

Towards integrating urban conservation and urban development: Klerksdorp as a case study

F Mangara
26842335

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Supervisor: Ms K Puren

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DEDICATIONS

This thesis is dedicated to my parents, for their love and support.

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ABSTRACT

The world is undergoing the largest wave of urban growth in history due to rapid urbanisation. Urbanisation results in development pressure on existing infrastructure and numerous existing buildings are being destroyed in the process. Many of these existing buildings are part of the heritage of the town or city and are therefore valuable heritages. Built environment heritage resources are important in the urban environment due to their historical, aesthetic and social value. Integrating these resources into urban development is currently a worldwide challenge, even more so in developing countries such as South Africa that has one of the highest urbanisation rates in the world. Past theoretical and legislative frameworks used in urban development and urban conservation, represent a segregated approach. One of the reasons for the disintegration of urban conservation and urban development is the spatial models many cities and towns developed according to.

These models include the Concentric Zone model, Multiple Nuclei model and Sector model (classical models) as well as the South African Apartheid model. These models resulted in fragmented urban environments in which older areas became abandoned or not acknowledged. This led to many heritage resources being destroyed. In response to the fragmented nature of urban development, post-modern models (such as New Urbanism, Smart Growth and the Compact City) became popular planning and design models to create more integrated towns and cities. A second reason for the segregated approach to urban conservation and urban development is urban conservation paradigms and theories that have treated built environment heritage resources as isolated objects in the urban environment in the past (in other words the focus was on the object and not its broader context). Recent theories moved towards more integrated approaches in which sustainability and resilience form overall goals for the urban environment while development and conservation needs are balanced.

The fragmented nature of historical urban conservation paradigms and theories are also reflected in the evolution of policy and legislation that guide the urban development and conservation of built environment heritage resources. Urban development and conservation have a long history of being guided by separated policies and legislation. The South African planning system is still influenced by modernistic roots in which built environmental heritage resources are being treated as isolated objects in the urban environment. However, recent international and South African policies and legislation have started to acknowledge the importance of integrating urban development and urban conservation. Urban planning regulates urban development and can be seen as an integrative tool. With the aforementioned in mind, the main research question that guided the study is: How can urban development and urban conservation be integrated?

The main purpose of the research was to develop a framework for integrating urban conservation and urban development, with special reference to built environment heritage resources. The case study was based on Klerksdorp in the North-West Province, South Africa. In Klerksdorp, balancing urban development and conservation is a challenge, as both these are priorities. Klerksdorp is located on the N12 Treasure Corridor - one of the main development corridors in South Africa. Furthermore, Klerksdorp is one of the oldest towns in the province and it contains numerous important heritage resources that need to be conserved. In the case of Klerksdorp, a segregated approach to urban development and conservation exists as portrayed in the spatial development framework as well as various planning and management processes.

A framework is proposed to integrate built environment heritage resources in urban development in which urban planning can play a proactive role. The framework suggests a three-tier system of integration namely spatial integration, an integrated management system and integrated planning processes using the Spatial Development Framework and Land Use Management System as tools. The proactive inclusion and involvement of various role players is emphasised in this framework. A few building blocks are suggested in order to develop a more integrated approach to urban development and urban conservation. Building blocks include the following: a Cultural Management Plan (CMP), the proactive involvement of community members, increased support from local government, educating people about urban conservation, branding built environment heritage resources as assets in urban development, a proper heritage policy and a strategy for adaptive re-use.

Key words: Case study research; built environment heritage resources; an integrated framework; urban conservation; urban development.

OPSOMMING

Die wêreld ondergaan tans die grootste golf van stedelike groei in die geskiedenis weens snelle verstedeliking. Verstedeliking lei tot ontwikkelingsdruk op bestaande infrastruktuur en talle geboue word in die proses vernietig. Baie van hierdie geboue is deel van die geskiedenis van die dorp of stad en is gevolglik waardevolle erfenisse. Bou-omgewing erfenis hulpbronne is belangrik in die stedelike omgewing as gevolg van hulle historiese, estetiese en sosiale waarde. Die integrasie van hierdie hulpbronne in stedelike ontwikkeling is tans 'n uitdaging wêreldwyd, selfs nog meer in ontwikkelende lande soos Suid-Afrika wat van die hoogste verstedeliking koerse ter wêreld het. Teoretiese en wetgewende raamwerke van die verlede wat gebruik is in stedelike ontwikkeling en stedelike bewaring toon 'n gefragmenteerde benadering. Een van die redes vir die disintegrasie van stedelike bewaring en stedelike ontwikkeling is die ruimtelike modelle waarvolgens baie stede en dorpe ontwikkel het.

Hierdie modelle sluit die Konsentriese Sone-model, die Veelvuldige Kerne-model en Sektor-model (klassieke modelle), sowel as die Suid-Afrikaanse Apartheidsmodel in. Hierdie modelle het gelei tot gefragmenteerde stedelike omgewings waarvan ouer areas verwerp is of nie belangrik geag was nie. Gevolglik het dit tot die vernietiging van baie erfenis hulpbronne gelei. In reaksie op hierdie gefragmenteerde wyse van stedelike ontwikkeling, het post-moderne modelle (soos Nuwe Urbanisme, Slim Groei en die Kopakte Stad) gewild geraak ten einde meer geïntegreerde dorpe en stede te skep. 'n Tweede rede vir die gefragmenteerde benadering tot stedelike bewaring en stedelike ontwikkeling is paradigmas en teorieë in stedelike bewaring wat bou-omgewing erfenis hulpbronne as geïsoleerde objekte beskou het (met ander woorde waar die fokus op die objek was in plaas van op die groter stedelike konteks). Onlangse teorieë het na meer geïntegreerde benaderings beweeg waarin volhoubaarheid en veerkragtigheid die oorhoofse doelwitte vir die stedelike omgewing en waarin ontwikkeling- en bewaringsbehoefte gebalanseer word.

Die gefragmenteerde aard van historiese paradigmas en teorieë rondom stedelike bewaring word ook in die evolusie van beleid en wetgewing wat stedelike ontwikkeling en -bewaring rig gereflekteer. Stedelike ontwikkeling en -bewaring het 'n lang geskiedenis waarin dit deur aparte beleid en wetgewing gelei is. Die Suid-Afrikaanse beplanningsstelsel word steeds deur modernistiese wortels beïnvloed waarin bou-omgewing erfenis hulpbronne as geïsoleerde objekte in die stedelike omgewing hanteer word. Nogtans het onlangse internasionale en Suid-Afrikaanse beleid en wetgewing begin om die belangrikheid van die integrasie van stedelike ontwikkeling en -bewaring te erken. Stadsbeplanning reguleer stedelike ontwikkeling en kan as integrerende gereedskap beskou word. Met in agneming van die voorgaande, is die hoof

navorsingvraag wat die studie gelei het die volgende: Hoe kan stedelike ontwikkeling en stedelike bewaring geïntegreer word?

Die hoofdoel van die studie is om 'n raamwerk te skep vir die integrasie van stedelike bewaring en –ontwikkeling, gebaseer op Klerksdorp in die Noordwes Provinsie, Suid-Afrika as gevallestudie. In die geval van Klerksdorp is die balansering van stedelike ontwikkeling en -bewaring 'n uitdaging aangesien beide prioriteite is. Klerksdorp is geleë op die N12 ontwikkelingskorridor, bekend as die “Treasure Development Corridor”, een van die hoof ontwikkelingskorridors in Suid-Afrika. Verder is Klerksdorp een van die oudste stede in die provinsie en bevat die stad vele belangrike erfenis hulpbronne. Daar bestaan tans 'n gefragmenteerde benadering tot stedelike ontwikkeling en -bewaring, soos gesien kan word in die ruimtelike ontwikkeling sowel as verskeie beplanning- en bestuursprosesse van Klerksdorp. 'n Raamwerk waarin bou-omgewing erfenis hulpbronne in stedelike ontwikkeling geïntegreer is en waarin stadsbeplanning 'n proaktiewe rol speel word voorgestel.

Hierdie raamwerk bestaan uit 'n drie-vlakkige sisteem vir integrasie naamlik ruimtelike integrasie, 'n geïntegreerde bestuurssisteem en 'n geïntegreerde beplanningproses waarin Ruimtelike Ontwikkelingsraamwerke en Grondgebruik Bestuursisteme as integrerende gereedskap gebruik word. Die proaktiewe insluiting en betrokkenheid van verskeie rolspelers word in hierdie raamwerk beklemtoon. Verder word 'n aantal boublokke vir 'n meer geïntegreerde benadering tot stedelike ontwikkeling en -bewaring ook voorgestel. Hierdie boublokke sluit die volgende in: 'n Kulturele Bestuursplan (KBP), proaktiewe gemeenskapsbetrokkenheid, toenemende ondersteuning van die plaaslike regering, bewusmaking onder mense oor stedelike bewaring, skepping van 'n sterk identiteit van bou-omgewing erfenis hulpbronne as bates in stedelike ontwikkeling, 'n erfenis beleid en strategie vir aanpasbare hergebruik.

Sleuteltermes: Bou-omgewing erfenishulpbronne; geïntegreerde raamwerk; gevallestudie navorsing; stedelike bewaring; stedelike ontwikkeling

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LIST OF ACRONYMS AND ABBREVIATIONS

BNG	Breaking New Ground
BRPA	Bushmen Relics Protection Act
CBD	Central Business District
CIAM	International Congress of Modern Architecture
CMP	Cultural Management Plan
CNU	Charter of the New Urbanism
DSDF	District Spatial Development Framework
GCIS	Government Communication and Information System
HIA	Heritage Impact Assessment
HMC	Historic Monuments Commission
HULA	Historic Urban Landscape Approach
ICCROM	International Centre for the study of the Preservation and Restoration of Cultural Property
ICOMOS	International Council on Monuments and Sites
IDP	Integrated Development Plan
IUDF	Integrated Urban Development Framework
KSDF	Spatial Development Framework for Klerksdorp
LUS	Land Use Schemes
MDG	Millennium Development Goals
MSA	Municipal Systems Act
NEMA	National Environmental Management Act
NHMA	Natural and Historic Monuments Act

NHMRAA	Natural and Historical Monuments, Relics and Antiques Act
NHRA	National Heritage Resources Act
NMA	National Monuments Act
NMC	National Monuments Council
NSDP	National Spatial Development Perspective
NSDP	National Spatial Development Perspective
NWPC	North West Planning Commission
NWSDF	North West Spatial Development Framework
PHRA	Provincial Heritage Resources Agency
RSA	Republic of South Africa
SA	South Africa
SACN	South African Cities Network
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
SPLUMA	Spatial Planning Land Use Management Act
UN	United Nations
UNESCO	United Nation Educational, Scientific and Cultural Organisation
WHC	World Heritage Convention
WHCA	World Heritage Convention Act
WPSPLUM	White Paper on Spatial Planning and Land Use Management

CHAPTER 1 CONTEXTUALISING THE RESEARCH

1.1 Introduction

The world is undergoing the largest wave of urban growth in history (United Nations Population Fund, 2007:1). The United Nations (2014:2) projects that by 2050, 66% of the world's population will be residing in urban areas. Rapid urbanisation is even more prevalent within developing countries (Yaakup and Nazri, 2004:2), especially Africa and Asia, with South Africa having the highest rate of urbanisation, at a projection rate of 77% by 2050 (United Nations, 2014:21). As a result, South Africa is experiencing numerous challenges in terms of urban growth that imply social, economic and environmental transformation. These challenges include poverty and public health issues resulting from contaminated water and polluted air caused by overcrowding and the decrease in urban green space. Spatially, urban growth is accommodated by: (i) expanding towns and cities beyond the urban edge; and (ii) creating less compact cities (Cape Town Development Edges Policy, 2009:2). According to Kaur (2008:4), urban expansion should be discouraged due to the deterioration in the quantity and quality of valuable agricultural land and nature, which surround urban areas. In addition, compacting cities through infill development and the densification of existing densities, lead to development pressure on existing infrastructure and buildings. Numerous existing buildings are being destroyed in the process, to make way for new ones (Research solutions, 2000:7). Many of these existing buildings are part of the history of the town or city and are therefore valuable heritages. Thus, in South Africa and other developing countries, there is a challenge of balancing urban growth and urban conservation.

Built environment heritage resources are important in the urban environment due to their historical, aesthetic and social value. According to UNESCO (2005), the concept of integrating built environmental heritage resources in urban development or proactively conserving these resources has not yet been fully applied in developing countries. This is mainly due to huge financial challenges that are inherently part of the management and maintenance of these resources. Therefore, the future of these resources, whether to maintain or demolish them, is an important question.

While the current condition and integrity of heritage resources in the world is generally good (State of the Environment Heritage report, 2011:292), the status of built environment heritage resources in developing countries has not been comprehensively surveyed and assessed (Mackay, 2011:704). Ashworth (2007:511) asserts that, built environment heritage resources are at risk of destruction in developing countries, as they are not adequately identified or protected, nor is conservation adequately addressed.

According to Marchettini (2014:210), the modernist and post-modernist dichotomy plays a significant role in influencing how built environment heritage resources are treated in urban planning. Modernist thinking signals a break from the past into the future, with the effect that built environment heritage resources are treated as isolated objects and are not integrated into urban development. Built environment heritage resources, in terms of the modernistic paradigm, are protected by applying an isolated preservationist approach. Post-modernism on the other hand, tries to re-establish ties between the past and future in urban development, such that heritage resources are part of a cyclical process, and are integrated into the future development of the city. These theoretical paradigms have opposing opinions on how conservation should be applied, vis-a-vis the process of urban development. In terms of propagating the ideal of a more sustainable future, it may be rewarding to research ways to integrate both the past (heritage) and the future (development) in spatial planning.

Urban planning regulates urban development and can be seen as an integrative tool to integrate the past and future in towns and cities, by incorporating built environment heritage resources into the future development of these areas. However, the South African planning system is still influenced by modernistic roots (Coetzee, 2005:38), in which built environmental heritage resources have been treated as separated aspects of the total urban environment. These built environmental heritage resources have, up until now, not been fully integrated into the urban planning and management system, in all towns and cities. To illustrate this, the conservation of built environmental heritage resources and urban development are currently regulated by separate legislation, while worldwide urban conservationists are propagating an integrated approach.

With the aforementioned background in mind, the main purpose of this study is to develop a conceptual framework for the integration of urban conservation (with special reference to built environmental heritage resources) and urban development using Klerksdorp, in the North-West Province, South Africa as a case study.

1.2 Background to the study

In as much as the acknowledgement of built environmental heritage resources has been emphasised in developed countries such as England and France since the late 19th century, it has only recently evolved as a global movement. According to Elachi (2008:1), the establishment of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1945, and The International Council on Monuments and Sites (ICOMOS) in 1964, provided major impetus for international conservation.

In developing countries, urban conservation (with an emphasis on the preservation of tangible heritage sites or structures), is especially important for tourism (Habitat III, 2015:2). This has resulted in various governments establishing substantial investments in protecting, refurbishing and rehabilitating buildings that have heritage value for economic reasons (UNESCO, 1975). However, the conservation of built environmental heritage resources is a new field within the South African context, particularly in the government structures and institutions. The South African Heritage Resources Agency (SAHRA) is the first official organisation in post 1994 South Africa as there were several organisations prior 1994 that indeed addressed cultural heritage, although unilaterally. SAHRA is a statutory organisation established under the National Heritage Resources Act, No 25 of 1999. However, the integration of built environmental heritage resources into the ambit of heritage resources management and the development of the built environmental heritage resources at SAHRA, present numerous challenges and opportunities. One of the noticeable challenges has been the urgent need for recruitment of more expertise to maximise capacity and enhance skills development, especially since intangible heritage is a relatively new field, which demands both extensive and intensive research.

On the other hand, the opportunities associated with safeguarding built environmental heritage resources are the exposure that is gained through the interaction and exchange of information and experience, with experts from other parts of the world. This background serves as a point of departure to highlight the underlying issues that need to be taken into account when executing the task of developing a policy for safeguarding built environment heritage resources. Even though much has been done in terms of policy and legislation in South Africa on the protection of built environmental heritage resources in the past years, built heritages are protected as separate and isolated architectural objects, and are not integrated into the spatial planning of the urban environment.

1.3 Problem statement

Currently, urban development and urban conservation are guided by separate legislation in South Africa. This is so, despite worldwide the integration of urban conservation, with regard to built environment heritage resources, into urban development. This results in a dichotomy in the treatment of built environment heritage resources (Marchettini, 2014:210). As it is, local planning instruments such as Spatial Development Frameworks (SDF's) and Land Use Schemes (LUS) have the ability to integrate these two opposites (conservation and development), but are not necessarily used for this purpose. Furthermore, the role of urban planning are the use of tools such as local planning instruments (for example, SDF and LUS), not clear.

Klerksdorp (the focus of this study) is an example of a city that provides challenges with regard to balancing urban conservation and urban development. This city is situated on the N12 Treasure

Corridor, and therefore a future investment area in terms of economic and tourism development. On the other hand, it is the second oldest town in the North West Province, containing fifty-five built environmental heritage resources ranging from grade I to grade III sites. Spatial planning can possibly serve as a way to integrate urban conservation (built environment heritage resources) into urban development given that planning is regarded an integrative tool (Marchettini, 2014:211).

1.4 Aims of the study

1.4.1 Primary aim:

The main purpose of the study is to develop a framework for spatial planners to integrate urban conservation, with special reference to built environmental heritage resources, with urban development in Klerksdorp in the North-West Province of South Africa.

1.4.2 Secondary aims:

The secondary aims of the study include the following:

- a) To give an overview of the theories that shape urban development;
- b) To give an overview of the development of urban conservation theories;
- c) To evaluate policies and legislation in terms of the integration of urban conservation with urban development;
- d) To analyse the integration of urban development with urban conservation in Klerksdorp as a case study; and
- e) To explore how spatial planning can be used as a tool for integrating urban conservation and urban development.

1.4.3 Research questions

As the study is qualitative in nature, it is guided by research questions instead of a hypothesis. The following research questions were developed to guide the research:

The main research question is: How can urban development and urban conservation be integrated? Secondary questions are:

- a) To what extent do the theories on urban development and urban conservation support the integration of built environment heritage resources with urban development?
- b) To what extent are the policies and legislation that guide urban conservation and urban development integrated?
- c) How integrated are urban conservation and urban planning in the case of Klerksdorp?

- d) What is the role of spatial planning in the integration of urban conservation with urban development?

1.5 Research context

The research was conducted in Klerksdorp in the North West Province. Klerksdorp is the second oldest town in the North West Province. It is preferable to use a historic city such as Klerksdorp when aspiring to integrate urban conservation into urban development, as the city is rich in built heritage resources. Figure 1-1 shows the map of Klerksdorp.



Figure 1-1: The location of Klerksdorp in South Africa

Source: King and Cole (2006)

1.6 Research design

A singular instrumental case study research design was selected as the overall design for the study (Yin, 1993:22). Using a case study for the purpose of this research is appropriate because a case study offers an in-depth understanding of the integration of built environmental heritage resources (urban conservation) into the future urban planning and development of Klerksdorp. The case of Klerksdorp will be analysed in terms of the integration of urban conservation (in terms

of built environmental heritages) into urban development by means of an analysis of the existing spatial trends and planning processes that guide urban development and conservation. A desktop analysis of existing documents about the study area was included, as well as a spatial analysis and face-to-face interviews with key stakeholders to assess the processes in terms of urban development and urban conservation. (A full discussion of the research design and scientific process followed to conduct the research is included in Chapter 5).

1.7 Significance of the study

Built environmental heritage resources remain the best form in which historic cultural heritage can be expressed. Built environmental heritage resources are regarded as the main components of tangible cultural heritage that societies want to keep, share and pass on to future generations, and are regarded as fundamental cultural heritage elements that strengthen a country's national identity and sovereignty and capture its soul and spirit (Ahmad, 2006). Furthermore, built environmental heritage resources are very important assets due to their cultural significance and tourism potential.

Built environment heritage resources provide architectural continuity and boost revenue generation through heritage tourism. Considering the numerous benefits of conserving heritage buildings, it can be affirmed that the country's heritage buildings should be of high importance or priority in the maintenance and management of these buildings. The proper management and maintenance of built environmental heritage resources are necessary in order to continuously care and protect built environmental heritage resources from being demolished and generate more tourism revenue for the government. However, several authors have pointed out that the management practices for maintaining heritage buildings are challenging (Ahmad, 2005; Kamal et al., 2008; Idrus et al., 2010; Eshak, 2011; Mohamad, 2011; Tharazi, 2011).

In addition, the study provides a step in the direction of formulating and refining guidelines for future management of built environmental heritage resources, by providing a possible framework to be used in the towns and cities in South Africa. With these steps, fewer resources may be required for the maintenance of heritage building. The buildings can be maintained proactively, thereby slowing down the rate of deterioration of valuable original material, avoiding potential hazards, reducing maintenance costs, and improving the life and performance of the buildings. In addition, the research could serve as a platform for further research in order to improve and achieve best practices in the maintenance and management of built environmental heritage resources, through integrating urban conservation into urban development.

1.8 Limitations to the research

Urban conservation is a broad concept that includes the natural as well as the cultural environment. It encompasses landscapes, historic places, sites and built environments, biodiversity, collections, past and continuing cultural practises, knowledge and living expenses (Bandarin and van Oers, 2012:105). Heritage includes tangible¹ and intangible resources.² The scope of this study is limited to built environment heritage resources, including historic buildings and monuments, which are worthy of preservation for the future.

The study is limited to one medium sized city, Klerksdorp. Therefore, it is important to note that the conclusions reached and the recommendations proffered may not necessarily apply to other cities or towns. However, the framework provided in Chapter 7 provides a possible point of departure for similar cases, where there is need for a more integrated approach in terms of urban planning and urban conservation.

1.9 Structure of the dissertation

A brief overview of the structure is presented in the table below (Table 1-1).

Table 1-1: Chapter outline and summary

Chapter	Content	Purpose of the chapter	Relation to Research aim and question
Chapter 1: Contextualising the research	This chapter provides an introduction and background of the study in order to motivate the relevance of the study. The chapter includes a problem statement, the research aims and questions that guide the study. The research study area is identified, and the chosen research design briefly explained.	The main purpose of Chapter 1 is to orientate the reader on the topic: urban conservation and urban development, and their relationship. The reason for the study is to integrate urban conservation and urban development for the sustainability of built heritage resources. The research employs a case study methodology. Finally, the chapter gives a summary of the structure of the study.	N/A

¹ Tangible heritage resources are physical artefacts which are produced maintained and transmitted intergenerationally in a society. They include artistic creations, and built heritage such as buildings and monuments (UNESCO, 2003).

² According to UNESCO (2003), intangible heritage relates to practices, representations, expressions, knowledge and skills; for example, oral traditions, local skills and traditional skills.

Chapter 2: Urban development theories	Chapter two discusses the main theories that influence urban development, and includes an overview of various models and theories e.g. the concentric zone theory, radial sector theory, multiple nuclei theory and the South African Apartheid model. These models are some of the main models that shape the South African city. Various post-modern models are also included in the discussion such as New Urbanism, Smart Growth and The Compact City model. These models are suggested as integrated models in order to address urban fragmentation and segregation caused by classical, modernistic models.	Chapter 2 aims to explain underlying reasons for separated and fragmented manner in which urban development is shaped. More recent models are offered as guidelines to address the fragmentation caused by urban development in the past.	To give an overview of theories that shape urban development	To what extent do theories on urban development and urban conservation support the integration of built environmental heritage resources?
Chapter 3: Paradigms in urban conservation	This chapter focuses on various paradigms and theories with regard to urban conservation. These paradigms include Preservation, The Historic Urban Landscape Approach and Sustainability.	Chapter 3 illustrates the progressive move in urban conservation, from an isolated approach in which built heritage resources were treated in isolation, towards a more integrated approach where urban conservation should be incorporated into urban planning.	To give an overview of the development of urban conservation theories;	To what extent do paradigms on urban development and urban conservation support the integration of built environmental heritage resources?
Chapter 4: Urban development and urban conservation policy and legislation	In chapter 4 an overview is given of various policies and legislation that govern urban conservation and urban development. In terms of international policy, UNESCO (1945) and the World Heritage Convention of 1972 are included. In terms of the South African context policies such as the Natural and Historical Monuments Act No.6 of 1923 and the National Monuments Act No. 28 of 1969 (that guide urban conservation) and policies/legislation such as the Constitution of the Republic of South Africa (1996) and the National Heritage Resources Act No.25 of 1999 are included.	In this chapter, the extent to which policies and legislation had influenced urban conservation and urban development is going to be discussed. The way policies and legislation has separated urban conservation and urban development as well as how these policies and legislation influence integration therefore, will be expressed	To evaluate policies and legislation in terms of the integration of urban conservation and urban development;	To what extent are policies and legislation that guide urban conservation and urban development integrated?
Chapter 5: Research Design	Chapter 5 presents how the research was conducted. A case study methodology is employed. Primary data collection methods such as semi-structured interviews and secondary data collection are discussed.	The main purpose of the chapter is to clearly discuss the methodology of the research.	N/A	

Chapter 6: Presenting the case: Klerksdorp, Matlosana	Chapter six discusses the case study (Klerksdorp) in terms of all the activities that take place in the area, such as the economic and social activities, and how they have influenced urban conservation and urban development.	The main aim of this chapter is to merge theories and practice in terms of urban conservation and urban development.	To analyse the integration of urban development and urban conservation in Klerksdorp as a case study	How integrated is urban conservation and urban planning in the case of Klerksdorp?
Chapter 7: A Framework for Integration	This chapter discusses a broad framework for spatial planners that is developed, to be used in integrating urban conservation and urban development.	The rational of the chapter is to provide a framework for integrating urban conservation and urban development.	To explore how spatial planning can be used as a tool for integrating urban conservation and urban development.	To develop a framework for spatial planners to integrate urban conservation (with specific reference to built environmental heritage resources) and urban development in Klerksdorp. What is the role of spatial planning in the integration of urban conservation and urban development?
Chapter 8: Synthesis and Conclusion	This chapter synthesises the major findings of the research. Conclusions will be drawn, and recommendations made towards the integration of urban conservation and urban development.	The purpose of this chapter is to provide the conclusion of the study in terms of how urban conservation and urban development can be integrated as well as to reflect on the aims of the study and answer the research questions.	How can urban development and urban conservation be integrated?	

Source: Author's own construction (2016)

1.10 Conclusion

The chapter presented an overview of the purpose of this study. The management of built environmental heritage resources presents challenges that are quite different, as compared to non-heritage buildings. The aim of this study is to develop a spatial planning framework for integrating urban conservation into urban development for Klerksdorp in the North-West Province. Many built environmental heritage buildings are decaying due to age, neglect, high maintenance cost and poor maintenance management. Though there are a few heritage building maintenance manuals and best practices, they do not provide guidelines on how maintenance should be conceived, managed and integrated with other key management activities in the context of heritage building conservation. By way of intervention, there is an urgent need for a framework that would provide such guidelines. The framework could present a promising guideline for the integration of urban planning and urban conservation. The main goal of the framework is to help

plan, control, organise and monitor built environmental heritage resources in a sustainable manner.

CHAPTER 2 URBAN DEVELOPMENT MODELS

2.1 Introduction

Cities have always been dynamic entities that constantly develop over time (Murphey, 2014:243). According to Olson and Vargas (2014), urban development mainly relates to residential expansion, such as expansion into unpopulated areas (outward development) and the renovation of the regions in existing urban environment (inward development). While it is a multi-faceted concept (Burton, 2014:2), there are two ways in which urban development unfolds: (i) by means of natural expansion; or (ii) by means of outside intervention (United Nations Habitat, 2014:1). Urban development by means of natural expansion occurs through uncoordinated urban sprawl (Bhatta, 2010:17), which implies the spontaneous development of cities without a specific predetermined plan or deliberate intervention. Urban expansion by means of outside intervention entails the proactive planning of the urban environment according to a specific predetermined spatial plan (Urban Development Framework, 1997). Whether urban development occurs spontaneously or through planned intervention, it influences the spatial structure of the urban environment.

Various urban models such as the Garden City (Ebenezer Howard), the Lineal City (Don Arturo Soria Y Mata), the Neighbourhood Unit (Clarence Perry), Superblock (Clarence Stein) and the City of the Future (Le Corbusier) have influenced the way cities develop since the Industrial Revolution. However, three spatial models are used to explain the overall structure of contemporary cities. These include (i) the Concentric Zone Model of Burgess (1923), the Sector Model of Hoyt (1939) and the Multiple Nuclei Model of Harris and Ullman (1945). These models represent perspectives from Geography (the Multiple Nuclei model), Sociology (the Concentric Zone model) and Economics (Sector model). While these models influenced the South African city, they are generic in nature and do not take into account the specific contextual dynamics of the South African city. Apart from modernism (Adebayo and Musvoto, 2010:1127), South African cities are also shaped by the Apartheid model (Brooks & Harrison, 1998:93). Davies and Simon's models of the Apartheid city are included as a fourth modernistic model that specifically shaped the South African urban structure. The three classical models and the Apartheid model structure form the discussion in the first part of this chapter.

Lately, various post-modern models of urban development have started to influence the structure of contemporary cities in reaction to modernistic urban developments (Hobson 1999). These models are characterised by a suburban ethos, separation of urban functions, neighbourhoods as building blocks, a quantitative approach to planning and an overemphasis on technology and efficiency. More sustainable and integrated models proposed in literature to transform modernistic

urban structure include New Urbanism; Smart Growth; and the Compact City model. These models will structure the discussion in the second part of the chapter. This chapter aims to explain the underlying reasons for the separated and fragmented manner in which urban development is shaped.

2.2 Classical urban development models

Various classical spatial models of urban development exist (Hall, 2010:4). These models aim to explain how cities have emerged in different parts of the world, taking into account different geographical and economical characteristics. The three classical spatial models of urban development that are the Concentric Zone of Burgess, Sector model by Hoyt and Harris and Ullman's Multiple Nuclei model, are discussed in the following section. Each discussion will include: (i) a short introduction of the model; (ii) the assumptions upon which the model is based; (iii) the layout of the model; (iv) critiques of the model; and (v) its relevance in terms of the integration of urban development and urban conservation.

2.2.1 The Concentric Zone model – Ernest Burgess (1923)

The Concentric Zone model of Burgess was one of the first theoretical models to explain the urban social structure. According to Waugh (2009:420), the model was based upon some studies conducted within Chicago. The Concentric Zone model explicitly relates social processes to spatial patterns. Waugh (2009:420) mentioned that, the Concentric Zone model is based upon the outer expansion and socio-economic groupings of inhabitants of the city of Chicago.

2.2.1.1 Assumptions

According to Waugh (2009:420), the Concentric Zone model has many assumptions that can be summarised as follows:

- The city is built upon flat land which therefore gave equal advantages in all directions, i.e. morphological features such as river valleys were removed;
- Transport systems are of limited significance being equally easy, rapid and cheap in every direction;
- Land values are high in the centre of the city and decline rapidly outwards to give a zoning of urban functions and land use;
- The oldest buildings are found in or close to the city centre;
- Cities contain a variety of well-defined socio-economic and ethnic areas;
- Poor classes had to live near to the city centre and places of work as they could not afford transport or expensive housing; and
- Concentrations of heavy industry do not occur. Industries are located close to the CBD.

(Waugh, 2009:420)

Through these assumptions, Burgess developed the Concentric Zone model (Figure 2-1 below).

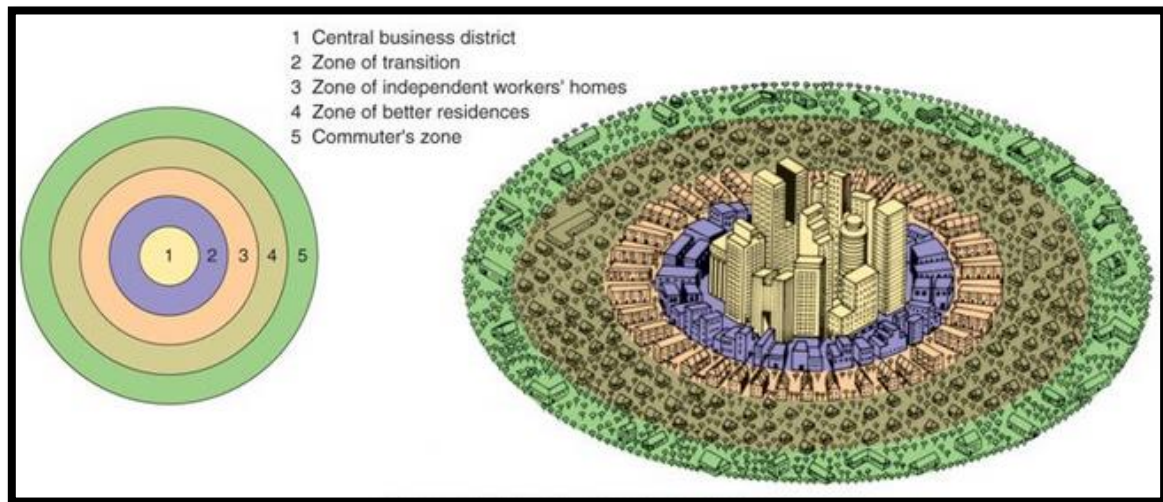


Figure 2-1: Concentric Zone model

Source: Waugh (2009:420)

The Concentric Zone model is based on the concept that a city develops outwards from the central business district towards the periphery (Johnson, 1967:163). Burgess proposes five zones in developing the Concentric Zone model areas as follows (Waugh, 2009:420):

i. Zone 1: Central Business District (CBD)

The CBD contains the major shops and offices. It is the centre for commerce and entertainment, and the focus for transport routes. Land in the CBD is very expensive, thus characterised by a high proportion of tall buildings and vertical expansion. In Burgess's model, the centre is the oldest part of the city, and buildings gradually spread out from the middle leaving the newest parts of the city on the edge. The zones in the Concentric Zone model developed from a combination of economic and social factors.

ii. Zone 2: Zone of Transition

In the zone of transition thus where the oldest housing is, either deteriorating into slum property or by being invaded by light industry. It is a zone of mixed land uses, ranging from car parks and derelict buildings, to slums, cafes and older houses, often converted to offices or industrial uses.

(i) Zone 3: Zone of the working class.

This area contains modest, older houses occupied by stable, working class families. A large percentage of the people in this area also rent.

iii. Zone 3: Zone of better residence

The zone of better residence consists of medium-class housing of higher quality that include inter-war private semi-detached houses and councils' estates. The zone contains many condominiums and residents are less likely to rent.

iv. Zone 4: Commuter's Zone

People who can afford the expensive properties and the high cost of commuting occupy this area. Burgess' views on the urban fringe of the city are not clear. Burgess states that high-income housing is found on the edge of cities without elaborating on what happens behind this edge (Cilliers, 2010:16). Van der Merwe (1989:141) asserts that in illuminating the functional areas of the city, Burgess' model shows some relevance, but it is overgeneralised and does not accurately show reality. The following section reflects on the critiques of the Burgess' model.

2.2.1.2 Critique of the Concentric Zone model

Many contemporary geographers had challenged the Concentric Zone Model. The critiques on Burgess's model are summarised as follows:

- The social point of departure results in an over emphasis on residential patterns that do not give proper credit to other land uses;
- The model is too simple and limited in terms of various historical and cultural urban contexts, and is restricted in its applicability as a typical 1950's model. It is therefore not a timeless model;
- The model was developed when American cities were growing rapidly in demographic terms and when motorised transportation was still uncommon as people used public transport. Expansion thus involved reconversion of existing land uses. This concept cannot be applied in a contemporary (from the second half to the twentieth century) context where highways enable urban development to escape the reconversion process and to take place directly in the suburbs;
- The model was developed for American cities and therefore has limited applicability elsewhere. It has been demonstrated that pre-industrial cities, notably in Europe, did not in any way follow the concentric zone model;
- It describes the peculiar American geography, where the inner city is poor, while suburbs are wealthy; the converse may be the norm elsewhere;

- The Concentric Zone model assumes a spatial separation of place of work and place of residence, which was not generalised until the twentieth century;
- This model does not take into account any physical barriers as land may restrict growth of certain sectors; hills and water features may make some locations not suitable for residential purposes, and it does not take into account the gentrification that may occur in these cities; and
- This model is not applicable to modern cities influenced by technological changes such as advancement in transportation, information technology and the global transformation of economies where cities are no longer organised with clear zones (Rodrigue, 2009).

Despite a number of critiques, the Concentric Zone model remains useful for the approximation of concentric urban development and as a way to introduce the complexity of urban land use (Rodrigue 2009). According to Pacione (2005:140), the Concentric Zone model was proposed as an ideal type, and not automatically a representation of reality, it explains the effect of market forces upon land-use arrangements (Chaplin & Kaiser, 1979:32) and provides a valuable descriptive framework for the spatial organisation of urban land-uses (Herbert, 1972:70). It makes a powerful argument about the relationship of urban space to social class, social mobility, and assimilation (Dwyer 2010).

2.2.1.3 Applicability

The Concentric Zone model is applicable to this study for its impact on built environment heritage resources, as it represents the dynamic nature of cities in terms of urban development. The transition zone is, for instance, a zone that seems to change according to the demographic changes in cities, and accommodates change. Together with the CBD, it is typically the oldest part of traditional cities, where the oldest buildings appear and the CBD has the highest pressure to accommodate change. These zones (the transition and the CBD) are therefore the most vulnerable in terms of decisions about how to accommodate change. Many old buildings (part of the heritage of cities) are thus subjected to change or may be removed to accommodate new demands.

In many contemporary cities, if not most, built heritage resources are located in the CBD and transition zones. Urban growth and structural changes affect these areas. Balancing the conservation of built environment heritage resources with the pressure for development in these zones, is one of the major challenges for those involved in regulating the spatial planning and development of the city.

2.2.2 The Sector Model – Homer Hoyt (1939)

Following the Concentric Zone model, Homer Hoyt developed the Sector Model based on Burgess' work. According to (Herbert, 1972:74), the Sector Model by Hoyt is the second of the classic models of urban spatial form. Hoyt was a land economist and focused on land economics. Hoyt developed an influential approach to the analysis of neighbourhoods and housing markets. He refined local area economic analysis, and was a major figure in the development of suburban shopping centres in the decades after World War 2.

Urban development theorists argue that cities have multiple centres rather than a single urban core. This perspective is also known as the 'Sector theory' that suggests that cities are curved up not by concentric zones, but by unevenly shaped sectors within which different economic activities tend to congregate together. Hoyt (1939) suggests that the cities do not take the ecological pattern as suggested by Burgess, but that they grew in irregular blocks and not in Burgess's neat circles. However, Hoyt's model does not aim to replace the Concentric Zone model, rather, it aims to extend and refine it by adding the concept of direction to that of the distance from the city centre (Cilliers, 2010:16).

According to Hoyt's Model, the periphery of an urban area will develop in sectors, with different land uses as they originated from the centre (Cilliers, 2010:16). In this model, it is assumed that mixed land-uses develop away from the CBD and towards the periphery, in the form of sectors. Hoyt's Sector model for spatial urban development remains one of his most well-known contributions to urban planning and development, and also represents an economic perspective in urban development.

While the Sector model was based upon the same assumptions as the Concentric Zone model, it differs in terms of certain aspects. These assumptions are discussed in the following section.

2.2.2.1 Assumptions

Hoyt made the same basic assumptions as Burgess, with the addition of three new factors (Waugh, 2009:422).

- Wealthy people, who could afford the highest rates, chose the best sites, i.e. competition based on 'ability to pay' resolve land use conflicts.
- Wealthy residents can afford private cars or public transport and so live further from industries, and nearer to main roads; and
- Similar land-uses attract other similar land-uses, concentrating a function in a particular area and repelling others. This process leads to a 'sector' development of cities.

