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THE CREATION OF SUSTAINABLE HUMAN SETTLEMENT THROUGH INFORMAL SETTLEMENT UPGRADING: THE CASE OF IVORY PARK, JOHANNESBURG

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A research report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Science in Development Planning.

Johannesburg, 2009

Declaration

I declare that this research report is my own, unaided work. It is being submitted for the degree of Master of Science in Development at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.



Mukondi Esther Nethavhakone

26 January 2010

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Abstract

The states that participated at the Second United Nations Conference on Human Settlements (Habitat II), held in Istanbul, Turkey from 3 to 14 June 1996, adopted Habitat Agenda which binds them to the pledge to achieve sustainable human settlements. South Africa, as one of the countries that adopted Habitat Agenda, raised the need to investigate if the adoption of Habitat Agenda in South Africa led to the creation of sustainable human settlements. From the Habitat II it was established that sustainable human settlements can be achieved through informal settlements upgrading. Therefore, this research investigates whether the creation of sustainable human settlements is achieved through the informal settlements upgrading in South Africa, using the case study of Ivory Park, Johannesburg.

To undertake this investigation a qualitative research method was utilized, whereby the researcher investigates the object of the case study in depth using a variety of data gathering methods to answer research questions. To gather data, three research tools were used namely; in-depth interviews, observations and document study. In-depth interviews were conducted with Ivory Park councilors and data from documents and observations were used to support information gathered from interviews.

The key finding in this research is that the upgrading process of Ivory Park did not lead to the creation of a sustainable human settlement. This is because all elements for the creation of sustainable human settlements have not been fully addressed through the upgrading process of Ivory Park. Many reasons contribute to this situation, however, in the literature it has been stated that the achievement of a sustainable human settlement requires that all elements for the creation of sustainable human settlements are met. However, the informal settlements intervention approach adopted in the upgrading of Ivory Park namely *'phased in situ'* upgrading approach provides for the achievement of sustainable human settlements. The process of upgrading Ivory Park is slow and it is delaying the transformation to sustainable human settlement. Therefore, the conclusion is that Ivory Park is not yet a sustainable human settlement and if they continue with the same informal settlements intervention approach it will eventually become a sustainable human settlement.

Chapter 1: Introduction

1.1 Introduction

The estimated number of poor urban residents in developing countries is one billion and the number is increasing more rapidly compared to that in rural areas (Payne and Majale, 2004). The fast-growing population of the urban poor resulted in putting too much pressure on the resources of national and local governments (*Ibid).* As a result few governments could meet the increasing need for planned and affordable housing and municipal services (*Ibid).* As a result, the majority of residents in urban areas are unable to afford planned land, housing and municipal services. Therefore, they create their own solution - residing in various types of slums, unauthorised or informal settlements (Huchzermeyer, 2004). These settlements are not legally recognised and serviced by the city authorities. Poor urban residents, who compose half of the urban population in most cities of the developing world, live in poor-quality housing with inadequate provision of water, sanitation and drainage, and hence their lives and health are in threat (UNCHS, 1997). The number of urban residents who live in informal settlements is quite high: in 2004, the UN-Habitat estimated it to be 942 million, and if no major changes to the policies and practice of urban management are made, the number is expected to increase to two billion by 2030. This reflects the serious problem of urbanisation poverty in developing countries (Payne and Majale, 2004).

Based on the challenges of the increasing formation of informal settlements that developing and urbanising states are faced with, the Second United Nations Conference on Human Settlements (Habitat II), held in Istanbul, Turkey from 3-14 June 1996, offers a positive vision of the achievement of sustainable human settlements within a framework of goals, principles and commitments. This vision for cities aims to achieve settlements where all have adequate shelter, a healthy and safe environment, basic services and productive and freely chosen employment (Springer, 1996). At Habitat II, two themes were discussed - provision of adequate shelter for all, and development of sustainable human settlements in an urbanising world - and within these two themes human beings were the centre of attention as it is believed that healthy and productive living that is harmonious with nature, are the rights of human beings (UNCHS, 1996). A

document entitle 'Habitat Agenda' emerged from this conference, which is essentially a commitment to improving the living conditions in the world's cities, towns and villages, making them safer, healthier and more sustainable (Springer, 1996:7). This commitment is made by states that participated in Habitat II. Basically, the states that participated in this conference adopted Habitat Agenda, which outlines how the states can achieve the vision of providing adequate shelter for all and achieving sustainable human settlements in an urbanising world. South Africa is one of the countries that adopted Habitat Agenda.

