



Chapter 3: Contextual typologies

3.1 Introduction

Sustainable development is very dependent on the particular local context in which the settlement development is taking place. It will therefore mean different things for different settlement types or, seen from the other side, different settlement types will have different implications for sustainable development and ultimately for achieving settlement sustainability. Understanding different settlement types in South Africa therefore becomes crucial to the sustainable development debate in this country.

The previous chapter described what is understood by “sustainable human settlements” and has already alluded to a difference in scale (including cities, towns and villages), as well as to different areas within the cities or towns, such as suburbs and inner city areas. Settlements are not uniform and a variety of settlement types are prevalent. Settlement typology can be defined as the study and interpretation of settlement types.

It is not always easy to identify and distinguish these different settlement types because of a multitude of complex factors that play a role in differentiating one settlement from another, such as topography, location, size, proximity and management structures. This is also the case in South Africa.

3.2 South African typologies

A number of observers and policy guideline documents have identified settlement typologies in South Africa. These are used below to distinguish between settlements which differ according to size, location and institutional management. In some cases settlement and housing typologies have also been used together, due to difficulties in separating them.

3.2.1 Settlement typologies

A number of different sets of settlement typologies have been identified for South Africa. The *Urban Development Strategy* (1995)¹ distinguishes between different settlements on the basis of size and identifies four principal city size classes: large metropolitan areas (over two million); large cities (500 000 to two million); medium sized cities (100 000 to 500 000); and small cities

and towns (up to 100 000). Since the strategy had an urban focus, it did not include any rural towns, villages or farmsteads.

The *White Paper on Local Government*² extended the interpretation of settlement types in South Africa to include rural settlements as well. These settlement types were distinguished on a more random basis, including size, location, function and tenure type. The document also differentiates between a hierarchy of types, ranging from urban (urban core and urban fringe with various sub-parts) to rural settlements (including former homeland settlements named “betterment” settlements with more than 5 000 people, informal settlements with more than 5 000 people, rural villages with less than 5 000 but more than 500 people, agri-villages servicing commercial farming areas and dispersed settlements which are mostly unplanned homestead settlements with less than 500 people). The criteria for identification of different settlement types are not always consistent.

Ian Palmer³ uses a more simplified settlement typology consisting of urban core, urban fringe, dense rural, villages, scattered settlements and farms.

The *State of Human Settlements Report*⁴ identified two sets of typologies for human settlements in South Africa, based on size and location. Settlements were divided into six typical settlement sizes in two broad categories, urban and rural: metropolitan areas (more than 500 000); cities or large towns (50 000 – 500 000); small towns (less than 50 000); displaced urban or dense rural (less than 50 000); rural villages (500 – 5 000) and scattered or dispersed settlements (less than 500).

The locational typology expanded the two broad categories and distinguished between urban core (higher density developments near the city centre) and urban fringe (generally lower density developments on the urban periphery). It also identified displaced urban or dense rural settlements as those that are some distance away from large agglomerations. This typology was further developed to include different settlement types (sub-types) in each of the three broad categories.





Urban Core	Urban Fringe	Displaced urban or dense rural
Core informal settlements	Fringe informal settlements	Peri-urban traditional tenure/mixed settlements
Core townships	Fringe townships	Former homeland border towns and townships
Inner city high-rise flats	Collective dwellings	Agri-villages
Inner city houses	Informal settlements	Peri-urban informal settlements
Squatting in disused buildings	Fringe suburbs	Informal settlements in commercial farming areas

Settlement types as identified in the State of Human Settlements Report (1999)⁵

Although it gives a very accurate reflection of South African settlements, it includes a combination of settlement and housing types. While it is very difficult to separate settlement and housing types in many cases. Their combination into one typology can become extremely complex and often adds to difficulties in analysing the existing state of human settlements. This said, it is acknowledged that housing types often define a specific settlement type to a large extent, for example shacks (informal housing) in an informal settlement, and this may be the reason why settlement and housing typologies are often combined.