With these assumptions, Hoyt developed the Sector Model as shown in figure 2-2

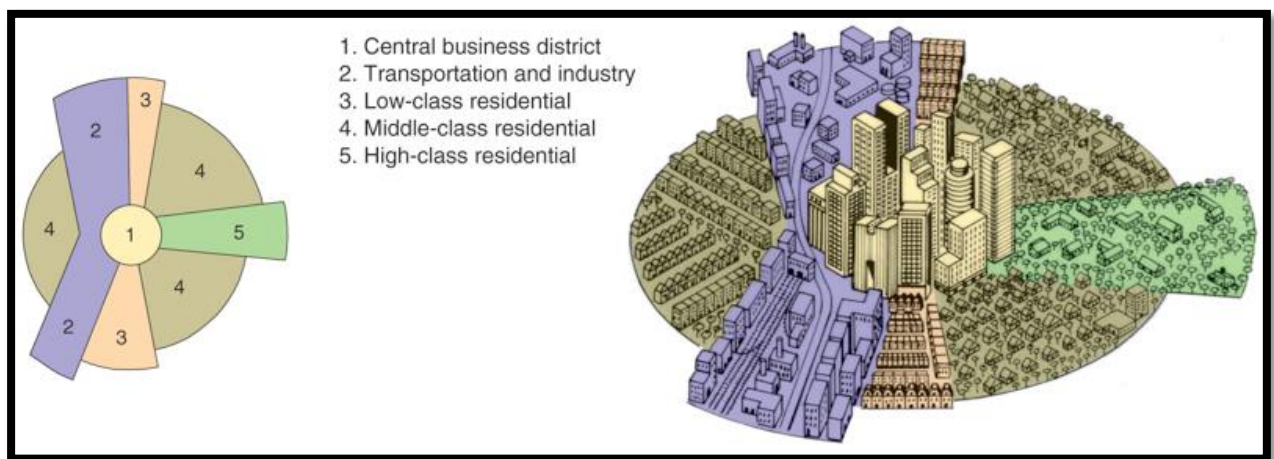


Figure 2-2: Sector Model

Source: Waugh (2009:422)

According to Hoyt, cities grow along the lines of economic activities and the main lines of transportation. The city is shaped more like a starfish or a spoked wheel, than concentric zones. Higher levels of access mean higher land values, thus, many commercial functions remain in the CBD, but manufacturing functions develop in a wedge, surrounding transportation routes. While accepting the existence of a CBD, Hoyt suggests that various socio-economic groups expand outward from the city centre, along railroads, highways, and other transportation arteries. Hoyt's Sector model consists of the following zones:

i. The CBD

Hoyt theorises that cities tend to grow in wedge-shaped patterns, or sectors, emanating from the CBD, and centred on major transportation routes. The CBD is posited around, while other land uses cluster.

ii. Transport and Industry

In the sector model, the industry follows rivers, canals, railroads and roads. Lower class workers work here, have low income and experience bad working conditions. The locals usually use goods produced by the industry.

iii. Low-class residential

This zone is characterised by low-income housing. It is located near the railroads that feed the factories. The inhabitants tend to work in the factories and live near the industry to reduce

transportation costs. Pollution (noise) or poor environmental conditions that are caused by the industry make it cheap.

iv. Middle-class residential

The middle class residential zone is further from the industry as well as pollution, making it a more desirable area. Access to transportation lines for working people who work in the CBD make transport easier. This is where the largest residential area is situated.

v. High-class residential

In the high class, residential zone there is less traffic. It is clean, quiet and furthest away from the town. In developing this model, Hoyt observes that it is common for low-income households to be near railroad lines; and for commercial establishments to be along business streets.

The Sector model is best recognised when examining Hoyt's views on residential development. Thus, residential functions grow in wedge-shaped patterns, with a sector of low income housing bordering manufacturing or industrial sectors (traffic, noise, and pollution makes these areas the least desirable), while sectors of middle and high-income households were located furthest away from these functions.

2.2.2.2 Critique of the Sector Model

Critiques of Hoyt's sector model are similar to those of Burgess's model, although it should be considered that the model was put forward before the redevelopment of inner-city areas, and the rapid growth of the car-based suburbs. The critiques of the Hoyt's sector model are as follows:

- The theory is based on nineteenth century transport and does not make allowances for private cars that enable commuting from cheaper areas outside city boundaries;
- Physical features may restrict or direct growth along certain wedges;
- No reference is made to out of town development; and
- According to Pacione (2005:134), the major weakness of Hoyt's sector model is that it largely ignores land uses other than residential, and it places undue emphasis on the economic characteristics of areas, ignoring other important factors, such as race and ethnicity, which may underlie urban land use change.

Hoyt's model was created to show that zones expand outward from transportation zones. The model has shown extensive applicability in the development of cities. From an economic perspective, from which it was derived, it shows that cities expand in sectors, taking into account land values. More so, the Sector model has also shown that land values are based on sectors (land use).

2.2.2.3 Applicability

The applicability of the Sector Model relates to the fact that, as this model emphasises urban development according to economic considerations, the conservation of built heritage resources that are not located along economic corridors and routes will be difficult to protect. In addition, built environment heritage resources have a cultural and social significance that does not necessarily have monetary value, such that they are treated from a single-minded perspective, and if they are not on economic routes or spheres, as isolated objects.

Like the Concentric Zone model, Hoyt's model has been criticised for ignoring physical features and new transportation patterns that restrict direct growth. Hoyt's model will lead to increased pressure over the land use, thereby affecting built heritage resources and disturbing urban conservation. In addition, Hoyt's model overemphasises economic social class, but ignores ethnic factors.

As a land economist, Hoyt did not consider built environmental heritage resources in such a way that the ethnic values of built environmental heritage resources may not be taken into consideration when new development is considered. The sector model shows great applicability in the development of cities, and from the economic perspective from which it was derived, it shows that cities expand in sectors taking into account land values.

2.2.3 The Multiple Nuclei Model – Harris and Ullman (1945)

Harris and Ullman proposed a more realistic model than those of Burgess and Hoyt. Harris and Ullman's Multiple Nuclei model (see Figure 2-3) is regarded as the third, and last, of the classical models of urban spatial structure (Cilliers, 2010:17).

2.2.3.1 Assumptions of the Multiple Nuclei Model

According to Waugh (2009:423), the assumptions of the Multiple Nuclei model are that:

- Modern cities have more complex structures than is presented in terms of sectors or concentric zones;
- Cities do not grow from one CBD, but from several independent nuclei;
- Each nucleus acts as a growth point and probably has a function different from other nuclei within that city;
- In time, there will be outward growth from each nucleus until they merge as one large urban centre; and
- If the city becomes too large and congested, some functions may be dispersed into new nuclei.

2.2.3.2 Layout of the Multiple Nuclei Model

Figure 2-3 below shows the layout of the Multiple Nuclei model that was formed after the assumptions of Harris and Ullman. The model itself contains nine different sections, all with separate functions as listed in the diagram.

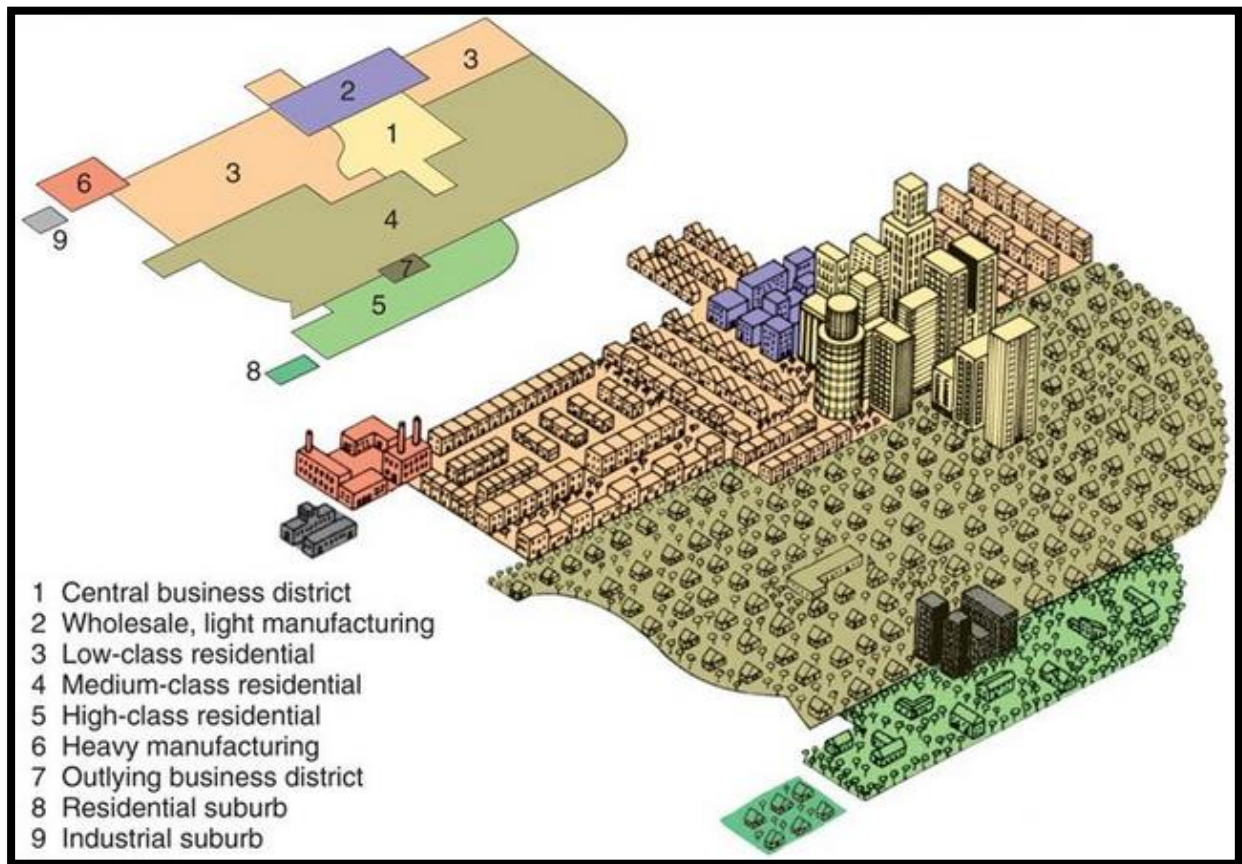


Figure 2-3: Multiple Nuclei model

Source: Waugh (2009:423)

The model describes the layout of a city. It notes that while a city may originate with a CBD, similar industries with common land-use and financial requirements are established near each other. These groupings influence their immediate neighbourhoods. The number and kinds of nuclei mark a city's growth.

The theory is based on the idea that people have greater movement due to increased car ownership. This increase of movement allows for the specialisation of regional centres, for example, heavy industries and business parks. There is no clear CBD in this model. The various nuclei of this model are discussed below:

- i. CBD

The CBD is the business centre of the city, and the centre point for transportation networks. In addition, this is where most of the offices and work are located.

ii. Wholesale, light manufacturing

The wholesale, light manufacturing region comprises light industrial businesses. Light manufacturing usually produces small products and things that will be used in the heavy manufacturing region. In addition, because it is close to the low-income residences, the people that usually work in this region are poorly paid.

iii. Low-class residential

The Low-income residential region predominantly houses the people with low wages. These people usually cannot afford to buy houses or large premises. Consequently, houses are typically condensed or have little space between them. In addition, from the figure of this model, this region is closer to the factories, because people cannot afford automobiles, and therefore live closer to the factories, in order to walk.

iv. Medium-class residential

The people living in the middle-income residential zone have a better standard of living than low-income residents. The houses in this region are usually larger than those in the lower class residential region.

v. High-class residential

The high-income residential region has the people with high wages or those that own businesses living there. This region is characterised by residents with better standards of living than the middle-income residents and low-income residents. Their houses usually have amenities such as swimming pools.

vi. Heavy manufacturing

The heavy manufacturing region where heavy or large products, mostly steel products, such as cars, are produced. Many people from the low-income residential region are employed here. This region is far from the CBD and the rest of the residential areas because it produces a huge amount of pollution. Therefore, most people do not want to live or work there, at least if they have a choice.

vii. Outlying business district

The outlying business district represents a second CBD.

viii. Residential suburb

The residential suburb is separated from other areas. In most instances, it has multiple functions.

i. Industrial suburb

The industrial suburb is a mixed industrial area that also spreads further from the centre of the city.

The different nuclei develop into dependent areas because of their activities. For example, some economic activities that support one another (for instance, universities and bookstores) will create a nucleus. Other nuclei form because they do better off when they are far from one another (e.g. airports and central business districts). Finally, other nuclei can develop from their economic specialisation (e.g. shipping ports and railway centres).

2.2.3.3 Critique of the Multiple Nuclei model

Similar to the other two classical spatial models of urban development, the Multiple Nuclei model has also been criticised as for the following reasons:

- The negligence of the height of buildings;
- The non-existence of abrupt divisions between zones;
- Each zone displays a significant degree of internal heterogeneity and not homogeneity;
- The unawareness of inertia forces;
- No consideration of the influence of physical relief and government policy;
- The concepts may not be applicable to oriental cities with different cultural, economic and political backgrounds.

2.2.3.4 Applicability

The Multiple Nuclei model was developed as a response to the need for maximum accessibility to a centre, to keep certain types of land use apart, for differences in land values and, more recently, to decentralise places (Waugh 2009:423). This model confirms that cities develop in nodes, based on geographical location. It states that the city will have numerous small nuclei that will enable its overall development.

Cities develop multiple centres or nodes that determine the value of the land and the surrounding areas. Built heritage resources in many historic cities shape or determine the forms and structures of the cities such that they are seen as the core of the cities. Moreover, due to their social and economic value, built heritage resources are seen as tourist attractions.

Harris and Ullman made the argument that the city's CBD loses its importance in relation to the rest of the city, and should not necessarily be seen as the only focal point of a city. The nuclei develop into independent areas due to specific activities taking place in the different regions nuclei.

The three models discussed namely, the Concentric Zone model, Sector model and the Multiple Nuclei model, all provide a framework for studying the growth and structure of cities and how urban development occurs. Fisher (1984) points out that these models are helpful since they are simple and easily comprehensible models to explain how the different land use classes of particular towns are arranged through specific approaches. Kivel (1993:69) mentions that these models establish theoretical models to describe the existing urban structure of cities.

Classical theories of urban development view cities as uncomplicated, whilst cities are in fact dynamic as they change from time to time due to factors such as urban growth, technology and climate change (Batty, 2008:4). Due to the criticisms of the classical models of urban development, it is accepted that these models are not necessarily timeless models of urban development. In countries such as South Africa, there are other influences or forces that shaped urban development that cannot be accounted for in terms of the classical models. Two forces, namely modernism and apartheid, shape the South African cities. For this reason, Davies' Apartheid City model (1981) and Simon's Modernised Apartheid City model (1989) are appropriate models to include when discussing urban development.

2.3 The South African Apartheid model

Although the classical models did, to some extent, shape South African cities, the ideology of separate development based on race had a huge impact on their structure. This section discusses the Apartheid model of Davies (1981) and Simon (1989) as the foundation for the fragmented urban development of the South African city.

2.3.1 Davies' Apartheid City model (1981)

In 1981, Davies developed the Apartheid City model that was preceded by his segregation model (Davies, 1981:63). According to Simon (1989:191) the Apartheid city is unique and incomparable to other cities around the world. It is the result of the 1950 Group Areas Act that sought to separate various racial groups in South Africa into distinct spatial areas (Christopher, 1984:77).

2.3.1.1 Layout Davies' Apartheid city

According to Davies's model, citizens in South Africa were classified into particular racial groups, each assigned to a specific residential area reserved only for that group (Christopher, 1984:77).

The model consists of the following areas, as indicated in Figure 2-4 (Christopher, 1984:77; Simon, 1989:191):

- A white CBD, reserved for white business owners;
- An Indian CBD, was an exception and usually located closer to the Indian residential zone;
- White residential areas of low, medium and high income earners, situated around the CBD;
- An Industrial zone, which developed in the direction of non-white residential areas and, in many cases served as a buffer zone between white and non-white residential areas;
- An African residential area or township. These areas were usually separated from white residential areas by means of a physical barrier (for example an industrial area); and
- Indian and Coloured residential areas, which were adjacent to African residential areas.

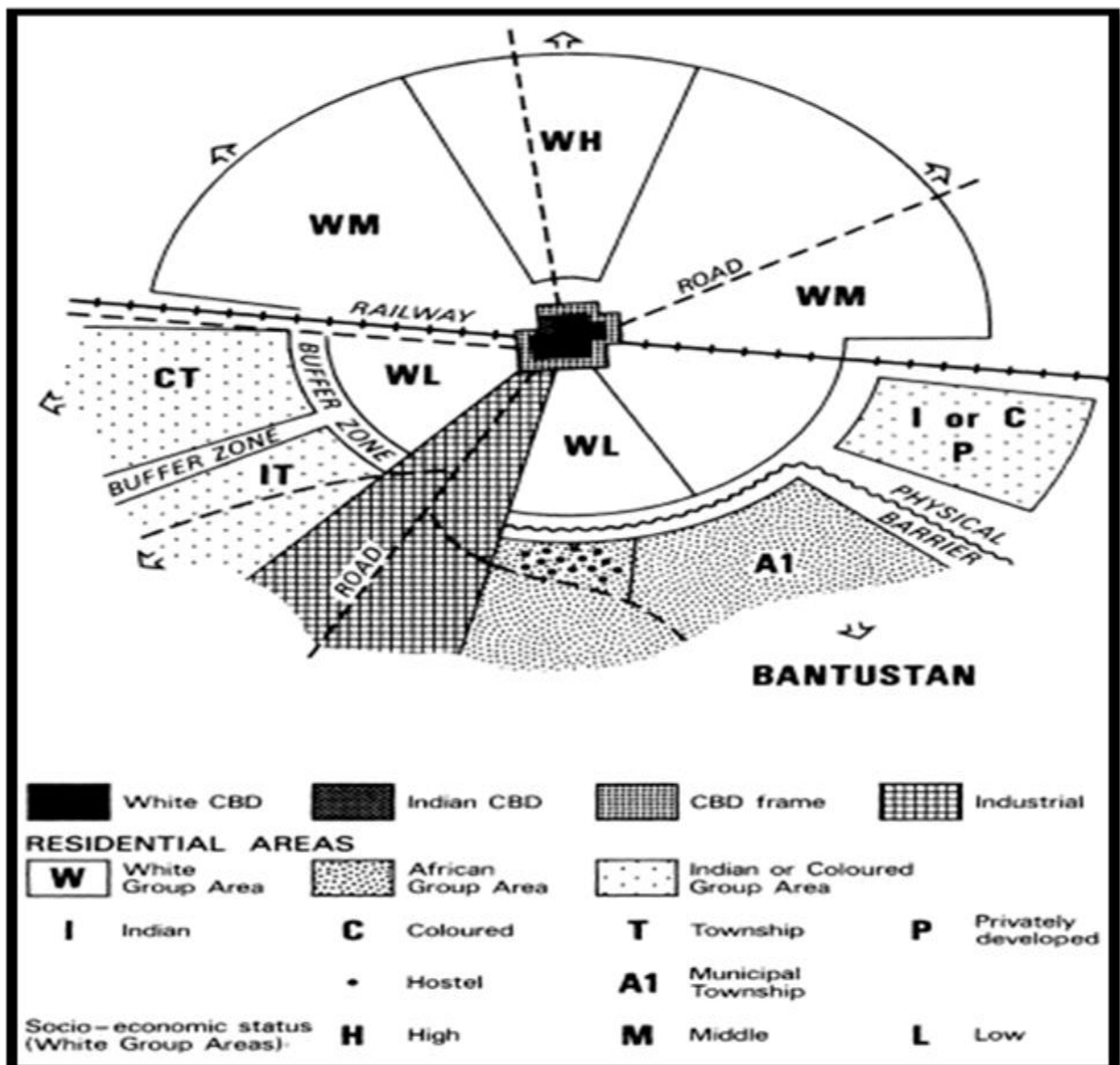


Figure 2-4: Davies Apartheid City model (1981)

Source: Adapted from Davies' (1981)

To achieve the enforced spatial division, forced removals were conducted, where residents were forced from their homes and moved to new residential areas. The Apartheid City model proposed controlled outward growth toward the periphery of the city. This model has similarities to Hoyt's sector model (Cilliers, 2010:23) with the city developing from the CBDs of the segregated groups, namely the White, African and the Indian CBD.

2.3.2 Simon's Modernised Apartheid City Model (1989)

David Simon (1989) proposed a modification of Davies' Apartheid City model. Simon's model addressed the changes that were occurring in South African cities due to changing political environments, which were mainly caused by international pressure and sanctions (Simon, 1989:191). The changes that had the biggest effect on the spatial development of towns and cities in South Africa were (Simon, 1989:194):

- The development of 'open' business districts. These business areas were open for the use of all racial groups, and in some cases included the CBD; and
- The establishment of free trade areas outside the CBD.

These changes had the most significant effect that new shopping centres developed in white residential areas and initiated the decentralisation of business and commercial land uses. At this time informal settlements also appeared around towns and cities. This is illustrated in Figure 2-5 below.

2.3.2.1 Layout of Simon's Modernised Apartheid City model

The modernised model illustrates some changes to the apartheid city during this period (from Davies to Simons) as follows:

- Free trade areas in the CBD and free settlement residential areas, that were free from race-based restrictions;
- Suburban shopping centres, as a form of decentralisation of business;
- Black residential areas began to diversify in terms of the types of housing; and
- In the African townships, site and service housing schemes and squatting were evident on the urban periphery.

Source: Simon (1989:193)

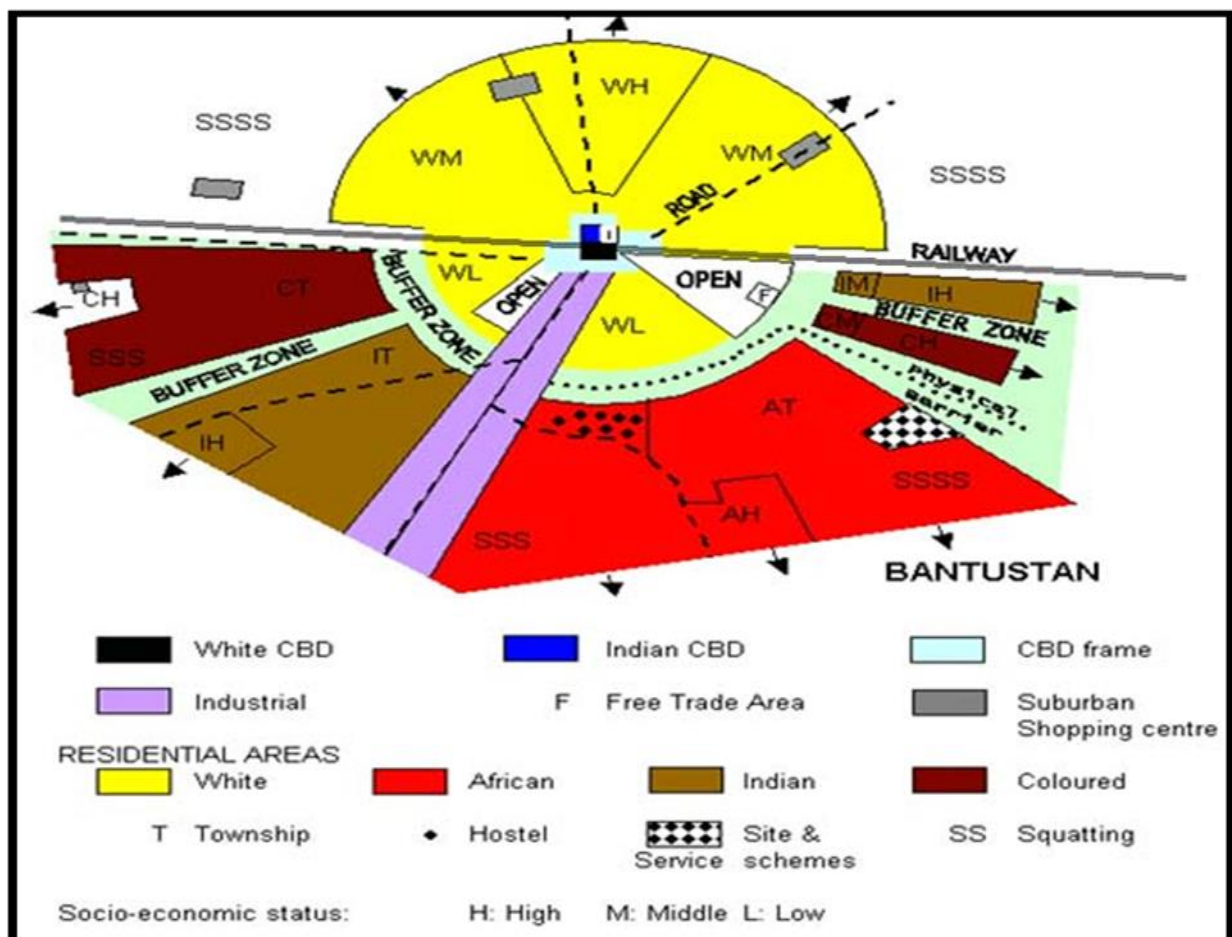


Figure 2-5: Simon's Modernised Apartheid City Model

Source: Adapted from Simon (1989)

The modernised apartheid city model illustrated above indicates the free trade areas in the CBD and beyond, open residential areas, spatial class differentiation within all racial group areas, site and service schemes in new peripheral African townships, and squatting on the urban fringe.

2.3.2.2 Critique against the South African Apartheid City model

The Apartheid City model shaped most of the current towns and cities in South Africa. It particularly guided the growth and structure of these cities. Urban development in South Africa raised numerous concerns and criticisms. The main points of criticisms revolve around the separated development based on racial grounds and the spatial fragmented form of South African cities. The critiques for the model include:

- Racial discrimination and residential segregation

In the Apartheid City model, residential segregation was especially thorough and the controls on urbanisation were unusually severe. Residential segregation under the Group Areas Act No 41

of 1950 (Thompson 1990: 194) resulted in towns that were divided into separated “white”, “coloured”, “Indian”, and “African” areas. Residential segregation was linked to the systematic regulation of social interaction in public spaces (especially municipal facilities).

- Fragmented urban form

The Apartheid City model promoted a fragmented and distorted urban form characterised by:

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

The Apartheid City model was thus highly ordered spatially, with the archetypal design illustrated by Davies (Christopher 1994:103-104). African settlements were successively removed eastwards; away from the city centre. The coloured population was the primary victim of forced removals from the 1960s through to the 1970s, subject to relocation from what became uniformly white areas to more distant areas especially sandy areas that were not even suitable for agriculture. Racial segregation was not simply to separate “racial” groups but also to ensure a clear racial hierarchy in which ‘poor whites’ would be lifted, economically and socially, above almost all non-white people.

According to Hirt (2005:30), the modernistic models have encouraged segregation and have affected urban development. Modernist planning caused the categorising and dividing of land use and function. Modernism dominates the western world (Healey, 1997:38) and has traditionally guided planning (Beauregard 1989). Irvine (2012:39) mentions that in South Africa segregation was gradually entrenched in urban areas over the centuries and climaxed during the apartheid era. Segregation took on many different forms, including spatial and social segregation.

Post-modernist thinkers started to advocate for a shift from segregation to integration, arguing that cities are dynamic entities that cannot be artificially separated or segregated. Thus, there was a need for a more holistic approach that accommodates the dynamic nature of cities, and makes cities and towns more integrated and sustainable. In the following section, the post-modern models that propagate integration will be discussed.

2.4 Post-modern urban development models

Allmendinger (2001:9) mentions that post-modernism is understood as a post 1960-1970s “sensibilities” shift, and a new state of mind. Post modernism signifies a break from the modernist idea that planning and development should focus on large-scale, metropolitan-wide, technologically rational and efficient urban plans (Harvey, 1989:66). In Milroy’s terms (1991:183), post modernism is “anti-foundationalism” in terms of questioning universal laws and unitary definitions of what “truth” or ‘good” is, “not dualistic” in the sense that it refuses to separate facts from values, and in ‘encouraging plurality and difference.” Planning theory has recently been dominated by debates on how to foster citizen-driven instead of expert-driven planning. This rise of participation signifies the adaptation of “the planning process to the postmodern relativity of views” (Filion, 1999:424; Hirt 2002).

While Modernist models entails a ruthless break from any or all preceding historical conditions (Harvey, 1990:12), post modernism thinking brings about a search for origins and nostalgia for the past (Ellin 1999). Thus, post modernism is a selective “revalorisation of tradition” (Inglehart, 1997:25). Postmodern urbanism represents a revival of traditionalism. In lieu of a clean break, it “seeks a reconciliation with the past” (Audriac and Shermeyen, 1994:161) in terms of a renewed interest in historic urban forms and the local cultural heritage. This is evident in the growing power of historic preservation and in the fact that some of the most celebrated new forms are built according to “neo-traditionalist” principles (Krier 1988). Ultimately, post-modernism seeks to integrate instead of segregate past and present.

Post-modern models that present more integrated approaches to urban development are, for example, New Urbanism, Smart Growth and the Compact city model. These models form the focus of the next section.

2.4.1 New Urbanism

New Urbanism can be defined as a planning and development approach based on the principles of how cities and towns were built for the last century. These cities and towns were characterised by walkable blocks and streets, housing and shopping in close proximity, and accessible public spaces (Charter of the New Urbanism, 2015). Boeing; et al (2014) also defines New Urbanism as an urban design movement which promotes environmentally friendly habits by creating walkable neighbourhoods containing a wide range of housing and job types.

New Urbanism reflects a general shift in the focus of planning, from efficiency-related, quantitatively measurable goals, to more intangible, qualitative, “soft” priorities, such as “community renewal” (Milroy 1991) or “sense of place.” This parallels what has been coined as a key element of global cultural post modernisation: a shift from materialist-centred, toward quality-

of-life-centred values (Inglehart 1997). The ensuing figures illustrate the new urbanism approach in a neighbourhood city. Figure 2-6 shows the neighbourhood city before New Urbanism and Figure 2-7 shows the neighbourhood city after New Urbanism.

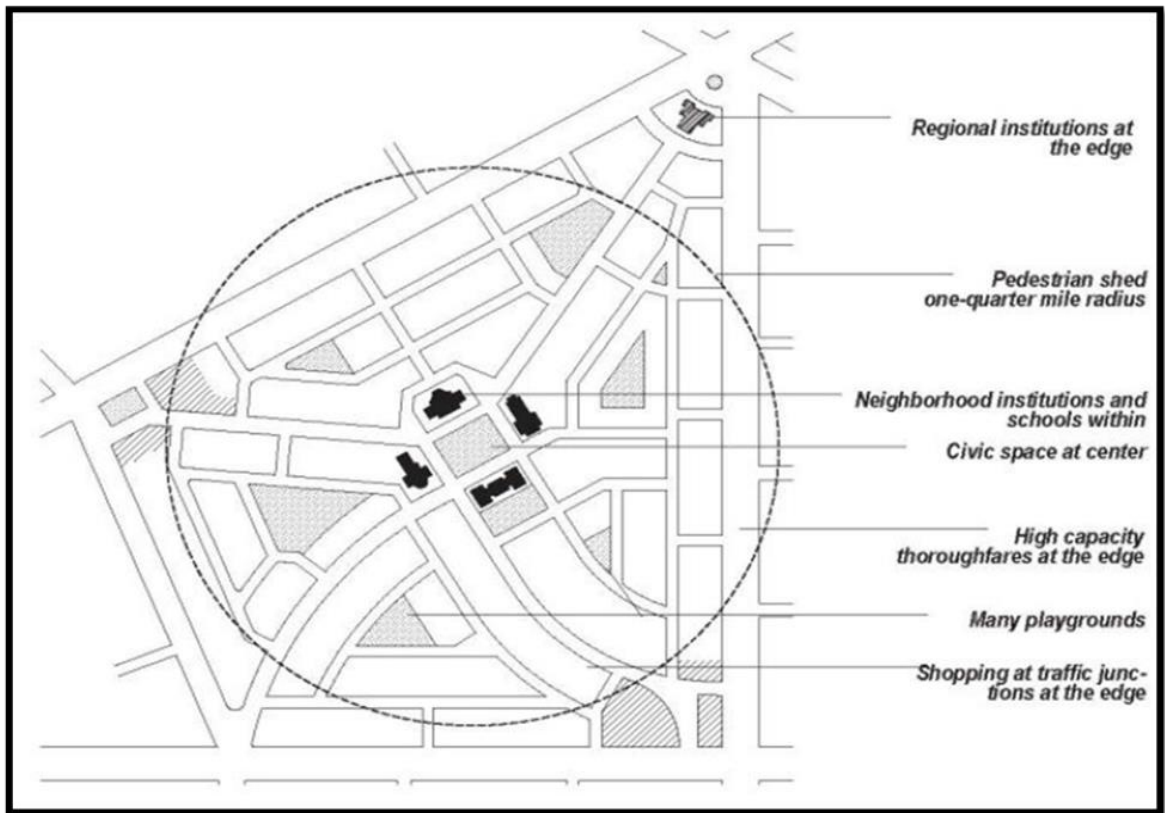


Figure 2-6: Neighbourhood unit before New Urbanism

Source: Rahnama (2012: 200)

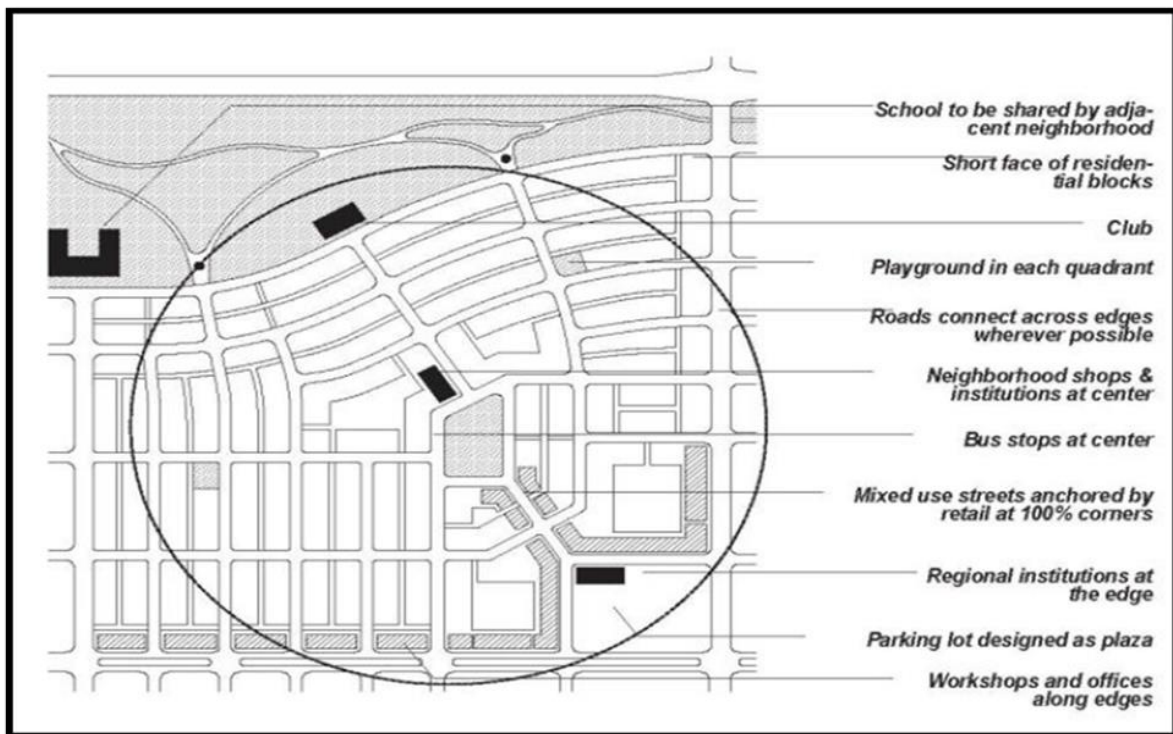


Figure 2-7: Neighbourhood city after New Urbanism

Source: Rahnama (2012:200)

2.4.1.1 Principles of New Urbanism

New Urbanism takes specific principles as points of departure to guide the planning and design of urban areas. These ten principles are (CNU, 2001)

2.4.1.1.1 Walkability

Most needs are within 10-minute walks from home and work. Street design is friendly to pedestrians, because buildings are close to the street and have porches, windows, and doors. Streets comprise several trees and on-street parking, with parking lots and garages placed behind buildings and houses, often connected to alleys. Streets are narrow, which ought to slow traffic dramatically.

2.4.1.1.2 Connectivity:

An interconnected street grid disperses traffic and encourages walking.

2.4.1.1.3 Mixed-use and Diversity:

Neighbourhoods, blocks, and buildings offer a mix of shops, offices, apartments, and homes. The neighbourhoods welcome people of all ages, income levels, cultures, and races.

2.4.1.1.4 Mixed Housing:

Zoning allows the close proximity of a wide range of housing types, sizes, and prices.

2.4.1.1.5 Quality Architecture and Urban Design:

Buildings emphasise beauty, aesthetics and comfort, and establish a sense of place. Public spaces function as civic art, establishing an attractive, quality public realm.

2.4.1.1.6 Traditional Neighbourhood Structure:

Neighbourhoods comprise definite centres and edges, with public spaces near the centre. Each neighbourhood contains a range of uses and densities within 10-minutes' walk.

2.4.1.1.7 Increased Density:

Buildings, residences, shops, and services are close together, to make walking more convenient, services and resources more efficient, and living areas more enjoyable.

2.4.1.1.8 Smart Transportation:

A network of high-quality public transport connects cities, towns, and neighbourhoods, while pedestrian-friendly designs encourage more use of bicycles, rollerblades, scooters, and walking as daily transportation.

2.4.1.1.9 Sustainability:

The community uses respect for natural systems and eco-friendly technologies like energy efficiency to minimise effects on the environment. The community connects strongly with surrounding farmland, encouraging land preservation and local food consumption.

2.4.1.1.10 Quality of Life:

These design principles produce a high quality of life by providing places that enrich, uplift, and inspire the human spirit.

2.4.1.2 Critique of New Urbanism

- According to Dewolf (2002), New Urbanism developments may be aesthetically pleasing, but aesthetics alone do not create community or urbanity;
- New Urbanism towns often segregate zones instead of integrating them. The majority of commercial establishments are limited to designated town centres surrounded by a ring of residential areas, with few bridges to connect the two sections. This zone segregation

keeps New Urbanism communities from resembling the small towns and urban neighbourhoods they strive to become;

- Dewolf (2002) further criticises the New Urbanism concept by stating that the concept has led to the neglect of the old urbanism concept. He does not find anything wrong with the organic neighbourhoods that fill inner cities and have never stopped working, as countless metropolises can attest;
- Another critique of New Urbanism is that it fails to take into account that many families prefer single-family homes and do not care to drive long distances. They do not necessarily want to live in higher density areas, even if facilities are closer (Smith 2015);
- Many New Urbanists are working directly on issues of racism and social equity; however, these are larger sociological problems that are not able to be resolved by physical planning measures and urban design; and
- Social problems cannot be fixed with design.

New Urbanism can be criticised, but in the absence of any superior alternative, it perhaps provides a starting point for transforming current urban forms of cities based on modernistic principles. It provides an alternative for what structured many current cities namely suburban development.

2.4.1.3 Applicability

New Urbanism is applicable to this study as it encourages the conservation and inclusion of the existing built environment in urban development. New Urbanism advocates urban development that is community based and people oriented, and in this sense acknowledges the current sense of place of the buildings and places that people are attached to, for example, historical buildings or areas. In New Urbanism, there is the integration of the new and old planning concepts (old and new urbanism), and this way of planning and design emphasises on incorporating built environment resources into an existing urban grain where built heritage resources do not become isolated objects from the past.

2.4.2 Smart Growth

Smart Growth provides another alternative for a more integrated urban environment (Whalen, 2009:15). Smart growth is defined as an approach to development that encourages a mix of building types and uses, diverse housing and transportation options, development within existing neighbourhoods, and community engagement. Smart Growth is not a single tool, but a set of cohesive urban and regional planning principles that can be blended together and melded with unique local and regional conditions to achieve a better development pattern (Littman, 2003:5). It is an approach to achieving communities that are socially, economically, and environmentally sustainable.

Smart growth refers to land use and development practices that enhance the quality of life of communities, preserve the natural environment, and save money over time. The aim is to limit costly urban sprawl, use tax money more efficiently and create more liveable communities. Smart growth practices range from promoting compact, complete communities to supporting a viable working land base. Developments that conserve resources (land, infrastructure, and materials) cost less and increase property values (Curran, 2003:10).

Smart Growth differs from New Urbanism in terms of size and focus. While New Urbanism is concerned with urban design and the actual neighbourhoods, Smart Growth is about sprawl management and regional planning. New Urbanism focuses on an aesthetic and design philosophy that promotes a compact built form. It does not necessarily concern itself with regional growth plans or land economics. Moreover, on the other hand, Smart Growth helps towns and cities grow in ways that expand their local economic opportunity, while protecting the existing urban environment. Smart Growth principles promote the conservation, restoration and protection of natural and cultural features, by removing development pressure from the regions that these features are located in, through the infill and densification of existing communities. However, infill development and densification increase development pressure.

2.4.2.1 Principles of Smart Growth

According to the Urban Land Institute (2007), the 10 principles that define Smart Growth are:

2.4.2.1.1 Mixed land uses

Mixing land uses means building homes, offices, schools, parks, shops, restaurants, and other types of development near one another on the same block or even within the same building.

Mixed land uses bring more people to a neighbourhood at various times of day, and mixed land uses support businesses, improve safety, and enhance the vitality of an area. Mixing land uses also makes it possible for people to live closer to where they work or run errands, and without driving to get there. With mixed land use being practised, neighbourhoods are in demand. Thus, this approach can boost property values and keep them stable, protecting the investment of homeowners as well as tax revenues for municipalities.

2.4.2.1.2 Take advantage of compact building design

Compact design means making more efficient use of land that has already been developed. Encouraging development to grow up, rather than out, is one way to do this. Other ways include infill development and building on empty or underutilised lots. Building within an existing neighbourhood can attract more people to the jobs, homes, and businesses already there, while

also making the most of public investments in basic services such as water and sewer lines, roads, and emergency services.

2.4.2.1.3 Create a range of housing opportunities and choices

Building quality housing for families at all stages of life and income levels is an integral part of a smart growth approach. Housing constitutes a significant share of new construction and development in any city, but its economic importance is sometimes overlooked. Adding housing in commercial districts may well breathe new life into these neighbourhoods. In addition, more importantly, the housing options available in a community will influence the economic opportunities of families, their costs of living, and how much time they spend commuting each day. Diversifying housing options within existing neighbourhoods can give everyone more choices about where to live.

