State interventions and how these can be improved upon.
- **Education:** Urban LandMark should promote the piloting of best practice interventions, which will enhance pro-poor market performance. Such interventions could include, for example, regulation assessments, financial support, policy frameworks, informal settlement upgrading projects etc.
- **Pilot data collection and analysis:** Urban LandMark could select a Municipality as a pilot study to undertake the development of a consolidated data set and to develop and test an effective data model. On the basis of the pilot recommendations, a national property market data system could be developed.

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7 Annexure A: Individuals Interviewed

Private Sector	L McKenna, Director - Urban Skywalkders F Viruly, MD - Viruly Consulting M van der Merwe, AfriGISR Rumney, Independent Consultant
Government	N Makgalemele, DG - Department of Land Affairs H Mohammed , NSDP - The Presidency A Botha, Department of Land Affairs
Specialist organisations	D de Groot, World Bank S Lewis, SA Cities Network S Bierman, CSIRE Van Huysteen, CSIRA Naude, CSIR
Academics	K Beavon M Mooya

8 Annexure B: Terms of Reference – Pilot Project to Develop an Urban Land Markets Monitoring Database

1. Introduction

The Urban Land Markets Programme (Urban LandMark) was set up in May 2006 with two years of funding from the UK's Department for International Development. Urban LandMark is intended to play a short-term, catalytic role so as to make urban land markets work better for the poor.

Urban LandMark is committed to an evidence-based process of discovery and advocacy around making urban land markets work better for the poor. The goal of the programme is to positively influence policies and practice in South Africa so as to improve poorer people's access to well located urban land, by making markets and land planning and land management systems work better, thus giving effect and meaning to the right to land.

Urban LandMark is undertaking research to develop an understanding of the functioning, as well as key trends, in the South African land and property markets. As part of this process, Urban LandMark requires sound urban land and property market data that provides insight into historical trends with respect to land ownership patterns such as racial demographics, shifts in land use within urban areas and more general land/property pricing trends.

2. Background

2.1 Defining the Urban Land Market

There is no international standard or commonly accepted definition of urban land, and the definitions used are often based on how and for what purpose the user wants this information. For example, land use planners will focus on land use, sociologists on social indicators, demographers on concentrations of people and civil engineers on service delivery.

The Urban Land Sector is defined as the institutions (including the markets) through which land is accessed, held and traded as an asset and as a commodity in urban areas. In this regard, land is not only seen as "raw" land, but is also seen as comprising raw land and improvements. Neither is land seen only in terms of its development potential or physical parameters, but also in terms of the range of functions it performs and the variety of sources of value it generates.

Land in South Africa can be categorised into the following six categories[26]:

- Metropolitan areas;

[26] There are many different ways to categorise settlements (for example, the State of Cities Report 2006 refers to functional urban areas which vary in population size from 25 000 to 3 500 000, the Urban Foundation defined secondary cities as between 50 000 and 500 000. There appears to be no widely consistent or accepted hierarchy in South Africa. Even internationally, there are no specific definitions for different types of settlements across countries. Many countries use a combination of population size and density to define urban areas. In South Africa, the use of a combination of these two key criteria can cause difficulties in trying to categorise what is urban and what is rural, given our racially distorted spatial development pattern. There are many settlements that have urban densities (greater than 1 000 people per square kilometre) but are distinctly rural in character and are therefore not helpful for this study, since the focus is on urban land. Hence, the use of the framework that uses population size as the main criterion has been used for this study.

- Secondary cities;
- Large towns;
- Small towns;
- Rural villages; and
- Agricultural land.

These are defined in the table below.

Table 12: Hierarchy of settlements in South Africa

Type	Hierarchy of settlement[27]	Defining Criteria	Examples
Pre-dominantly Urban	Metropolitan area	Population is greater than 1,000,000 individuals. Has strong, diverse economic base.	Johannesburg, Cape Town, eThekwini, Tshwane, Ekurhuleni.
	Secondary cities	Population is between 250,000 to 1,000,000 individuals. Has strong, diverse economic base.	Nelson Mandela, Emfuleni, Bloemfontein, Buffalo City, Pietermaritzburg, Mogale City.
	Large Towns	Population between 25,000 to 250,000 individuals. Economic base focused on limited products/services.	Rustenburg, Kimberley, Witbank, Middleburg, Stellenbosch, Sasolburg, Midvaal, Nelspruit, Richards Bay, Ladysmith.
	Small towns	Population is 2,000 to 25,000. Economic base focused on limited products.	Ceres, Underberg, Port Edward, Uppington, Ficksburg, Vryburg, Cullinan, Bethal.
Rural	Rural Villages	Varying population, clustered or dispersed, with few urban amenities and formal economic activities, in former homeland areas mostly.	
	Agricultural Land	Farming areas, non-urban.	