3.2.2 Housing typologies

While this report focuses primarily on settlements in South Africa, it acknowledges that housing plays a very important role as one of the defining and indicative components of specific settlement types. In this regard it is important to be aware of the different housing typologies present in the South African context. Statistics SA⁶ (in the 1999 October Household survey) define different dwelling types: formal (houses, flats, townhouses, rooms, flatlets), informal (shacks, shanties), traditional (huts or other structures made out of traditional materials) and other (houseboats, tents, caravans). These types are used to relate most of the infrastructure statistics.

3.2.3 Tensions and misunderstandings

The study of different settlement typologies often gives rise to a number of tensions and

misunderstandings, because of the complex nature of settlements in South Africa, as well as the combination of typologies. As illustrated, settlement typologies according to size and location are often combined with housing typologies. Most of the current typologies are in fact a mixture of these. In addition, settlements are also often defined according to income and or tenure type.

South African settlements are to a large extent characterised by major economic differences between traditional suburbs, townships and informal settlements; as well as between large metropolitan areas (often with huge economic resources and high GDPs) and small rural towns. The economic differences are often exacerbated by great distances between different settlement types and levels of affordability. In these terms one can almost start to refer to many settlements as split into rich city and poor city.

3.3 Typologies used in this study

It is not the immediate purpose of this study to develop the ultimate definition of human settlement types in South Africa. The study acknowledges, rather, the complex nature and continued transformation of human settlements in South Africa and therefore realises the difficulties in defining specific boxes and categories. Yet, in order to analyse the sustainability of human settlements in this country, one needs to have a relatively representative model of different settlement types to highlight the successes and problems experienced by different settlements.

The purpose of the settlement typologies is therefore to provide a tool for the systematic and representative analysis of South African settlements and its different components, of which housing is one.

This has led to a multi-levelled typological approach in which the study identifies three sets of typologies that are instrumental in highlighting three major aspects (size, location and municipal structure) of settlements in South Africa. This is not to imply that there are no other sets of typologies, but that these repeatedly feature as major role-players in terms of the sustainability of human settlements in South Africa. In addition, a differentiation between urban and rural is often made within the different sets of settlement typologies. While the definition of "urban" and "rural" is hotly debated⁷, and current estimates of population vary according to the different





definitions, demographers in South Africa generally agree that the proportions of South Africans who are living in urban areas will rise.⁸ In addition, a number of settlements are simultaneously urban and rural – for example, displaced settlements that were established as commuter settlements during the apartheid era outside the edges of traditional cities.

3.3.1 Dimensional typologies

The size of a settlement plays an important role in its sustainability, and influences a number of drivers and pressures in different ways. For the purpose of this study, settlements in South Africa are broadly divided into seven typical settlement sizes.

	Approximate sizes	Examples
Large cities / metropolises	> 2 000 000	Johannesburg, Cape Town, Durban
Medium cities	> 500 000 - < 2 000 000	Bloemfontein, Pietermaritzburg, East London.
Small cities / large towns	> 100 000 - < 500 000	Kimberley, Pietersburg, Potchefstroom.
Small towns	< 100 000	Upington, Ficksburg, Ladysmith.
Large rural village	> 5 000 - < 50 000	
Small rural village/ scattered settlements	< 5 000	

Table: Typical settlement sizes

Displaced urban settlements or dense rural areas in South Africa can vary in size, but usually have more than 50 000 people. Examples include Bushbuckridge, Winterveldt and Atlantis.

3.3.2 Geographical typologies

The second set of typologies is concerned with the location of settlements, i.e. the geographical distribution of broad settlement types and their sub-types. In this regard settlements may be located in the core of cities, on the fringe or periphery of cities, or some distance away from cities. Because of apartheid, these locational typologies also have clearly defined economic divisions.