Therefore, with this understanding, this research report aims to investigate if in South Africa, the adoption of Habitat Agenda led to the creation of sustainable human settlements. As will be discussed in the background of this research, it was established in the Habitat Agenda that sustainable human settlements can be achieved through informal settlements upgrading. Therefore, based on this understanding, this research aims to investigate whether the upgrading of the informal settlement known as Ivory Park in Johannesburg, led to the creation of sustainable human settlement.

In a quest to discover if the informal settlement upgrading of Ivory Park led to the creation of a sustainable human settlement, the crucial part of this investigation focused on the kinds of approaches of informal settlements intervention that the country, city or area adopts. In South Africa, the approaches adopted to deal with informal settlements are found within housing policy framework. Therefore, this research will deepen its investigation through the review of national and provincial housing policies in South Africa, to determine whether these policies provide room for the achievement of sustainable human settlements, in other words, to find out if these policies address the conditions for the achievement of sustainable human settlement.

This chapter aims to discuss where the need for this research arose, which will be discussed in the background to this research. The aims, rationale and problem statements of this research will be made evident in this chapter. This will further elaborate on what the research aims to achieve, why the research is necessary and important, and the problem that the research addresses and aims to solve. With regard to a conclusion for this investigation, this chapter will provide and explain research questions that the researcher aims to answer, and thereafter provides a

hypothesis, which is a statement of the assumed answer for the research questions. This chapter will conclude by providing an outline of the organisation of the research report

1.2 Background to the study

The need for this research arose from the Habitat Agenda, the official political document, which came about as a result of Habitat II. The Habitat Agenda is the document where the vision for the creation of sustainable human settlements was made a reality, through states that participated in Habitat II and who committed to improving the living conditions of the world's cities, towns and villages, making them safer, healthier and more sustainable (Springer, 1996). At this conference, 171 countries adopted this Habitat Agenda. Two themes were discussed: the provision of adequate shelter for all, and the creation of sustainable human settlements in an urbanising world (UNCHS, 1997). At Habitat II, participating states made seven major commitments which are as follows: adequate shelter for all; sustainable human settlements; enablement and participation; gender and equality; financing shelter and human settlements; international cooperation; and assessing progress (*Ibid*). For the purpose of this research, only commitments made with regard to provision of adequate shelter for all and sustainable human settlements will be discussed, because they relate directly to the investigation of this research. The substantial aim of this conference was to achieve cooperation among countries in order to build a world of safety, happiness, good health, hope and a decent life of dignity (UN-Habitat, 1996).

The countries that participated in Habitat II and adopted the Habitat Agenda committed themselves to the following goals focused on achieving adequate shelter for all;

- To develop policies to make housing affordable and accessible by:
  a) Providing subsidies and other types of housing assistance
  b) Supporting community-based, cooperative and non-profit housing programmes
  c) Mobilising new types of financial and other resources for housing and community development, and consulting with the affected people to come up with new policies and strategies. (Springer, 1996:17)
- To encourage the participation of Community Based Organizations (CBOs) and Non Governmental Organizations (NGOs) in order to facilitate access to land and security of tenure for all socio-economic groups by:

a) Adjusting legal frameworks to stimulate the diverse ways people organise the production and management of land, housing and services
b) Support capacity building of NGOs and CBOs to make them efficient partners
c) Encourage lending institutions to recognise that CBOs may act as guarantors for those who lack other sources of equity such as minorities, the poor and women (Springer, 1996: 20).