Urban land can be found in each of these categories of settlements (except for agricultural land). However, the extent of it will vary. In addition, urban land within each settlement can be further categorised into different land uses as set out in the table below.

Table 13: Categories of land use

Land Use	Categorise	Description
Residential	Residential 1	Low density, individual erven
	Residential 2, 3, 4	Medium to High density, including sectional title
Industrial	Industrial 1	Light
	Industrial 2	Heavy including noxious
Office		Business 3 and 4 including medical suites
Retail		Business 1 and 2 – shops and including public garages
Institutional		Churches, social and community halls, including educational and amusement uses

[27] This categorization is based on the draft Urban Development Framework, taken from the *State of Cities Report*, 2006, Chapter 2, pg 12. It uses population size as the key measure of the type of settlement.

2.2 Quantification of Urban Land

The nature and value of the urban land component within settlements differs as a result of the following key factors:

- Land use;
- Nature and volume of transactions that occur on the land;
- Density;
- Quality of the improvements on the land; and
- Location (access to urban amenities).

In order to understand the extent of this, it is further necessary to profile each land use in respect of each settlement category in terms of the following factors:

- Land status – proclaimed, agricultural, tribal;
- Land transactions – value and number of transactions;
- Land ownership – public versus private and income categories;
- Land occupation - public versus private and income categories;
- Land use – residential, industrial, office, retail etc; and
- Improvement – quality.

Consequently, any urban land market analysis must take into account urban settlement type, land use as well land ownership and transaction status and trends in order to effectively define the current status and emerging trends in that urban area. There is, however, no single data source that can provide all the analytical dimensions on a national scale. Rather, a variety of data exists that provides elements in respect of the desired analysis, and a consolidated picture that addresses as many of the variables as possible will require the construction of a database and model.

The types of data sets which exist include, for example:

- Integrated Development Plans;
- Surveyor General data;
- Deeds Registry data;
- GIS;
- Cadastral Datasets;
- Township registers;
- National Home Builders Registration Council data;
- Data provided by the Department of Housing in respect of the National Housing Programme;
- Property trend analyses; and
- Population data analyses.

Not only do the above data sets provide only partial information, but an additional problem is that they are diverse and many are not easily accessible. Furthermore, definitions differ both in terms of cadastral and terminology, so comparisons between different data sets is complex and requires extensive data manipulation. Some of the key challenges facing the development of land market data are that the key transactional data are located at national level but do not provide settlement level data, while key land use data are to be found at municipal level and consequently are likely to vary widely in quality, consistency and availability across local authorities.

Any comprehensive database/model developed will need to address a number of key limitations, including the following:

- The uneven availability of data across the country;
- Varying levels of accuracy, e.g. statutory sources (deeds) versus physical maps;
- Inconsistent spatial boundaries adopted for different data sets;
- The quantification of property in key data rather than land per se; and
- The unavailability of demographic data in respect of land/property ownership and/or transactions.