2.4.2.1.4 Create walkable neighbourhoods

Walking is a convenient, affordable, and healthy way to get if it is done safely and conveniently. Walkable neighbourhoods are in high demand. Walkable places are created, in part by mixing land uses and taking advantage of compact design, but are activated by smart street design that makes walking not only practical but safe and convenient to enjoy.

2.4.2.1.5 Foster distinctive, attractive communities with a strong sense of place

Unique, interesting places that reflect the diverse values, culture, and heritage of the people who live there have the greatest staying power. Projects and neighbourhoods that incorporate natural features, historic structures, public art, and place making, can help distinguish a place from its neighbouring areas to attract new residents and visitors, and support a vibrant community for the people who already live there.

2.4.2.1.6 Preserve open space, farmland, natural beauty, and critical environmental areas

Preserving open spaces like prairie, wetlands, parks, and farms is both an environmental and economic issue. People across the country want access to natural recreation areas, which translates to demand for housing and tourism. Meeting that demand improves a city's ability to attract employers, while also supporting agricultural industries. Preserving open spaces can also make communities more resilient, protecting them from natural disasters, combating air pollution, controlling wind, providing erosion control, moderating temperatures, protecting water quality, and protecting animal and plant habitats.

2.4.2.1.7 Strengthen and direct development towards existing communities

Developing within existing communities rather than building on previously undeveloped land makes the most of the investments already made in roads, bridges, water pipes, and other infrastructure, while strengthening local tax bases and protecting open space. However, regulations, zoning, and other public policies sometimes make this approach unnecessarily difficult for developers. Local leaders ought to change policy to encourage development within existing neighbourhoods.

2.4.2.1.8 Provide a variety of transportation choices

High quality public transportation, safe and convenient biking and walking infrastructure, and well-maintained roads and bridges helps communities to attract talent, to compete on a global scale, and to improve the day-to-day lives of their residents. To make this happen, elected leaders and transportation agencies must change how they prioritise, select, invest in, build, and measure transportation projects at the local, regional, and national level.

2.4.2.1.9 Make development decisions predictable, fair, and cost effective

Developers play a crucial role in how towns and cities are built. Many developers want to build walkable, urban places but are thwarted by restrictive regulations or complicated approval processes. Municipalities interested in encouraging smart growth development should examine their regulations and streamline the project permitting and approval processes whereby development decisions are more timely, cost-effective, and predictable for developers. By creating a supportive environment for the development of innovative, pedestrian-oriented, mixed-use projects, government can provide smart growth leadership for the private sector.

2.4.2.1.10 Encourage community and stakeholders' collaboration in development decisions

Every community has different needs and meeting those needs requires different approaches. Communities suffering from disinvestment may need to focus on encouraging development downtown, while communities with robust economic growth may need to focus on addressing social equity. The common thread is that the needs of every community and the strategies to address them are best defined by the people who live and work there.

Smart growth is not possible without the perspective of everyone with a vested interest in a town, city, or neighbourhood. Smart growth is about building a future for a community that everyone can participate in, and gathering the ideas, feedback, and support of everyone in that community is the only way to do it. This process is not only inclusive and equitable; it also gives projects built-in support and staying power.

Smart growth generally refers to development that, for the most part, resembles traditional city design. Smart growth stresses the importance of including pedestrians, the most basic and fundamental form of travel, as well as cyclists and transit users in planning new developments, and improving and infilling existing developments. It also encourages the use of compact development with large numbers of public space instead of large lawns. Figure 2-8 and 2-9 below illustrate some examples of Smart growth.



Figure 2-8: Illustration of a city before Smart Growth

Source: Robinson (2015)



Figure 2-9: A city after Smart Growth

Source: Robinson (2015)

2.4.2.2 Critique of Smart Growth

- Litman (2015:3), based on simple models of the relationship between density and trip generation, claims that Smart Growth increases traffic congestion and therefore reduces the transport system quality. Yet, traffic congestion alone is an ineffective indication of transport system quality; it is important to consider the quality of other modes;
- Consumer costs will increase (Litman 2009) because of rising transportation costs from the congestion and the restrictions on new shopping areas;
- Smart growth policies can be effective in encouraging middle-class residents to move into blighted neighbourhoods. However, when applied to already-functioning environments, Smart Growth frustrates consumer preferences and drives away residents through high prices, especially for real estate (Faherty, 2013);
- Due to Smart Growth, gridlock and air pollution will increase greatly as traffic congestion (Melia, Parkhurst and Barton 2011) continues to mount, imposing costs on travellers and consumers that are dependent on the distribution of goods delivered mainly by heavy vehicles and
- Smart Growth fails to see the unintended consequences of central planning. The concept of Smart Growth advocates and claims that policies make urban living easier and more efficient, but in fact causes an increase in housing projects. Smart Growth also reduces homeownership and increases population density. (O'Toole: 2001: 22).

2.4.2.3 Applicability

The Smart Growth concept promotes the preservation of built heritage resources whilst encouraging local economic opportunities and protecting the environment. The city will develop without any disturbances on the built heritage resources, with funds to take care of these resources coming from other sources of income generation of the city rather than themselves.

2.4.3 The Compact City model

The compact city model is designed to implement sustainable development within the urban environment, and to counteract the perceived negative social, economic and environmental impacts of urban sprawl. There have been attempts to define exactly what a compact city is, but in general, it means a relatively high-density, mixed-use city, based on an efficient public transport system and dimensions that encourage walking and cycling (Burton, 2000:1970). Figure 2-10 below illustrates the compact city concept.



Figure 2-10: Compact City model

Source: Tuinzing (2013)

The main benefits of the Compact City model include:

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

The world has been urbanising for centuries (United Nations, 2001). The availability of land has become an ever-growing issue owing to claims made by the rapidly increasing levels of mobility. Despite the need for housing and for urban space that keeps growing, the negative effects of urban sprawl call for a change in the outwards-oriented movement in the surge for urban space. Therefore, the Compact City concept is seen as an approach that may end urban sprawl (see figure 2-11).

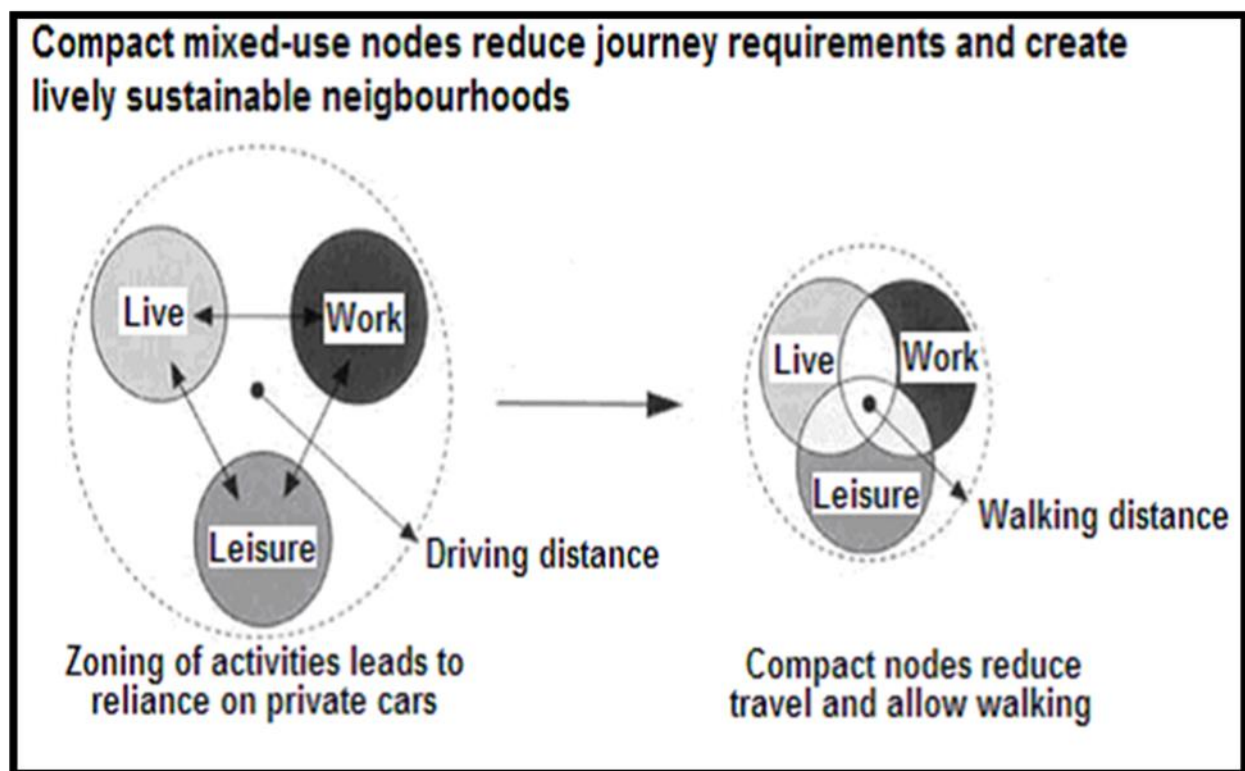


Figure 2-11: Illustrates the Principles of a Compact City

Source: Cilliers (2016:11)

The figure above describes the paradigms of a compact city taking into consideration three major compact city principles which are intensification, mixed use and density. The compact city principles are discussed in the following section.

2.4.3.1 Principles of compact city model

2.4.3.1.1 Mixed use

The Compact City concept is aimed at a high-density mixed-use and intensified urban form.

2.4.3.1.2 Density

The idea emphasises that urban activities should be located closer together, to ensure better access to services and facilities, via public transport, walking and cycling, and more efficient utility and infrastructure provision.

2.4.3.1.3 Intensification

In the Compact City, human scale factors should be given greater emphasis from the viewpoint of achieving a better quality of life, and therefore considerations of the effects of the local environment are key components in such planning (Burton 2000).

2.4.3.2 Critique of the Compact City

- Compact cities are related to environmental consequences. This urban form is not necessarily compatible with the requirements of sustainable development, since it may imply an increase in traffic congestion and pollution, as well as a decrease in the quality of life for people (Breheny 1995);
- According to Gordon and Richardson (1997), the weakness with the compact city model is in its feasibility from the point of view of both supply and demand in the housing market. On the supply side, the potential for densification in urban areas may be too limited to curb urban sprawl. On the demand side, the compact city may be unworkable because it is undesirable for residents; and
- The third critique focuses on the social implications of densification and rather contradicts the former argument, stating that the compact city may be seen as desirable (compatible with residential aspirations), but would not be neutral from a social point of view (the densification and regeneration of central areas would benefit only a well-off minority).

The Compact City concept is most of all a spatial concept with the intention of intensifying the use of existing urban space as much as possible, thereby improving the quality of urban life and sparing the countryside.

2.4.3.3 Applicability

The compact city model provides insight on how functional integration can be achieved through urban conservation and development. It also provides insight on the orienting or implementing of socio-economic nodal urban development and conservation in the presence of built heritage resources. The impact of having a compact city, in terms of built heritage resources, is that there are numerous economic impacts such as, heritage tourism, property values, small business incubation, jobs and household income, and centre city revitalisation. Therefore, the compact city design within built heritage resources is important as it enables cities to be self-sustaining. Compact cities encourage quality urban design that contains mixed-use developments, while limiting urban growth by focusing on urban intensification. This is a useful approach for this research as it integrates model of cities.

2.5 Conclusion

This chapter provided an overview of various modernistic and post-modernistic models that influenced, and are still influencing, urban development worldwide. Classical Urban development Models such as the Concentric Zone model, the Sector model and the Multiple Nuclei model all describe the current structure of cities. However, they all tend to view cities as predictable entities based on a fixed nature. Specific cultural, social, political influences are not necessarily accounted

for. South African cities, for instance, developed a fragmented urban structure due to the political dispensation of apartheid. Davies and Simons' models of the Apartheid city explain the segregated result of South Africa cities. While modernistic models succeed in giving reasons for structural formations of urban development, they were all based on the idea of separation, whether its land uses or cultural separation (the Apartheid model). This have major implications for the integration of urban conservation and urban development.

Post-modern urban models provide a more integrated view of cities. The major implications for urban conservation and development in these models are that the past should be incorporated into the present and future for the economic and social sustainability of cities. However, it is not only the theories on urban development that affect the way built environment heritage resources can be integrated in the urban environment. Urban conservation theories themselves developed from viewing conservation as an isolated practice (mostly done by architects). The development of urban conservation from classical paradigms to contemporary paradigms, is the focus of the next chapter.

CHAPTER 3 PARADIGMS IN URBAN CONSERVATION

3.1 Introduction

Culture is one of the engines that drive urban development (Van de Borg & Russo, 2005:18). The importance of culture as an engine of urban development can be fully gauged by considering its role in the regeneration of cities. Culture is part of revitalisation projects in urban areas throughout the world. Cultural development and planning are regarded as valuable strategies to accelerate the processes of urban growth or regeneration. Cities invest in cultural facilities and events, and in the preservation of their historical heritage to make their transition to a post-industrial economy that is based on advanced services, sustainable functional mixes and a high quality of the urban environment (Van de Borg & Russo, 2005:7).

Urban development and urban conservation are inseparable as there is a relationship between the 'search for identity', which looks back to the past, and the forward-looking phenomena of 'demand for progress' (Yean, 2005). According to UNESCO (2011), urban conservation is not just limited to the preservation of a single building in isolation but includes the overall urban setting. By definition urban conservation seems to be related to urban planning, as urban planning is used to guide the future development of towns and cities.

While the previous chapter (chapter two) focused on urban development theories and models and the way in which these models influenced the form of cities, the focus of this chapter is on urban conservation. After defining urban conservation, the primary purpose of this chapter is to give an overview of urban conservation paradigms and the way in which these paradigms have shaped and guided the treatment of built environment heritage resources until now. Literature on urban conservation as well as its relation to urban development will be discussed, they both are important in the spatial planning of towns and cities.

3.2 Defining urban conservation

According to Habitat III (2015:3), urban conservation relates to urban planning processes aimed at preserving cultural values, assets and resources through conserving the integrity and authenticity of urban heritage, while safeguarding intangible cultural assets through a participatory approach. The Australian ICOMOS Burra Charter of 1999 states that 'urban conservation means all the processes of looking after a place so as to retain its cultural significance'. In this statement, 'cultural significance' refers to 'aesthetic, historical, scientific or social value for past, present or future generations'.

Warren et al. (1998) asserts that urban conservation is the tact and skill of management and controlling change in urban historic environments. Previously, urban conservation was not viewed as something that did exist as a special activity requiring specialised and trained skills (Munoz, 2005:1). These definitions of urban conservation by Habitat III (2015) and ICOMOS (1999) remain as a source of the benchmarks of urban conservation. However, the concept of urban conservation is diverse and it has attracted many definitions from different scholars (Ukabi, 2006:78). Urban conservation is therefore, a long-term commitment to an area; not just the focus and including of a building or a monument per se, as purported by early conservators in history (Ukabi, 2006:78). These comprehensive definitions are supported by the definition of Lui (2011:25) of urban conservation as a multifaceted concept.

The definitions pertaining to urban conservation vary in accordance with the approaches to urban conservation and has since the 19th century, broadened in scope and strengthened in importance. According to Colendrander et al (2013:5), John Ruskin is a pioneer in the protection of historic monuments and has been influential at an international level with respect to heritage protection.

The above definitions illustrates that urban conservation is not just a constant concept but also a result of continuing history. In defining the concept of urban conservation, changes have occurred over time such that the current definition of urban conservation approaches view the concept in a holistic manner. These approaches are discussed in the following section.

3.3 Urban conservation paradigms

The protection and conservation of places and properties predates the 19th century (Jokilehto, 2008:5). In the 18th century, there was an increased attention to cultural diversity and national identity through what was referred to as the “grand tour”. These “grand tours” referred to visits paid to countries like Italy and Greece with numerous built heritage resources. These countries played an important role in creating an awareness of the value imposed on built heritage resources and the conservation thereof (Nasser, 2003:468). According to Orbasli (2008), an important spin-off of these ‘tours’ was the increasing awareness of the value of conserving built heritages in towns and cities other than just for the sake of conservation.

Against this background, the discussion turns to a discussion on the theories on urban conservation. When studying the theories behind urban conservation it is noticeable that urban conservation is considered from two approaches: (i) classical approaches and (ii) contemporary approaches. These two types of approaches will structure the discussion in the following section.

3.3.1 The classical paradigm: Isolating the past form the present

Urban conservationists such as Ruskin (1880s) and Brandi (1963) developed the classical urban conservation approaches. The classical conservation paradigm consists of preservation, restoration, stylish restoration, authentic restoration and anti-restoration. Figure 3-1 below provides a summary of classical conservation paradigms over time.

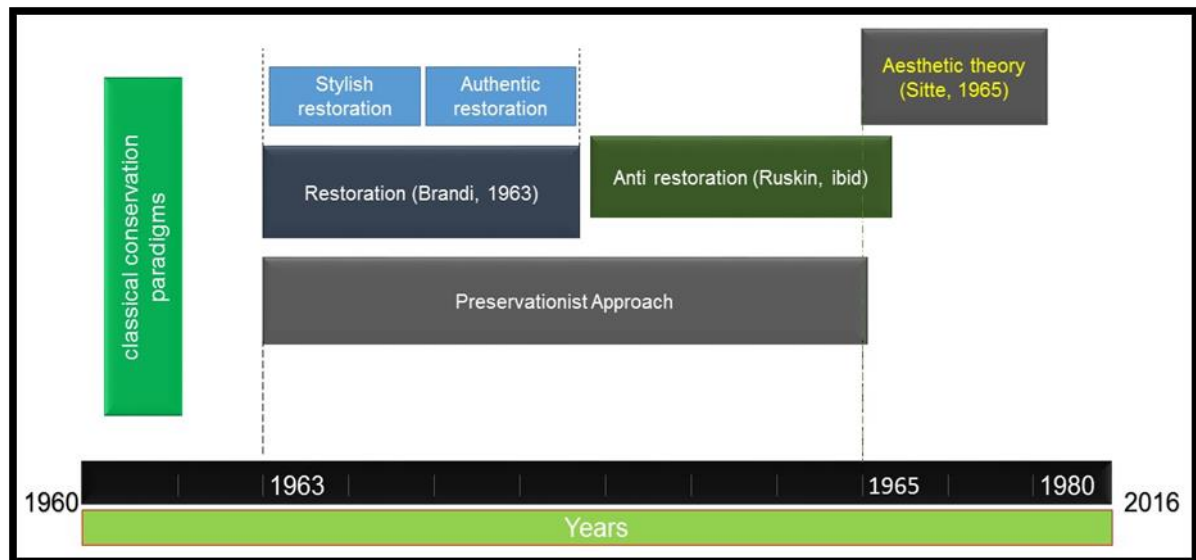


Figure 3-1: Classical conservation paradigms

Source: Author's own construction (2016)

3.3.1.1 Preservation

The Australian Burra Charter (2013) defines preservation as maintaining the fabric of a place in its existing state and retarding deterioration. The primary goal of preservation is to prolong the existence of cultural property. Preservation seeks to preserve, conserve and protect buildings, objects, landscapes and other artefacts of historic significance. The term refers specifically to the preservation of the built environment.

Preservation means to keep something as it is, without changing it in any way: retaining its shape, status, ownership and use, only to mention a few. According to Munoz (2005:15-16), the general meaning of built heritage resources preservation is “the activity that avoids alterations of something over time”. Preservation is mainly defined by its goals. Guillemard (1992), for instance, offers a concise example of this approach in his statement that “preservation has the goal of extending the life expectancy of cultural heritage”.

Various theories evolve from the above paradigm that aim to preserve the past (as represented by built environment heritage resources). These theories include the restoration and anti-restoration theories.

3.3.1.1.1 Restoration

The first theory relating to urban conservation is the restoration theory that is influenced by small and wealthy intellectual elite. According to Brandi (1963:231), restoration is the methodological moment in which the work of art is appreciated in its material form and in its historical and aesthetic duality, with a view to transmitting it to the future. In addition, Jokilehto (2006) mentions that, following Brandi's definition, restoration is a process in which there is recognition of a built heritage resource and understanding what it signifies thus restoration can be defined as a cultural approach to the inherited environment and means that something different should be understood (Jokilehto, 2006:3). Hejazi and Saradj (2014:9) state that restoration considers precious buildings such as objects in museums, and restorationists do possible reversible work to save the original fabric of historic buildings. Figure 3-2 below shows the cycle of restoration.

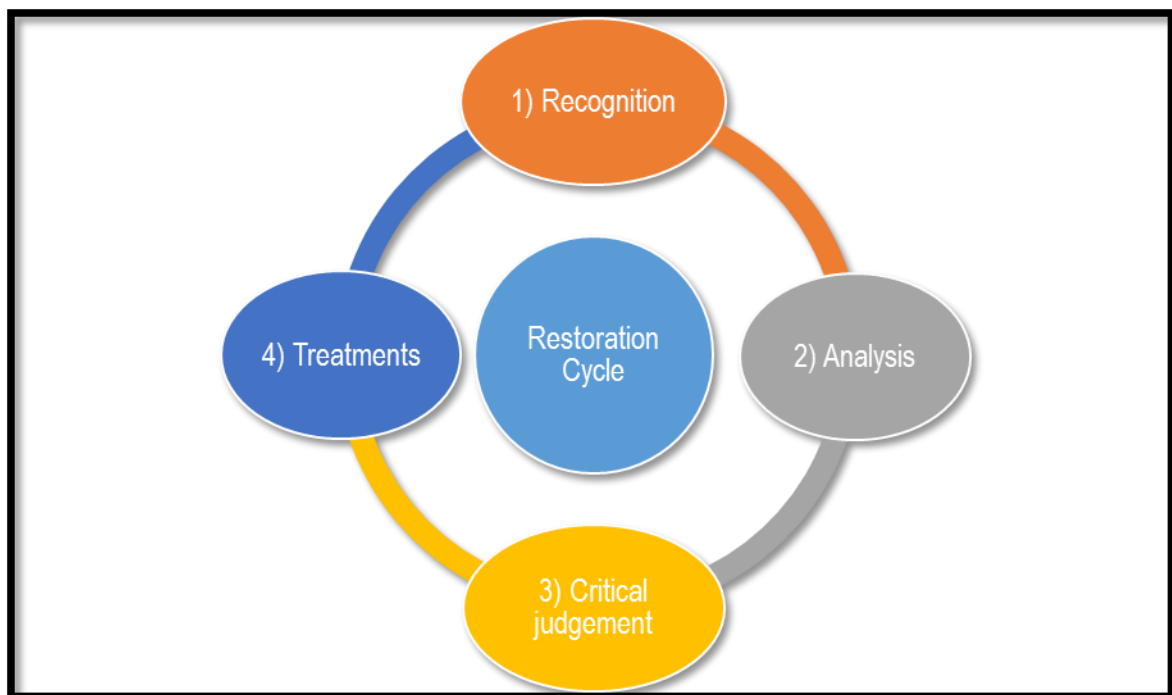


Figure 3-2: The cycle of restoration

Source: Author's own construction (2016)

The first phase of restoration consists of the recognition of the built heritage resource and what the built heritage resource signifies. The second stage of restoration is analysis, whereby the built heritage resource that is to be restored is analysed, taking into account its state of decay and associated problems. After the analysis stage comes the third stage that is the judgemental stage

of all the pros and cons that will have been identified relating to the built heritage resource. The last stage in the cycle is called the treatment stage and this is when built environmental heritage resources are restored.

According to Zubir and Brebbia (2013:1109), there are two forms of restoration namely (i) stylish restoration and (ii) authentic restoration.

(i) Stylish restoration

Changing fashions have influenced approaches to the conservation as well as restoration of built heritage resources. At the end of the 18th century, classicism encouraged the idea of mimesis. A new approach of “stylish restoration” was founded, based on respect for the original style. Nasser (2003:468) mentioned that restoration of a historic building came to be seen as a scientific activity that aimed at stylistic unity as an illustration of an ideal.



Figure 3-3: Before restoration Liebfrauenkirche Kitzbuhel, Tyrol, Austria

Source: ICOMOS Newsletter (2008:11)



Figure 3-4: After restoration Liebfrauenkirche Kitzbuhel, Tyrol, Austria

Source: ICOMOS Newsletter (2008:11)

In the late 19th century during the Romanticism age, the concept of stylish restoration raised numerous issues regarding authentic and style selectivity. This concept faced increasing criticism in the second half of the nineteenth century, leading to the rising of the anti-restoration movement and modern conservation in built heritage resources. It began to emerge as an opposition to some of the poor restoration practices (Orbasli, 2008). Stylish restoration was criticised for the destruction of the historical authenticity of buildings as well as for fighting for their protection, conservation and maintenance. In addition, stylish restoration preferred to restore all the buildings to one style rather than to preserve each part in its own form, regardless of the buildings being modified in various periods (Jokilehto, 1999).

(ii) Authentic Restoration

Viollet-Le-Duc (1987) mentions that the new restoration method namely, authentic restoration, states that built heritage resources have to be restored in their own style taking into consideration their appearance and structure. In this case, restoration means reinstating built heritage resources in a condition of completeness that might never have existed at any given time. This means replacing the original historical material from which built heritage resources were constructed, and in some cases the storage of the original, historical material that was lost to the building itself. An example of the manifestation of this principle can be seen in England, where stylistic restoration of churches and cathedrals is most prominent. Considering that the buildings

were modified in various periods, authentic restoration preferred that built heritage resources had to be restored to one style rather than preserving each building in its form (Nasser, 2003:469).

Authentic restoration involves adding some material that is not from the original building in order for the buildings to look good and for their value to increase. This means bringing the building as close as possible to its original condition, with some exceptions. Figure 3.5 and 3.6 below illustrates the Castle gate of Krnov in the Czech Republic, before and after authentic restoration.



Figure 3-5: Application of authentic restoration (Castle gate of Krnov, Czech Republic, 2001) before authentic restoration

Source: Ortner (2001)



Figure 3-6: Application of authentic restoration (Caste gate of Krnv, Czech Republic, 2009) after authentic restoration

Source: Ortner (2009)

Munoz (2005:194) adds that through authentic restoration, built heritage resources can be transformed to convey a meaning of ageless aesthetic splendour and through preservation, they can be made to convey a message of antiqueness or even destruction.

While restoration mainly revolves around the preservation of the past in an exact manner, stylish restoration entails restoring the building in its original style. Authentic restoration involves restoring a building while adding some material for aesthetic reasons, and tries to bring the building as close as possible to its original condition.

However, criticisms on the restoration of built heritage resources arose, leading to the genesis of an anti-restoration paradigm. Anti-restorationists oppose the proponents of restoration who believe in restoring historical buildings, those who remove plasters, cutting the weathered masonry and other actions to recreate the spirit of a special style or specific time (Hejazi & Saradj, 2014:9). The next section is a detailed discussion of the anti-restoration paradigm to urban conservation.

3.3.1.1.2 Anti- restoration

In the mid-nineteenth century, John Ruskin initiated the anti-restoration movement that was directed at the fashion of stylish restoration, criticising restoration architects for the destruction of the historical authenticity of the buildings and fighting for their protection, conservation, and maintenance. Ruskin contended that authenticity meant that a retained building should be

restored to its original state and use, where possible, and that its age gave it historical value and interest (Nasser, 2003:469).

A different line of thinking developed in Europe and emerged from the criticisms of the restoration paradigms (stylish and authentic). This resulted in an approach that is more conservative-oriented, to keep the historical stratigraphy in the built heritage resources. In anti-restoration, the anti-restorationists believe that historical buildings belong to a larger historical and cultural context. It is therefore impossible to recreate values that belong to another period. However, protection and maintenance of the original materials is important. This line of thought indicates the acknowledgement of a larger conservation context than just the pure restoration of the object itself.

The famous anti-restoration group is the Society for the Protection of Ancient Buildings (SPAB), founded by Ruskin. The SPAB is the most influential opponent of the restoration of historical buildings. Ruskin suggested that built environmental heritages need to be maintained within their settings rather than being isolated in a landscaped park. According to this group, restoration should be replaced with protection (Hejazi & Saradj, 2014:8). Figures 3-7 and 3-8 below show the anti-restoration concept. Figure 3.7 shows the St Pancras church with its original fabric before anti-restoration. In figure 8, the anti-restoration has taken place and the building still has its original fabric. No changes in the fabric has taken place in the anti-restoration concept.



Figure 3-7: St Pancras church in London between the 1920s and 1930s



Figure 3-8: Anti- restoration concept: St Pancras church in London after anti-restoration in 2013

Since the 1960s, shifts in the approach toward conservation widened the object of attention to ensembles and areas, as opposed to the previous approach, which focused on buildings or their remnants as monuments (Nasser, 2003). This resulted in a general critique towards the classical approaches to urban conservation.

3.3.2 Critiques of the classical paradigm

Although the classical conservation approaches dominated the urban conservation scene for very long, alternatives to preservation-orientated approaches started gaining momentum in the 1960s. In dealing with the management and conservation of built heritage resources, existing theoretical approaches at that time signalled a break from classical approaches, to more integrated approaches to urban conservation. The new paradigm propagated a move away from conservation in terms of isolated buildings or structures (monuments), towards a more integrated approach in which the built environment heritage resources were acknowledged in their wider urban context.

3.3.3 Moving from isolation to integration

The Aesthetic theory of urban conservation views urban conservation in a much more integrated manner than the preservation paradigm. Aestheticism (Camillo Sitte, 1965) is discussed below:

According to Bandarin and van Oers (2012), the Aesthetic theory is important for two reasons:

- The theory establishes the historic city as an aesthetic model, a source of inspiration for modern design; and
- It paves the way for the development of urban conservation practice as a broader concept.

Sitte's work is the beginning of an analytical appreciation of the historic city as the repository of a method that can provide continuity in city building. He advocates for a living urban environment in which architecture plays an integral role in determining the form and structure of spaces, and highlights the complementarity between the practical and the aesthetic found in the historic city. These characteristics are the antithesis of fragmentation (Siravo, 2011).

According to Sidney (2012), Sitte's principles are based upon the idea of not just focusing on traffic flow in the city, but creating a conducive environment that accommodates pedestrians and creates a safe area for pedestrians. Sitte advocates for the creation of an irregular urban structure, spacious plazas, enhanced by monuments and other aesthetic elements, thus turning away from the pragmatic, hygienic planning procedures of the time. He further contends that many urban planners neglected to consider the vertical dimension of planning, instead focusing too much on paper, and in so doing, hindered the efficacy of planning in an aesthetically conscious manner. In general, Sitte's work attempts to define a unity between modern and artistic methods through the creation of suitable public space.

The Athens and the ancient Greek spaces, for example the agora and the forum, are Sitte's preferred examples of good urban spaces. Figure 9 below shows a visual example of the city design that Camillo Sitte advocated for.

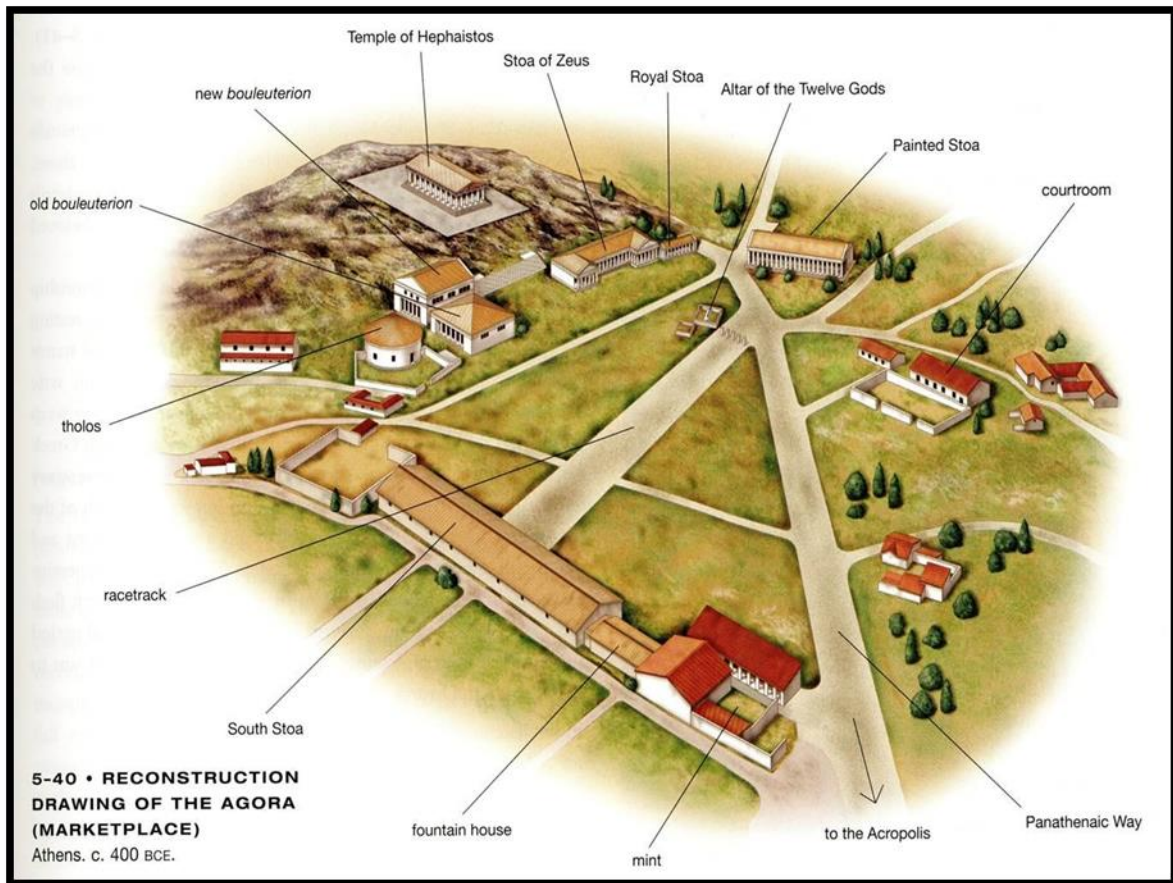


Figure 3-9: Visual illustration of the Agora

Source: Kimmelman (2016)

Sitte's idea of urban development continuity is also an important repercussion for the future development of conservation policies. The work of Sitte has been criticised by advocates of modernism, and in particular, by le Corbusier and the CIAM (International Congress of Modern Architecture), who see Sitte's theory as a reactionary approach, contrary to the ideas of modern urbanism. However, Sitte's ideas has inspired numerous urban conservation projects in Europe and in the colonial world, and provided the basis for the development of new approaches to architecture and planning, for the first time dealing with urban conservation from a more integrated perspective (Bandarin and van Oers, 2012:11). Nevertheless, the critiques against Aestheticism led to an introduction of contemporary paradigms of urban conservation.

3.3.4 The contemporary paradigm: integrating the past and present

There are aspects that emerged in the 1980s and 1990s that contributed to the latest approach in heritage, including sustainable development and other postmodern approaches to heritage management such as the systems theory and the Historic Urban Landscape Approach. This section is an in depth discussion of the contemporary paradigms that are recommended in

heritage management and urban conservation. Figure 10 below gives a summary of the contemporary paradigms of urban conservation over time.

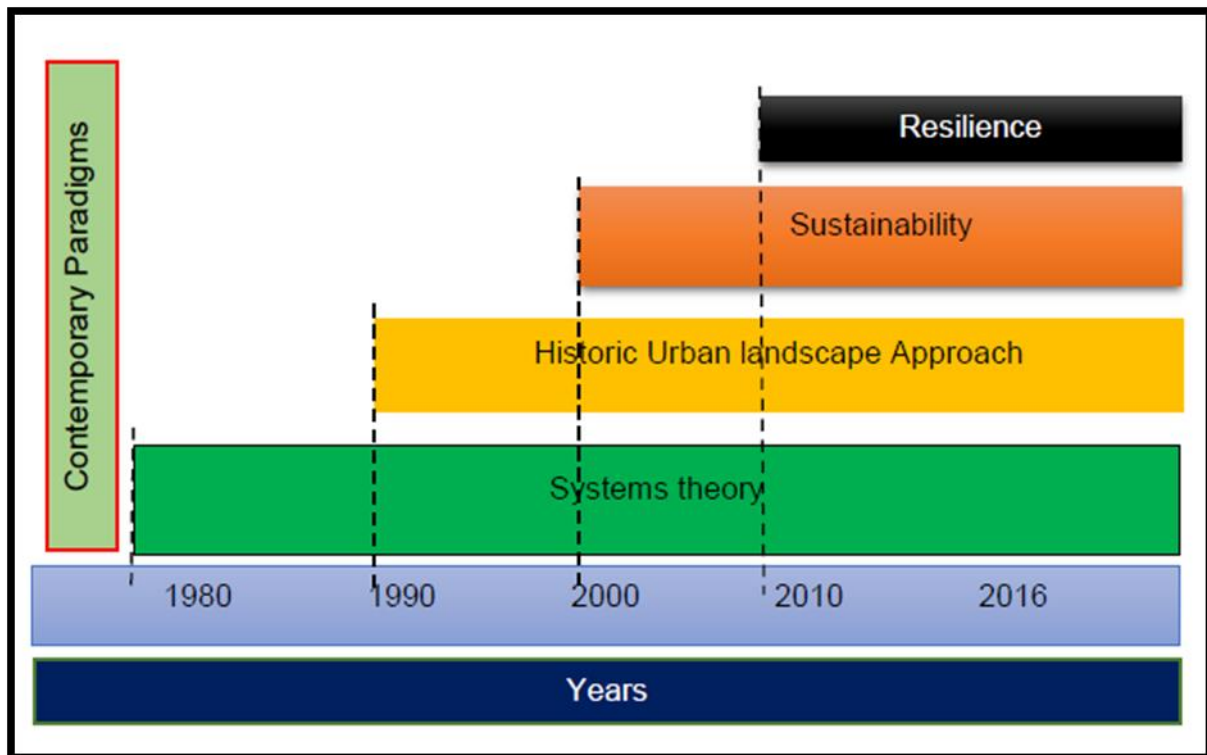


Figure 3-10: Contemporary Paradigms of urban conservation

Source: Author's own Construction (2016)

Figure 10 illustrates how the contemporary theories work concerning urban conservation of built environmental heritage resources. The systems theory is the first, while the resilience theory is the latest approach to urban conservation. All these theories should be combined together in a holistic approach to ensure sustainable urban conservation. In contemporary urban conservation, there are broader concepts involved and a more integrated approach in how built heritage resources should be managed. The next sections are going to give an in-depth explanation of contemporary paradigms of urban conservation.

3.3.4.1 Systems theory

The term “systems theory” remains a diverse and indeed, relatively poorly defined theoretical, often interdisciplinary approach to the study of systems in nature, science and society (Mackee, 2013:6). Essentially, the word “system” is used to describe “a configuration of parts connected and joined together by a web of relationships”.

The systems theory in urban conservation advocates for an integrated approach to urban conservation as it calls for all the stakeholders that are involved in the protection of built heritage

resources to come together, in order to come up with efficient results in the process of urban conservation. The systems theory in contemporary urban conservation relates to the fact that urban conservation should be followed holistically.

3.3.4.1.1 Components of a systems theory

According to Mackee (2007:10), three principles that provide strong links with the systems theory are universal interconnectedness, radical interdependence and mutual conditioning. Universal interconnectedness implies taking a holistic approach, thus seeing oneness in all things. Radical interdependence is when different things are dependent on each other, and mutual conditioning entails the relations among all the elements in the systems theory. These principles describe intra- and inter-systems relationships that would be the basis for determining what is important about the heritage, how it is important, and how it could be conserved. These are the three key relational qualities of heritage, chosen because they explain the complex multiple reciprocal relationships (Munjeri, 2004) between heritage, communities, societies, and tangible and intangible values, which provide a basis for developing a theoretical framework for urban conservation.