Broad category	Sub-types
Urban core	CBD / mixed use area Core informal settlements Core township Core suburb

Broad category	Sub-types
Urban fringe	Fringe informal settlement Fringe township Fringe suburb/ edge city
Displaced urban and/or rural	Displaced townships Peri-urban informal settlements Former border or homeland towns
Rural	Rural towns and villages Agri-villages Farm villages/ homesteads

Table: Geographical typologies

Urban core settlements are those areas that are located close to the traditional city core or business area. They generally have higher densities (> 10du/ha), which are often achieved through higher-rise buildings or smaller plot sizes. These areas are also characterised by high levels of economic activity and consequently higher land values.

Sub-types	Definition
CBD / mixed-use area	High-density, often high-rise areas with a large proportion of commercial and business land uses, sometimes combined with high-rise residential buildings in areas such as Hillbrow in Johannesburg or Albert Park in Durban.
Core informal settlements	Previously or currently illegal and unplanned settlements within inner cities or towns close to the traditional CBD or areas of employment, mostly with shacks as the predominant housing type (e.g. parts of Cato Manor in Durban, parts of Alexandra in Johannesburg, and Duncan Village in East London).
Core township	Formal mass-built settlements (old or new) within inner cities or towns close to the traditional CBD or areas of employment (e.g. formal township of Alexandra in Johannesburg).
Core suburb	Lower-density, low-rise areas of single houses close to the inner city centre (e.g. Arcadia in Pretoria and lower Berea in Durban).

Table: Urban core settlement types

Although these sub-types represent broad settlement types in the urban core, many are becoming increasingly mixed-use in nature, especially the CBDs and core suburbs.

Urban fringe settlements refer to settlement types that are located within the larger urban or municipal boundaries, but outside the urban core. They generally have lower densities,





except for some township areas and especially informal settlements that often have higher densities, but in terms of du/ha and number of people/du.

Sub-types	Definition
Fringe informal settlement	Freestanding, previously or currently illegal and unplanned settlements (mostly with shacks) located far away from the traditional CBD and often far from places of employment as well, resulting in extensive commuting patterns, e.g. Inanda in Durban, Cross Roads in Cape Town and parts of Ivory Park in Midrand.
Fringe township	Formally planned and mass-built settlements (often with backyard shacks) located far away from the traditional CBD and often far from places of employment, e.g. Soweto in Johannesburg, KwaMashu in Durban, and Khayelitsha in Cape Town.
Fringe suburb/ edge city	Low-density, low-rise areas of single or townhouses (mostly medium to high income) and often planned as neighbourhood units with a closed road network system (typical suburban layouts). These areas are located at moderate to long distances from the traditional CBD, but are generally well connected through rapid transport roads (e.g. Sandton and Randburg in Johannesburg, Westville in Durban and Claremont in Cape Town). In some cases suburban residential areas develop into mixed-use settlements with decentralised commercial nodes operating as almost autonomous edge cities.

Table: Urban Fringe Settlement Types

While large cities and towns easily lend themselves to a clear distinction between the urban core and the urban edge, these differences are often difficult to identify or irrelevant to small towns, which generally only have a central business and commercial area, surrounded by a suburban area, and often separated from the township and informal settlement(s).

Displaced urban or rural settlements are those settlement types that are located at moderate to long distances from urban areas and often fall outside the urban growth or municipal boundaries. As mentioned earlier, these areas can simultaneously be urban or rural. They generally have higher densities with limited employment opportunities close by, resulting

in extensive commuting patterns and high unemployment.

Sub-types	Definition
Displaced townships	Dense, formally planned and mass-built settlements located at moderate to long distances from the nearest cities or towns (e.g. parts of Botshabelo in the Free State, Winterveldt north of Pretoria and Diepsloot near Johannesburg).
Peri-urban informal settlements	Dense, unplanned settlements comprising mostly non-traditional dwellings and located far away from the nearest cities or towns (e.g. Loskop in KwaZulu-Natal and parts of Botshabelo in the Free State).
Former border or homeland towns (also known as "betterment areas")	Dense, planned settlements located in former homeland areas that are sometimes adjacent to decentralised industrial areas (e.g. Siyabuswa in the former KwaNdebele, Bisho in the former Ciskei and Butterworth in the former Transkei).