- To enable housing finance institutions to serve the needs of large segments of the population, particularly those belonging to vulnerable and disadvantaged groups, the poor and low-income people by:
  a) Adopting policies to extend more housing finance credit to poor people and eradicate discrimination against borrowers
  b) Encouraging the private sector to provide resources for rental housing, maintenance and rehabilitation
  c) Supporting non-traditional finance
  d) Encouraging all financial institutions to be more efficient
  e) Making community mortgage programmes accessible to poor people, especially women
  f) Encouraging cooperatives to play a greater role in mobilising finance through savings and credit cooperatives, credit unions, cooperative banks, and trade union or community-based financial and housing cooperatives
  g) Providing subsidies to allow people without access to credit and land to enter the housing market (*Ibid*: 21).

These countries further committed themselves to the goals of achieving sustainable human settlements in an urbanising world through the following: developing societies that will make use of resources in such a way that they (resources) will be enough for the present generation without compromising the future generation; and by making use of resources within the carrying capacity of the ecosystems (UNCHS, 1997). In addition, people from vulnerable and disadvantaged groups should live a life in harmony with their cultural heritage and spiritual and cultural values, and their cultural beliefs and values should not be compromised (UNCHS, 1997). In addition, the following specific commitments, with the aim of achieving sustainable human settlements, have

been made through adopting Habitat Agenda (by implication, achievement of the following objectives would mean that sustainable human settlements would have been achieved;

- Promoting, as appropriate, socially integrated and accessible human settlements, including appropriate facilities for health and education, combating segregation and discriminatory and other exclusionary policies and practices, and recognising and respecting the rights of all, especially of women, children, persons with disabilities, people living in poverty and those belonging to vulnerable and disadvantaged groups
- Providing adequate and integrated environmental infrastructure facilities in all settlements as soon as possible, with a view to improving health by ensuring access for all people to sufficient, continuous and safe freshwater supplies, sanitation, drainage and waste disposal services, with a special emphasis on providing facilities to segments of the population living in poverty
- Promoting integrated water use planning with a view to identifying effective and cost-efficient alternatives for mobilising a sustainable supply of water for communities and other uses
- Promoting, where appropriate, the upgrading of informal settlements and urban slums as an expedient measure and pragmatic solution to the urban shelter deficit
- Giving priority to human settlements programmes and policies to reduce urban pollution resulting especially from inadequate water supply, sanitation, and drainage, poor industrial and domestic waste management, including solid waste management, and air pollution (UNCHS, 1996)
- Promoting the development of more balanced and sustainable human settlements by encouraging productive investments, job creation and social infrastructure development in small and medium-sized cities, towns and villages.

South Africa is one of the countries that 'endorsed the Habitat Agenda for sustainable human settlements at Istanbul in 1996 and is committed to promote its implementation and to report on progress' (Department of Housing, 2000:1). The adoption of Habitat Agenda in South Africa to achieve sustainable human settlements and adequate shelter for all started through the National Housing Policy and Strategy for South Africa (1994) and the Housing Act (1997), where it commits itself to achieve adequate shelter for all and sustainable human settlements development

(Department of Housing, 2000). The National Housing Policy and Strategy for South Africa (1994) aims to achieve settlements that are viable, socially and economically integrated communities that are situated in areas that allow for convenient access to economic opportunities as well as health, educational and social amenities (*Ibid).* Through this policy, it is envisaged that all South Africans would have access to permanent residential structures, portable water, adequate sanitary facilities including waste disposal and domestic electricity supply. The aim is to provide permanent residential structures with secure tenure, privacy and adequate protection (*Ibid).* Follow-up research on the adoption of Habitat Agenda was done through the commissioning of the CSIR at the beginning of 2002 by the Department of Housing to investigate the sustainability of settlements in South Africa (CSIR, 2002).

After the implementation of this policy, there was a realisation of its shortfalls and shortcomings, and therefore the Department of Housing introduced another policy known as 'Breaking New Ground, a Comprehensive Plan for the Development of Sustainable Human Settlements' (2004). This policy, as the name clearly suggests, was aimed specifically at achieving sustainable human settlements. These housing policies that have been adopted in South Africa with the aim of achieving commitments sets out in the Habitat Agenda will be discussed in greater details in the policy review chapter.