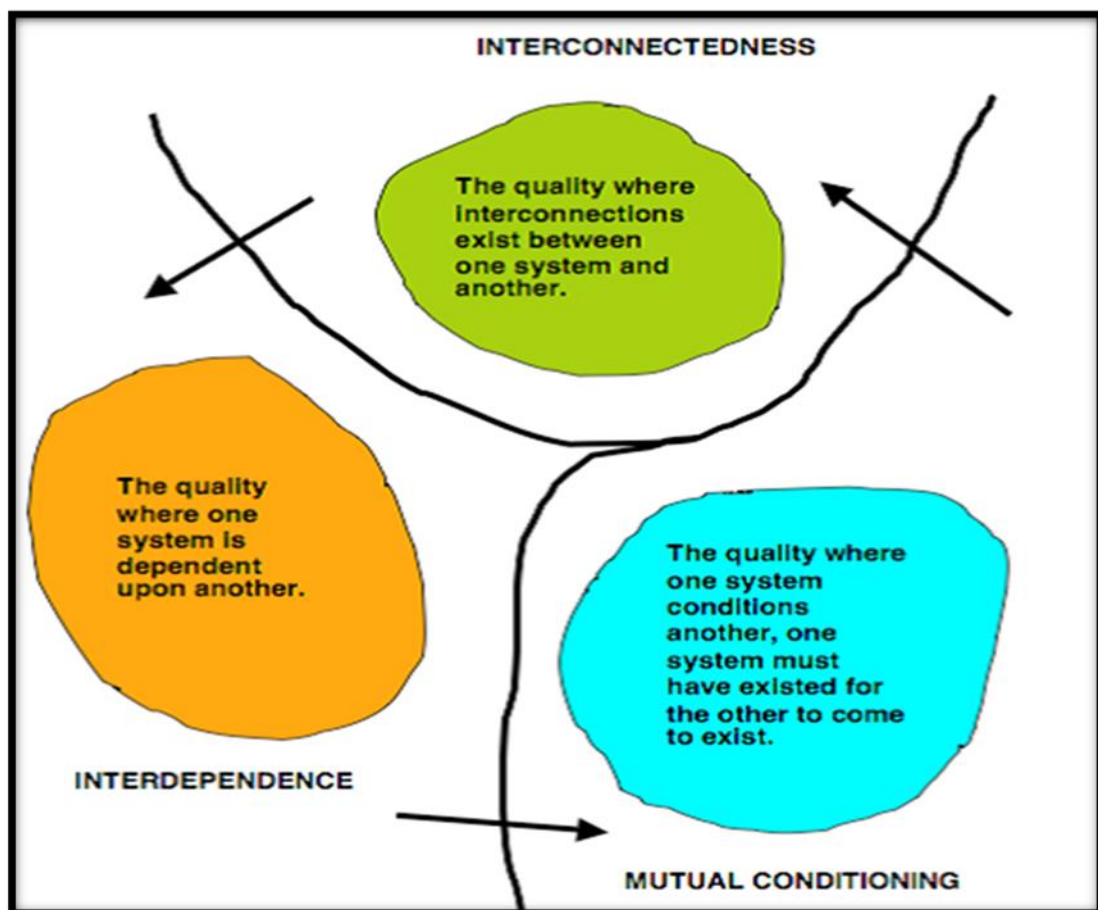


Figure 3-11: Components of the Systems Theory

Source: Mackee (2007:11)

The framework above (Figure 11) provides an alternative approach for the conservation strategies on the cultural built heritage in the wake of natural disasters. It is argued that the systems theory provides a means of operationalising this alternative paradigm that, while based on describing the heritage and the culture within which it exists as a series of systems and subsystems, has its theoretical argument very much founded within the philosophical and cultural experiences (Mackee, 2007:13).

The systems theory framework is a means of exploring a heritage system, whether it is tangible or intangible, and determining how the heritage system exists within the larger cultural system in the context of developing a strategy for protection. According to Jokilehto (2006), the adoption of the systems theory moves beyond the existing system of looking at the heritage in terms of conditions of authenticity that are essentially a series of material terms with token gestures to traditions, feelings and spirit. The acceptance of the notions of intangible or immaterial values as described in the Nara Document (Larsen 1995, ICOMOS 1994) or the Indian Charter (2004) is merely the presentation of possible exceptions to the accepted procedures and interpretations that are given in international charters and guidelines (Mackee, 2007:14).

3.3.4.2 The Historic Urban Landscape Approach (HULA)

In the past decades, the definitions of built heritage resources management has been evolving from an object-based approach towards a more all-inclusive approach that also includes notions such as the intangible, setting and context, and urban and sustainable development, accompanied by a greater consideration of the social and economic function of historic cities (Bandarin and van Oers, 2012). This approach is known as the historic urban landscape-based approach. Current contemporary theories of urban conservation define built heritage resources management as “managing thoughtful change” and recommend a landscape based approach towards built heritage resource management (Fairclough et al., 2008; Bloemers et al., 2011; Bandarin and van Oers, 2012).

The historic urban landscape is defined as “an urban area understood as a result of a historic layering of cultural and natural values and attributes, extending beyond the notion of “historic centre” or “ensemble” to include the broader urban context and its geographical setting.” As such, the definition of cultural heritage is extended to include a wide, nearly unlimited range of tangible and intangible attributes, without a specific geographic demarcation. Such a concept considers all layers of cultural significance conveyed in the urban landscape, and their varied interpretations, as possibly valuable, not only the aesthetic, historic, and scientific values, but also values of economic, social, ecological or political background (Colenbrander et al, 2013:13).

The objective of the HULA is stated as:

to define operational principles able to ensure urban conservation models that respect the values, traditions and environments of different cultural contexts, as well as to help redefine urban heritage as the centre of the spatial development process-in other words, to recognise and position the historic city as a resource for the future (Bandarin and van Oers, 2012: xvi-xvii).

The ICOMOS (2011) mentions that the HUL approach is a new way to include the aspects of urban conservation in an integrated framework on built heritage management. With all the normative tools of its type, the city is an outgrowth of modern needs and thinking, but is also rooted in the history of urban conservation. Thus, the HUL approach is not designed to replace existing doctrines or conservation approaches, but is envisaged as a tool to integrate policies and practises of the conservation of the built heritage resources. In this sagacity, the HUL approach comprises the layering and diversity of visions and methodologies that have been handed down from a century-long tradition (Bandarin and van Oers, 2012).

The HULA is expected to be the future path in built heritage resource management as well as a key indicator for sustainable development (Veldpaus et al. 2013). In addition, heritage management organisations such as the ICOMOS (2011) accept this approach and have been defining strategies to address it. According to Bandarin and van Oers (2012:72), the HULA “stresses the link between physical forms and social evolution, defining historic continuum, representing a layering of expressions throughout history.

Advocates of the HULA argue for a more flexible and integrated approach to urban conservation that recognises change and provides relevant and effective tools. However, the HUL approach provides a framework to think about the ways in which a number of key theoretical developments in heritage studies can be brought into contemporary heritage practice. Atkinson (2008) mentions that the HULA has the advantage that it is a shift from a focus on specific sites, to seeing how heritage is expressed and represented across larger areas, an approach that has also been developed within cultural geography.

The urban historic approach considers that current principles and practises are now insufficient to define the limits of acceptable change and the assessment and decisions tend to be ad hoc and based on subjective perceptions. There is a need for the development of a new specific approach to define the role of contemporary architecture and contemporary creation in historic places, as the need to respect a continuum has been disregarded or misunderstood frequently (ICOMOS, 2010:10). The HULA aims at preserving the quality of the human environment and enhancing the productive use of urban spaces. It integrates the goals of urban heritage conservation with those of social and economic development. It is rooted in a balance and sustainable relationship between the built and natural environment, and between the needs of present and future generations with the legacy from the past (ICOMOS, 2010:11). Moreover, the

contemporary thinking in urban heritage conservation points to a need to reassess the historical divide between conservation and development, both in the theory and practice of urban planning. This is what the HUL approach aims to accomplish in the coming decades (Bandarin and van Oers, 2012:176).

According to Nebel (2009), the central challenge in the historic urban landscape is to respond to development dynamics in order to facilitate socio-economic changes and growth on the one hand, while simultaneously respecting the inherited townscape and its landscape setting, on the other. The continuous changes in functional use, social structure, political context and economic development may be acknowledged as part of the city's tradition. The future of historic urban landscapes calls for a mutual understanding among policy makers, urban planners, city developers, architects, conservationists, property owners, investors and concerned citizens, working together to preserve the urban heritage, while considering the modernisation and development of society in a culturally and historically sensitive manner, strengthening identity and social cohesion. With the HULA in mind, the sustainable development and sustainability paradigm has been introduced and will be discussed in the next section.

3.3.4.3 Sustainability

Staniforth (2000) mentions that sustainability is the key to future urban conservation practices. The Bruntland Commission on Sustainable Development in its report defines sustainable development as “development that meets the need of the present without compromising the ability of future generations to meet their needs”. This definition is reflected in the aim of the conservation of cultural heritage that is to pass on maximum significance to future generations. For the past two decades, the word sustainable has become a part of the discussion on urban conservation. The question is: can urban conservation be sustainable, or is this not a matter of preserving the past, whereas sustainability today is more concerned with planning, that is, with activities connected to the future? So what does sustainability in urban conservation and urban development mean? (Friedrich, 2010:35).

The contemporary theory of conservation is developed around the current democratic narrative otherwise it would not be acceptable at all. It also resorts to another contemporary conceptual tool that is sustainability (Munoz, 2005:194). In common usage, “sustainability” has economic and ecological resonance, but its usefulness in conservation has also been recognised. The economic sustainability of the conservation process has been proposed by many authors (Bluestone et al, 1999; ICC Krakow 2000; and Knowles, 2000), although this kind of sustainability is only possible in the case of built heritage resources with strong public appeal, and cannot be applied to most conservation of built heritage resources.

Nebel (2009) asserts that for urban conservation to be sustainable, an integrated approach that combines economic, social and physical aspects of development in any given territory is needed. It also recognises that cultural heritage can serve economic development without destroying the local identity of a location, if the local community's participation is ensured (Nebel, 2009). Figure 3-12 below summarises the concept of sustainability in relation to urban conservation.

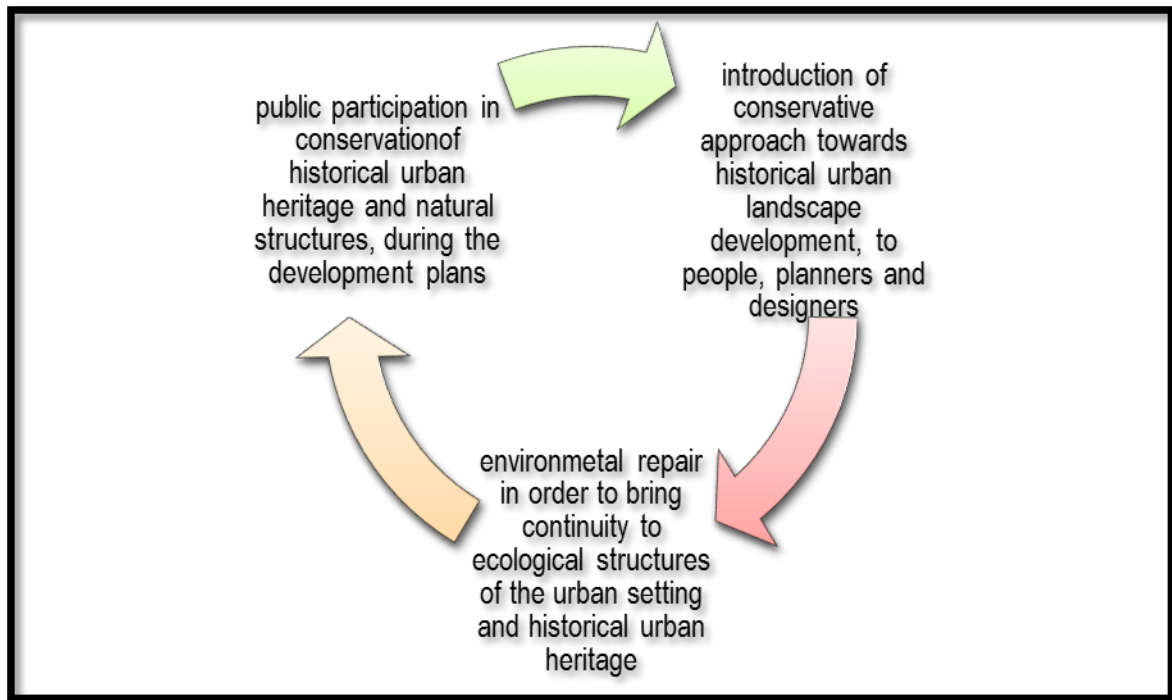


Figure 3-12: The concept of sustainability

Source: Bahrami and Samani (2015:462)

According to Munoz (2005:183), the principle of sustainability has been advanced, in acknowledgement of the fact that it is a crucial notion underlying the contemporary conservation theory. Another important principle is the application of the concept of sustainability to built heritage resources (Munoz, 2005: 194).

Orbasli (2000) asserts that urban conservation and sustainability has three interrelated objectives that are physical, spatial, and social aspect. *Physically*, urban conservation is linked to the preservation of buildings and the type of new development, to ensure that a town's past, present, and future combine to create a recognisable unit, so that its growth can be seen and felt to be continuous (Worskett, 1969). This involves seeking to improve old environments and bring them into modern use by adapting the townscape. The *spatial* aspect of urban conservation views the townscape as a holistic entity, with its relationships between spaces and their use, as well as circulation and traffic. The third objective, and most neglected, is *social*, which concerns the users, local community, and the urban population. Orbasli (2000) argues that although the social

dimension is the most difficult to define, it is the most important, as continuity in conservation can be achieved only through the continuation of urban life (Nasser, 2003:469).

According to Elmqvist (2013), a classic definition of sustainability focuses on managing resources in a way that guarantees welfare and promotes equity for current and future generations. Building on this definition, sustainability needs to incorporate a holistic perspective of urban conservation and its impact on the rest of the planet. Sustainability is viewed as a goal of a society while resilience represents a characteristic of the urban system. The discussion that follows focuses on the concept of resilience.

3.3.4.4 Resilience (Crawford Stanley Holling, 1973)

According to Dos Santos and Paridaro (2005:29), the concept of ecological resilience originated from Holling in 1973. Holling (1973) defines resilience as “the capacity of a system to absorb, utilise or even benefit from disturbances and changes and so to persist without a qualitative change in the system’s structure”. The concept deals with the structure and function of built heritage resources.

From a resilience perspective, urban conservation can be understood as a complex system that, in a world of growing turbulence and uncertainty, must be able to absorb disturbances without collapsing. Transposing the concept of resilience into the field of urban conservation does, however, require that we accept urban conservation as a socio-ecological system; that is, a system that is part of and dependent upon the society (human system) and nature (the ecological system) at the same time (Walker and Salt, 2006:10).

Walker and Salt (2006) further state that in resilience thinking, people and nature are considered as interdependent elements of one system and both parts must be considered when seeking an understanding of the system. Understanding and dealing with change is a key to Holling’s concepts of adaptive cycles and resilience. As such, the theory provides a valuable link to issues related to urban conservation and natural disasters, and it may help address issues related to risk and vulnerability (Makcee, 2013:9). In explaining how a system self-renews, Holling uses a key concept, the ‘adaptive cycle’ that is illustrated in figure 3-13 below.

Holling (1973) develops the notion of an adaptive cycle. He identifies four phases of the cycle: (1) growth; (2) conservation; (3) release or creative destruction; and (4) reorganisation. In the first phase following a disruption, there is a rapid colonisation (growth) of a disturbed site by one or more species that are best able to exploit the change. This rapid change is followed by a period of slower change (conservation), as material and energy are accumulated. The system may seem stable but is ‘brittle’, and a small disturbance could result in a moment of ‘release’ in which change may suddenly cascade through the system, leading to a process of reorganisation or productive

change. There are different possible trajectories of changes, and relatively small influences may direct a system onto one path or another.

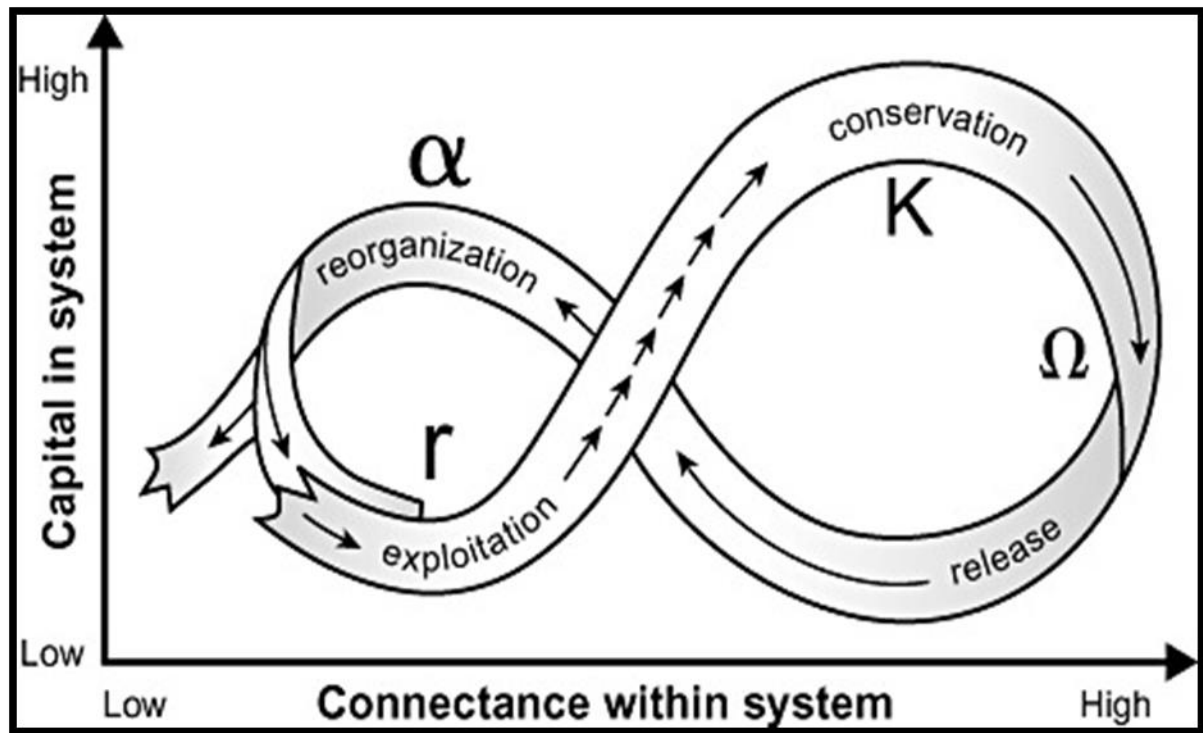


Figure 3-13: The adaptive cycle

Source: Holling (2001:398)

The resilience of the system has to do with the capacity for reorganisation, and may be measured in terms of the time it takes for a system to be restored to a new state of equilibrium (Gunderson, 2000). In Holling's conception, disturbance is not necessarily negative as it may unleash the forces of "creative destruction" and lead to new and possibly better states of being. However, Holling does warn that an adaptive cycle may become maladaptive if resilience potential is destroyed (for example, if the diversity and connections required for adaptation are removed). This leads to severe system degradation or what is termed as a "rigidity trap" (Holling, 2001).

Thus, the application of resilience thinking to the conservation of built heritage resources in the context of natural disasters provides an opportunity to explore the persistence and survival of heritage resources against ongoing forces of disasters, which result in physical, social and natural change. Moreover, the resilience theory provides a holistic perspective through which issues related to built heritage resources can be developed in the wake of disasters.

Furthermore, MacKee (2013:13) asserts that the resilience approach to urban conservation is highly relevant as it provides a framework that can be overlaid on any cultural context. The notion of adaptive cycles and the theoretical concepts of resilience can be applied in both European and

Asian contexts through the emphasis on a holistic understanding of the system (built heritage resources) as it sits within its particular geographical, climatic, cultural, social and ecological context.

Although the main advantage of the resilience theory is to advocate for a system to absorb, utilise and benefit from disturbances and changes, thereby enabling adaptive reuse, it was not without critique. The main points of critique are:

- Davoudi (2012) advises that as the notions of resilience are popularised they might lose their force and clarity and become yet another buzzword to justify all sorts of practices. Resilience cannot mean everything. More than this, as indicated previously, resilience may not always be positive and may serve unjust ends.
- Davoudi (2012) mentions that in the context of people, the adaptive cycles of nature do not work in any deterministic or inevitable way. Human foresight and intelligence, and the application of technology, can significantly alter the nature and speed of adaptation.
- Turok (2014:5) writes, “Resilience is not a neutral attribute of a social system, affecting all groups the same way. It is necessary to discuss ‘for whom’ it applies and not assume homogeneous interests”. This is so as cities are complex, adaptive political socio-ecological systems.
- Davoudi (2012:306) offers a sympathetic critique of the resilience theory by saying that the theory provides a useful framework for understanding “the complex interplays between persistence, adaptability and transformability” and “has the potential to become a bridging concept between the natural and social sciences”. However, she concludes by saying that “in applying an ecologically rooted concept to the social setting, we need to tread carefully and ensure that in trying to understand society through the lens of ecology we do not lose the insights from critical social science”.

Ideas of resilience do not offer a simple panacea for urban conservation. They provide a way of thinking and require intelligent application. They are rooted in the understanding that change and disturbance are inevitable, and often unpredictable, and so building adaptive capacity is critical (Davoudi, 2012:306).

This theory points towards an understanding of the interactions across scales; the position of cities within wider systems; the interdependencies between natural, technical and social networks; and the importance of learning and innovation. The theory shows that large cities have a high degree of resilience, as adaptive cycles in a nested hierarchy (from neighbourhoods upwards) allow for change and continuity to co-exist.

The resilience theory builds on the systems approach though, rather than focusing on the models, principles and laws of generalised systems or their subclasses (Betalanffy, 1968). It describes the consistency of connections within systems and the ability of these systems to adapt to change and endure. As such, the resilience theory may provide a valuable approach to the preservation and protection, recovery and reconstruction, of built heritage resources after natural disasters (MacKee, 2013).

3.4 The way forward

For built heritage resources to be sustainable, there is a need to consider an approach which incorporates the past into the future (an integrated approach which incorporates everything) such that these resources are conserved from the grass roots, taking into consideration the future generation. As built heritage resources have been treated in isolation, the way forward to build resilience is a more holistic integrated approach where all possible stakeholders in the urban conservation field are included while built environment heritage resources are not viewed as isolated objects that are removed from the larger physical, economic, social and cultural context and challenges. The following diagram (figure 3-14) summarises a possible future urban conservation framework that can be used as guideline.

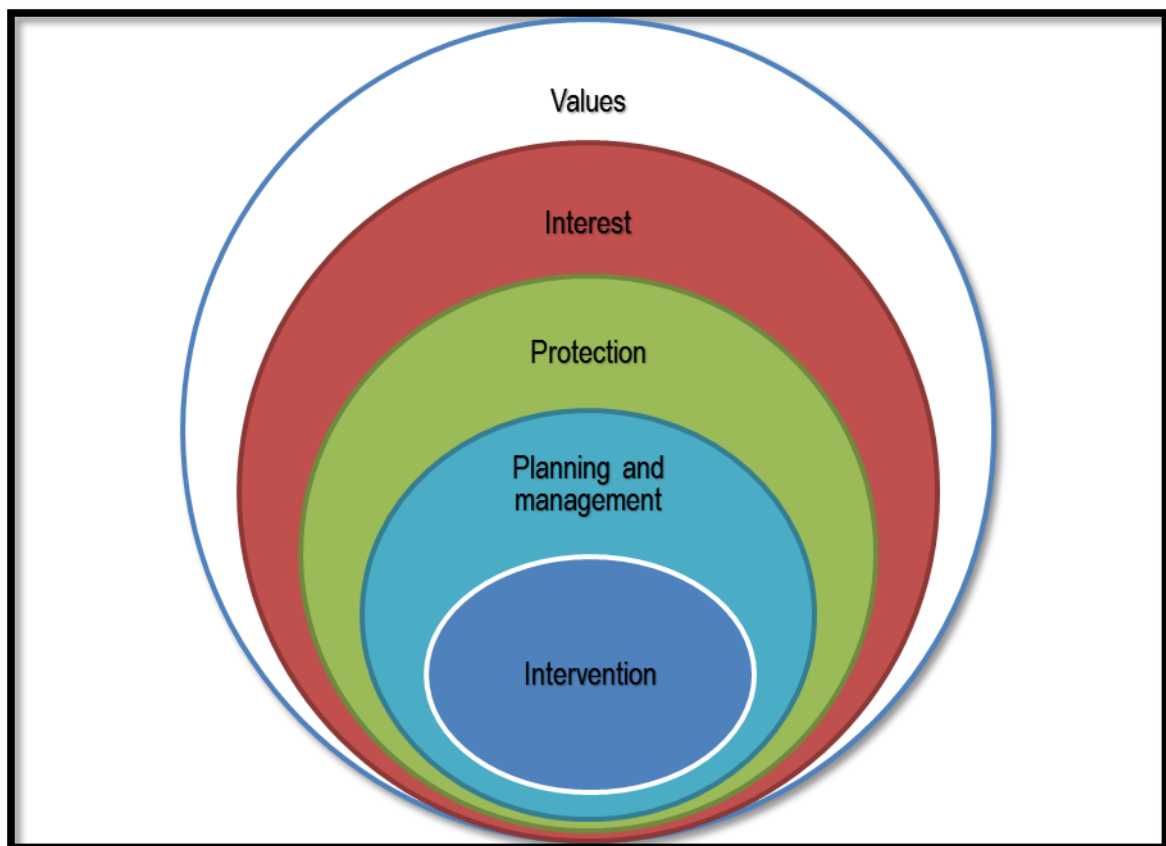


Figure 3-14: The potential future of urban conservation framework

Source: Getty Conservation Institute Report (2000:5)

With the immediate challenges that built heritage resources are facing, many conservation professionals and organisations have recognised that a greater cohesion, connection and integration are needed in the conservation field. As shown in the diagrams above (figures 3-12), rather than a disjointed sequence, the spheres of conservation ought to be integrated better and embedded within their relevant contexts, so as to ensure that urban conservation remains responsive to ever-changing cultural conditions (Getty Conservation Institute Report, 2000:4).

3.5 Conclusion

In conclusion, this chapter has focused on urban conservation paradigms that have governed built heritage resources from the past up until the present. It can be concluded that a paradigm shift occurred from a preservation-oriented approach to a more integrated approach to urban conservation. This is summarised in Table 3-1.

Table 3-1: A summary of urban conservation paradigms over time

Paradigm:	Preservation:	Conservation:
Year	1960s to 1980s	1980s to present
Theory types	Classical approaches to Urban Conservation	Contemporary theories of urban conservation
	Preservationist paradigm Restoration (Brandi, 1963) Anti-Restoration (Ruskin, ibid)	Contemporary theory of urban conservation
	Aesthetic Theory (Sitte, 1965)	Integrating the past: Contemporary Theories
		System Theory
		Historic Urban Landscape Approach
		Sustainability
		Resilience Theory (Holling, 1973)

Source: Author's own construction (2016)

From the above discussion, it is evident that the focus is more on architecture rather than the wider urban environment in which the built environment resources were situated. Furthermore,

the past is conserved for its historical value without consideration of existing or future needs. Conservation is thus treated in an isolated manner, thus separating the past from the present and future. The failure of urban conservation paradigms overtime has raised eyebrows of urban conservationists and planners resulting in the formulation of new approaches, such as the new postmodern approaches for sustainable future historic cities. To come up with sustainable solutions in the field of urban conservation, there is need for an integrated urban conservation approach to built environmental heritage resources. Therefore, there is a need to move from the theoretical approaches, to provide a way forward to apply and assess these theories in practice looking into the policy and legislation that is the focus of the next chapter.

CHAPTER 4 URBAN DEVELOPMENT AND URBAN CONSERVATION POLICY AND LEGISLATION

4.1 Introduction

As discussed in chapter 3, the theories and approaches of urban development and urban conservation form the underlying pillars that guide how people think about urban conservation. However, a legislative framework guides the practice of urban development and urban conservation. Having a formalised set of guidelines that regulates conservation, valorisation and the use of historical urban assets is necessary due to the fast transformation of the context in which the urban and heritage management disciplines have developed.

The aim of this chapter is to analyse the interrelationship and integration of the policy and legislative framework, including international, national and local level legislation, which guide urban development and urban conservation in South Africa. The discussion of the policies and legislation focuses on the main aims of the various policies and laws, a brief overview of applicable content with regard to the study and an evaluation of the extent to which these two sets of policies and legislation are integrated.

4.2 Legislative framework: Urban Conservation

Due to the growing awareness of heritage conservation issues, urban conservation has become a field of speciality in its own right that is being guided by principles set out in various conservation charters adopted by international and national conservation bodies. Previously, built heritage resources were not integrated into the policies that governed urban conservation and urban development (Puren & Jordaan 2014). With this in mind, the policies and legislation that emphasise the importance and integration of built heritage resources in urban conservation are discussed in the sections that follow.

4.2.1 International Policy and Legislation that guide urban conservation

According to Dugard (2002:1), international legislation refers to those rules that bind states in their relationship to one another. A basic framework has been developed in which the concepts of built heritage resources can operate. The following subdivisions aim to discuss the various international conventions, acts and organisations that are instrumental in guiding built heritage conservation.

4.2.1.1 United Nations Educational, Scientific and Cultural Organisation (UNESCO) – 1945

According to Breedlove (2002:69), the various constitutions and divisions of international organisations concerned with world heritage direct international relationships between countries regarding heritage. The most widely recognised and active organisation is United Nations Educational, Scientific and Cultural Organisation (UNESCO), together with its national and special committees, which forms the backbone of international co-operation on heritage. UNESCO works to create the conditions for dialogue among civilisations, cultures and people, based upon respect for commonly shared values. It is through this dialogue that the world can achieve the global vision of sustainable development, encompassing the observance of human rights, mutual respect and the alleviation of poverty (South African Yearbook 2010/2011:8).

UNESCO's overall aim is to contribute to peace and security in the world by promoting collaborations among nations through education, science, culture and communication, in order to advance the universal respect for justice, the rule of law and human rights and fundamental freedoms, which are affirmed for the people of the world, without distinction of race, sex, language or religion (UNESCO 2005). This organisation achieves this aim by encouraging the identification, protection and preservation of cultural and natural heritages around the world, which are considered to be of outstanding value to humanity. This aim is embodied in an international treaty called the Convention Concerning the Protection of the World's Cultural and Natural Heritage adopted by UNESCO in 1972.

UNESCO's World Heritage Mission is to:

- Encourage countries to sign the World Heritage Convention and to ensure the protection of their natural and cultural heritage;
- Encourage States parties to the Convention to nominate sites within their national territory for inclusion on the world heritage list;
- Encourage States parties to establish management plans and set up reporting systems on the state of conservation of their World Heritage sites;
- Help States parties to safeguard World Heritage properties by providing technical assistance and professional training;
- Provide emergency assistance for World Heritage sites in immediate danger;
- Support States parties' public awareness-building activities for World Heritage conservation;
- Encourage participation of the local population in the preservation of their cultural and natural heritage; and

- Encourage international cooperation in the conservation of our world's cultural and natural heritage.

(UNESCO World Heritage Centre, 2008:3)

Cultural diversity is a driving force for development in respect of economic growth. UNESCO acknowledges the dual role that culture plays in social and economic development. The role of culture in social and economic development should be treated as multi-layered: as an intrinsic value: as a real factor of regional development leading to increased attractiveness of regions for tourists, residents, investors; and as an active factor of social development based on knowledge, tolerance and creativity (Tylus, 2014). One of the ways that cultural diversity manifests in the spatial environment is through cultural products of humanity namely, built environment heritage resources.

On a global scale, UNESCO has developed and adopted a range of heritage legislation for the protection of built heritage resources. Other pieces of legislation, instruments and organisations such as the International Council on Monuments and Sites (ICOMOS), the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and World Heritage Centre (WHC) make provision for the conservation of built heritage resources. An in-depth discussion of these instruments will shed light on how urban conservation is guided internationally.

4.2.1.2 International Centre for the study of the Preservation and Restoration of Cultural Property (ICCROM) -1959

In 1959, The 9th UNESCO general conference in New Delhi established ICCROM at a time of rising and widespread interest in the protection and preservation of monuments and sites of historical, artistic and archaeological interest. International Centre for the study of the Preservation and Restoration of cultural Property (ICCROM) is thus an affiliation of UNESCO. It is the only institute with a worldwide mandate to deal with the conservation of all types of cultural heritage (ICCROM 1996). According to Breedlove (2002:72), ICCROM does not only aim at increasing the quality of conservation but seeks to increase the awareness and support of conservation worldwide, for everyone, from children to decision-makers. It aspires, through conservation, to make cultural heritage meaningful and useful to the benefit of people around the globe.

ICCROM's strategic programmes are increasingly becoming a part of sustainable economic, social and cultural development schemes, and are linked with policies to promote social stability, economic development, mutual understanding and peace. Together with close links to the United Nations, the ultimate goal of ICCROM is to contribute to the promotion of world peace. Indeed,

heritage conservation fosters a sense of respect for cultural identity that is essential for development and social stability (ICCROM, 1996:3).

ICCROM aspires to be the crossroads of people, ideas and actions at the service of cultural heritage conservation worldwide. It provides for the transfer of knowledge. Moreover, it functions by organising, co-producing and co-ordinating or facilitating various preservation activities. ICCROM contributes to the worldwide conservation and restoration of cultural property by initiating, developing, promoting and facilitating conditions for the conservation and restoration of built heritage resources.

4.2.1.3 Venice Charter -1964

The Venice Charter was established by the ICOMOS in 1964 as a set of international guidelines for the conservation and restoration of monuments and sites. According to O'Donnell (2005), the aim of the Venice Charter is to address the universal responsibility to conserve cultural heritage for future generations in "full richness of their authenticity". Article 4 to 8 of the Venice Charter deals with the conservation of built heritage resources on permanent basis as stated in the following articles:

Article 4: *"It is essential to the conservation of monuments that they be maintained on a permanent basis."*

Article 5: *"The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the layout or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted."*

Article 6: *"The conservation of a monument implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which would alter the relations of mass and colour must be allowed."*

Article 7: *"A monument is inseparable from the history to which it bears witness and from the setting in which it occurs. The moving of all or part of a monument cannot be allowed except where the safeguarding of that monument demands it or where it is justified by national or international interest of paramount importance."*

Article 8: *"Items of sculpture, painting or decoration which form an integral part of a monument may only be removed from it if this is the sole means of ensuring their preservation."*

4.2.1.4 International Council on Monument and Sites (ICOMOS) -1965

ICOMOS is an international non-governmental organisation of professionals dedicated to the conservation of the world's historic monuments and sites. ICOMOS serves as the review agent on behalf of UNESCO for sites that are to be evaluated and certified as World Heritage Sites. They provide a forum for professional dialogue and a vehicle for the collection, evaluation and dissemination of information on conservation principles, techniques and policies (ICOMOS 2015). Furthermore, they strive to strengthen ties across national boundaries and between people from different nations (Breedlove, 2002:72). In this way, knowledge is shared and exchanged freely for the benefit and protection of heritage.

Members of ICOMOS participate in a range of conservation activities including site visits, training, conferences and meetings. In so doing they serve as a link between public authorities, institutions and individuals involved in the study and conservation of places of cultural significance such as historic areas or buildings. According to ICOMOS (1987), the conservation of historic towns and other historic urban areas is an integral part of policies on economic and social development as well as of urban and regional planning at every level. ICOMOS therefore is promoting the integration of urban development and urban conservation in this way.

4.2.1.5 World Heritage Convention (WHC) -1972

In the year 1972, UNESCO held a General Conference at its 17th session and adopted the World Heritage Convention (WHC). However, this Convention only came into force in 1975. The WHC of 1972 is aimed at identifying, protecting, conserving and presenting world heritage properties for recognition and adoption as world heritage sites.

The WHC aims to promote co-operation among nations to protect heritage around the world that is of outstanding universal value, and needs to be conserved and protected for current and future generations. It is intended that, unlike the seven wonders of the ancient world, properties on the world heritage list will be conserved for all time.

All countries who are part of the WHC have agreed to:

- Adopt a general policy that aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programs;
- Undertake 'appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage'; and

- Refrain from 'any deliberate measures which might damage, directly or indirectly, the cultural and natural heritage' of other parties to the Convention, and to help other parties in the identification and protection of their properties.

Source: WHCA (1999:1)

By signing the Convention, each country pledges to conserve not only the world heritage sites situated on its territory, but also to protect its national heritage. The state parties are encouraged to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures that give this heritage a function in the day-to-day life of the community.

The World Heritage Convention Act of 1999 (WHCA) incorporates the World Heritage Convention into South African law. The WHCA provides for:

- The incorporation of the World Heritage Convention into South African law;
- The enforcement and implementation of the World Heritage Convention in South Africa;
- The recognition and establishment of world heritage sites: and
- The establishment of authorities, boards and executive staff who will be responsible for the administration of the WHCA and the world heritage sites in South Africa, including financial, auditing and reporting matters and controls

Source: WHCA (1999:2)

The convention is important to urban conservation as it encourages and promotes awareness on what built heritage resources are. It also encourages the integration of built heritage resources into regional planning programmes, thus acknowledging the importance of integrating urban development (regional planning) and conservation.

The scope of the work undertaken within the framework of the World Heritage Convention coincides with the mission of ICCROM, particularly with regard to built environmental heritage resources. While ICCROM is concerned with the technical, scientific and policy aspects, the WHCA formally recognises and defines sites that have cultural or environmental significance. With this in mind, the WHCA enables built heritage resources to be recognised as having intrinsic value.

4.2.1.6 The Australian Burra Charter -1979

The Burra Charter is based on the International Charter for the Restoration of Monuments and Sites of 1964 and was adopted by the Australian International Council on Monuments and Sites (ICOMOS) in 1979. The Burra Charter is probably the most significant document in the last thirty

years on the basic principles and procedures for the conservation of heritage places in Australia. The charter provides a guiding philosophy for the care of heritage and has been widely adopted as the standard guidelines for heritage conservation practice not only in Australia, but also in other parts of the world (Heritage Perth, 2016).

The aims of the Burra Charter are to ensure that the people involved in the conservation of a heritage place:

- Understand the place and its cultural significance, including its meaning to people, before making decisions about its future;
- Involve the communities associated with the place;
- Care for the culturally significant fabric and other attributes, taking into account of all aspects of significance;
- Care for the place's setting;
- Provide an appropriate use;
- Provide security for the place;
- Use available expertise;
- Make records of the place and the changes to it, and the reasons for decisions and actions; and
- Interpret and present the place in a manner appropriate for its significance.

Source: Burra Charter (1979)

The Burra Charter is a set of principles that have been adopted in Australia to create nationally accepted standards for heritage conservation practice.

The principles inherent in the Charter are:

- There are places worth keeping because they enrich our lives -by helping us understand the past, by contributing to the richness of the present environment and because we expect them to be of value to future generations;
- The cultural significance of a place is embodied in its physical material (fabric), its setting and its contents, in its use, in the associated documents and in its meaning to people through their use and associations with the place;
- The cultural significance of a place, and other issues affecting its future, are best understood by a process of collecting and analysing information before making decisions; and
- Keeping accurate records about decisions and changes to the place helps in its care, management and interpretation.

Source: Burra Charter (1979)

The Burra Charter is very important in the field of urban conservation as it provides guidance for the conservation and management of places of cultural significance (cultural heritage and built heritage resources), and is based on the knowledge and experience of the Australia ICOMOS members. The Burra Charter advocates a cautious approach to change do as much as necessary to care for the place and make it useable, but otherwise change it as little as possible so that its cultural significance is retained (Burra Charter, 2013:1).

4.2.1.7 Habitat Agenda

After recognising the urgency of urban explosion in the year 1996, the international community convened the second UN Conference on Human Settlements in Istanbul. At the conference governments agreed to adopt the Habitat Agenda and Istanbul Declaration (Urban Millennium, 2001:25). The acceptance of the Habitat Agenda marked a turning point in the international efforts to promote socially and environmentally sustainable cities.

The Habitat Agenda aims to address two themes of equal global importance, namely, 'adequate shelter for all' and 'sustainable human settlement development in an urbanising world'. The objective is to achieve adequate shelter for all, especially the deprived urban and rural poor, through an enabling approach to the development and improvement of shelter that is environmentally sound. The second theme, sustainable development of human settlements, combines economic development, social development and environmental protection, with full respect for all human rights and fundamental freedoms, including the right to development. To this end, it offers a means of achieving a world of greater stability and peace, built upon ethical and spiritual vision (UN Habitat, 2003:1).

The Habitat Agenda mentions that there is a sense of opportunity and hope that a new world can be built, in which economic development, social development and environmental protection, as interdependent and mutually reinforcing components of sustainable development, can be realised through solidarity and cooperation within and between countries and through effective partnerships at all levels (Habitat Agenda, 2003:1). According to the UN Habitat (2003:3), to overcome current problems, and to ensure future progress in the improvement of economic, social and environmental conditions in human settlements, there is need for the recognition of the challenges facing cities and towns. Therefore, it is very important for sustainable urban development to encourage the integration of all the social, economic and environmental issues when it comes to city building.

According to Habitat Agenda, the conservation of the built heritage contributes to the achievement of environmental balance in human affairs and sustainable development. The UN Istanbul

Declaration on Human Settlements and the Habitat Agenda explore the ramifications of Rio Declaration for how the global built environment should be organised. The 2003 'Global Plan of Action' stated:

'Conservation, rehabilitation and culturally sensitive adaptive reuse of urban, rural and architectural heritage are also in accordance with the sustainable use of natural and human-made resources. Access to culture and the cultural dimension of development is of the utmost importance and all people should be able to benefit from such access.'

The re-use of old buildings is not new; it has been done for centuries for the reasons of prestige and economy. Sustainable development now deepens the ethical reasons to re-use old buildings. There is an economic value in a standing structure that encloses space, either partially or fully. The Habitat Agenda tries to bring out the relevance of the idea of an integrated approach to planning.

4.2.2 South African policy and legislation that guides urban conservation

This section provides an overview of the applicable South African legislation that regulates the conservation of heritage resources. A brief summary regarding the progression of legislation with regard to conservation is compiled.

4.2.2.1 Bushmen Relics Protection Act (BRPA) -1911

The Bushmen Relics Protection Act (BRPA) of 1911 is considered the first piece of legislation on the conservation of cultural heritage in South Africa. Townsend (2000:132) points out that, during the first decades of the 20th century the South African conservation legislation dealt with subjects such as rock art and meteorites (BRPA of 1911). This is because architecture and the environment were not yet recognised as having worth for protection, whereas scientific objects were regarded as important. Rock art was considered to be prehistoric and of scientific rather than cultural or aesthetic interest.