Table: Displaced urban and/or rural settlement types

Rural settlements refer to settlement types that are located in non-urban and sparsely populated areas in which people farm or depend on natural resources. They are therefore settlements that pre-dominantly serve an agricultural community and generally have lower densities, except for some township and informal settlements.

Sub-types	Definition
Rural towns and villages	Small rural settlements that are planned (mainly residential with a small number of commercial and business premises) or unplanned (traditional or resettled areas).
Agri-villages	Planned, dense settlements in rural areas servicing the surrounding farms and mainly act as dormitory areas for farm workers.
Farm villages/ homesteads	Mostly unplanned homestead settlements located on privately or collectively owned farms.

Table: Rural settlement types

According to the 1996 census 55,4% of the population in South Africa lives in urban areas.⁹ It is however estimated that by the year 2020 75% of the population will live in urban areas.¹⁰

3.3.3 Institutional typologies

The third set of typologies is concerned with the municipal structures and methods of governance in South Africa. The Local





Government Municipal Structures Act (1998) identifies five types of local municipalities that fall within three types of categories, namely metropolitan, local and district municipalities. The five types include a collective executive system, a mayoral executive system, a plenary executive system, a subcouncil participatory system, and a ward participatory system.

Three categories of municipalities are defined in the Act. *Category A* refers to a metropolitan municipality and requires the following from a municipality to be classified as a category A municipality:

- A conurbation with the following features:
 - areas of high population density;
 - area with intense movement of people, goods and services; and
 - area with multiple business districts and industrial areas.
- A centre of economic activity with a complex and diverse economy.
- A single area for which integrated development planning is desirable.
- An area with strong interdependent social and economic linkages between its constituent units.

Eight types or combinations of types are possible in this category.

A *Category B and C* area refers to local (B) and district (C) municipalities and the criteria are only defined as those which do not comply with above criteria. Six types or combinations of types possible are possible in category B and three in category C (see table with new municipal structures).

A category C municipality specifically refers to a district council, made up of a collection of local municipalities.

Municipal governance structures are therefore made up of a combination and categories and types, as well as a combination of different types, where appropriate, for example a Category A municipality can have a type 1 governance structure combined with a type 4 structure, to therefore be a metropolitan municipality with a collective executive system and sub-council participation.

	Category A	Category B	Category C
Type 1	Collective executive system	Collective executive system	Collective executive system
Type 2	Mayoral executive system	Mayoral executive system	Mayoral executive system
Type 3	-	Plenary executive system	Plenary executive system
Type 4	Subcouncil participatory system	-	-
Type 5	Ward participatory system	Ward participatory system	-

Table: New municipal structures

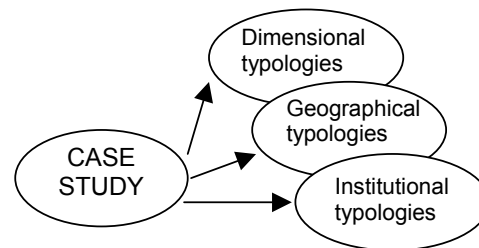
3.3.4 Multi-typological approach

The multi-typological approach outlined above is used to understand and distinguish different settlement types in South Africa, and to identify specific problems and challenges faced by different settlement types in relation to size, location and institutional structures.

3.4 Case study selection

The multi-typological approach is also used to ensure a fair and representative selection of case study areas in South Africa and each case study area therefore has three layers of typologies.

Seven case study areas were selected to include a range of provinces, spatial and



locational combinations, institutional types and sizes. The case study areas include: City of Johannesburg, Buffalo City, Winterveldt, Kimberley, Clarence and Warden, Mathabatha and Naledi Village.

The distribution of different typologies across the different case study areas can be seen in relation to each other in the following table.