The commitment in the Habitat Agenda to 'promoting where appropriate, the upgrading of informal settlements and urban slums as an expedient measure and pragmatic solution to the urban shelter deficit' (UNCHS, 1996:5*)* asserts that upgrading of informal settlements is one of the components of achieving sustainable human settlements. From this understanding arises the need to investigate whether in South Africa, as one of the countries that adopted the Habitat Agenda, upgrading of informal settlements includes the conditions agreed upon to create sustainable human settlements in Habitat II. However, the focus will be on one aspect of informal settlements upgrading, which is service delivery. In other words, the need to investigate whether South African informal settlements upgrading, looking specifically at service delivery, includes the elements of sustainable human settlements as they were laid down at Habitat II.

As much as the enquiry in this research is to find out if informal settlements upgrading leads to the achievement of sustainable human settlements in South Africa using the case study of Ivory Park, the need for this research also arise from the kind of informal settlements intervention approach that was adopted in South Africa during the upgrading of Ivory Park. The informal settlements intervention that was adopted during the upgrading of Ivory Park is embedded within the National Housing Policy Strategy for South Africa (1994). This policy has its shortcomings, the main one being its inability to produce sustainable human settlements especially with regard to informal settlements upgrading, because the approach is supply driven rather than demand responsive (Huchzermeyer, 2003).

However, after realising the shortfalls of the National Housing policy and Strategy for South Africa (1994), the Department of Housing came up with a new policy that was aimed specifically at achieving sustainable human settlements which is known as 'Breaking New ground, A Comprehensive Plan for the Development of Sustainable Human Settlements' (2004). Thereafter, provincial housing policies were informed by this new policy, including, for example, the Gauteng Department of Housing's five-year strategic plan (2004-2009). Therefore, the need arises to enquire if the changes proposed in 'Breaking New Ground'" have been addressed in the upgrading of Ivory Park in order to correct the mistakes in the informal settlements intervention approach brought about by the National Housing Policy Strategy for South Africa (1994).

1.3 Research aims

This research aims to demonstrate the practical application of the outcomes of the Second United Nations Conference of Humans settlements (Habitat II) in a South African situation. It aims to do this by demonstrating the results of adopting Habitat Agenda in South Africa through assessing whether the upgrading of informal settlements in the country led to the creation of sustainable human settlements, using the case study of Ivory Park, Johannesburg. This investigation will be accompanied by the demonstration of informal settlements intervention approaches adopted in the upgrading of informal settlements in South Africa. These approaches are embedded within housing policies such as National Housing Policy and Strategy for South Africa (1994), 'Breaking New ground, a Comprehensive Plan for the Development of Sustainable Human

Settlements' (2004) and the Gauteng Department of Housing: Five Year Strategic Plan (2004-2009).

The case study area for this research is Ivory Park and it has been upgraded using the National Housing policy and Strategy for South Africa (1994), which has been criticised for its inability to transform informal settlements into sustainable human settlements, because its informal settlements intervention approach is supply driven rather than demand responsive (Huchzermeyer, 2004). Therefore, this research aims to demonstrate how the three fundamental changes from the National Housing Policy and Strategy for South Africa (1994) that have been proposed in Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlements (2004), are being incorporated in the ongoing process of upgrading Ivory Park. These fundamental changes are as follows: to move away from 'breadth to depth'; a shift from supply to demand-side delivery (from Greenfield developments to *in situ* upgrading); and the concentration of policy on the people housing process (Huchzermeyer, 2006b), This research aims to contribute broadly to the existing literature about informal settlements upgrading as one of the components of achieving sustainable human settlements, but looking specifically at one aspect of informal settlements upgrading - service delivery. In this regard, the research asks that if service delivery is one of the ways of upgrading informal settlements, does it contribute to the achievement of sustainable human settlements?