In the BRPA, section 1 and 2 (below) mentioned that the protection offered was limited to the conservation of Bushmen and aboriginal painting as well as Bushmen-owned contents of graves, caves and rock shelters. Section 2 of the BRPA provided that the aforementioned items could not be removed without a consenting permit from the Minister of the Interior. Any person contravening this provision was liable to a fine or imprisonment. The protective measures of the BRPA were very narrow in scope. These protective measures merely extended to the protection of the cultural heritage of a very small segment of South Africa's population, rendering them ineffective for general and sufficient protection. Below are section 1 and 2 of the BRPA of 1911.

Section 1: *“Bushmen-relic” shall mean any drawing or painting on stone or petroglyph of the kind commonly known or believed to have been executed by the South African Bushmen or other aboriginals.”*

Section 2:

- (i) *“No person shall remove, cause or allow to be removed, from the Union by any Bushmen-relic without first having obtained from the Minister a written permit to do so.”*
- (ii) *“Any person desiring to remove from the Union any Bushmen- relic may make up application to the Minister for such a permit.”*
- (iii) *“Every such application shall be accompanied by a drawing, photograph, or tracing of the relic to be removed and shall state the exact locality in which the relic is situated and the place and purpose for which the relic is destined, when removed.”*

The act was promulgated due to mounting concerns of damage and loss of rock art through exports. At the time of promulgation of the BRPA, architecture and the environment had not yet been recognised as worthy of conservation and consequently not included in the Act (Viney, 2004:1). However, the BRPA of 1911 is no longer in use. In the year 1923, a new piece of legislation was promulgated and replaced the BRPA of 1911. This subsequent Act is going to be discussed in the following section.

4.2.2.2 Natural and Historical Monuments Act (NHMA) No.6 of 1923

The Natural and Historic Monuments Act (NHMA) of 1923 became the first legislation on the protection of monuments in South Africa. The scope of the legislation was limited to the protection of monuments as follows:

‘areas of land having distinctive or beautiful scenery, areas with a distinctive, beautiful or interesting content of flora and fauna, and objects (whether natural or constructed by human agency) of aesthetic, historical or scientific value and also specifically includes waterfalls, caves, bushmen paintings, avenues of trees and old buildings’ (NHMA 1923).

This Act also established the first statutory body responsible for heritage management, the Historic Monuments Commission (HMC), to identify and declare monuments and mark them with badges. The commission had the responsibility of compiling a register of the monuments of the Union of South Africa, and could pass by-laws to safeguard these monuments. It could also enter into agreements with any public body or private individual who owned a monument to ensure that

it was preserved, and to prevent damage. In the NHMA, section 1(1)³ dealt with the establishment of the commission for the preservation of natural and historical monuments of the Union. This section specifically stated that the commission's duties included the composition of a register of national monuments that, in the opinion of the commission, ought to be preserved. The commission was also mandated to undertake assessments of the legal ownership of any monument. Furthermore, the commission was responsible for the undertaking of steps to preserve and prevent impairment of monuments (depending on the availability of funds) and to act as the trustee of the monuments. The Commission had the authority to make by-laws with regard to the access to monuments by the public and the determination of the fees payable for such access.

In addition, section 8 of the NHMA extended the protection offered under the BRPA to areas of land with, among others, distinctive scenery, waterfalls, old trees and buildings, and to objects of aesthetic, historical and scientific value.

Section 8: *"emphasised the definition of the word "monument "in the Act, :For the purpose, of this Act "monument" includes areas of land having distinctive or beautiful scenery, areas with a distinctive, beautiful or interesting content of flora and fauna, and objects (whether natural or constructed by human agency) of aesthetic, historical or scientific value, or interest, and also specifically includes in any event and without limiting the generality of the previous portion of this definition, waterfalls, caves, Bushmen painting, avenues of trees, old trees and old buildings."*

The authority conferred upon the Commission to regulate the protection of and access to monuments it deemed worthy of protection, was very wide. This implied discretion inevitably resulted in discriminatory practices with regard to the protection of cultural heritage. The primary protection measures were aimed at the conservation of colonial heritage alone, while the broader spectrum of South African society was denied access to monuments and the enjoyment thereof, through the strict regulation of access to the monuments and the fees payable for such access.

However, critiques have noted that seven years into operation the Commission did not report much progress in conserving sites as it relied heavily on the voluntary cooperation of the private owners of the sites. Eleven years later, the Historical Monuments Commission was given increased powers to manage South Africa's heritage resources in terms of the Natural and Historical Monuments, Relics and Antiques Act of 1934.

³ Section 1(1): "The Governor-General may establish a commission which shall be known as the commission for the Union and is hereafter referred to as the commission."

4.2.2.3 Natural and Historical Monuments, Relics and Antiques Act (NHMRAA) -1934

This piece of legislation replaced the previous acts, both the Bushmen Relics of 1911 and the Natural and Historical Monuments Act of 1923. The NHMRAA of 1934 gave increased powers to the HMC and included archaeological and paleontological sites and objects. Procedures were put in place for proclaiming monuments (notifications in the Government Gazette and endorsement of title deeds) and by 1996, approximately 300 monuments had been declared. A permit was required for the exports of relics and for the alteration or demolition of structures (Pistorius, 2009:2).

Although the regulatory framework for the protection of cultural heritage was notably enhanced under NHMRAA, the scope of protection was still limited to objects of cultural heritage that, in the opinion of the Commission, were worthy of conservation. This discretion again did not advance the adequate protection of South Africa's cultural heritage as a whole.

The period after 1948, which marks the advent of formal apartheid, witnessed the gradual increase in the construction and naming of places commemorating white Afrikaner nationalist cultural heritage. The attitude towards conservation did not change until the 1960s. However, the 1960s mark a phase of emerging public interest in cultural heritage (Pistorius, 1997:4). Even then, only a few privileged and well-resourced individual and organisation could influence the management of heritage resources. The public interest in heritage management, at this phase is partly inspired by an increased pace and scale of modern developments (Viney, 2004:3). During the 1970s and a major part of the 1980s, much of the focus was geared towards the built environment or architectural heritage resources, setting precedents for the conservation of heritage resources. Due to the efforts of the Historical Monuments Commission, new legislation namely the National Monuments Act was promulgated and adopted in 1969.

4.2.2.4 National Monuments Act (NMA) No.28 of 1969

In 1969, the National Monuments Act (No.28 of 1969) was implemented. Under this Act (NMA), the declaration of individual buildings as National Monuments became the most widely used mechanism for the protection of built heritage resources in South Africa. Declared monuments often included buildings that were not necessarily of national significance, but that contributed to an urban environment, or that were threatened by development pressure or demolition.

The NMA has been amended several times since its promulgation in 1969. This was done to expand the powers of the National Monuments Council (NMC) to cover the conservation of built heritage resources. Much of the conservation approach of the NMC focused on the built environment and architecture, which celebrated both colonial and apartheid heritage with regard to the cultural heritage resources of black South Africans. Section 2A of the NMA of 1969

mentioned that councils were responsible for preserving, protecting the historical and cultural heritage, encouraging, and promoting the preservation and protection of heritage resources (NMA, 1969). The NMA repealed the NHMRAA and acted as the central legislation dealing with the conservation and management of South Africa's cultural heritage for thirty years, until the National Heritage Resources Act (NHRA) replaced it in April 2000. Under the NMA, the NMC served as the main regulatory body.

Pistorius (2002) in Townsend (2003:64) asserts that in the late 1980s, the NMC was still trying to protect the environment as it declared a larger number of individual buildings as National Monuments in older towns. The declaration was the only legal protection available at the time and was probably the greatest contributor to the town's preservation during the 1970s and 1980s before the designation of urban conservation areas and adoption of architectural guidelines. The NMA made a very important improvement, which was the introduction of Heritage Impact Assessments (HIA's) for the protection and management of environments and not just buildings.

Clearly much of the focus on heritage policy and management from 1911 to 1969 has been centred on the conservation of built heritage resources. In this period, intangible heritage or living heritage was barely protected or mentioned within the legal framework relating to heritage throughout the colonial and apartheid periods. It is only in the period of transition to democracy that serious political interventions made way for the integration of tangible heritage or living heritage into the broader national policy framework on heritage resources management.

The NMA focused on the built environment and architecture that celebrated both the colonial and apartheid heritage. From the BRPA of 1911 to the NMA of 1969, most of the conservation served the interest of the dominant white minority and this did not recognise all the heritage resources. Therefore, there was a need for a policy that takes into consideration all the heritage resources, either for blacks or for whites. On the other hand, the NMA encourages the protection of built heritage resources from grassroots level by giving the national councils the powers to promote, preserve and protect built heritage resources, and this through community involvement.

4.2.2.5 The Constitution of the Republic of South Africa 1996

The democratically accepted Constitution of the Republic of South Africa (Constitution) of 1996 creates a new dispensation of acceptance, tolerance and mutual well-being among South Africans. These constitutionally entrenched principles imply that the South African legislator is under the obligation to adopt legislation that is in accordance with the aims set out by the principles of the Constitution. The Constitution came as a vehicle to discard previously discriminatory and racially exclusive legislation. The intention is to fulfil this aim by recognising the injustices of the past, by respecting those who have worked to build and develop the country,

honouring those who suffered for injustice and freedom and by recognising the fact that South Africa belongs to all who live in it.

The Constitution does not guarantee the explicit protection of built heritage resources but promotes a strong support for the conservation of the environment. Section 24b of the Constitution stipulates that everyone have the right to have the environment protected through reasonable legislative and other measures that secure and justify ecological, economic and social development in a sustainable way. Several provisions of the Constitution are relevant to the conservation of cultural heritage in South Africa. Although no definition of culture is to be found in any of the constitutional provisions, it is submitted that culture, in the context of the Constitution, refers to something that one enjoys, shares and in which one participates. The various contexts in which culture is therefore used in the Constitution encompass the objects, actions, products and conditions of conduct. This is emphasised in section 31 of the Constitution.

Section 31 states that persons belonging to a cultural, religious or linguistic community may not be denied the right to enjoy their culture, practise their religion or to use their language, if the exercise of this right is consistent with all the provisions of the Bill of Rights in the Constitution. Although no explicit right or duty is granted for the protection of cultural heritage, it is submitted that the logical implication of granting the rights contained in section 30 and 31, is to further equal protection of human dignity, freedom and equality. These fundamental values will accordingly promote an open and democratic society if, inter alia, cultural heritage is conserved for the members of society that will enable them to enjoy, participate in and live the cultural life of their choices. The implication of these provisions is that both the national and provincial spheres of government may enact legislation concerning cultural matters. All legislation, procedures and administrative practices carried out by heritage authorities must give further content to the fundamental rights set out in the Constitution. These provisions accordingly create the mandate and obligation to protect, care for and promote culture and cultural heritage within the framework of constitutional rights, duties and principles.

Although no explicit guarantee is formulated for the protection of cultural heritage in the Constitution, the existing provisions unquestionably articulate the support for the protection of a multi-cultured society. The constitutional provisions furthermore strengthen the conservation functions of heritage authorities, which may result in the recognition and guarantee of the particular way of life that a plural community leads around and among its cultural heritage. At the national level, the Constitution's provisions unquestionably support the protection of a multi-cultured society, thereby strengthening the conservation functions of heritage authorities.

4.2.2.6 National Environmental Management Act, Act 107 of 1998 (NEMA)

The National Environmental Management Act (NEMA) provides for the management of cultural heritage. In terms of the NEMA, the word 'environment' includes the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influenced human health and well-being. Historical and cultural resources therefore fall within the scope of the natural environment. Being a component of the natural environment, South African heritage resources are by law subject to protection and conservation under national and international law (Breedlove, 2002:38). This is supported by a clause in section 2(2) that environmental management must take place, with people and their needs at the forefront of its concerns, and serve their physical, psychological, developmental, cultural and social interests equitably.

NEMA requires that the potential impact on (a) the environment, (b) socio-economic conditions, and (c) the cultural heritage, of activities that require authorisation or permission by law and which may significantly affect the environment, must be considered, investigated and assessed prior to their implementation, and reported to the organ of state charged by law with authorising, permitting, or otherwise allowing the implementation of an activity (NEMA, chapter 5, section 24(1)).

South Africa has ratified a number of international conventions and bills that primarily deal with cultural heritage conservation and management. In 1997, South Africa became a state party to one of the primary international environmental conventions, namely the Convention Concerning the Protection of the World Cultural and Natural Heritage (CCPWH 1972). This convention falls within the scope of the definition of an international environmental instrument contained in NEMA section 1(xviii) that includes 'any international agreement, declaration, resolution, convention or protocol which relates to the management of the environment'. South Africa accordingly ratified the CCPWH in order to provide for the possibility of the domestic establishment of protection measures offered by an international environmental instrument.

The NEMA corresponds with the principles and recommendations made by Agenda 21 concerning sustainable development. It is crucial that NEMA be consulted in urban planning, to ensure a sustainable future for all (Scheepers, 2008:81-82). This Act is very useful in the protection of built heritage resources, and it encourages the integration of heritage resources in urban development through taking into consideration the environmental issues relating to built heritage resources.

4.2.2.7 National Heritage Resources Act (NHRA), Act 25 of 1999

The National Heritage Resources Act (NHRA) was enacted in 1999 and became operative in the year 2000. The NHRA is the central legislation on the management of South Africa's heritage

resources, and replaces previous legislation from 1911 to 1969. The new constitutional dispensation necessitated the enactment of legislation for the establishment of an all-encompassing cultural heritage protection regime, by creating an integrated framework for the protection of cultural heritage with regard to the management and development thereof, as well as participation in and access to heritage resources. In general, the NHRA aims to promote good management of the national estate, and to enable and encourage communities to nurture and conserve their legacy so that it may be bequeathed to future generations (NHRA 1999:01). Furthermore, the NHRA provides an integrated system for the identification, assessment and management of built heritage resources in South Africa, and to protect and manage them as part of the national estate (as defined in NHRA Section 3).

The principles of the NHRA include the following:

- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society;
- Heritage resources are valuable, finite, non-renewable and irreplaceable and should accordingly be managed carefully in order to ensure their survival;
- Every generation has a moral obligation to act as trustee of the national heritage;
- Heritage resources should be managed in the interest of all South Africans;
- Heritage resources have the capacity to promote reconciliation, understanding and respect and to contribute to the development of a unifying South African identity;
- Heritage resources form an important part of history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management;
- Heritage resources contribute significantly to research, education and tourism and should therefore be developed and presented in a way that ensures respect and dignity for cultural values;
- The identification, assessment and management of heritage resources must take account of all relevant cultural values and indigenous knowledge systems;
- Management of cultural heritage should contribute to socio-economic development; and
- Management should safeguard the options of present and future generations.

Source: NHRA (Act 25 of 1999)

The aforementioned principles recognise international trends and are meant to give effect to the provisions of the NHRA, and the constitutionally entrenched rights to have built heritage resources protected. The underlying principles of these provisions, furthermore, correspond to a large degree to those contained in the CCPWH and WHCA. By taking heed to and implementing these principles in the management of built heritage resources, heritage authorities will ensure that built

heritage resources of the entire South African community will be preserved for current and future generations.

For the first time, the NHRA also advocates for heritage conservation to be part of the broad strategy of socio-economic development, by promoting the integration of heritage resources management in urban and rural planning and social and economic development (NHRA 1999). This suggests that heritage conservation is inseparable from the development issues that are taking place in South Africa.

The management of built heritage resources is operated on a three-tier system at national, provincial and local levels of government. The national level functions are the responsibilities of South African Heritage Resources Agency (SAHRA), the provincial level functions are the responsibility of the provincial heritage resources authorities and the local level functions are the responsibility of the local authorities. Heritage resources authorities and local authorities are accountable for their actions and decisions and the performance of functions under this system. At national level, SAHRA are responsible for management of Grade I sites⁴, provincial level oversees Grade II sites⁵ and at local level they are responsible for the management of Grade III sites⁶.

(i) National level: SAHRA

SAHRA was established in terms of section 11 of the NHRA of 1999, which outlines an integrated interactive system for the management of the national heritage resources of South Africa. The SAHRA plays a critical role in the identification, protection, conservation and promotion of built heritage resources in South Africa for present and future generations. SAHRA's powers under the NHRA include: (i) inspecting certain heritage resources; (ii) educating the public about the management of the national estate; (iii) facilitating access to heritage resources; and (iv) making arrangements for the protection of heritage resources.

In terms of the (NHRA, SAHRA has a mandate to conserve and manage, both intangible and tangible heritage resources, for the present and future generations. Tangible heritage under SAHRA's protection includes monuments such as museums and historic cities or landscapes. Intangible heritage includes language, culture and music. This suggests a move from protecting

⁴ Grade I sites: these are National Heritage Sites. Grade I sites are heritage resources with qualities so exceptional that they are of special national significance.

⁵ Grade II sites: these are provincial heritage sites. They are heritage resources with special qualities which make them significant in the context of a provincial or region, but do not fulfil the criteria for Grade I status.

⁶ Grade III sites: They are local heritage sites. They do not fulfil the criteria for Grade II status. Grade III sites may be formally protected by placement on the Heritage Register.

only buildings and monuments, as propagated in previous legislation, to incorporating a broader scope of what heritage entails.

(ii) Provincial level: PHRA

The PHRA is a government agency established at provincial level in South Africa and is responsible for the management of immovable heritage. It is responsible for the Grade II heritage resources, and in most instances, those at Grade III level since few municipalities have been assessed as competent to manage the national estate and are delegated to do so.

The PHRA is able to exercise the bulk of the powers to protect heritage resources set out in Chapter 2 of the NHRA. These are divided into two types, which are, formal protections and general protections. Formal protections require specific action by a heritage resources authority to designate, usually a notice in the government gazette, whilst general protections apply without the need for specific action and usually apply by virtue of the age of the heritage resource concerned.

(iii) Local level: Municipality

The local authority is responsible for the identification and management of Grade III heritage resources and heritage resources that are deemed to fall within their competence in terms of the NHRA. According to 8(6) (a) of the NHRA, the local authority shall not perform any function in terms of this Act, or any other law, for the management of heritage resources unless it is competent to do so. The capacity of a local authority shall be assessed in terms of criteria prescribed by the Minister, including the availability of adequate staff, expertise, experience and administrative systems to be applied by provincial heritage resources authorities.

Throughout the history of heritage resources management in South Africa, the NHRA is the first diverse and inclusive cultural law, which attempts to address the imbalances and inequalities of the past, in the heritage sector. One of the highlights of the NHRA is its emphasis on public participation and the involvement of the local communities in heritage resources management. This is one of the aspects that make the NHRA distinct from the previous heritage policies (Deacon et al 1996:2). Moreover, there is a big shift in terms of the integration of urban conservation into urban development in the NHRA. Section 38(1) of the Act mentions that the NHRA is responsible to notify the relevant heritage authorities about a proposed development and to supply details about such development. For the first time, the NHRA also advocates for heritage conservation to be part of the broad strategy of socio-economic development, by promoting the integration of heritage resources management in urban and rural planning and socio and economic development (NHRA 1999).

The NHRA represents a paradigm shift in the South African approach to conservation with regard to built environment heritage resources. The NHRA provides a solution for integrating the policies and legislation on the management of cultural heritage resources within town and regional planning schemes, policies and legislation. The NHRA's principles recognise international trends, giving effect to the provision and constitutionally entrenched rights to have cultural heritage protected. If these principles are implemented in the management of cultural heritage, heritage authorities will ensure that the cultural heritage of the entire South African community will be preserved for current and future generations (Kotze and Jansen van Rensburg, 2003).

4.2.2.8 World Heritage Convention Act (WHCA), Act 49 of 1999

The CCPWH was enacted in the South African law in the year 1999 by means of the World Heritage Convention Act (WHCA), with the primary objective to provide for the protection and sustainable development of World Heritage Sites (RSA, 1999b). The WHCA (1999) defines sustainability with reference to the principle of natural and cultural heritage, to promote reconciliation, understanding and respect as well as the unification of the South African identity. The convention was aimed at establishing an effective system of collective protection of built heritage resources of outstanding universal value, organised on a permanent basis and in accordance with modern scientific methods. It provides for the world heritage list of sites of 'outstanding universal value' (Kidd, 2011:62).

The general objectives of the WHCA include:

- To promote, manage, oversee, market and facilitate tourism and related development in connection with World Heritage Sites in accordance with applicable law, the Convention and the Operational Guidelines for the implementation of the Convention (Operation Guidelines), so as to maintain the cultural and ecological integrity of the sites;
- To ensure that the cultural and natural heritage of South Africa is protected, conserved and represented;
- To encourage investment, innovation and job creation in connection with World Heritage Sites;
- To promote the development of sustainable projects in connection with World Heritage Sites; and
- To promote empowerment and advancement of historically disadvantaged people in projects related to World Heritage Sites applicable to the actions of all organs of State and authorities in relation to World Heritage Sites.

Source: WHCA (1999, section 3)

Although the WHCA mainly provides for the identification, management and nomination of World Heritage Sites, it functions alongside the NHRA as an instrument to protect cultural heritage. The WHCA has, as its main objectives, to give effect to the values of the Constitution and to provide for the cultural and environmental protection and sustainable development of World Heritage Sites. Section 4(2) of the WHCA defines sustainable development with reference to the underlining principle cultural and natural heritage may promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity. This implies that cultural heritage management should take cognisance of the fact that the use of this heritage should not be for the purposes of threatening a culture, based on equality and freedom or for political gain. The WHCA is a parallel regulatory instrument not intended to override or replace existing legislation, such as the NHRA and the NEMA, but support the objectives and underlining principles of the NHRA and the Constitution. Thus, the NHRA and NEMA remain as the pre-eminent pieces of conservation legislation.

From the discussion of the policies and legislation that guide urban conservation internationally, but in South Africa specifically, the following conclusions can be made. Firstly, a shift has occurred in what heritage entails. While the emphasis was previously on single buildings or built environment heritage resources, the scope of heritage is broadened to include larger areas as well as intangible heritages. Secondly, a more integrated approach to heritage is noticed. This entails integration in terms of a more comprehensive definition of heritage as well as a more integrated approach to conservation and development. The management of heritage is now more inclusive, as the public and various levels of government have now become part of the process.

According to Cohen (2001), due to rapid urbanisation, historic cities' structures are facing immense challenges with regard to problems associated with development pressure. Built heritage resources are at a risk of total destruction or damage such that they will be irreplaceable. There is still a lack of clearly formulated urban conservation regulations and principles to integrate built heritage resources into the urban planning system. Urban development in South Africa is still regulated by a separate set of policies and legislation. These policies and laws form the focus of the second section of this chapter.

4.3 Legislative framework: urban development

The following sections discuss the various policies and legislation that guide urban development and impact on the conservation of built heritage resources. The first part of the discussion focuses on international policy, namely, the Habitat Agenda and Millennium Development Goals. The second section discusses South African national legislation. Local policies that are applicable to the specific study area will be discussed in the empirical section under the case study of Matlosana.

4.3.1 International policy and legislation that guides urban development

According to UN-Habitat III (2015:1), urban law is the collection of policies, laws, decisions and practices that govern the management and development of the urban environment. The UN-Habitat has experience in the implementation of law and policy making processes that have led to legislation.

4.3.1.1 Millennium Development Goals (MDGs)

The MDGs are eight goals with measurable targets and clear deadlines for improving the lives of the world's poorest people. A historic millennium declaration was signed by leaders of 189 countries at the Un-Millennium Summit in the year 2000 to meet these goals and eradicate poverty. At that time, eight goals that range from: providing universal primary education to avoiding child and maternal mortality, were set with a target achievement date of 2015 (MDG Fund 2009).

In this research, where the key focus area is urban development and urban conservation, a selective number of MDGs that are essential are discussed in Table 4-1 below.

Table 4-1: Summary of MDGs and Targets

MDG	Target	Motivation
Goal 1, Eradicate extreme poverty and hunger	1- Halve the proportion of people whose income is less than US\$1 per day. 2- Reduce by half the proportion of people who suffer from hunger.	The widening gap between the rich and the poor is a major threat to global security and economic integration. Introducing this MDG 1 is a way of unleashing the productive potential of the poorer groups in the world by promoting productive activities, industrial policies, and institution-building and industrial support services.
Goal 2, Achieve universal primary education	3- Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	To eradicate illiteracy is still a priority given its importance for the reduction of poverty. More so, MDG 2 is there to create awareness of what is importance in our daily lives, and in this case taking into consideration built heritage resources.
Goal 3, Promote gender equality and empower women	4- Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.	To increase the number of women to be educated and to encourage that in all sectors of development there is gender equity. In the previous years, women were disadvantaged especially in developing countries due to factors such as culture. Also, to address gender imbalances at different levels.

Goal 4, Reduce child mortality	5- Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	In developing countries, in the past decades, there have been continuous infant and youngster-infant mortality rates, and these rates are too high.
Goal 5, Improve maternal health	6- Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	To increase delivery in health care, as the number of live births has decreased, and this decrease reflects a decrease in access health services.
Goal 6, Combat HIV/AIDS, malaria and other diseases	7- Have halted the diseases by 2015 and begun to reverse the spread of HIV/AIDS 8- Have halted the diseases by 2015 and begun to reverse the incidence of malaria and other major diseases	According to different epidemic profiles by region, there was a high rate of HIV & AIDS in developing countries, due to less prevention, care and the treatment of diseases.
Goal 7, Ensure environmental sustainability	9- Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. 10- Halve, by 2015, the proportion of people without sustainable access to safe drinking water 11- Achieve significant improvement in the lives of at least 100 million slum dwellers by 2020.	Due to an increase in climate change effects, lack of awareness on how important the environment is, this MDG came into effect to protect the environment from continuous degradation.
Goal 8, Develop a global partnership for development	12- Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development, and poverty reduction both nationally and internationally	There has been no support for development as well as proper trade among countries. No country is self-sufficient. This MDG promotes international trade and regional integration and by achieving this, absolute poverty will be reduced.

Source: MDG Fund (2006:5)

In relation to urban development and urban conservation, the MDGs in the table above, are the most pertinent. Goal 1 is mainly targeted at the culture and development sector as well as the development and private sector. Thus, if cities are developed in such a way that they will be engines of economic growth, more job opportunities will be available, and the poverty datum line can be beaten and poverty itself swept away. In this way, there will be proper urban development and conservation. Goal number three advocates for equity in that: all the decisions must be gender based; and by promoting equity. This goal also focuses on cultural rights, social inclusion and its potential in stimulating creative industries. Urban development and conservation will be achieved effectively as decisions are made from all angles. However, the most important MDG is goal 7 as it advocates for a sustainable urban environment. MDG 7 focuses on ensuring

environmental sustainability in urban development, and its targets and indicators are reviewed within the context of other local, national and global development initiatives.

4.3.2 South African Policy and legislation that guides urban development

Moving from an international perspective, there are also national policies and legislation that govern urban development throughout South African History. The following section is going to give an in-depth analysis of South African policy and legislation and how they govern and impact built heritage resources.

4.3.2.1 Constitution of the Republic of South Africa -1996

The Constitution of South Africa, as the supreme law of land, forms the core of all planning carried out within the country. Its Preamble emphasises on healing the racial divisions, laying the foundation of a democratic society, improving the quality of life of all citizens, and building a united and sovereign country (South African, 1996). The study focuses on the sections of the Constitution that address issues relating to urban development. Although the Constitution has been discussed earlier, the focus is now on the development side.

Schedules 4 and 5 of the Constitution provide for “regional planning and development”, “urban and rural development”, “provincial planning and municipal planning”. In the Constitution, subsection 153 (below) talks about urban developmental duties of municipalities.

Subsection153:

(a) “A municipality must structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community;” and

(b) “Participate in National development programmes.”

The Constitution promotes urban development through giving powers to the municipalities to enable them to engage in projects that promote urban development.

4.3.2.2 White Paper on Spatial Planning and Land Use Management (WPSPLUM) -2001

According to the DLA (2001:2), the WPSPLUM was implemented to ensure an improved approach in ensuring integrated planning for sustainable management of land resources. The WPSPLUM builds upon the concept of the municipal integrated plan and will rationalise the existing plethora of planning laws into one national system, which will be acceptable in each province in order to achieve the national objective of wise land use.

Every municipality has the right to have a spatial development framework that shows the desired patterns of land use, the directions of how the city will grow urban edges, the conservation areas as well as the land use management scheme. The spatial development plan should be flexible and able to change to reflect changing priorities of the municipality. The scheme, on the other hand, should be tighter and amended only where necessary for a specific development that conforms to the plan. The plan influences the contents of the scheme, as and when required, rather than as the direct source of rights and controls itself (SA, 2001(3.2)). Section 3(2) of the spatial development plan guides and informs all the decisions of the municipality relating to the use, development and planning of land, and informs, inter alia, the conservation of both the built and natural environment.

In 2001, the White Paper on Spatial Planning and Land Use Management proposed the following elements of a new spatial planning and land use management system:

- Principles aimed at achieving sustainability, equality, efficiency, fairness and good governance in spatial planning and land use management, which all planning authorities should adhere to;
- Land use regulators who are the authorities responsible for making decisions regarding spatial planning and land use management;
- IDP-based local spatial planning with a direct legal link to the land use management scheme, that is an essential step towards integrated and coordinated planning for sustainable and equitable growth and development;
- A uniform set of procedures for land development approvals; and
- National spatial planning framework for sustainable and equitable spatial planning around national priorities.

Source: WPSPLUM (2001)

The white paper is very important to this research as its principles clearly support urban development and urban conservation through the principles of sustainability, equality, integration and the fair and good governance. More so, WPSPLUM facilitates and align spatial planning, land use and environmental management in support of promoting sustainable and integrated planning and development. It thus forms the foundation of the Spatial Planning Land Use Management Act (SPLUMA) (Act 16 of 2013) and the subsequent spatial development frameworks.

4.3.2.3 National Spatial Development Perspective (NSDP) -2006

The National Spatial Development Perspective (NSDP) of 2006 is a major achievement in the drive by the State to eradicate the damage wrought by decades of colonial and apartheid

manipulation of settlement patterns and economic activity in South Africa. The NSDP provides a framework for a far more focused intervention by the State in equitable and sustainable development. It represents a key instrument in the State's drive towards ensuring greater economic growth, buoyant and sustained job creation and the eradication of poverty.

Even more, the NSDP provides a framework for deliberating the future development of the national space economy and recommends mechanisms to bring about optimum alignment between infrastructure investment and development programmes within localities. It is a critical instrument for policy coordination, with regard to the spatial implications of infrastructure programmes in national, provincial and local spheres of government. It is regarded as an indicative tool for development planning (NSDP, 2006).

The NSDP provides for:

- A set of principles and mechanisms for guiding infrastructure investment and development decisions;
- A description of the spatial manifestation of the main social, economic and environmental trends that will form the basis of a shared understanding of the national space economy; and
- An interpretation of the spatial realities and the implications for government interventions.

Source: NSDP (2006)

According to the NSDP (2006), the national spatial perspectives are increasingly being recognised as critical tools for bringing about coordinated government action and alignment to meet social, economic and environmental objectives. The perspectives provide for a comprehensive and incisive analysis of current and future trends, of the factors or forces driving these trends and of the strategic implications thereof, in spatial terms. Thus they provide the basis for maximising the overall social and economic impact of government development spending by interpreting the strategic direction, promoting policy coordination and fitting government actions into coherent spatial terms of reference.

The ultimate purpose of the NSDP in the South African setting is to fundamentally reconfigure apartheid spatial relations, to implement spatial priorities that meet the constitutional imperative of providing basic services to all and to alleviate poverty and inequality.

4.3.2.4 Spatial Planning and Land Use Management Act No 16 of 2013 (SPLUMA)

There has been a sharp increase in the number of official systems and legislation that have attempted to control spatial development and planning since 1994 (DEAT, 1997). However, no

primary legislation had been enacted in relation to the correlation that exists between spatial planning and land use management. The introduction of the Spatial Planning and Land Use Management Act (SPLUMA) is set to aid effective and efficient planning and land use management. SPLUMA has been proposed as the tool to bring effective spatial transformation (South African Cities Network, 2015:4).

This new piece of legislation intends to repeal all older legislation and provide a single law to govern spatial planning and land use management. One of the intentions of SPLUMA is to enable provinces to draft and enact provincial specific legislation to assist and guide municipalities in their municipal planning functions. The system elements proposed in the 2001 White Paper on Local Government, and detailed in subsequent spatial policy, were not included in any legislation governing spatial planning and land use management until the promulgation of SPLUMA.

In terms of section 3, the objectives of the Act are to:

- Provide for a uniform, effective and comprehensive system of spatial planning and land use management for the Republic;
- Ensure that the system of spatial planning and land use management promotes social and economic inclusion;
- Provide for development principles, and norms and standards;
- Provide for sustainable and efficient use of land;
- Provide for cooperative government and intergovernmental relations amongst the national, provincial and local spheres of government; and
- Redress the imbalances of the past and to ensure that there is equity in the application of spatial development planning and land use management systems.

Source: SPLUMA (2013:12)

In summary, SPLUMA is a response to the challenges facing the planning domain in:

- Clearly defining each element of the planning system, from strategic spatial planning to management of land development, and specifying the links between the elements;
- Legislating principle-led planning, giving normative direction to the content and intended outcomes of plans and planning mechanisms;
- Through the planning principles, attempting to address the fragmented, unsustainable spatial development patterns still characterising the country;
- Creating a single, integrated legal system dealing with planning in a uniform way for the country; and
- Specifying the role of each sphere of government in the planning system.

Source: South African Cities Network (2015:20)

SPLUMA is very important in urban development as it places municipalities at the centre of spatial planning, land use management and decision-making. According to SPLUMA, each sphere of government must take responsibility for spatial planning in their jurisdiction. In this regard, the local municipality, as the sphere of government operating closest to the community, will have a direct role to play in spatial planning on which all decisions on land development should be based. SPLUMA stipulates the role of a local municipality relating to spatial planning and land use management on the following elements:

- The compilation, approval and review of IDPs;
- The compilation, approval and review of the components of an integrated development plan prescribed by legislation and falling within the competence of the municipality, including a spatial development framework and a land use` scheme; and
- The control and regulation of the use of land within the municipal area, where the nature, scale and intensity of the land use does not affect the provincial planning mandate of provincial government or the national interest.

4.3.2.5 Integrated Urban Development Framework (IUDF) – 2016

Due to rapid urbanisation, South Africa has developed the Integrated Urban Development Framework (IUDF) in order to manage the scale and growth of South Africa's cities and towns (IUDF, 2016:3). The IUDF seeks to foster a shared understanding across government and society about how best to manage urbanisation and achieve the goals of economic development, job creation and improved living conditions by addressing the current urban inefficiencies (IUDF, 2016:3). It provides a framework for reorganising the urban system so that cities and towns can become more inclusive, productive, resource efficient and good places to work and live in. Moreso, the IUDF aims to guide the development of inclusive, resilient and liveable urban settlements, while directly addressing the unique conditions and challenges facing South Africa's cities and towns.

South Africa has different types of cities and towns, each with different roles and requirements. To achieve better and sustainable towns and cities, there is need for a vision to be pursued and interpreted in differentiated and locally relevant ways. Four overall strategic goals were introduced to achieve this vision and these are:

- ii. Spatial integration: To forge new spatial forms in settlement, transport, social and economic areas.
- iii. Inclusion and access: To ensure people have access to social and economic services, opportunities and choices.

- iv. Growth: To harness urban dynamism for inclusive, sustainable economic growth and development.
- v. Governance: To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

Source: IUDF (2016:4)

4.4 Conclusion

In conclusion, this chapter focused on the legislative framework that currently informs decision-making and policy around the world and in South Africa. This chapter dealt with the international legal instruments of built heritage resources and shows how heritage is of international importance and concern. The emphasis was on the importance of legislation concerning built heritage resources in all cultures and societies. The international organisations and charters are informative in the support they provide to countries, research organisations, individuals and others in the management of built heritage resources.

In South Africa, policy and legislation with regard to urban conservation has become more comprehensive, with recent legislation, for example, the South African Constitution, NHRA and SPLUMA, as calls for a more integrated approach in which these built heritage resources should be treated. There has been a paradigm shift in built heritage resources policy and legislation since the advent of democracy in South Africa as the legislation before 1994 did not fully taking heritage resources seriously and was based on racial grounds. The chapter has also expounded on various doctrines that have guided the practice of urban development and urban conservation. It has been shown that built heritage resources are being protected in all spheres and levels of domestic and international governance. Built heritage resources are protected by various forms of legislation such as environmental, planning and developmental legislation and all guide and aid in the protection of built heritage resources.

Table 4-2: An analysis of the extent of integration of policies and legislation that govern urban development and urban conservation.

legislative instrument	Focus/scope		Integration	
	Limited (Include tangibles/built objects: (buildings/monuments))	Comprehensive (Include intangibles and other than only built objects)	Urban conservation	Urban development
UNESCO of (1945)	✓	✓	✓	x
ICCROM of (1959)	✓	X	✓	x
Venice Charter of (1964)	✓	X	✓	x
ICOMOS of (1965)	✓	X	✓	x
WHC of (1972)	✓	X	✓	x
The Australian Burra Charter of (1979)	✓	✓	✓	x
BRPA of (1911) *	✓	✓	✓	x
NHMA of 1923	✓	✓	✓	x
NHMRAA of (1934) *	✓	✓	✓	x
NMA of (1969) *	✓	✓	✓	x

Constitution of the Republic of South Africa (1996)	✓	✓	✓	x
NEMA of (1998)	✓	✓	✓	x
NHRA of (1999)	✓	✓	✓	✓
WHCA of (1999)	✓	✓	✓	x
MDGs (2000)	✓	✓	✓	✓
Habitat Agenda (2001)	✓	X	x	✓
WPSPLUM (2001) *	✓	X	x	✓
NSDP of (2006)	✓	X	x	✓
SPLUMA of (2013)	✓	X	x	✓
IUDF of (2016)	✓	X	✓	✓

Source: Author's own construction (2016)

The table above summarises all the policies and legislation that guide urban development and urban conservation. The following important conclusions can be drawn:

Urban conservation and urban development were run in isolation, as the policies from 1945 focused on urban conservation without considering urban development. In 1999 when the NHRA came into effect, it integrated the two (urban conservation and urban development) and is therefore very important as the first law to show a turning point in the management of these built heritage resources. The main objective of the NHRA is the creation of an integrated and interactive system for the conservation (which includes protection, maintenance, preservation and sustainable use) of built heritage resources.

Moreover, there is a move towards a more comprehensive approach to urban conservation as the earlier focus was limited to tangible resources such as monuments. In addition, there is now more integration in terms of cross-referencing than there was in the beginning.

CHAPTER 5 RESEARCH DESIGN

5.1 Introduction

Research is a process that involves obtaining scientific knowledge by means of various methods and procedures (Huysamen, 2005:2). A research design (Mouton, 1996:175) serves as a plan, structure and method to conduct the research. Yin (2003:19) describes a research design as an action plan for getting from an initial set of questions to some set of conclusions. The main purpose of the research design is to direct the overall process of the research.

In this context, the research design is structured to answer the following research questions: - (1) to what extent do the theories on urban development and urban conservation support the integration of built environmental heritage resources? (2) To what extent are the policies and legislation that guide urban conservation and urban development integrated? (3) How integrated is urban conservation and urban planning in the case of Klerksdorp? (4) What is the role of spatial planning in the integration of urban conservation and urban development?

This chapter outlines the choice of the research methodology (a case study methodology) and the reasons for adopting this methodology. While some authors view case studies as an approach (Yazan, 2015), others consider it as a methodology (Hyett, 2014). This study uses a singular case study as the overall methodology in order to explore urban conservation and urban development in Klerksdorp in the North West Province (South Africa). In addition, the chapter will discuss the methods used to generate data, data analysis as well as the considerations given to ethical aspects.

5.2 Research design: A case study design

Gillham (2000a:1) defines a case study as an investigation to answer specific research questions that seek a range of different evidence from the case settings. Yin (2009:240) is of the view that the goal of a case study is to understand complex social phenomena and real life events, such as organisational and managerial processes. In a nutshell, “a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 2009:240). While people and social phenomenon are not the direct the focus of this research, a case study is appropriate because the aim is to explore a spatial planning phenomenon (the integration between conservation and urban development) in a specific context. Furthermore, a case study is suitable because the planning processes and the role of planning of a specific context are under investigation.

According to Rule and John (2011:12), case studies help to generate depth and insight into a particular phenomenon, in this case the integration of built heritage resources into urban planning. Case study research is more than simply conducting research on a single individual case or situation. According to Yin (2003), the case study approach enables the researcher to answer “how” and “why” type questions, while taking into consideration how a phenomenon is influenced by the context within which it is situated. For the novice researcher, a case study is an excellent opportunity to gain insight into a particular topic. It enables the researcher to gather data from a variety of sources to illuminate the case.