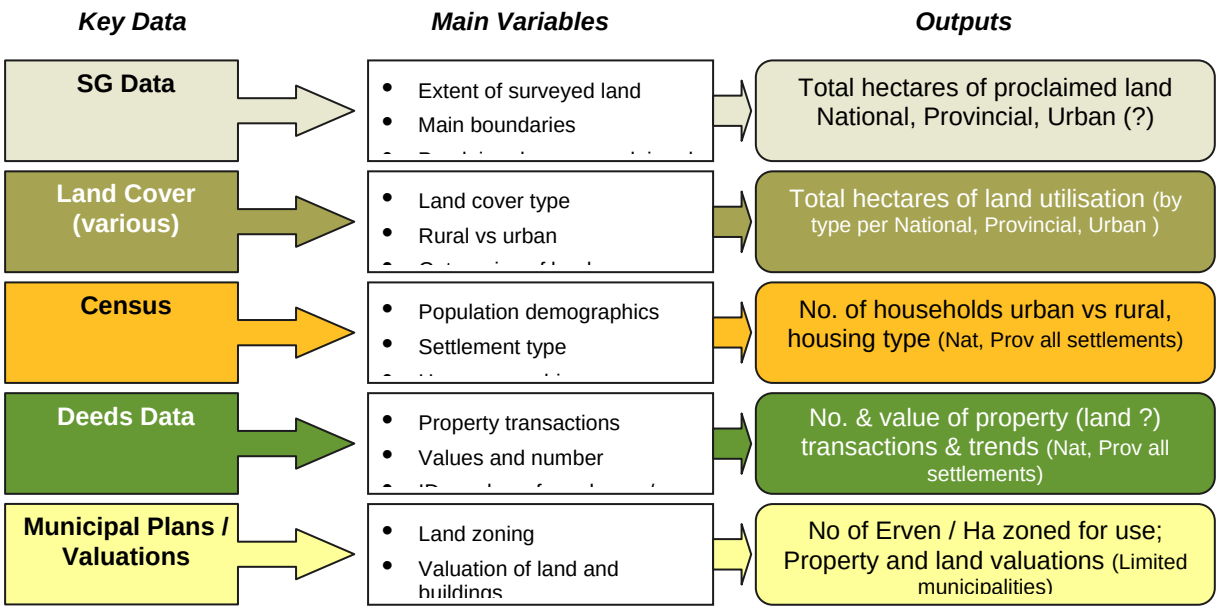
3. Terms of Reference

3.1 Assignment Overview

To understand urban property markets and the efficacy of interventions implemented, it is critical that there is consistent and reliable information on both formal and informal property markets. Accordingly, a consolidated data set and data model for analysing and monitoring the urban property/land market needs to be developed.

Ultimately, the responsibly for the creation of a national land/property management tool should rest with government. However, given the variety of initiatives currently underway within different government departments and agencies this is unlikely to materialise in the medium-term. Consequently, it is **proposed that a pilot project be undertaken to develop an appropriate methodology, collect relevant data and develop a suitable model.** A high level overview of the proposed approach is set out in the figure below.

Diagram 13: Proposed approach to the development of a land markets tool



3.2 Overall Approach

It is proposed that the development of the approach be piloted in a selected municipality for three reasons:

- To assess the ease and cost with which data can be obtained from various government departments and agencies as well as private sector sources;
- Because some municipalities are quite likely to have proceeded far in developing their own land management system in line with the Property Rates Act; and
- In order to limit the scope and consequently risk of the assignment.

In respect of this pilot, Urban LandMark will set up a Steering Committee (with appropriate Terms of Reference) to guide and oversee the project. It is anticipated that this Steering Committee will guide and approve the selection of the pilot area, facilitate access to data sources and oversee the work of the appointed service provider.

3.3 Scope of Work

The service provider will be required to undertake the following activities:

1) Carry out a review of municipalities with a view to identifying those that have an advanced property management system/land management system in place and that indicate a willingness to participate in a pilot study.

2) Prepare an analysis and recommendations to the Steering Committee in respect of the preferred Municipality.

3) Draft an MOU between Urban Landmark and the Municipality with respect to cooperation in the pilot project.

4) Review the international literature with respect to urban land management and land market information systems with particular reference to variables, data sources as well methodologies adopted. In this respect, it is noted that the World Bank in particular has been active in the development of land management systems in a number of countries globally. Other countries such as Australia and Canada (amongst others) provide useful reference points.

5) Develop a project plan setting out how the database/model will be developed including the data sets required and the integration/overlay process. Specific attention must be given to dealing with critical stumbling blocks in respect of data coding and differential units of analysis. This should include a work-shopping process with Urban Landmark and agreed technical specialists to agree upon the variables as well outputs of the tool.

6) Document the availability of key data in respect of the proposed municipality as well as national and other data sources. This should include, but not be limited to:
   i) Cadastre (Surveyor General);
   ii) Deeds Registry;
   iii) Census 2001;
   iv) Land Use/Cover (in particular data developed by the CSIR); and
   v) Municipal valuation roll, property register, GIS etc.

   This assessment must include an analysis of the nature of the data available and the terms and conditions (including any costs) on which this could be obtained.

7) Present the project plan, as well as data review to the Steering Committee for approval.

8) Assist Urban Landmark with the acquisition of relevant identified data.

9) Undertake the development of the database/model as per the approved project plan. This will include a process of testing the model with the Steering Committee and other identified experts.

10) Present the outputs from the database/model to the Steering Committee.

11) Prepare a close-out report documenting the process, key issues as well as outcomes in respect of the database/model. This report should also include recommendations in respect of the development of a national property market data system on the basis of the pilot.

3.4 Functionality/Outputs Required

The functionality and outputs anticipated in respect of the database/model include the following in respect of the municipality:

- The ability to provide a quantification of the total extent of land within the boundaries per land use (zoning and actual use) and ownership (e.g. private, government, raw farm land etc). This should include any data in respect of shifts over time.

- An assessment of the number, value and average value of property transactions within the municipality for the last five years (preferably 10 years). If possible, this should include an analysis per property use, e.g. residential, commercial etc.

- Average land values (as opposed to property values) in respect of different land uses in the municipality. This will be greatly enhanced by a spatial analysis in respect of the municipal area as well as an analysis/measurement of urban amenities and transport access.

- An analysis (to whatever extent possible) of demographic shifts in property ownership within the municipality, with specific reference to residential property.

The above data must be coded in a GIS so that it can be spatially represented.

Deliverables

The following deliverables are required:

- A final report setting out the overall methodology adopted;
- An integrated database with the agreed functionality; and
- An analytical report providing insight into land/property market trend over the last 10 years for the pilot area. This should include key findings as well maps illustrating key points.