1.4 Rationale

This research report is of paramount importance because if Department of Housing officials read the report, they would have an opportunity to evaluate the effectiveness of informal settlements intervention approaches proposed in Breaking New Ground, A Comprehensive Plan for the Development of Sustainable Human Settlements (2004), as compared to the ones in National Housing Policy and Strategy for South Africa (1994). These officials would be able to evaluate the effectiveness of informal settlements intervention approaches with regard to the ability of their approaches to produce sustainable human settlements. This would be possible because this research focuses on an area that was initially upgraded using an informal settlements intervention approach proposed in National Housing Policy and Strategy for South Africa (1994) and then

shifted to adopt an informal settlements intervention approach proposed in Breaking New Ground, A Comprehensive Plan for the Development of Sustainable Human Settlements (2004).

This evaluation would enable the Department of Housing to identify the gaps between policy and implementation, and would therefore know what conditions or factors to address in the next housing policy. Because the case study is in Gauteng, it would offer officials from other provinces a reference case of what works and what does not work, and therefore assist them in their future development of informal settlements intervention approaches.

The importance of this research lies in the contribution it will make towards the existing literature on achieving sustainable human settlements through informal settlements upgrading. This contribution is quite crucial as it focuses on how the policy implementers rectify the mistakes on the ground. For instance, Ivory Park's upgrading was guided initially by the National Housing Policy and Strategy for South Africa (1994), however, while still being upgraded; a new policy was adopted with a better informal settlements intervention approach known as Breaking New ground, A Comprehensive Plan for the Development of Sustainable Human Settlements (2004). This research's contribution lies in that it focuses on how the city incorporates changes that have been proposed in the new policy when upgrading was started in terms of an old policy.

The significance of this research lies in the substantial contribution to the literature. This is with regard to demonstrate the, is with regard to demonstrate the possibility of the city to still achieve a sustainable human settlement through informal settlements upgrading. Even though the city started the upgrading process being guided by a policy that is regarded as a not working policy in terms of achieving sustainable human settlement. This simply demonstrates to the interested parties that if cities have adopted an upgrading approach at the beginning of the upgrading process, it does not necessarily have to end with the initial approach; changes and adjustments can be made if they lead to the desired goals. Hence, this research is important because it gives a practical application of the above.

The importance and necessity of this research report lies in the fact that there is little literature on informal settlements upgrading as a way of achieving sustainable human settlements. Therefore, this research is important as it adds to that limited literature. It also adds to the limited literature on service delivery as one of the components of upgrading informal settlements, and more especially with regard to the ability of service delivery to contribute to the creation of sustainable human settlements.

1.5 Problem statement

More people in the developing world decide to live in the cities rather than in countryside or rural areas because; there are better economic opportunities in cities (Kramer, 2006). Our world is now become urbanised; it is no longer going through the process of urbanisation (*Ibid*). As people come to cities looking for employment opportunities they cannot afford to buy their own houses, pay rent and for municipal services. Because cities are unprepared for such a large number of residents, these people create their own settlements (Dewar, 2002). These settlements are not planned for by local municipalities and are therefore illegal, without electricity, clean water, sewerage, garbage collection systems, and community organization, and they are called informal settlements, or unlawful occupation, or urban slums (Hart, 1992).

The problem that this research aims to address is that one billion people, or one in three urban residents, lives in urban slums. Because of this global problem, at Habitat II, countries that participated in the conference committed themselves to the goals of solving this problem through reaching the goals of achieving the provision of adequate shelter for all, and achieving sustainable human settlements in an urbanising world. South Africa is one of the countries that committed themselves to these goals.

The problem is that in South Africa, the informal settlements upgrading approach that is embedded within the National Housing Policy and Strategy for South Africa (1994) does not address the conditions for the achievement of sustainable human settlement. Breaking New Ground, A Comprehensive Plan for the Development of Sustainable Human Settlements (2004), is aimed specifically to achieve the creation of sustainable human settlements, but was only adopted in 2004. Does this mean there is no possibility of the informal settlements that were

upgraded through National Housing Policy and Strategy in South Africa (1994) becoming sustainable human settlements? If it would still be possible to achieve sustainable human settlements, even though the initial policy adopted did not stipulate conditions leading to the creation of sustainable human settlements, how would the mistakes made under the old policy is addressed when the upgrading process of that particular informal settlement had already started or if the upgrading had been completed?