Stake (1995) distinguishes three types of case studies: intrinsic, instrumental and collective. An intrinsic case study is done when the case is unique and is therefore not representative of others. The purpose of conducting this type of case study is not mainly to build a theory, but because of its intrinsic interest. An instrumental case study is selected to provide insights or to develop an existing theory: ‘The case is often looked at in depth, its contexts scrutinised, its ordinary activities detailed because it helps us pursue the external interest’ (Stake, 1995:237). Finally, the collective case study is instrumental and extends to more than one instance. In this instance, integrating conservation (built heritages) and development is explored within a specific context and situation, which is not representative of all contexts (towns or cities), so that the case study is intrinsic. However, guidelines for integration and the possible role of planning will be developed as generic considerations for other contexts.

5.2.1 Components of effective case study research

According to Yin (2009:20), there are five components of an effective case study design, namely: research questions, propositions or the purpose of the study; a unit of analysis; a logic that links data to propositions; and criteria for interpreting findings.

Research Questions: - The most appropriate questions for this type of qualitative case study research are the “how” and “why” types of questions. In this study, the main question that guided the study revolves around how urban conservation (built environmental heritages) and urban development can be integrated through spatial planning.

Purpose of the study: - The case study research design also seeks to define the purpose of the study clearly. This component is most commonly recognised as the purpose statement. In this particular case study, the purpose statement is to develop a spatial planning framework for integrating urban conservation into urban development in Klerksdorp.

Unit of analysis: - The third component of the case study research design is the unit of analysis. Yin (2009) describes the unit of analysis as the focus of the analysis in the case study. Yin (2009) states that an appropriate unit of analysis occurs when the primary research is accurately

specified. The unit of analysis is directly tied to the research questions developed by the researcher. The unit of analysis is defined by Miles and Huberman (1994:25) as a phenomenon occurring in a bounded context. In this study, the unit of analysis is a spatial unit, namely, the built up area of Klerksdorp, with a focus on the built heritages and future development areas. This unit is explored in terms of the spatial patterns, processes and policies that inform the spatial planning.

Logic that links the data to propositions: - The case study research design also seeks to connect data to propositions. This connection is made following the data collection phase, as themes emerge. As data is analysed, the researcher will attempt to match patterns that appear in the data to the theoretical propositions of the case study. The themes that will emerge in this study, will thus serve as answers to the research questions.

Criteria for interpreting the findings: - The collected data is interpreted by putting the information in perspectives. The information is then compared to what is expected. In addition, the findings are interpreted through relevance, effectiveness, efficiency, impact, sustainability credibility, dependability and confirmability. Dependability means that data can be replicated. The replication is not necessarily of the results, but of the process used to obtain the results. On confirmability, other researchers can have access to the data and can do their own analysis.

5.2.2 Case study types

According to Yin (1993), case studies differ in terms of their style, and include exploratory, causal and descriptive case studies. In an exploratory case study, the collection of data occurs before theories or specific research questions are formulated. It is followed up by an analysis of data and leads to case studies that are more systematic. The first stage in this type of case study is to define the issues that are to be researched. With respect to the causal case study, the focus is on establishing the cause and effect relationships, and search for explanatory theories of the phenomenon. For Yin (ibid), this situation offers the most suitable conditions for adopting the case study as the research strategy of choice. There is also the descriptive case study that requires a theory to guide the collection of data. This theory should be openly stated in advance, be the subject of review and debate and later serve as the “design” for the descriptive case study. The more thoughtful the theory, the better the descriptive case study will be (Yin, 1993:22). In this study, the case study aims to explore a spatial phenomenon in-depth and is therefore exploratory in nature.

Case studies can also be single or multiple according to their numbers. Case studies can also be embedded as well as holistic. An embedded case study is one in which there is more than one sub-unit, whilst in a holistic case study, a global programme of organisation is contemplated (Yin, 1994). This research focuses on a single case study. Conducting a singular case study in this

research offers an in-depth understanding of the integration of built heritage resources (urban conservation) into the future urban planning and development of Klerksdorp, the case study. This phenomenon is researched on numerous levels (legislation, spatial and procedural levels).

5.3 Research context

The research context of this project is Klerksdorp, located in Matlosana municipality, in the North West Province of South Africa (Figure 5-1). Klerksdorp as a case is a suitable research context due to (i) the overall fragmented spatial structure influenced by Apartheid; (ii) Klerksdorp is very rich in built heritage resources as it consists of more than 50 built heritage resources, including Grade 1 and Grade 2 heritage resources, therefore it is an important historic city; and (iii) the economic status of the city is flourishing due to its location on the N12 Treasure corridor, which implies tourist development and an ideal situation to preserve the history while expanding its economic function. In essence, Klerksdorp is an example of a city facing challenges with regard to balancing urban conservation and urban development, as both are important spatial planning issues to address.

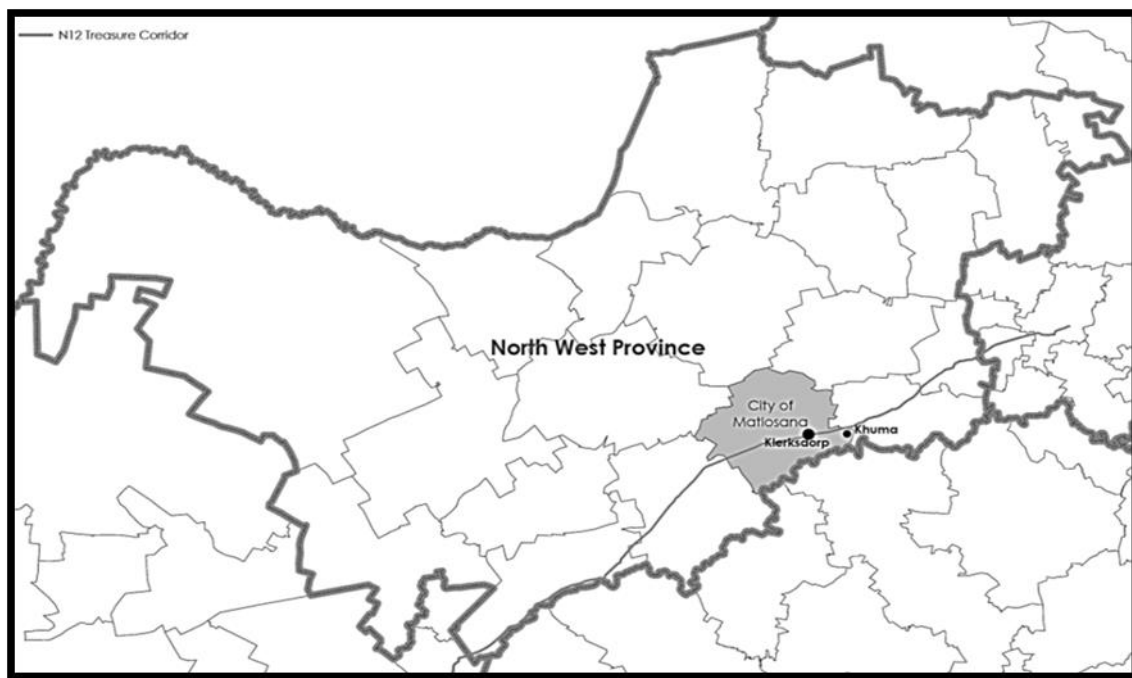


Figure 5-1: Map showing the study area

Due to Klerksdorp's location (Figure 5-2), it had experienced rapid urbanisation and is a resource base for mining, which later turned into a trade centre for agricultural produce after mining production depleted. In addition, Klerksdorp is a medium sized city that is earmarked as a development node.



Figure 5-2: Map showing the location of Klerksdorp in the N12

Source: Maxim Planning Solutions: 2013

5.4 Research methods

Unlike many other forms of research, the case study does not make use of one particular method of data collection (Merriam, 1998:28). For this reason, a combination of data collection methods was selected in this study. The case study approach makes use of multiple methods of data collection (Yin, 2003). The following sections are going to give an in-depth analysis of the data collection methods used in this research.

The data collection in this study includes both primary and secondary sources. The most common method of data collection within this qualitative case study is primary data sources, specifically, key informant interviews; and secondary data sources, in the form of document analysis, archival records, direct observation and physical artefacts (Yin, 2003a:88). Different techniques are combined and triangulated in order to understand the case study approach, in its uniqueness and potential in the modification of generalisations (Stake 1995, Johansson 2003 and Simons 2009).

5.4.1 Primary data collection: Semi-structured key informant interviews

Semi-structured key informant interviews are qualitative in-depth interviews with people who know the case at large. Semi-structured interviews are conducted with an open framework, which allows for focused, conversational, two-way communication. They can both give and receive information. Conducting a good semi-structured requires thoughtful planning, which includes identifying key informants, inviting them to participate, arranging for the date and time, deciding on the number

of interviews and preparing the interviews. After conducting the interview, a comprehensive analysis is needed.

In this research, undertaking semi-structured key informant interviews, involved conducting telephonic invitations with the research participants so as to determine the willingness of the participants to participate; and to inform them about the broad objectives of the research project, discussing its nature and how long the participants will be involved in the research project. Follow up meetings were also conducted with every research participant during which research details were discussed. Key informant interview questions are shown in Annexure B.

The preparation of the semi-structured interviews provides a clear set of instructions for interviewers and can provide reliable, comparable qualitative data. Furthermore, semi-structured interviews are often preceded by observation, and informal and unstructured interviewing in order to allow the investigators to develop a keen understanding of the topic of interest, that is necessary for developing relevant and meaningful semi-structured questions.

Table 5-1: Summary of key informant participants

Stakeholders	Stakeholder subgroups	Motivation
Spatial planning officials	Head of spatial planning	To give information regarding the spatial distribution of built heritage resources, to clarify on the challenges these resources are facing and how they are coping with such challenges.
Heritage specialists	Curator of the Museum NGOs which deals with heritage	To aid with information on how they manage built heritage resources as well as to clarify on the challenges built heritage resources are facing.
Private sector planners	Private planning consultant companies	Private sector planners are responsible for the main development guidelines, for example, looking at the SDF and LUMB. They will also clarify on their role to integrate urban conservation and urban development.
Heritage Resources Agency	PHRA LA	These bodies are responsible for the management of built heritage resources and are knowledgeable about the processes as well as legislation which protect heritage and the relevance of such the legislation.

Source: Author's Own Construction (2016)

5.4.2 Secondary data collection

5.4.2.1 Desktop study

A desktop study comprises of a review of existing published data pertaining to the general area around the site of the proposed development area. Desktop research involves investigating the data that is already available regarding a given problem. This type of data is referred to as secondary data. Desktop research also serves as preliminary research and as such may help to clarify the goals of the research. In this study, the researcher undertook desktop research, gathered, and analysed information that is already available in print or published on the internet, textbooks, journals, newspapers, articles and publications. The desktop research also included document analysis. Information regarding urban conservation and urban development integration as well as information on built heritage resources was researched from textbooks, journals, newspapers and articles to provide a better understanding of the relevant topics (urban conservation, urban development and built heritage resources).

There are three primary types of document analysis, which are (i) public documents: annual reports, strategic plans, policy manuals, the official, ongoing records of an organization (ii) personal documents: first person accounts of an individual's actions, experiences and benefits, for example, calendars, emails, blogs, journals and newspapers and (iii) physical evidence: physical objects found within the study setting (often called artifacts) examples include flyers, posters, agendas, handbooks and training materials. In this study, an analysis of the documents was done to get hold of important and relevant information regarding built heritage resources in Klerksdorp. Document analysis compares information from different sources thereby providing the researcher with insight on built heritage resources.

In this regard, a comparison of what had been done in other countries with what is being done in South Africa to protect built heritage resources was done. The researcher visited Klerksdorp museum, Maxim Planning solutions, Matlosana Municipality, Potchefstroom private regional and urban planners, Tlokwe Municipality and some local heritage organisations to access documented information, which included existing inventory of heritage resources, policies and legislation (NW Spatial Development Framework, Klerksdorp Spatial Development Framework and the Land Use Management Bill) on built heritage resources.

5.4.3 Spatial Analysis

Spatial analysis includes any of the formal techniques that study entities using their topological, geometric or geographic properties. In a more restricted sense, spatial analysis is the technique

applied to structures at the human scale, most notably in the analysis of geographical data. Like many other spatial data, field data are composed of two elements, namely, the coordinate information of the spatial objects and their associated attribute information. For spatial analysis, the researcher made use of maps that illustrated the spatial distribution of built environmental heritage resources as well as maps that illustrated urban development. A comparison between the status quo of both aspects (conservation and development) will be made. This will be done through Geographical Information System and satellite images. A spatial analysis includes the integration of urban conservation and urban development on the spatial planning level (SDF) level, LUMS level and process followed when development and conservation to be integrated, for example when development is proposed and the area or property contains a heritage resource.

5.4.4 Ethical considerations

Ethical considerations are very critical in research. The researcher had to take into account ethical considerations as there were concerns regarding seeking permission from the participants to publish the information they gave regarding built heritage resources. Their views led to additional questions and raised broad confidentiality and privacy issues. Striking a balance between protecting participants and providing sufficient details to make case studies useful is a central ethical challenge in case study approach. In addition, the ethical challenges that are pertinent to qualitative research involve the issue of informed consent procedures, the researcher participant relationship and confidentiality. To address the issue of ethical consideration, participants as key informants signed informed consent forms (See Annexure A).

5.5 Conclusion

The aim of this chapter was to present the research design, the methods and tools for data collection that are appropriate for the study. In addition, the chapter aimed at giving the researcher a holistic and in-depth understanding of a specific research context namely, Klerksdorp. This is a city that holds challenges concerning balancing urban conservation and urban development as it is both a historic city and is located along the N12 development corridor. A case study design was therefore chosen as the appropriate research design for this study because of its advantages in revealing unique perceptions and concerns of individual participants in a real-world situation, which would have been lost in quantitative or experimental strategies. This chapter also laid the foundation for the next chapter that will focus on interpreting and discussing the findings of this chapter.

CHAPTER 6 PRESENTING THE CASE OF KLERKSDORP, MATLOSANA: URBAN DEVELOPMENT AND URBAN CONSERVATION

6.1 Introduction

Built environmental heritage resources are of vital use especially in developing countries (UN, 2013). They trigger economic development as well as create employment opportunities. In this instance, Klerksdorp is chosen as a suitable case study as it presents a city with conservation potential, due to its richness in terms of built heritages (it is the oldest city in the previous Transvaal province and contains two Grade I built environment heritages), while simultaneously being a city with potential for urban development (due to its location on the N12 Treasure Corridor).

Built environmental heritage resources have been isolated in the past due to the lack of awareness about their potential in urban development, and the fact that conservation and development was, and to a certain extent still is (as illustrated in Chapter four), run by separate legislation. This isolated treatment of built heritages enhances their risk of destruction. In addition, rapid urbanisation has been a contributing factor in the destruction of built environmental heritage resources, as the pressure over land and space has resulted in change and mixed land uses, which pose a threat to these heritage resources. Furthermore, Ashworth (2007:511) asserts that heritage resources are at a risk of destruction in developing countries as they are not adequately identified or protected, nor is conservation adequately addressed.

This chapter presents the application of the case study methodology described in Chapter 5. The macro context (including the North-West Province, Dr Kenneth Kaunda district and Matlosana) is be presented, followed by the micro research context, Klerksdorp, as the focus of the study. Both discussions include the location as well as supporting aspects such as the spatial planning, economic growth and population statistics. The main aim of the chapter is to present the current situation with regard to urban development and conservation in Klerksdorp in order to analyse the spatial integration of these two perspectives.

6.2 Presenting the macro research context: Matlosana municipality, North-West Province

In this section, the focus is on Matlosana. However, Matlosana cannot be discussed in isolation because the economic and demographic trends of the larger provincial and district context influence it. For this reason, reference will also be made to the broader context of Matlosana, namely the North-West Province and the Kenneth Kaunda District.

6.2.1 Location

Matlosana covers about 3 625km² and is situated 164km southwest of Johannesburg, on the N12 Treasure Corridor. This municipal area links the Gauteng province in the east with the Northern Cape in the southwest. Matlosana municipality is located in the Dr Kenneth Kaunda District in the North West Province (Draft Integrated Development Plan, 2015/2016:4) (see Figure 6-1), 120km south of Rustenburg and the Platinum belt (SA Cities Network, 2014:1). It is one of the four local municipalities in this district. The major towns in the Matlosana municipality are Hartbeesfontein, Klerksdorp, Jouberton and Khuma.



Figure 6-1: Map of the North West Province and the surrounding municipalities

Source: North West Environmental Outlook (2013:2)

6.2.2 Urban development: Matlosana

Due to economic activities such as agriculture, manufacturing, construction, trade, finance and mining in the North West Province, urban development is on the rise as agglomeration economics is taking place (Collins, 2012). To trigger the sustainability of urban development in the province, three Spatial Development Initiatives (SDI's) have been launched to strengthen a potential activity corridor link into the North West and create a competitive advantage within the province (North West Provincial Growth and Development strategy, 2004-2014:10). In this regard, the SDI introduces three corridors, namely the platinum corridor, the treasure route and the western corridor in the North-West, with the aim of strengthening the potential of activity corridors (RSA,

2004b:10). As illustrated below, Figure 6-2 shows the spatial location of the corridors within the province.

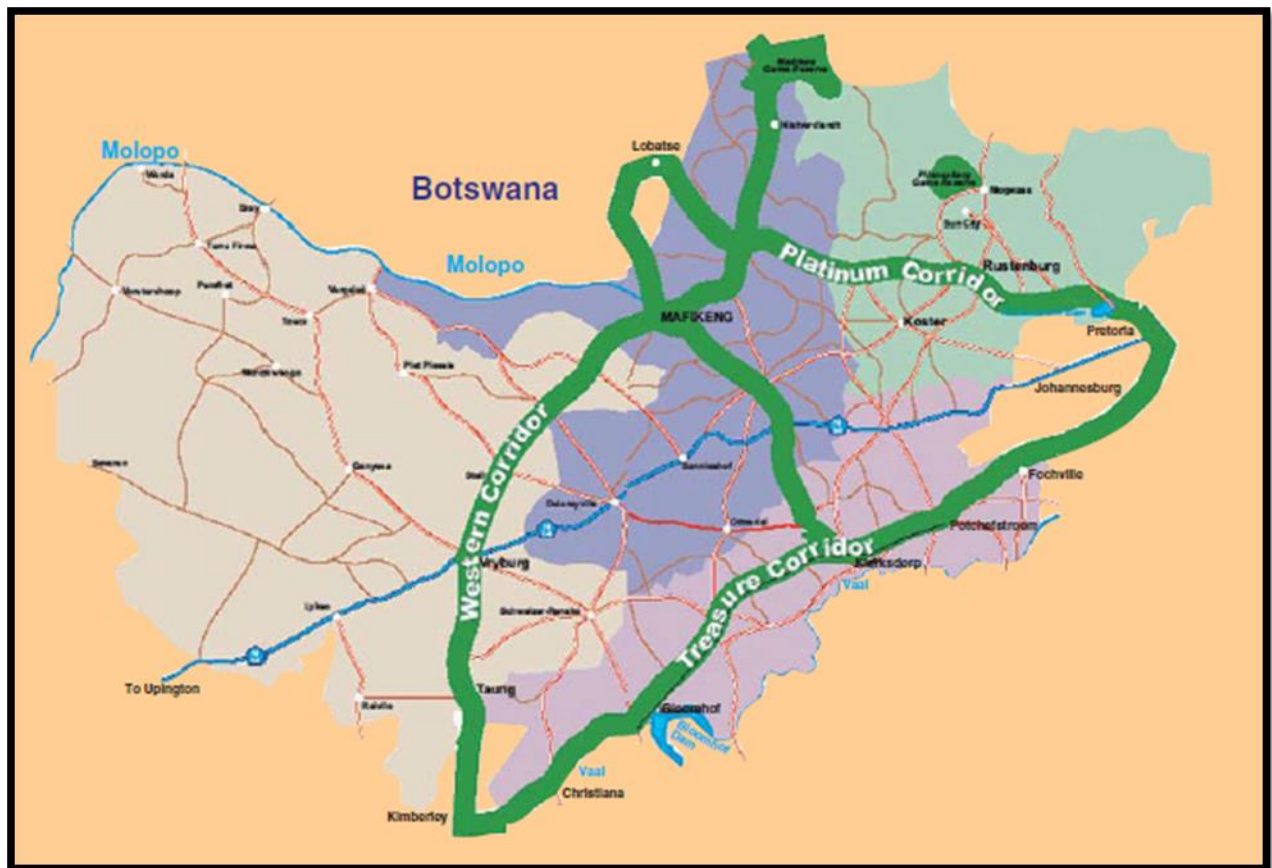


Figure 6-2: Spatial Development Initiatives in the North West Province

Source: North West Provincial Growth and Development Strategy (2004-2014:10)

The spatial development initiatives are:

- The Platinum Corridor, with a specific focus on the North West portion of the East-West corridor that links Maputo in the East, with Walvis Bay in the West, through Nelspruit- Pretoria- Rustenburg- Lobatse- Windhoek;
- The Western Corridor, which is intended to strengthen a North-South initiative from SADC through Botswana southwards, and the North West and Northern Cape. This corridor simultaneously links the Platinum Corridor with the Treasure corridor through the Mafikeng airport and industrial zone and the Taung irrigation scheme, and promoting development and growth in between. More so, the western corridor stimulates and kick-starts new nodes in areas of poverty that show potential for economic development given their spatial and socio-economic realities; and
- The Treasure Corridor, which strengthens developments from Johannesburg to Potchefstroom, Klerksdorp and further South, along the N12 national road.

The most important corridor for this study is the Treasure Corridor which extends between Johannesburg, Potchefstroom, Klerksdorp and further south along the N12 (Matlosana SDF, 2008:46). This corridor passes through Matlosana such that economic opportunities are attracted in the municipality, thus promoting urban development at large (Matlosana SDF, 2008:45).

With the availability of the North-West Spatial Development Framework (NWSDF), the District Spatial Development Framework (DSDF) also seeks to transform the treasure highway into an activity and mobility corridor, with a multi-dimensional character that unlocks opportunities and generates inner efficiency, economies of scale, private sector investment in high priority areas and overall employment creation that will benefit the local, provincial and national community. This development concept is based on the objectives of the National Spatial Development Perspective (NSDP) (RSA, 2003:25), which seek to strengthen existing core areas in the development corridor. The NSDP goes on to state that new residential developments should complement the urban structure through the adequate provision of socio-economic land usage that is concentrated along nodes and corridors (Matlosana SDF, 2008: 49).

Furthermore, the DSDF introduces the concept of environmentalism, where people are willing to move to areas that are socially, economically and environmentally attractive, stating, “centres on the corridor and within the intermediate regions are in direct competition with the Gauteng area in order to attract investment”. Therefore, a key principle for development on the corridor will have to be provided to attract social as well as economic infrastructure at competitive cost for new developers (Matlosana SDF, 2008: 48). This phenomenon has already started in the Klerksdorp area where many entrepreneurs have migrated to Klerksdorp to take advantage of the relatively cheaper property as well as the cleaner and less congested environment (Botha, 2009a).

Urban development is taking place in Matlosana, and the province as a whole, as proposed settlements and economic development are being channelled into these corridors and nodes that are linked to the main growth points (RSA, 2004b:10; RSA, 2003). This is because the province had already displayed potential economic growth. The section below focuses on the population in the North West Province and narrows down to the Matlosana Municipality and how it affects urban development in the region.

6.2.3 Population dynamics

The North West Province has a population of 3.5 million people and its growth rate is 1.6% per annum. The Dr Kenneth Kaunda District Municipality (where Klerksdorp is located) has experienced the highest population growth since 2001, followed by the Bojanala Platinum District Municipality, while Ngaka Modiri Molema District experienced only a slight increase. Contrastingly, Dr Ruth Segomotsi Mompati District experienced a decline in its population (Figure

6-3 below). The overall population growth is slow at 1.6% per annum (Stats SA, 2012a). This can be attributed to a number of factors such as decreased birth rates, increased death rates and emigration.

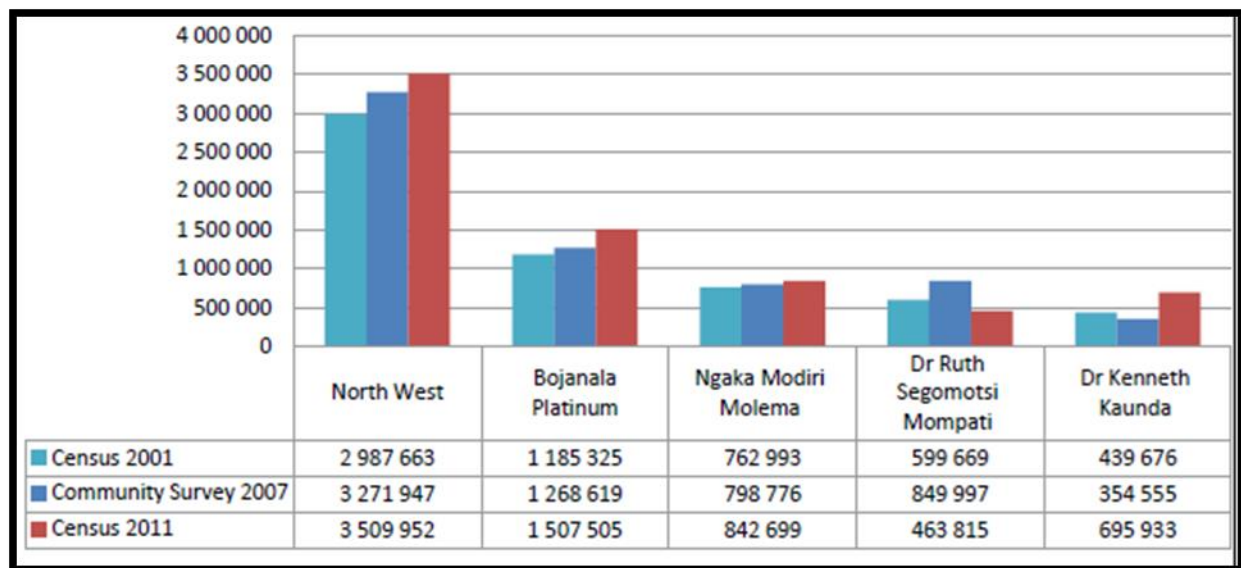


Figure 6-3: Population statistics in the North West Province

Source: StatsSA (2013b).

The province has experienced contrasting migration trends between the last two decades. In 2001, a nett outward flow of 635 000 people was reported. 10 years later, the balance between in and outward migration seems to have stabilised. Migration is mainly influenced by perceptions of employment opportunities. The typical immigrants into the North West fall in the age group of 25-34 years do not have tertiary qualifications and are mostly (50%) single males (NWPC, 2013).

The majority of urban areas and general population are located in the southern (Potchefstroom and Klerksdorp) and eastern (Rustenburg and Brits) regions of the province. The concentration of the population is due to the proximity of these areas to the economic opportunities in Gauteng as well as in areas where mineral or metal deposits are found. In contrast, some areas in the Dr Ruth Segomotsi Mompoti District are located more than six hours away from the nearest urban centre (NWPC, 2013b).

According to StatsSA (Census 2011), the majority of the Dr. Kenneth Kaunda District population reside within the City of Matlosana (57.29%), followed by the City of Tlokwe (23.39%). Nevertheless, there are two local municipalities with smaller percentages of the Dr. Kenneth Kaunda District population namely Maquassi Hills (11.18%) and Ventersdorp (8.15%). Figure 6-4 below shows a chart presentation of the population within the Dr Kenneth Kaunda District.

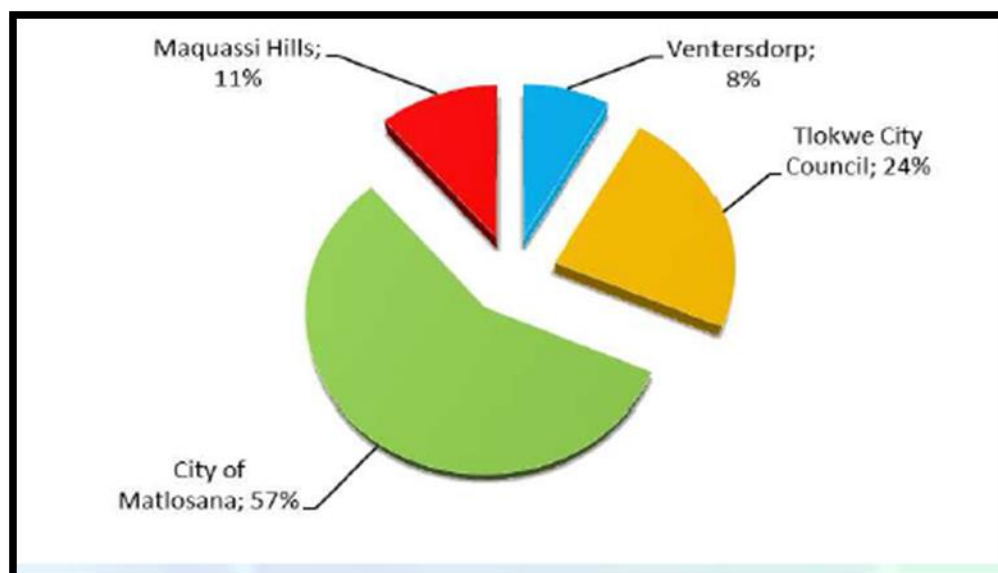


Figure 6-4: Population of Dr Kenneth Kaunda District

Source: StatsSA (Census 2011)

Figure 4 above illustrates the potential for high pressure for urban growth in Matlosana. The rate of population is increasing, exerting pressure on the existing infrastructure and buildings, thereby affecting urban development and urban conservation. In this regard, integration of urban development and conservation become important considerations for the future sustainability of the city.

Matlosana's population size is estimated at 428 024 people, of which 92% are urbanised and 8% rural. The largest population concentrations are situated in Jouberton (31%), Kanana, Khuma and Tigane, which represents 67% of the total urban population. Population growth and household growth has declined over time. The average annual population growth between 1995 and 2010 is 1.45% and the average annual household growth between 1995 and 2010 is 3.46%. The household growth has decreased over time and in 2010, the growth rate was at 0%. The population growth showed a slower decline and was at 0.75% in 2010.

Other factors to consider include the age and gender of the broader context. The population of the North West Province is quite young, with the majority under the age of 35, while high birth rates sustain the high percentage of children overall (StatsSA, 2012).

6.2.4 The economic sector

The North West Planning Commission (NWPC, 2012) indicates that the North West Province produces 5.7% of the South African GDP, with mining, agriculture and manufacturing contributing the largest share. This is clearly illustrated in figure 6-5.

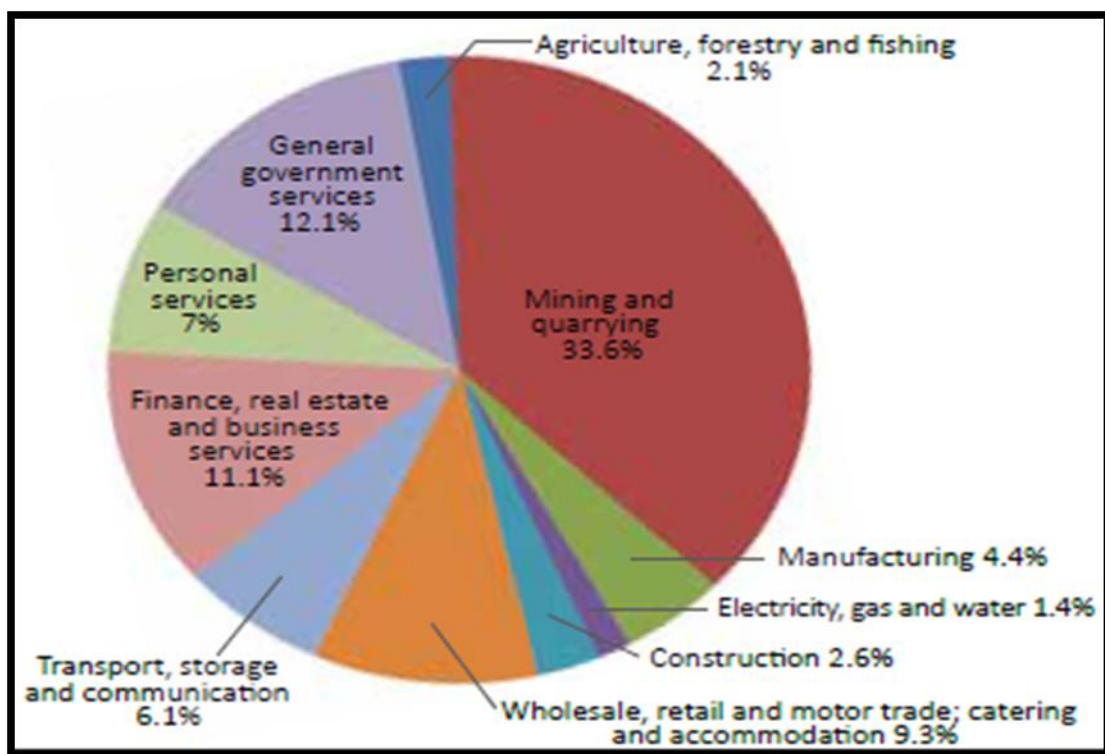


Figure 6-5: Percentage contribution to the provincial economy by industry

Source: NWPC (2013)

Mining is the predominant economic sector from a financial value perspective, contributing 33.6% to the total provincial output (NWPC, 2013). 25 % of the employment in the province in 2010 was in mining (Cloete and Isardi, 2012). The manufacturing capacity in the North West is mainly directed towards the larger towns in the northeast and eastern regions of the province. The major manufactured products include food, beverages and tobacco, fabricated metals and metal products, as well as petrochemical products.

Agricultural activities include intensive and extensive crop production, mixed farming, cattle ranching and sheep farming. However, the agricultural sector (classified in economic categorisations as 'agriculture, forestry and fishing') only contributes an estimated 2.1% to the total provincial economic output (NWPC, 2013) and contributed only 7.5% to the employment in the province in 2010 (Cloete and Isardi, 2012). 20.9% of the province's surface area is cultivated although 43.9% of the province is classified as arable (NWPC, 2013). Most of the arable land is found in the central region. The western region is the most arid in the province, making it appropriate for livestock and game farming.

The rural areas of the North West, where agriculture is the main economic activity, also accommodates 65% of the provincial population (Cloete and Isardi, 2012), which suggests that the agricultural sector plays a major part in sustaining the rural population. The figure below

(Figure 6-6) summarises all of the economic activities in the province and how they contribute to sustaining the province.

The North West Province boasts a variety of tourist attractions that contribute to the provincial economy. Major assets such as the Pilanesberg National Park and the Madikwe Game Reserve contain several luxury private lodges. The entertainment and casino complex at Sun City and The Lost City also contribute to the provincial tourism experience. In addition, there are two UNESCO World Heritage Sites in the province with one located at the Vredefort Dome and the other forms parts of the generalised Fossil Hominid Sites of South Africa (GCIS, 2012/2013). These key features have been development nodes in the North West Province and have triggered tourism offerings. The tourism industry provides valuable economic contributions to the North West Province and its people, and it is strongly linked to natural and cultural heritage resources and their spatial connotations. A number of built heritage resources such as museums, community halls and churches form part of these cultural heritage resources (NWPTB, 2013).

Economic activities in Dr Kenneth Kaunda are concentrated in the southern region between Potchefstroom and Klerksdorp, and around Rustenburg in the eastern region, where more than 83.3% of the GDP of the province is generated (GCIS, 2012/2013). The main economic sectors within the Matlosana municipality are mining, trade, finance, business services, manufacturing, construction, government services and agriculture (LGH, 2012). Matlosana municipality's economy remains vulnerable due to its overreliance on the mining industry. According to Industrial Development Corporation (2013), very few alternatives to mining have yet materialised and the growth in sectors such as trade or finance and business services has not been able to compensate for the job losses resulting from the downscaling of mining activities. Within the municipality, only six out of twenty-eight mining shafts are still in full production (Jacobs, 2013). Therefore, the municipality should no longer depend on the mining sector to keep economic growth in place. Consequently, the authorities at local and district municipal level, as well as the mines that are still operating (AngloGold Ashanti and Shiva Uranium) (Manzana 2013) have started putting systems in place to develop the area towards becoming a service centre of trade for all the surrounding areas instead of remaining predominantly as a mining area.

The City of Matlosana contributes 43.8% of the Dr Kenneth Kaunda District economy, which represents 27.9% of the North West Province (Maxim Planning Solutions. 2012:4). Figure 6-6 below gives an indication of the contributions of Matlosana to major economic sectors as compared to the national level, the North West Province and other metropolitan areas.

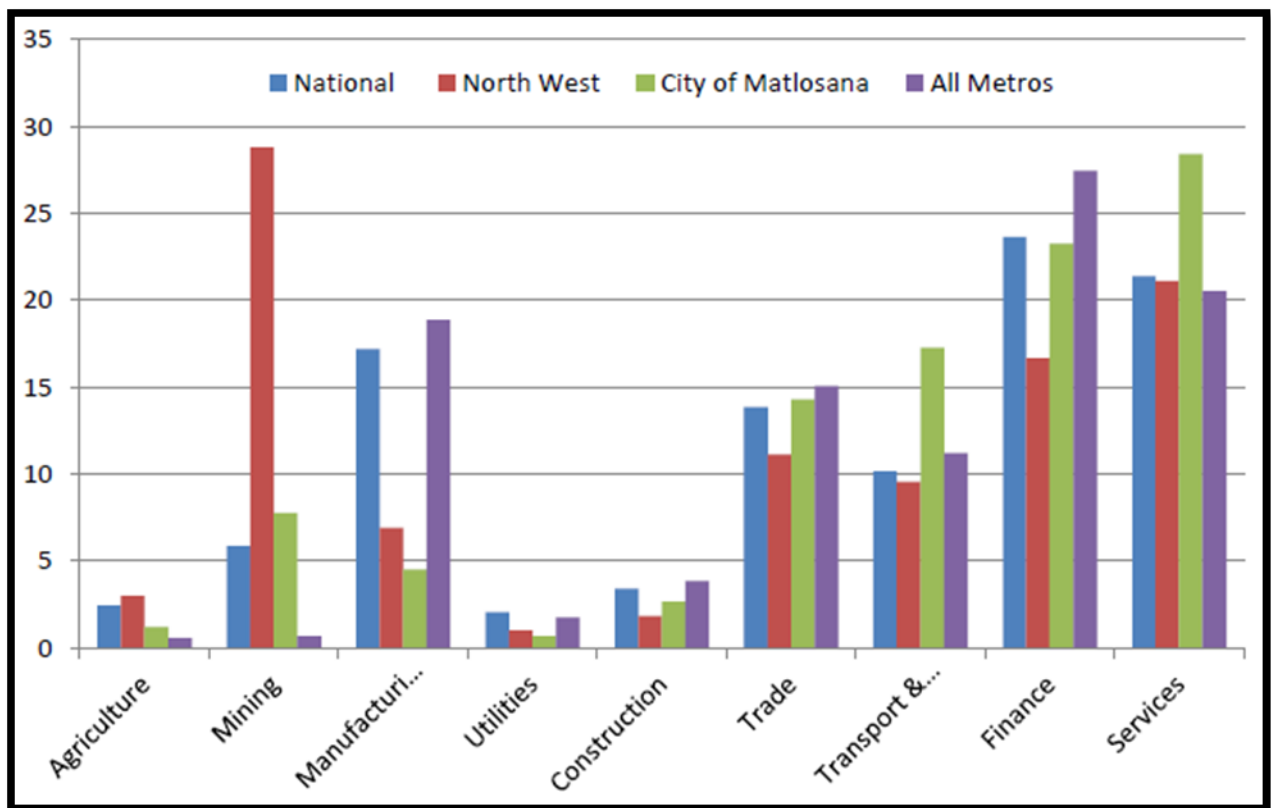


Figure 6-6: Relative contribution (%) of economic sectors in the City of Matlosana, North West Province, South Africa, and all metropolitan areas, 2011 (real values, GVA)

Source: IHS Global Insight Data (2013).

From figure 6 above, it is clear that mining plays an important role in the economy of the North West Province (28.79%) whereas the manufacturing sector (18.87%) features strongly in the metropolitan areas. Currently (2011) the main pillars of the local economy of the City of Matlosana are the services (28.11%), financial (27.47%), transport and communication (17.26%), retail (14.30%) and the mining (7.75%) sectors. The transport sector will possibly become more important as the N12 Route development occurs. This forms part of the alternative N1 Route between Gauteng and Cape Town as well as the main routes for exporting to Namibia and Botswana.

Surprisingly, agriculture has contributed only minimally to the economy of the City of Matlosana. Although the head office of SenWes is located in the area, the company do not necessarily operate primarily in the City of Matlosana but have expanded mostly in the adjacent areas, such as Wolmeranstad and Bothaville in the Free State and even as far as Botswana. Near the mines, mining companies have bought out agricultural land. Although this is primarily to minimise the risks associated with pollution of agricultural land by mining activities, large portions of this land have been rented back to farmers. A few small farms along the Schoonspruit are under irrigation.

Figure 6-7 below further elaborates on the relative contribution that each economic sector has made between 1996 and 2011.