CASE STUDIES	Settlement typologies		
	<i>Dimensional typologies</i>	<i>Geographical typologies</i>	<i>Institutional typologies</i>
Johannesburg Province: Gauteng	Large City (> 2 000 000) Population: 2.83 million	Urban core (CBD, Informal settlements, suburbs) urban fringe (Informal settlements, townships, suburbs and peri-urban) and displaced urban settlements (informal settlements, townships).	City of Johannesburg Metropolitan Municipality Category: A Type: Mayoral executive with Ward Participatory
Buffalo City Province: Eastern Cape	Medium City (> 500 000 - <2 000 000) Population: ± 900 000	Urban core (CBD, informal settlements, township, suburbs), urban fringe (informal settlements, townships, suburbs) and displaced urban settlements (townships, peri-urban traditional settlements, border/former homeland towns).	Buffalo City Municipality Category: B/C? Type: Mayoral Executive with Ward Participatory
Kimberley Province: Northern Cape	Small City/Large Town (> 100 000 - < 500 000) Population: ± 210 000 (TLC)	Urban core (CBD, suburbs) urban fringe (informal settlements, townships) and displaced urban settlements.	Kimberley Municipality Category: B/C? Type: Collective Executive with Ward Participatory
Winterveldt Provinces: Gauteng and North-west Province	Displaced urban settlement Population: 240 000	Displaced township and informal settlement.	Part of City of Tshwane Metropolitan Municipality Category: A Type: Mayoral executive with Ward Participatory
Clarence and Warden Province: Free State	Small Town (< 100 000) Population of Clarence (including Kgubetswane): 5 745 Population of Warden (including Ezenzeleni): 6 805	Small towns with small central business and commercial areas surrounded by residential development (suburbs and township).	Clarence is part of Dihlabeng Municipality. Category: B/C? Type: Collective Executive with Ward Participatory Warden is part of Phumelela Municipality. Category: B/C? Type: Plenary Executive with Ward Participatory
Mathabatha Province: Northern Province	Large rural village (> 5 000 - < 50 000) Population: 27 900	Collection of 13 rural villages with a combination of formal and traditional housing areas and a few scattered businesses under the leadership of the local chief.	Part of Lepelle-Nkumpi Municipality Category: B/C? Type: Collective Executive
Naledi Village Province: Free State	Small farm village (< 5 000) Population: 150	Farm village	Part of Sesotho Municipality Category: B/C Type: Collective Executive with Ward Participatory

Table: Case study areas with different layers of settlement typologies

The selection of case studies therefore represents a range of different settlement sizes (from a large metropolitan area to a very small farm village) with a wide variety of geographical types (including different spatial distribution patterns and relationships), as well as different institutional structures.

3.5 Conclusion

South African settlements can be categorised into multi-dimensional typologies and should therefore be considered through a

superimposition of different and relevant typologies. The case study areas that have been selected for the purpose of this study aim to represent this multi-dimensionality and its relation to the sustainability of human settlements in South Africa. However, this said, it is often very difficult to create definitive boxes, because successes and problems are not always applicable to a specific type or may be influenced differently due to a specific combination of types. This study will therefore make use of the broad categories identified in





this chapter in a flexible way, with the understanding that no categorisation is absolute. The next chapter will deal with the specific model used to analyse the sustainability of the different settlement types in South Africa.

¹ Urban Development Strategy (1995) Government of National Unity, p. 2.

² White Paper on Local Government (1998) Department of Provincial and Local Government, Government Gazette, 13 March 1998, pp 32-33.

³ Palmer, I (1997) Local Government: Its role in service delivery.
<http://www.local.gov.za/DCD/policydocs/whitepaper/cl2ian2.htm>

⁴ CSIR (1999) The State of Human Settlements: South Africa 1994 – 1998. Prepared for the Department of Housing by CSIR Building and Construction Technology, Pretoria.

⁵ Ibid. pp. 4-5.

⁶ Statistics South Africa (2000). RSA Statistics, 2000. Stats SA, Pretoria.

⁷ White Paper on Local Government 1998 p. 32.

⁸ Urban Development Strategy (1995) Government of National Unity, p. 10.

⁹ Statistics South Africa (1996). RSA Statistics, 1996. Stats SA, Pretoria.

¹⁰ Urban Development Strategy (1995) p 9.