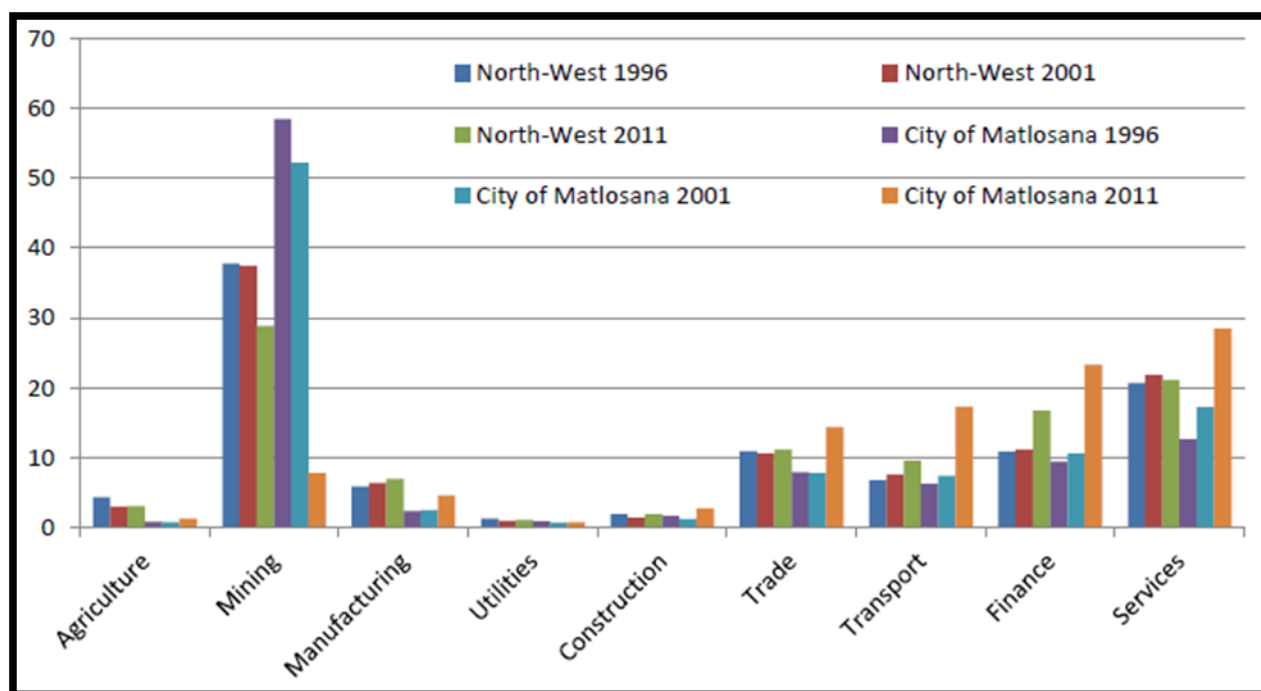


Figure 6-7: Change in the relative contribution of economic sectors in the City of Matlosana and North West, 1996, 2001, 2011 (real values, GVA)

Source: IHS Global Insight Data (2013).

From figure 6-7 above, the mining sector's economic contribution to the City of Matlosana has dropped dramatically from 58.48% in 1996 to only 7.75% in 2011. As noted earlier it is directly related to the risks associated with deep mining and the "depletion" of gold reserves. Even the share prices of the mining companies have declined drastically. The contribution that the mining sector has made in the North West Province has also decreased from 37.8% in 1996 to 28.79% in 2011. This is not such a drastic drop for the province as a whole. In the North West Province, the other sectors have not changed in their contributions to the economy. The sectors that have shown growth in their proportionate shares in the economy of the City of Matlosana are the trade sector (from 7.87 to 14.30%), the transport and communication sector (from 6.19 to 17.26%), the finance sector (from 9.40 to 23.27%) and the services sector (from 12.59 to 28.41%).

Thus, the demise of mining has resulted in a more diversified economy with transport, finance and services sectors proportionally growing their share of the economy. In terms of the sectoral composition, the economic activity gives an indication of the level of diversification of a region, which can be measured by a tress index. It is evident that in 2008 (39.3%) the local economy had become more diverse since 54.6% in 1998. The closer this figure is to 100, the more dependent the area is on a single sector and is the more vulnerable it is to climate conditions and commodity

fluctuations (Maxim Planning Solutions. 2012:8). The increased diversification is thus a direct result of the demise of gold mining as the most important economic sector in area. The only major mining activity that is currently taking place within the City of Matlosana area is uranium mining (First Uranium and Uranium One) and gold mining (Pamodzi - not in operation) (Maxim Planning Solutions. 2012:19). For both gold and uranium, beneficiation tends to take place at the market. The only beneficiation that is currently taking place is the rehabilitation of the old mine dumps (rocks) and using the rocks for various types of construction. Figure 8 below further elaborates on the contribution of the City of Matlosana's economy relative to the North West Province and South Africa.

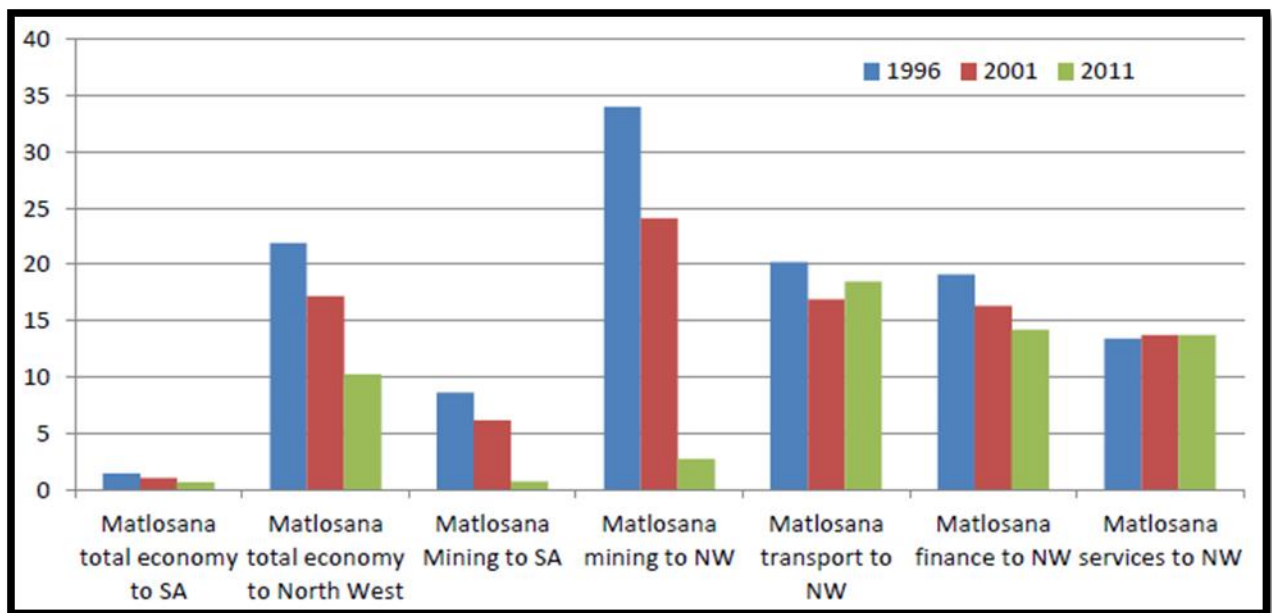


Figure 6-8: GVA contribution of the City of Matlosana's mining and other sectors and the total economy to the North West and South Africa, 1996, 2001 and 2011 (real values, GVA)

Source: IHS Global Insight Data (2013).

The City of Matlosana currently contributes only 0.6% to the South African economy and 10.2% to that of the North West Province. Similarly, the mining sector also contributes minimally to the total South African (0.7%) and North West (2.7%) mining economy. The City of Matlosana does, however, contribute to the North West economy in terms of the transport (18.5%), finance (14.2%) and services (13.7%) sector.

6.2.5 Spatial structure

The spatial structure of the Matlosana Municipality is a product of a region that was initially occupied by various African people, settled by colonialists, shaped by apartheid planning and ultimately concentrated in places through economic development. Initially, the original inhabitants

of the area were resettled and concentrated in settlements towards the extreme north-west of the province as white people started moving into the area, but through the years of apartheid, the contrast and conflicts between traditional living and commercial farming were compounded by differentiated systems of land ownership and economic freedom. Most of the rich natural resources were claimed for the benefit of commercial enterprises or the spread of commercial farming. In Matlosana Municipality, four towns include Klerksdorp, Orkney, Khuma, Stilfontein and Jouberton. These towns are illustrated in figure 6-9 below.

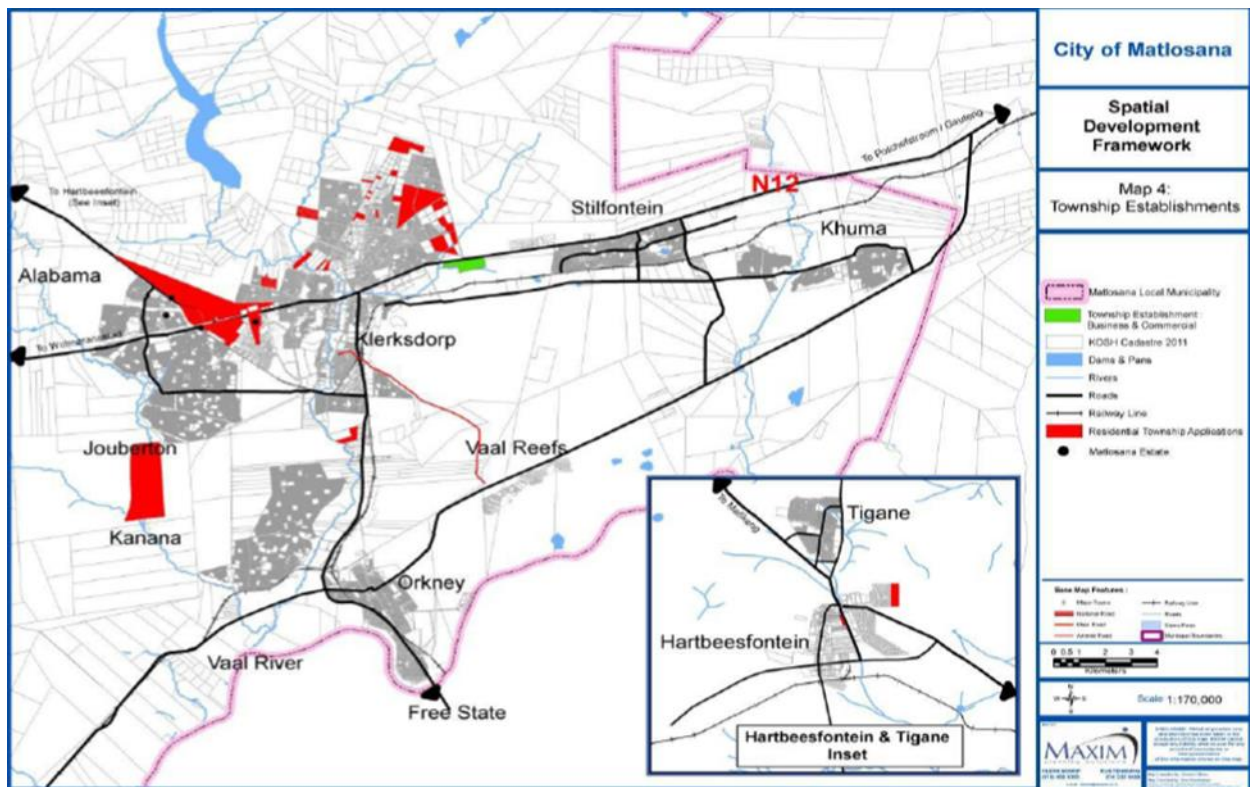


Figure 6-9: Map indicating the position of the towns in the City of Matlosana

Source: Maxim Planning Solutions (2013)

The N12 treasure corridor passes through Matlosana Municipality. Towns in Matlosana Municipality are spatially located as they are all along the treasure corridor, which is the centre of all development.

6.3 Urban conservation: Matlosana

The heritage resources of the province collectively include both tangible resources (heritage objects, natural features and landscapes) and intangible resources such as oral histories, traditional knowledge systems, cultural practises and folklore. However, the focus in this study is on built environment heritage resources. There are fifty-five built heritage resources ranging from Grade I, Grade II and Grade III sites within the Matlosana Municipality as illustrated in Table 6-1.

Table 6-1: Classification and number of built environmental heritage resources in Matlosana Municipality

	Classification of built environmental heritage resources		
	*Grade I	**Grade II	***Grade III
Khuma			9
Jouberton			3
Klerksdorp	1	18	21
Hartebeesfontein		1	2
Total number of built environmental heritage resources	1	20	34
*GRADE I: National heritage sites **GRADE II: Provincial heritage sites ***GRADE III: Local heritage sites			55

Source: Adopted from Matlosana Catalogue of Heritage Sites (ibid)

Matlosana Municipality has one Grade I site, which is the Goudkoppie Museum. Altogether, there are twenty Grade II heritage sites and among them are the Klerksdorp Museum, Klerksdorp Railway Station and the Woods and Iron Houses in Klerksdorp. Most of the built environmental heritage resources are located in Klerksdorp and are mainly Grade III heritage sites with a total of twenty-one. Due to these built environmental heritage resources, urban conservation comes into conflict with other land uses such as mining and infrastructure development. With an in depth interpretation of Matlosana as a macro research context, the following section is going to discuss Klerksdorp as a micro research context taking into account the population dynamics in the area, the economic sector, urban development and urban conservation in Klerksdorp.

6.4 Presenting the micro research context: Klerksdorp

6.4.1 Location

The city is strategically located along the Treasure Corridor (N12) (see figure 10) which links the region to Gauteng in the north and the Northern Cape in the south, between Potchefstroom and Wolmaransstad, exposing it to numerous commuters and passers-by (Matlosana SDF, 2008:5). The N12 development route was identified by the municipality as a flagship project for golden opportunities in the housing, business, industrial, heritage, mining, tourism, sports as well as recreation sectors. Thus, Klerksdorp fulfils a higher order central place function.

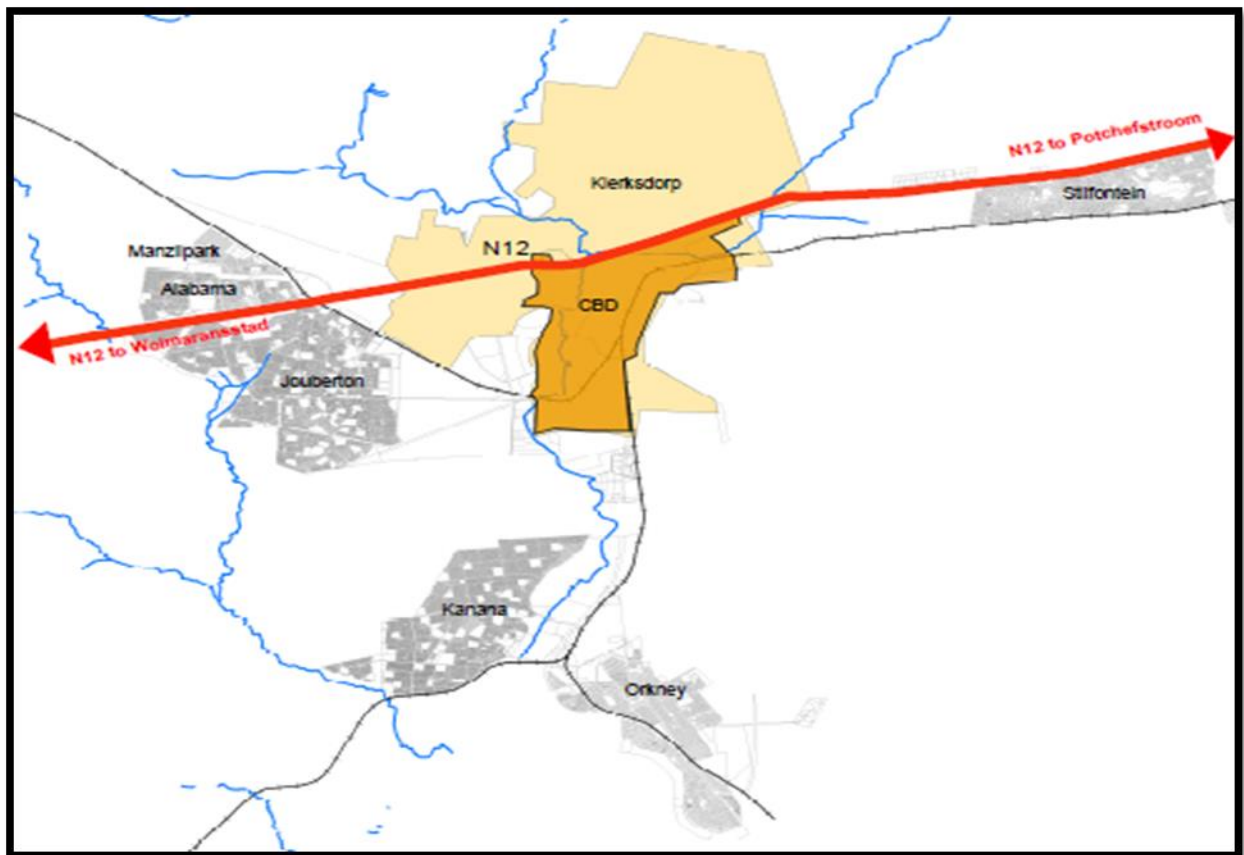


Figure 6-10: Map showing the study area – Klerksdorp

Source: Puren (2010)

6.4.2 Background and history

Klerksdorp originated in the late 1830s as a Voortrekker settlement and is the second oldest city in the old Transvaal Republic, which is now divided into the North West, Gauteng, Mpumalanga and Limpopo Provinces. The city was made popular by the discovery of gold along the Vaal River banks and the surrounding area in the early 1900s. Due to Klerksdorp's historical background, it is a rich source of built heritage resources. Literature suggests that a range of historical and

functional reasons have contributed to the growth of cities such as Klerksdorp. Klerksdorp developed as a regional service centre soon after the discovery of gold in the area. Gold was discovered in Klerksdorp in the year 1885. The discovery of gold made a rapid development of the area (Gaffen, 2012).

In addition, Klerksdorp housed a large concentration camp during the second Boer war of 1899-1902 and after the war it achieved municipal status. Between the year 1939 and 1951, various services such as the hospital, electricity, municipal offices and the airport were all established to develop the town into what it is today. Klerksdorp grew extensively during the 1950s and 1960s and the council often argued that it's the largest town in the area (Dunn, 1987). The discovery of gold in Klerksdorp led to the agglomeration of economies as many activities and businesses attracted each other to expand the area. Figure 6-11 below shows the historical development of Klerksdorp.

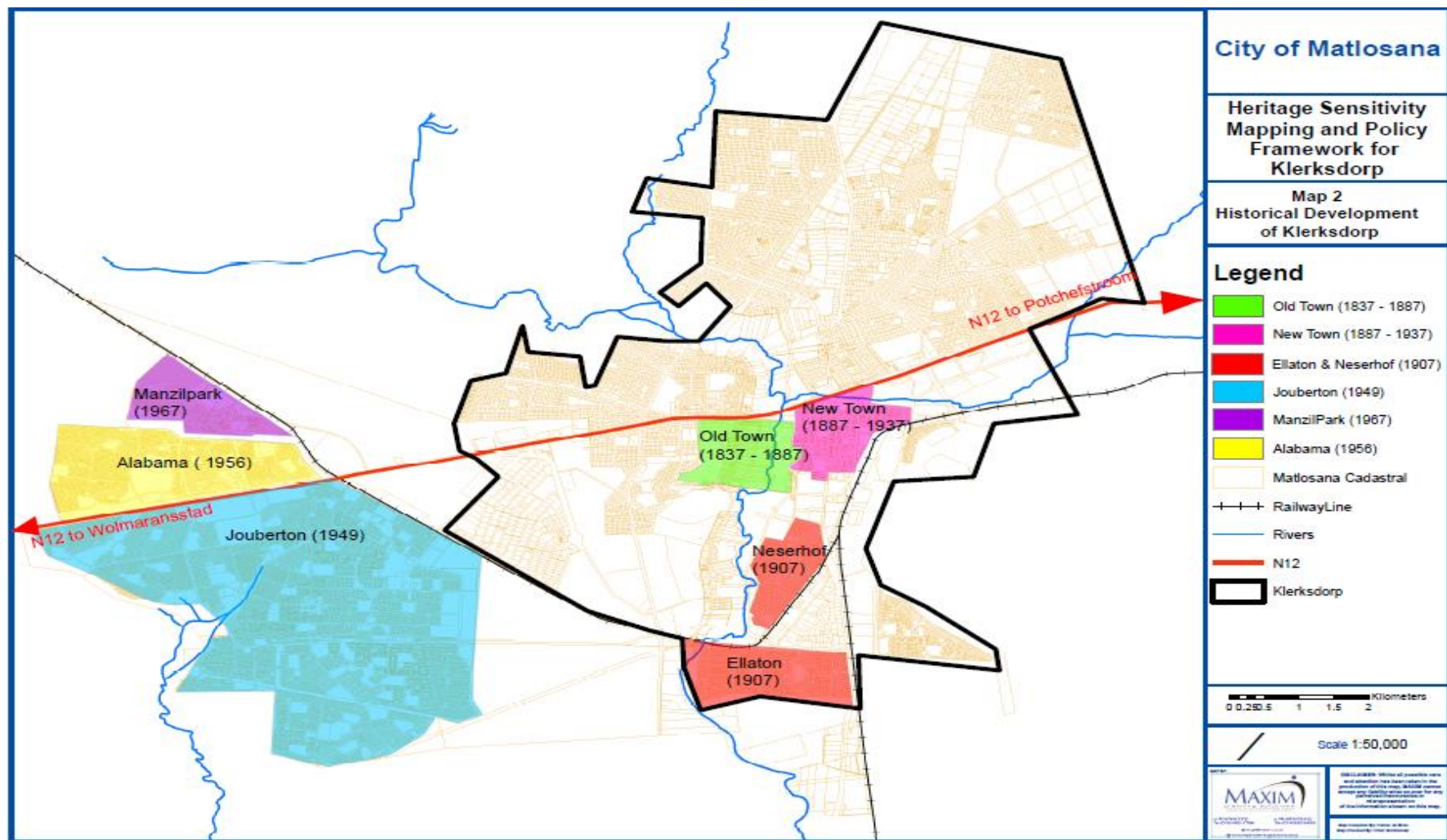


Figure 6-11: Map showing the historical development of Klerksdorp

Source: Puren (2010)

The old town (1837-1887), as shown in the map, was the very first settlement in Klerksdorp after the arrival of the Voortrekkers in 1837. On the west of the houses that they built, a road was developed, parallel to the channel. This road was known as Main Road, and after 1938 it was renamed “Hendrik Potgieter Road”. It is the oldest road in Transvaal, and still has the old character of Old Town (Marx, 1987). When gold was discovered in Klerksdorp in the year 1887, major changes occurred to Old Town, exerting stress on infrastructure. It was therefore decided to move all developments to New Town in 1888. Today the New Town is known as the CBD (Marx 1987). The buildings in the CBD of the current Klerksdorp, which were erected between 1937 and this present day, are classified into the Modern Movement of Architecture, hence a distinction is made between New Town (buildings that are known for different architecture) and Klerksdorp (Marx, 1987).

6.4.3 Urban development: Klerksdorp

The unprecedented development that has taken place in Klerksdorp over the past years has served to emphasise the importance of the intelligent planning of urban communities. According to Turner et al (2000: 1), there is need for urban management and town planning to be practised in a manner that satisfies both the social and physical well-being of communities. Unfortunately, urban planning and management in Klerksdorp, particularly with respect to service delivery, have not yet reached their full potential in furthering public planning and developmental policies. One of the most pressing challenges for urban managers across the world, particularly managers from the developed and mid developed countries, is the reduction of social exclusion and the redevelopment of deprived neighbourhoods and communities.

From a development perspective, Klerksdorp is one of the towns in South Africa that has experienced rapid urbanisation due to its location and as a resource base for mining, which later turned into a trade centre for agricultural produce. Based on an investment matrix, the conceptual macro-framework of the NWSDF (2004) has identified Klerksdorp as one of the priority investment areas hinged on a comparison of needs and economic potential (Matlosana SDF, 2008:46).

6.4.4 Population dynamics

The greater city area of Klerksdorp today incorporates the towns of Orkney, Kanana, Stilfontein, Khuma, Hartebeesfontein and Tigane, giving it a population of more than 350,000 inhabitants (Census Statistics South Africa 2001). The population dynamics in Klerksdorp clearly show that there are numerous activities in Klerksdorp Town. It is the hub of the activities in Matlosana Municipality and this has a direct impact on urban development and urban conservation. According to StatsSA (2011), Klerksdorp has a total population of 186 515 in which 91 205 are

male inhabitants and the remaining 95 310 are female. Table 6-2 below shows the growth rate of the total population in Klerksdorp over time.

Table 6-2: Population Growth Rate

Total population			Annual Growth Rate %		
1996	2001	2011	1996-2001	2001-2011	1996-2011
48502	49487	57136	0,4%	1.4%	1.1%

Source: StatsSA (2011)

The population growth rate in Klerksdorp is due to economic decline because of the outflow of people. Population growth and household growth has declined over time.

6.4.5 Economic activities

Klerksdorp forms the economic heart of the North West Province. According to the North West Provincial Spatial Development Framework (NWPSDF, 2013), Klerksdorp was expected to be the largest city in North West Province by the year 2015. It is identified as an area with high economic and investment opportunity because of its location, leading to a high rate of urbanisation in the city. This, combined with the provincial government's socio-economic development vision for the municipality, creates conflict between development and conservation. Hence the need for the balanced integration of urban heritage with urban development.

The large tracks of land, the treasure corridor and the mining activities account for the many economic activities, such as mining, trade, agriculture, manufacturing and business that take place in Klerksdorp. Yet, as stated by Marais (2013), Klerksdorp developed as a rural service centre providing trade and social services to the surrounding agricultural communities.

Moreover, Klerksdorp is one of the hubs of the South African gold mining industry. Most of the development in Klerksdorp occurred because of the boom in mining. However, between the year 1996 and 2011, there was a massive decline in the mining sector and this contributed to a decrease in employment rates in the area. However, the decline in the mining activities opened up some sectors of the municipality's economy such as trade and tourism, thereby sustaining the area. That Klerksdorp is the oldest town in the former Transvaal creates tension with respect to development versus conservation. The historical spatial structure and urban conservation will therefore form the focus of the next section.

6.4.6 Spatial structure

The spatial development trends of Klerksdorp are dominated by developments along the Treasure Corridor (N12), which is becoming an important industrial and commercial corridor, with most expansions occurring in the direction of Potchefstroom. In addition, a secondary corridor has been identified between Klerksdorp and Orkney, which is characterised by residential growth with local business, commercial and industrial nodes (Matlosana SDF, 2008: 55).

Currently therefore, the N12 Treasure Route puts Klerksdorp at the centre of new developments. Towards the west of the N12, developments comprise of residential development, retail nodes and mixed land usages. This development has also affected the decentralisation of business into the northern suburbs of Klerksdorp and business activities along the N12 (SA Cities Network, 2014:2). Moreover, the treasure corridor serves as a concentration for new development initiatives such as the industrial, commercial, nodal, tourism and mixed land-use development. This principle is based on those contained in the Breaking New Ground initiative (BNG) for sustainable human settlements. The east of this corridor is earmarked for a regional retail centre as well as commercial, light and residential development (Matlosana SDF, 2008:53).

Klerksdorp serves the function of a higher order central place; with its CBD, that is the largest in the municipal area. However, there is a clear trend of suburban centres in the northern and southern suburbs but with minimum development occurring in townships (Matlosana SDF, 2008:60).

6.5 Urban conservation: Klerksdorp

Klerksdorp does not only focus on urban development, it is a rich area in terms of built environmental heritage resources (refer to Table 6-1). There are forty identified heritage sites within Klerksdorp. These heritages enjoy protection in terms of national legislation (NHRA) but are not integrated in the day-to-day management of the spatial environment, nor are they aligned to the various management sectors of the local authority. While national legislation has captured the essence of the international paradigm shift concerning heritage, it is still treated in a rather isolated way locally.

As a historical city and as the second oldest city in North West Province, Klerksdorp is rich in heritage resources, for example, museums (Klerksdorp and Goudkoppie Museums), community halls (Jouberton and Tigane community halls), Dutch Reformed Church, Sister Mary's place and Casey Cindi Freedom Square. The location and distribution of built environmental heritage resources in Klerksdorp are indicated on the map in Figure 6-12 below.

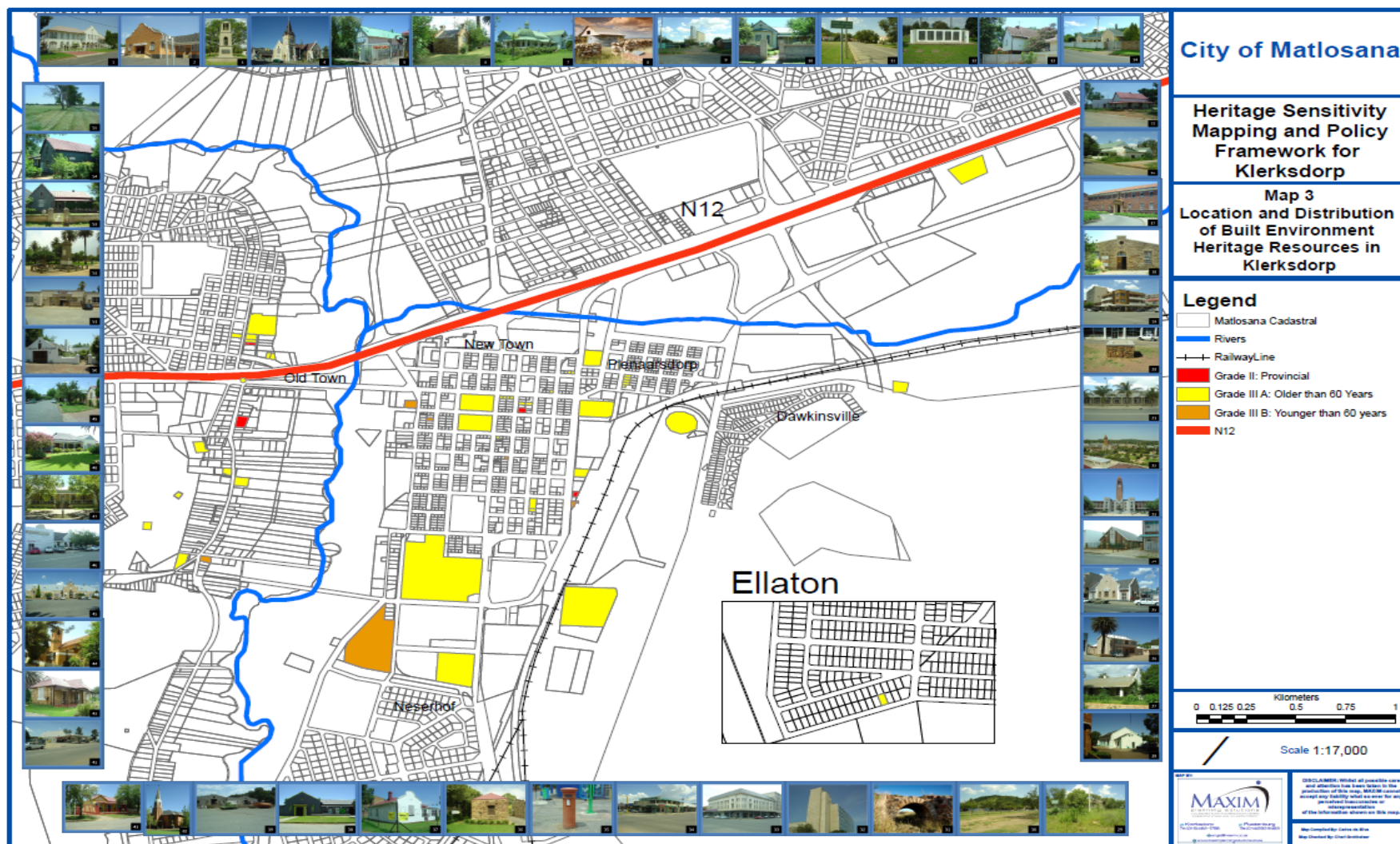


Figure 6-12: Spatial distribution of built environmental heritage resources

Source: Puren (2010)

In figure 6-12 above, other than the N12 route, the sites that are indicated in red are Grade II heritage sites. Klerksdorp consists of one national heritage site, eighteen provincial heritage sites and 21 local heritage sites. Klerksdorp has 72% of the total heritage sites in Matlosana Municipality and its built environmental heritage resources need to be formally protected as stipulated by the NHRA. Therefore, there is a need to address urban development and urban conservation for these resources to be incorporated into urban planning practises.

Built heritage resources that fall under the Grade classification include the Goudkoppie Museum as a Grade I site; and among the Grade II sites there is Klerksdorp Museum, Klerksdorp Railway station and the Wood and iron Houses in Klerksdorp (see Annexure C).

Built heritage resources boosts tourism in the province and therefore need to be integrated into urban planning for the sustainability and growth of the province economically and socially (Kusel 2013). The formal and proactive inclusion of these sites into the spatial planning and management of Klerksdorp is important. This will ensure that heritages are not treated as isolated objects but as part of the larger urban fabric, which is in line with international trends to ensure a more sustainable approach towards the built environment.

The sustainability of urban heritage conservation in the context of Klerksdorp is problematic because of the dynamic nature of the city and the history of colonialism and apartheid. Urban heritage conservation in Klerksdorp is further impeded by the related problems with respect to urban form, political will, difficulties in implementation and a problematic socio-economic context. The following section is going to discuss the factors that are affecting urban conservation in Klerksdorp.

6.6 Klerksdorp: Integration versus separation

This section analyses the extent of the integration of built heritage resources in the urban development of Klerksdorp from the perspective of: (i) the policy and legal context; (ii) interviews with key informants; (iii) development control processes; and (iv) a spatial analysis.

6.6.1 Policy and legislative integration

Policy and legislative tools such as the NHRA, NEMA and the Constitution only to mention a few, protect built heritage resources and advocate for public awareness on how important built heritage resources are. Prior to the NHRA built heritage resources were not deemed as indicated by the absence of legislative instruments on incorporating heritage resources into urban planning. The NHRA serves as the core legislation that regulates heritage resources in South Africa. This Act includes various sections on how spatial planning should respond to and integrate built heritage in urban development, local planning policy in the study area. However, the spatial development

framework and land use management scheme, has not yet integrated built heritage in the management of urban development.

6.6.1.1 Klerksdorp Spatial Development Framework

The Spatial Development Framework for Klerksdorp (KSDF) also forms part of the Integrated Development Plan (IDP) of the municipality and is a key tool for the land use management system of the city. The main objectives of the spatial KSDF are to (i) provide a spatial strategy to achieve the municipal vision, (ii) coordinate development initiatives (iii) provide direction for development (iv) identify key development areas and (v) serve as a guideline for decision-making on land related matters. The KSDF focuses much on urban development but is not aligned to urban conservation legislation.

6.6.2 Key informants' views on integration

Government officials:

Government officials mentioned that there is no integration of urban development and urban conservation. The reasons are that the internal processes with regard to decision-making are not aligned. For example, spatial planning, building control, and community services, which are involved in decision making with regard to urban conservation and urban development, are not aligned.

Planning consultants:

According to the planning consultants, built heritage resources have not yet been integrated into urban development. This is because some of the built environmental heritages are not yet included in the master plans of towns and cities.

Heritage specialists:

In identifying built heritage resources integration, the heritage specialists mentioned that there is no integration between urban conservation and urban development. This is further supported by the lack of awareness on how important built environmental heritages are. Measures to integrate urban conservation and urban development are in place but there is no implementation due to the lack of financial resources.

Stakeholder participants:

Stakeholder participants also stated that there is no integration between urban conservation and urban development. Stakeholder participation was important in this research as they raised some technical issues. The biggest challenge in building conservation is the limited availability of

resources and financial support. Due to the lack of conservation skills for the repair and maintenance of historic architecture, it was discovered that about 60% of conservation and maintenance of historic buildings is done by inexperienced workers, resulting in 50% of the problems that have surfaced.

Furthermore, the segregation processes of apartheid have not yet disappeared. Different stakeholders, such as private organisations, mentioned that many built heritage resources are treated on racial grounds and has resulted in some of the built heritage resources being given more attention than other built heritage resources. There are more policies and legislation that protect built heritage resources, but there is a lack of implementation caused by the lack of skilled force as well as financial resources to fully implement the process of built heritage resources conservation, in practice.

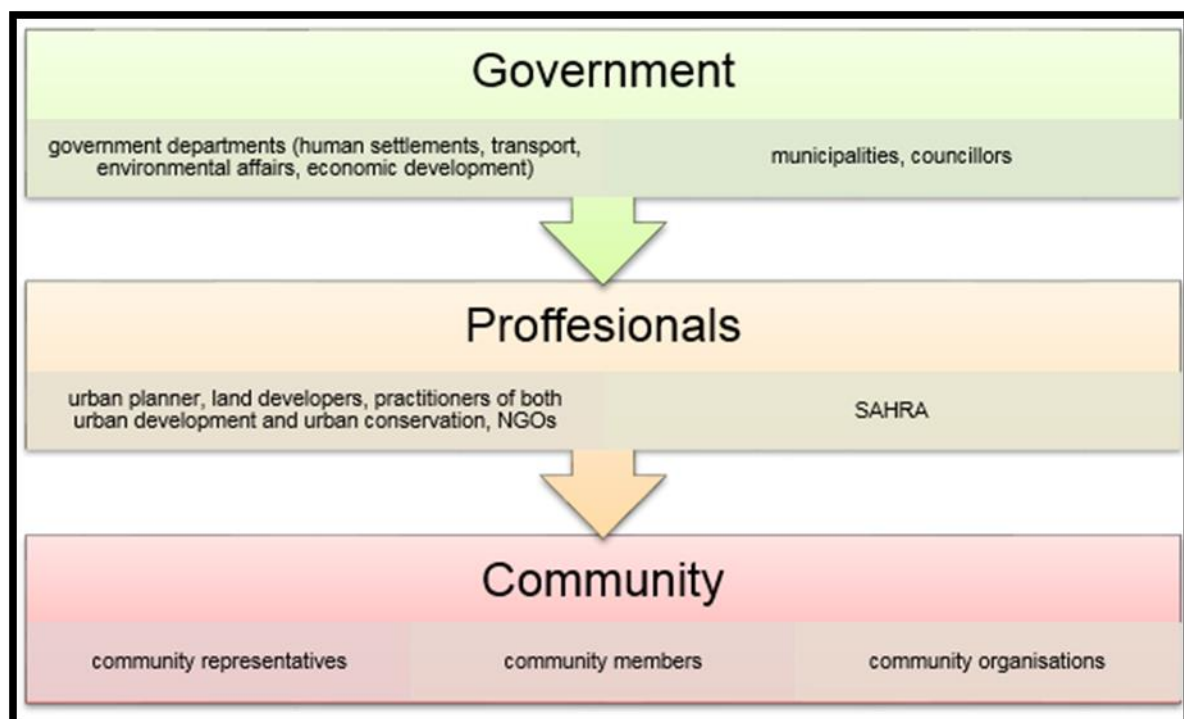


Figure 6-13: Three levels of stakeholders

Source: Author's own construction (2016)

There are three levels of stakeholders that include government, professional and the community. There is delegation of power among the stakeholders in figure 6-13. The government is the overall decision maker followed by the professionals, then the community. All the stakeholders are important when it comes to urban development and conservation. There are a set of stakeholders in the fields of urban development and urban conservation but they work separately. This does not promote the integration of the two fields. Moreover, built heritage resources have been run in

isolation, as the organisations that govern these resources do not take into consideration urban planning.

In socio-economic terms, the desperate needs of the rapidly expanding mass of the urban poor and the political pressure that this creates, means that urban heritage conservation has a low priority. On the other hand, the life of high consumption that the elite enjoy is a lifestyle that differs considerably from the simple lifestyles of past ages as embodied in the historic cores. Finally, and most importantly, there is the issue of political will. Here the question must be asked whether the African elite, who govern Southern Africa, have any interest in agreeing to, or leading efforts to conserve an urban heritage that is comprised mainly of colonial European buildings and monuments.

6.6.3 Procedural integration

Apart from the normal planning processes in terms of development control (applications for rezoning, subdivisions, consent uses and removal restriction), there is no specific alignment between the town planning departments and community services. For example, with the museum, a special procedure does exist for any development involving a building older than 60 years

With respect to destroying a built environmental heritage resource, the NHRA states "no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority". Apart from the NHRA, applicants are required to submit plans to the Council and non-compliance will attract another set of penalties. The first step in this regard is to apply to the Council for a demolition permit. The application will be sent to the City's department of arts, culture and heritage services who will assess if the building might have some form of heritage or historic value. If they are in doubt, they might ask the applicant to get a report from an architect or other professional. If there is no doubt, they will grant the permit. If the building is older than 60 years, then the application to demolish is automatically routed to the Provincial Heritage Authority (PHRA) who will assess whether the building has some form of significance.

The PHRA may issue a demolition permit but subject to the objections of members of the public or heritage groupings. The latter have the right, in terms of the Act, to appeal against the granting of the permit within 30 days. In such instances, the Minister, in the case of the National Heritage Authority, SAHRA, or the MEC in the case of the PHRA, then appoints an independent tribunal of three experts. If the applicant loses the appeal, or the appellant loses theirs, a further appeal can be referred to the next highest authority.

6.6.4 Spatial integration

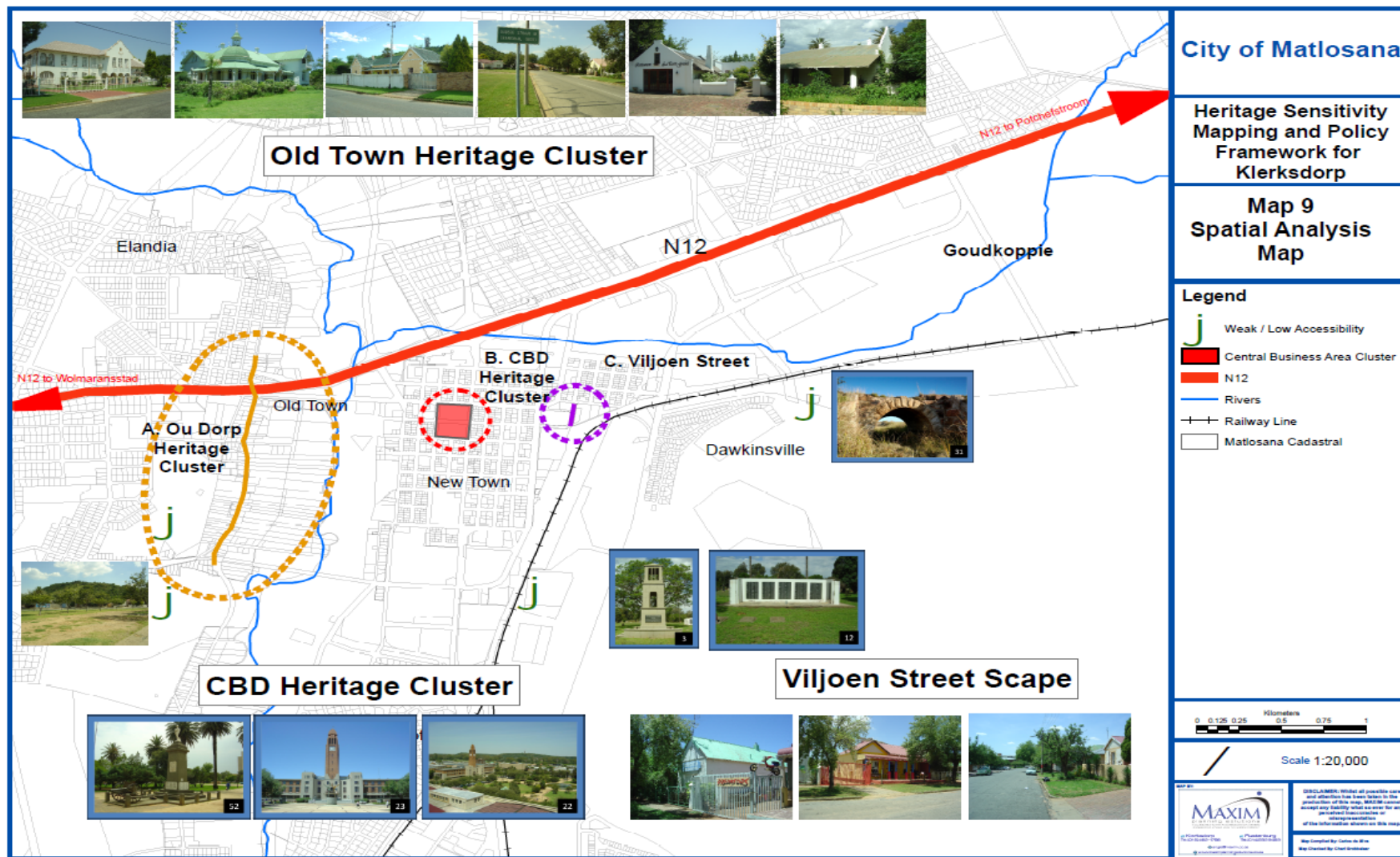


Figure 6-14: Spatial analysis map of built heritage environmental resources

Source: Puren (2010)

The map above (figure 6-14), shows the spatial analysis map of built environmental heritage resources. Their distribution is a reflection of their isolation. They are being preserved as isolated objects in the urban space. An example of this isolation is concerning the old cemetery. In the Klerksdorp CBD, many built heritage resources are located in a rather fragmented way. This is clearly seen through the buildings surrounding the museum.

Additionally, built heritage resources are not being managed properly due to the lack of financial resources since most of these resources are not included in the annual budgets of local municipalities. Organisations that take care of built heritage resources do not have enough funds to fully take care of them so that they are left in isolation. This clearly shows that built heritage resources have been isolated from urban planning processes. The isolation of these heritage sites creates difficulties in terms of access, maintenance and heritage planning in an integrated way. Not only that, there are also other heritage sites that have changed their use to residential areas and cannot be preserved as an entire area.

On spatial analysis, there are also environmental issues. Environmental issues refer to challenges caused by external factors such as economic pressure, building conditions, building location, business opportunity and third party interference. Among the threats identified for the conservation of built heritage resources is the continuous change in economy and development patterns that create development pressure in urban areas.

6.7 Important issues with regard to urban conservation in Klerksdorp

A few issues are identified in terms of urban conservation; these include issues with regard to the urban form, implementation issues and socio-economic issues.

6.7.1 Issues of urban form

The evolution of cities in developing countries from structurally simple towns to large urban agglomerations with the dispersed form of the urban region is a characteristic of all developing countries. Boelens (ibid) argues that the traditional city and its tight urban spaces and spatially integrated buildings are the domain of the architect. The regional sprawl and the endless mix of transportation networks, residential areas, industry, commerce and open space has a chaotic complexity. These large-scale, highly complex and rather untidy urban regions are dispersed in character and are the result of increased population, and the efficiency of transportation and information and communication technologies in overcoming the tyranny of distance.

The impact of this dramatic change in urban form on the historic cores of towns and cities has had a number of important consequences. First, the impact of contemporary transportation systems, especially the motor vehicle, on historic environments has been devastating. In

discussing the impact of planning for the motor vehicle on ancient cities, Lewcock (2004:9) writes: "... town planners tend to begin with the forceful imposition of a modern road network and if traffic is encouraged to come into the old city there is need for parking space and later parking buildings. Soon nothing will be left." Imposing a modern vehicular system on an historic environment usually also involves road widening, street parking and the construction of petrol stations, all of which are hostile to the architectural character of the area. The dominance of the modern vehicular system is a key characteristic of the dispersed urban form and in its engineered mode is destructive of historic neighbourhoods.

6.7.2 Issues of implementation

In South Africa the conservation of old buildings and neighbourhoods is a part of general heritage resource conservation and is covered by the NHRA. This Act replaced the apartheid era legislation and led to the disbanding of the old National Monuments Council and its replacement by SAHRA. As stated in chapter four, SAHRA "is responsible for the protection of South Africa's tangible and intangible cultural heritage, and works in cooperation with local and provincial planning authorities to ensure the integration of environmental and heritage management into development planning".

Klerksdorp municipality has a listing of built heritage resources dating from the 1890s. Despite the progressive nature of the NHRA, there is currently no legal basis for comprehensive urban heritage conservation in Klerksdorp without a register of heritage resources. Urban conservation is also not included in either the policy plans or the statutory planning instruments that exist in city. Only the ad hoc implementation of the sixty-year rule by PHRA Permit Committee and the listing of buildings in Klerksdorp can be used to protect old buildings from demolition and insensitive alteration. The actual implementation of the sixty-year rule has proved to be highly problematic due to political interference and the inefficiency of the responsible provincial staff.

An additional factor is the restructuring of local government that has taken place in South Africa since the 1994 general elections. The Local Government Municipal Structures Act and other related legislation provided for the comprehensive re-organising of local government. Flowing from this legislation, smaller municipalities was grouped into larger units, necessitating the amalgamation and restructuring of their administrations. In many instances, this led to the retrenchment or retirement of employees and the appointment of new staff on a selective basis that favoured those who were disadvantaged during the era of apartheid. The old staff may have had many shortcomings, but were generally technically competent to perform their tasks.

6.7.3 Socio-economic issues

Urban heritage conservation is hindered by a number of related problems in this modern world due to increased globalisation. Globalisation has caused destabilisation in cities with an increasing number of immigrations. Globalisation has also created the dispersed urban form, different to the form of the traditional city. This form, with increased traffic, suburbs and hyper stores, is hostile to and marginalises the historic core which is perceived as an obsolete spatial zone.

Since 1994, there is progressive urban conservation legislation in South Africa; although the actual implementation of the legislation is problematic. This is due to the restructuring of all levels of governmental administration after the 1994 elections that have led to a loss of skills, and a general inability of the administration to implement urban heritage conservation legislation.

The apparent focus on the needs of the rapidly expanding mass of the urban poor and the political pressure for urban development means that urban heritage conservation is of low priority. Moreover, urban conservation of built heritage resources needs a bottom up approach. There is a need to consult with the locals; the municipality should work with the community, and conduct awareness campaigns on the importance of built heritage resources. The following sections are going to give an overview of the research methods used in relation the isolation and integration of built heritage resources.

6.7.4 Financial issues

It has been established, in the document analysis of Klerksdorp that financial problems exist. Due to the unpredictable nature of conservation work, the ultimate cost of conservation projects is often difficult to ascertain (Reyer and Mansfield, 2000). As quoted by Raftey (1994), "It is almost impossible to predict a correct market price for a product that is not built, with labour force not yet recruited, on a site for which there is incomplete information".

The current legislation has been outpaced by developments on the ground. The legislation is inflexible, while the practice requires conciliation of the new uses to fit in built heritage resources. In addition, built heritage resources must be adjusted to allow for adaptive usage. The proposed legislation change must aim at preserving original architectural elements and encourage cost-effective rehabilitation, while also providing building safety.

6.8 Conclusion

This chapter presented a case study of urban conservation and urban development in Klerksdorp. The relevant role players in urban development include ministries from the department of human

settlements, transport, environmental affairs and rural development and land reform. In addition, the other key players in urban development are the urban planners, the South African Local Government Association, the municipalities and practitioners of urban development. In urban conservation, the key stakeholders include urban conservationists, heritage practitioners, heritage managers and the SAHRA. However, it was established that these key stakeholders work in separation. This has led to the isolated treatment of built environmental heritages.

The factors affecting urban conservation and urban development were discussed in the context of the findings from the study area. The perspectives from the semi structured interviews with regard to urban conservation and urban development, reveal that there are mixed feeling regarding the management of built heritage resources. The participants gave their views on how they value these built heritage resources. Some of the participants complained that these built heritage resources waste revenue and should pave way for new developments. With the findings from chapter 6, this study proposes for an integrated framework, which is the focus of chapter 7.

CHAPTER 7 A FRAMEWORK FOR INTEGRATION

7.1 Introduction

The main findings of the chapter 6 are that urban development and conservation in the study area, namely Klerksdorp in Matlosana are mostly treated in a fragmented manner. The fragmentation in terms of urban development and urban conservation is a challenge that occurs on various levels. In this chapter, the main aim is to develop a framework for spatial planners to integrate urban conservation, with specific reference to built environmental heritage resources, into urban development in Klerksdorp in the North-West Province of South Africa. The main objective of such a framework for integration is to improve the sustainable management of built environmental heritage resources for the present and future generations.

The importance of integrating built heritages in urban development is for their sustainability because they are under threat from being destroyed. Conserving built heritages reduces the energy usage associated with demolition, waste disposal and new construction. It also promotes sustainable development through the conservation of the energy embodied in the existing buildings. In order to achieve a sustainable management of the conservation of heritage buildings in Klerksdorp, it is vital for maintenance to take a leading role in conserving the heritage values of the buildings. A well-maintained heritage building enhances the quality of life for everyone in the community. Additionally, it helps to attract investment to the community (tourism product), to contribute to regeneration and to provide a source of local pride and sense of place (Forsyth, 2007)

The framework discussed in this chapter includes integration on various levels, namely, on policy and legislation, procedural integration and spatial integration. Although the proposed framework is formulated for the specific research context of Klerksdorp, it can serve as a generic concept and a point of departure for frameworks elsewhere. The framework should be viewed as a flexible concept that can also be refined and elaborated upon in other studies or cases. The framework will forge the way forward for built environmental heritage resources. The proposals for the framework are divided as follows: spatial proposals, public participation and management proposals for the local heritage of Klerksdorp.

7.2 Proposed Framework for integration

From the findings, it can be deduced that practices for conserving built environmental heritage resources remain very poor. This could be strongly attributed to the lack of clear guidelines on how built heritage resources should be taken care of. The management and conservation of built environmental heritage resources can be better explained and understood if there is a

comprehensive guideline or framework that integrates urban conservation and urban development, which at this time does not exist. From the case of Klerksdorp, challenges for integrating urban development and conservation (built environmental heritage resources) are found on the levels that will be discussed in the sections that follow.

7.2.1 Levels of disintegration

7.2.1.1 Policy and legislation

There is no alignment between the policy and legislation. Policies that govern urban development and those relating to urban conservation work separately (see figure 4-2 in chapter 4.). Local heritage policies are not aligned to the SDF and the heritage management zones are not clearly indicated.

7.2.1.2 Procedural

There is no alignment of the different departments identified in Table 7-1 below. All these departments operate in isolation when it comes to development regulation, for example, townships establishments and rezoning.

7.2.1.3 Spatial

Built environmental heritage resources are rather scattered throughout the urban landscape in Klerksdorp. Where these assets are concentrated, for example outside the CBD and in present day residential areas, the areas are not identified as such, neither are they earmarked as special areas to consider.

7.2.2 Levels of integration

The findings revealed four levels at which built heritage can be integrated into contemporary and future development through urban planning: spatial integration, management integration, continuous public involvement and external exposure of Klerksdorp's heritage through branding. Based on the levels of disintegration in the findings of the study, the following levels of integration area proposed:

7.2.2.1 Spatial proposals

Built environmental heritage resources in Klerksdorp need to be included in the Klerksdorp land use management system, a policy that regulates local development in terms of the location and distribution of land uses in such a way that development is executed in an orderly manner. In addition, there is a need to include heritage management zones where a large concentration of built heritage resources exists.

Moreover, spatial integration should make sure that there is access to the heritage sites, since many of these sites are not accessible and thus isolated. In addition, there is need for streetscape preservation such that a street with built heritage environmental resources will be reserved as a whole, to redress the isolation.

7.2.2.2 Policy and legislative integration

There is need for policy and legislative alignment on local level. In particular, the local heritage policy must be formulated, and then aligned to the SDF. Heritage management zones need to be spatially identified. This should be followed by a map to show sensitive heritage zoning marked for specific sites (Grade I and Grade II), preserved streetscapes, measurements where built heritages are located and isolated. The proposed heritage management zone can be incorporated into the land use management scheme of Klerksdorp, with specific development conditions applicable to the zone. The heritage management zone should also be formally integrated into the Klerksdorp spatial development framework.

7.2.2.3 Procedural integration

On procedural integration, different departments and role players as identified in Table 7-1 below need to be aligned. The departments in Table 7-1 operate in isolation when it comes to development regulation, for example, township establishments and rezoning. Procedural integration proposes the following:

- (i) An internal communication system when any heritage is affected by development;
- (ii) A heritage forum with private consultants (planners), members of the community who are key informants with heritages and government officials from each section. Proper channels need to be followed when dealing with the protection of built environmental heritage resources. Each stakeholder involved in the protection of built environmental heritages needs to be consulted to ensure proper conservation as well as urban development. The municipality, the PAHRA and the SAHRA should be at the centre of management and protection of built environmental heritages. All permit approvals should be undertaken with the participation of all stakeholders, working in a holistic manner to ensure the sustainability of built environmental heritage resources;
- (iii) A community forum, where members of the community have to serve as watchdogs and also communicate with heritage forum;
- (iv) Public participation – there is need for a heritage board or heritage committee to be established to ensure the active participation in partnership with the municipality. Such a body can play an important role in the identification, assessment, recording and management of heritage resources in cooperation with the municipality. In this way,

continuous involvement and opportunities for the public to be actively involved in urban conservation can be created. In addition, for successful management of built environmental heritage resources, there is a need for full cooperation of non-governmental heritage organisations, community groups and the property owners of heritage sites, rather than depending on the municipality. In order to ensure the involvement of stakeholders, an appropriate institutional or partnership framework needs to be in place.

7.2.2.4 Local government

All heritage sites need to be included in a management framework and in the Klerksdorp land use management system for them to be preserved sustainably. Moreover, within the management framework, there is need for proper alignment of the different departments of the municipality in the management of built environmental heritage resources. These departments are summarised in table 7-1 below.

The alignment between the different departments of the municipality is crucial in the management of heritage sites. The key departments of the municipality that play a role in the management of the heritage resources are included in Table 7-1.

Table 7-1: Summary of municipality departments' role in the management of built heritage resources.

Department	Responsibility
Town planning section	land use management
Building Control Section	Building plans, conversions, demolitions, renovating and building inspections
Museum Section	primarily responsible for the cultural heritage resources and history of the municipality
Community Services	Maintenance of public places including cemeteries and parks
LED Department	promotion of cultural heritage resources for tourism development

Source: Author's own construction (2016)

The framework proposes that a system should be devised to ensure that all relevant departments are properly consulted prior to any land use change approvals, building plans, demolitions, conversions and infrastructure development that may affect existing and proposed heritage resources.

7.2.2.5 Heritage forum

Heritage forums will be important as a proposal for integrating built environmental heritages into urban planning. The heritage forum brings together all role players in the field of urban conservation and urban development to discuss gaps and issues in the practice of heritage conservation. The heritage forum is responsible for the alignment of role players and the heritage policy

7.2.2.6 Community forum

A community forum is also crucial as a proposal for integrating urban conservation and urban development. This is because it includes a panel of experts who have the experience in urban conservation and development and will share their knowledge and perspectives with the community. The community forum is an effective way of raising awareness in integrating, protecting and getting people involved.

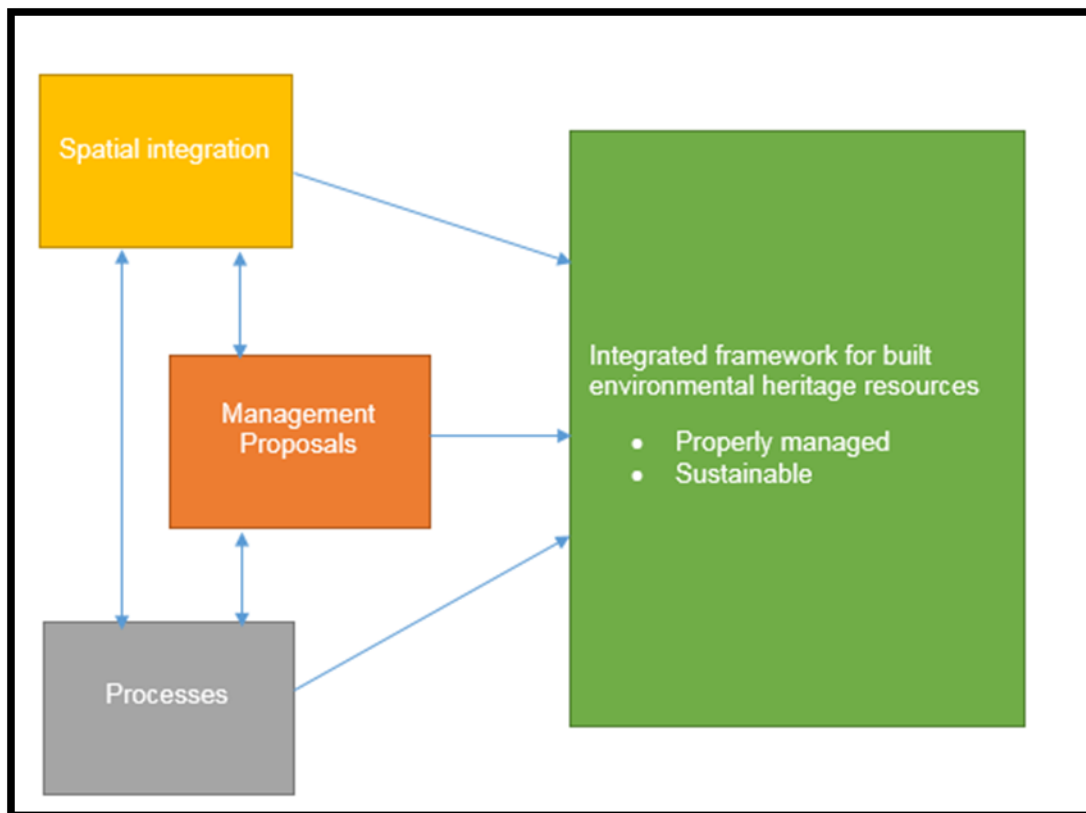


Figure 7-1: Framework for integration

Source: Author's own construction (2016)

Figure 7-1 above shows a diagrammatical illustration of a proposed framework for integration to cater for the sustainability of built environmental heritage resources. The proposed framework will consist of spatial integration, management proposals and proper processes in urban development and urban conservation. The framework proposes that all the three levels of integration should work in a holistic manner and not in isolation. Spatial integration, management proposal and processes should be aligned and to work hand in hand for the sustainability of built heritages and for them to be incorporated into urban planning practices. Thus, all role players will be involved in decision-making, specialising in different areas for built heritage maintenance.

7.3 Conclusion

This research suggests a shift in the perceptions on urban conservation from preserving heritage resources as isolated objects towards a more integrated view. In a more integrated view, heritage resources are proactively integrated into the contemporary uses and future development of cities to ensure the continued existence of these assets. It emphasises the proactive role of urban planning in combining the past, with contemporary use, and the possible levels of integrating urban conservation and urban development. Built environmental heritage resources need to be included in the spatial planning and management of Klerksdorp. This will ensure that heritages are not treated as isolated objects but as part of the larger urban fabric, in line with international trends to ensure a more sustainable approach towards the built environment. The next chapter is going to synthesise and give conclusions for the study.

CHAPTER 8 SYNTHESIS AND CONCLUSION

8.1 Introduction

The main purpose of this study was to develop a conceptual framework for the integration of urban conservation (with special reference to built environmental heritage resources) and urban development using Klerksdorp, in the North-West Province, South Africa as a case study. To develop a framework, the study included a literature review of various urban development models (presented in Chapter 2), urban conservation theories (presented in Chapter 3) and an overview of international and national policy and legislation that guide urban development and conservation (presented in Chapter 4). The trends identified in the literature review served as background for the empirical section of the study in which the case of Klerksdorp was analysed.

This chapter provides the overall synthesis of the literature that was discussed in chapter two to chapter four, as well as the empirical section of the study. A reflection on how the aims of the study were met and answers to the research questions are provided. Also, a short concluding synthesis of the framework developed to use urban planning as a tool to integrate urban development and conservation is given. Based on the aforementioned, a few overall recommendations are given for those involved in the planning and management of urban development and urban conservation in order to provide an integrated approach as well as for further studies. A few main conclusions drawn from the study form the concluding part of the chapter.

8.2 Reflecting on aims of the study and answering of research questions

8.2.1 Reflection on research aims

The following secondary aims, as depicted in chapter one were achieved in the study:

- a) To give an overview of theories that shaped urban development. This is attempted in Chapter two that includes various urban development models namely classical models (the Concentric Zone model of Burgess, the Sector model of Hoyt and the Multiple Nuclei model of Harris and Ullman), the South African Apartheid model of Simon and Davies and Post-Modern models (such as New Urbanism, the Smart Growth model and the Compact City model);
- b) To give an overview of the development of urban conservation theories. This is illustrated in chapter three and the chapter includes various urban conservation paradigms which includes Preservation (Restoration, Anti-Restoration), HULA and Sustainability;

- c) To evaluate policies and legislation in terms of the integration of urban conservation and urban development. Chapter four focused on the policies and legislation which governed urban conservation and urban development. Among the policies and legislation which governed urban conservation there are UNESCO, ICCROM, ICOMOS, NHRA, WHCA and the Constitution of the Republic of South Africa. Urban development policies and legislation include the WPSPLUM, NSDP, SPLUMA and IUDF;
- d) To analyse the integration of urban development and urban conservation in Klerksdorp as a case study by using primary data collection methods that are semi-structured key informant interviews, secondary data collection methods (desktop study) and Spatial analysis; and
- e) To explore how spatial planning can be used as a tool for integrating urban conservation and urban development.

8.2.2 Synthesis of research aims

Secondary aim 1: The aim was to give an overview of the theories that shape urban development.

Synthesis

It is significant to thoroughly investigate urban conservation and development theories when conducting a study regarding built heritage resources. Chapter 2 thus presented an overview of urban development theories. Chapter 2 included classical models, apartheid models and post-modern development models; these were studied to obtain an understanding regarding the formation of cities up to the present day, taking into account the cities characteristics and form.

Secondary aim 2: To give an overview of urban conservation theories.

Synthesis

Chapter 3 focused on urban conservation paradigms assessing the classical and contemporary paradigms of urban conservation. This chapter explored the urban conservation movement in cities, illustrating the progression of urban conservation paradigms from an isolated approach towards a more integrated approach whereby urban conservation could be incorporated in urban planning.

Secondary aim 3: To evaluate policies and legislation in terms of the integration of urban conservation and urban development.

Synthesis

Furthermore, in chapter four there was a discussion regarding the policy and legislation (International and South African) which governs urban conservation and urban development dating from the classical era to the present day. The discussion illustrated how the policies and legislation had influenced urban conservation and development, in the way they separated urban conservation from urban development, as well as how the policies are trying to integrate the two (urban conservation and urban development).

Secondary aim 4: To analyse the integration of urban development and urban conservation in Klerksdorp as a case study

Synthesis

Chapter 5 furthered the discussion on the integration of urban conservation and urban development. From the findings, urban development and urban conservation are not yet integrated due to a number of factors such as spatial disintegration, policy and legislation and management disintegration. Role players in the protection of built environmental heritage resources and the urban development key actors work in separation thereby leaving built heritage resources in isolation.

Secondary aim 5: To explore how spatial planning can be used as a tool for integrating urban development and urban conservation.

Synthesis

Spatial planning had been seen as a key tool to integrate built heritages in urban planning. Spatial planning as a tool for integration proposes for heritage management zones to be formulated and also spatial maps to clearly show the location of built environmental heritage resources. With spatial planning, heritage sensitivity zones can be mapped and proposes how built heritage resources can be protected.

8.2.3 Reflecting on research questions

Based on the aims that were met, the main aim of the study could be addressed through research questions, namely:

Research question 1: How can urban development and urban conservation be integrated?

Urban development and conservation can be integrated through the proposed framework for integration that was illustrated in chapter 7 of the study. In addition, recommendations that are mentioned later in this chapter for example the cultural management plan, education and awareness and formulation of a heritage policy aid in the integration of these two (urban development and urban conservation).

Secondary questions are:

Secondary question 1: To what extent do the theories on urban development and urban conservation support the integration of built environment heritage resources into urban development?

Theories of urban development and urban conservation have been running parallel and they isolated built heritage resources. The introduction of post-modern theories in urban development (New Urbanism, Smart Growth and Compact City) and urban conservation paradigms (HULA and sustainability) had evidenced a shift from isolation to a more integrated approach in urban development and urban conservation. These theories and paradigms try to incorporate built environmental heritages in urban planning for the sustainability of towns and cities.

Secondary question 2: To what extent are the policies and legislation that guide urban conservation and urban development integrated?

Policies and legislation which guide urban development and urban conservation have been treating built environmental heritages in isolation. This is evidenced in chapter 4 as policies and legislation (international and national) were either focusing on urban development or urban conservation. The introduction of the NHRA, WHCA, the Constitution of the Republic of South Africa, SPLUMA and IUDF shed light in the management of built environmental heritages as these policies incorporates urban conservation and urban development.

Secondary question 3: How integrated are urban conservation and urban planning in the case of Klerksdorp?

Urban planning and conservation in Klerksdorp are not integrated as evidenced by the illustrations in chapter 6. Built heritage environmental resources are isolated and lack maintenance. A number of factors contribute to the disintegration of built heritages and among them include financial and implementation issues. In addition, there are levels of disintegration (spatial, procedural and policy and legislation) in the management of built heritages.

Secondary question 4: What is the role of spatial planning in the integration of urban conservation into urban development?

Spatial planning plays an important role in integrating urban development and urban conservation. Isolated built environment heritage resources are spatially mapped this enables them to be easily identified for maintenance. In addition, spatial planning identifies heritage sensitivity zones, where built heritages are more concentrated and need attention. This helps in the development of heritage zones and these heritage zones will be maintained as people will be aware of the heritage zones. Spatial planning aid in the branding of built environmental heritage resources and they will be incorporated into urban planning practices. Spatial planning acts as a tool to integrate built heritages into urban planning through spatial development frameworks and land use management systems.

8.3 Recommendations

The main recommendation is included in Chapter 7 in which a suggested framework for integration is discussed. Apart from the integrative framework in which urban planning plays a primary role, various other broad recommendations are suggested below. The recommendations suggest key aspects of a policy and spatial framework pertaining to the integration of built environmental heritage resources in urban planning. The recommendations address the need to better integrate urban conservation practices into urban planning within the larger goals of overall sustainable development.

8.3.1 An overall integrated approach in urban development and conservation

There is need for an integrated planning among urban conservation and spatial planning to ensure the sustainability of built environmental heritage resources. Moreso, through integrated planning, coordination between the spheres of government should be ensured; from all different sectors so as for a more holistic approach in the management and maintenance of built environmental heritage resources. While the study reveals much about the conceptualisation of heritage and reveal many physical representations of it, an integrated approach should form the foundation of urban development in which urban conservation is proactively integrated.

8.3.2 Cultural Management Plan (CMP)

It is suggested that a cultural management plan to be compiled as Klerksdorp is an area with high cultural heritage sensitivity while development is also emphasised. Moreso, in Klerksdorp there are high impact activities which include developments with the potential to cause significant changes in land use. With this in mind, it is important to note that land uses affect built environmental heritage resources and there will be need for an agreement between the heritage

owner and the land sponsor to ensure sustainable development. Responsible spheres of government should work together to promote integration of built heritage resources into urban planning processes. There should be a holistic approach on how the SAHRA and PHRA and the local municipality run the management of built heritage resources. A cultural heritage management plan is a possible effective tool for ensuring that cultural heritage is considered in development.

8.3.3 Public participation

Public participation is a corner-stone in the heritage planning process but exists on various levels, each of which will influence the future planning and sustainability of heritage sites. Whatever level is deemed appropriate for a specific community or locality it is necessary to acknowledge that heritage goes beyond the obvious to conclude meanings and values. Traditional heritage specialists and authorities need to be more open about the inclusion of different stakeholders in decision-making processes about heritages. This will be important in generating interest among the public and also public participation in the preservation and protection of built heritage resources is instrumental to the success of the endeavour. Public participation facilitates intercultural dialogue by learning from communities about their histories, traditions, values, needs, and aspirations and by facilitating the mediation and negotiation between conflicting interests and groups. It is suggested that more awareness be created in how the Klerksdorp community can be involved in urban conservation.

8.3.4 Government support

It is also recommended that there is need for government support for built environmental heritage resources to be sustainable. The government need to take a leading role in coordinating various departments which involves the preservation of built environmental heritage resources. The government must implement policy driven projects so as to prioritise preservation and protect the practice from other competing socio-economic and political programs. To add, the government is supposed to avail funds for the protection and maintenance of built environmental heritage resources but however the financial crunch makes it impossible hence there is need to degenerate to other non-monetary measures like considering and rate discounts on all built heritage resources. The government must also take a leading role in the monitoring and inspection of built environmental heritage resources so as to ensure that they meet their required standards.

In particular, there is need for the governments to integrate urban heritage conservation strategies into development policies and agendas so as to protect built heritage resources. Moreso, local

authorities need to prepare urban development plans taking into account the areas values (heritage values) and their associated features.

All the levels of government should be aware of their responsibility and they should contribute to the definition, elaboration, implementation and assessment of urban heritage conservation policies. There should be a participatory approach of all stakeholders and coordinated from both an institutional and sectorial viewpoint.

8.3.5 Education and awareness

Information need to be disseminated with regards to the practice, maintenance and the preservation of built environmental heritage resources. To start kick the awareness, there is need of a detailed research and documentation of the history of cities, their growth and the built heritage resources within the cities. Built heritages should be clearly identified so that they will be recognised easily and respected. Towns and cities need to be involved in the publication and distribution of brochures, magazines, booklets, newsletters and information cards regarding built heritage resources which can be made readily available to the public and this will create awareness.

Education and awareness allows for the recognition of cultural significance and diversity, it also provides for the monitoring and management of built environmental heritage resources which will improve the quality of life and of the urban space.

8.3.6 Branding built environmental heritage resources

There is need for built heritage resources to be branded to ensure the city's identity. Branding create and strengthen existing awareness of heritage sites. In this case branding is very important as if it is practised, all the built heritage sites will be visible for tourist attraction. The owners of heritage sites should be officially notified of branding of their property to create awareness that these sites will be regarded as sensitive in terms of any development. Also, the local authority should be responsible for the protection and management of these sites, as well as the implementation of the proposals.

8.3.7 Formulation of a local heritage policy

There is need for a proper heritage policy which will cater for built environmental heritage resources. The heritage policy need to be incorporated into the site management plan and endorsed by the appropriate governing bodies of each site and the main stakeholders.

8.3.8 Adaptive reuse

The current legislation has been outpaced by developments on the ground. The legislation is inflexible while the practice requires conciliation for the new uses to fit in built heritage resources. Moreso, built heritage resources must be adjusted to allow for adaptive usage. The proposed legislation change must aim at preserving original architectural elements and encourage cost-effective rehabilitation while also providing building safety. Adaptive reuse should also be proactively included in a CMP (see recommendation earlier) and the suggested heritage policy for Klerksdorp.

8.3.9 Using theories of urban development to create a more integrated approach

The principle of New Urbanism may be applied as a renewal strategy. The use of CMP in New Urbanism identifies zones where built heritage resources have the ability to become future facilities. Smart Growth and Compact city to be applied by identifying specific areas for infill development close to built environmental heritage resources, where new developments such as housing can be used to accommodate future expansion of Klerksdorp while the development in total should be designed with the heritage buildings as focal points and multi-purpose community centres (a public place where people can learn about urban conservation and its implications to the community).

8.4 Key areas for further research include:

- a) Research on integration of urban development and urban conservation to be expanded to other cases as research contexts may differ, the way and extent to which these two are integrated may be different in other towns and cities.
- b) Explore the formulation of local heritage policy for small and medium sized cities to integrate urban development and urban conservation
- c) Research on the application and refinement of Framework for integration in other similar medium sized cities as Klerksdorp; and
- d) Propose a Framework for integration not only on an urban scale but also on a district and regional scale

8.5

8.6 Conclusion

The main conclusions drawn from this study include the following:

- (i) From the literature review on urban development, it is illustrated that towns and cities have always been subjected to structural change that impacted on urban development.

Numerous classical models of urban development (such as the Concentric Zone model, Sector model and the Multiple Nuclei model) as well as the South African Apartheid model caused this structural change in towns and cities. Cities became fragmented and segregated. It is especially some of the older areas (but not excluding newer parts) of cities that have been affected. Many of the city's built environment heritage resources were (and still are) located in these older parts as urban structural change occurred, these older areas became abandoned and heritage resources were destroyed. In response to urban fragmentation, segregation and also environmental deterioration, post-modern models were offered as ways to create more integrated urban environments in which the conservation of the natural and built environment is emphasised. These post-modern models are currently becoming popular to use to plan and design more integrated urban environments to rectify past urban forms.

- (ii) A second conclusion is with regard to the shift in paradigms in terms of how urban conservation has been approached in the past and present. While past theories mainly treated built environment heritage resources as isolated objects in the urban environment (in other words the focus was on the object and not its broader context), more recent theories moved towards a more integrated approach where sustainability and resilience are important overall goals for the urban environment. This implies a more integrated approach in urban development in which development and conservation needs are balanced.
- (iii) The fragmented approach is reflected in the evolution of policy and legislation that guide urban development and conservation of built environment heritage resources. Urban development and conservation has a long history of being guided by separated policies and legislation and in which built heritages were treated as isolated objects, similar to the evolution of theories and paradigms. Recently some policies and legislation (for example the NHRA) and has started to acknowledge a link between urban development and urban conservation. Policy and legislation in South Africa, especially on local level (Klerksdorp) is in general still separated.
- (iv) In the case of Klerksdorp, urban development and conservation are both priorities as the town is located on a development corridor (N12 treasure corridor) and is the oldest town with fifty-five built heritage resources. It is an example of a challenging South African case study in terms of integrating urban development and conservation. The segregation of these two priorities is visible in the spatial planning of Klerksdorp as built environment heritage resources are still treated as isolated objects in the urban planning of Klerksdorp.

- (v) A third last conclusion drawn from the study relates to the role of town planning as an integrative tool for urban development and urban conservation. Urban planning has the ability to integrate these two (urban development and urban conservation) as it may incorporate built environmental heritage resources into master plans of towns and cities rather than leaving them isolated.
- (vi) Finally, a way forward in terms of a framework for integration is suggested in which a framework for integration is proposed consisting of three levels (spatial integration, management proposals and proper processes) that should be followed in urban development and urban conservation. These three levels should be aligned and work in a holistic manner for built heritage environmental resources to be incorporated into urban planning practices.
- (vii) Lastly, a few building blocks need to be kept in mind by planners with regard to working towards a more integrated approach to urban development and urban conservation. These include a Cultural Management Plan (CMP) as part of the urban future, proactive involvement of community members, increased support from local government, educating people about urban conservation, branding the built environment heritage resources as assets but not isolated objects, a proper heritage policy for Matlosana and a strategy to include adaptive re-use.

The study serves as an attempt to research urban development and urban conservation in Klerksdorp in the Matlosana District in the North-West Province of South Africa in order to develop an integrative framework for urban planners.

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ANNEXURE A: CONSENT FORM



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299 1111/2222

Web: <http://www.nwu.ac.za>

Urban and Regional Planning

Tel: 018 299 2545

Fax: 086 567 9097

11 October 2016

Dear participant

INFORMED CONSENT

RESEARCH ON THE INTEGRATION OF URBAN CONSERVATION AND URBAN DEVELOPMENT. A CASE OF KLERKSDORP

I am currently a Master's degree student in the subject group Urban and Regional planning at the North-West University (Potchefstroom) under supervision of Ms Karen Puren (Senior Lecturer: Urban and Regional Planning). The aim of my research is to develop a spatial planning framework for integrating urban conservation and urban development for Klerksdorp in the North-West Province. In order to conduct this study, I need to do some interviews with participants in the study area. I kindly invite you to participate in this research by taking part in a short (approximately 30 minutes) semi structured interviews about your experience regarding urban conservation integration into urban planning. In order to adhere to all ethical aspects with regard to the research it is compulsory for participants to give their written permission to take part in the research. If you agree to take part, please read the following statements and give your permission in written form by signing the informed consent.

(i) I have been informed that the purpose of the research is to explore how urban conservation and urban development are integration in Klerksdorp. My participation will involve a semi-structured interview of approximately 30 minutes in which questions will be asked by the researcher.

(ii) I understand that there are no foreseeable risks or discomforts if I agree to participate in the study. I understand that the results of the study may be published but that my name or identity will not be revealed. I also understand that the results of the study may be used for secondary studies connected to this project, but that my name or identity will not be revealed. The researcher will maintain confidentiality of all records, materials and voice recorders.

(iii) I have been informed that I will not be compensated for my participation. I have been informed that any questions I have concerning this research study or my participation in it before or after my consent, will be answered by the investigators of this study. I understand that I may withdraw my consent and discontinue participation at any time without penalty or loss of benefit to myself. In signing this consent form, I am not waiving any legal claims, rights, or remedies.

I, the undersigned, _____ (full names), have read the above information and by signing this form indicate that I will participate in the research voluntarily.

Participant

Date

Researcher

Date

Thank you for participating in my research.

Kind regards

Fortune Mangara (Master's student)
Karen Puren (Supervisor)

ANNEXURE B: KEY INFORMANT INTERVIEW QUESTIONS



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

Name: Fortune Mangara

Department: Urban and Regional Planning

Title: Towards integrating urban conservation and urban development. Klerksdorp as a case study.

Aim: To develop a framework for spatial planners to integrate urban conservation, with special reference to built environmental heritage resources, into urban development in Klerksdorp in the North-West Province of South Africa.

QUESTIONS

QUESTION 1:

Do you think urban conservation and urban development is something that should be integrated or not?

Probe: May you please elaborate on your answer.

QUESTION 2:

Do you think that urban conservation (with regard to built heritages) and urban/spatial development are integrated in Klerksdorp?

Probe: Can you please elaborate why you say so.

QUESTION 3:

How do you see your role as a (consultant/town planner/heritage specialist/) in this process of integration between urban development and urban conservation?

QUESTION 4:

What can be done in future to improve/optimize this integration? Are there any challenges to implement/apply these ideas/proposals?

ANNEXURE C: BUILT ENVIRONMENTAL HERITAGE RESOURCES

a) Klerksdorp Railway Station



Source: Photograph by researcher (2016)

b) Wood and Iron Houses



Source: Photograph by researcher (2016)

Wood and Iron Houses



Source: Photograph by researcher (2016)

c) Goudkoppie Museum



Source: Photograph by researcher (2016)