1.6 Research question

Main research question

To what extent does the informal settlement upgrading of Ivory Park, Johannesburg, contribute to the creation of sustainable human settlements?

Sub-questions

1) Have the conditions for the achievement of sustainable human settlements sets out in the Habitat Agenda been addressed in the upgrading of Ivory Park?

2) Is informal settlement upgrading one of the informal settlements intervention approaches that leads to the creation of sustainable human settlements?

3) Are the three fundamental changes found in the new housing policy (Breaking New Ground), namely to move away from 'breadth to depth', a shift from supply to demand-side delivery - from Greenfield developments to *in situ* upgrading, and the concentration of policy on the people housing process, being incorporated in the ongoing process of upgrading Ivory Park?

4) Are the municipal services (sanitary facilities, water, electricity, maintenance of streets and parks, health facilities etc) currently provided in Ivory Park contributing to the good health of the community?

5) What is the municipality doing to improve the quality of service delivery in Ivory Park to make it a sustainable human settlement?

1.7 Hypothesis

Based on the understanding that Ivory Park has been upgraded guided by the National Housing Policy and Strategy for South Africa (1994), the hypothesis that this report aims to prove is that the upgrading of Ivory Park contributes, to a very large extent, to the creation of sustainable human settlements. The ongoing process of upgrading of Ivory Park has made this contribution possible because it allows for adjustments and changes brought by the new housing policy, to be incorporated into the upgrading process and therefore achieve sustainable human settlements.

1.8 Organisation of the report

This research report is composed of six chapters:

Chapter one introduces the research report by setting the background for the research from which the need for this research arose. The problem statement, rationale and research aims are discussed in this chapter, which leads to the unpacking of the research's main question, sub-questions and hypothesis.

Chapter two conceptualises the research by providing an understanding of key concepts and a discussion on informal settlements intervention. The conceptualisation of the research establishes the relationship between informal settlements and sustainable human settlements, and also determines, whether informal settlements upgrading is one of the informal settlements interventions leading to the creation of sustainable human settlements?

Chapter three reviews National Housing Policy and Strategy for South Africa (1994), Breaking New Ground, a Comprehensive Plan for the Development of Sustainable Human Settlements (2004), and Gauteng Department of Housing: Five-Year Strategic Plan (2004-2009). The review of these policies, together with research conceptualisation, serve as the means through which one can answer the research questions.

Chapter four discusses the research method employed in undertaking this research and describes the case study area, namely Ivory Park, Johannesburg.

Chapter five presents the findings which have been collected through the research method discussed in chapter four, and analysed these.

Chapter six concludes the research report in terms of the discussion about the answer to research questions, what it tells us about the South African informal settlements upgrading as a way of achieving sustainable human settlements, and a discussion of a way forward.

Chapter 2: From informal settlements to sustainable human settlements

2.1 Introduction

This chapter reviews the literature that is related to the research topic and ultimately leads to answering the research question. The main aim of this chapter is to conceptualise the research topic through two sections: the first provides an understanding of key concepts used in this study, such as informal settlements and sustainable human settlements; the second seeks to understand various forms of informal settlements interventions in relation to the creation of sustainable human settlements. The specific questions that this chapter aims to answer are as follows: Is there a relationship between informal settlements and sustainable human settlements, and is upgrading of the informal settlement one of the informal settlements intervention approaches that leads to the creation of sustainable human settlements?

2.2 Research conceptualisation

This section discusses key concepts used in this study, namely informal settlements and sustainable human settlements. It aims to do this by providing an understanding of these concepts and establishing the relationships between them. These key concepts underpin this research in a such a way that they set premises upon which to determine whether or not the upgrading of Ivory Park led to the creation of sustainable human settlements. The understanding of the concept of 'sustainable human settlements' will assist in determining which of the informal settlements interventions leads to the creation of sustainable human settlements, as will be discussed in the second section of this research report.

2.2.1 Informal settlements

This sections aims to give an understanding of the concept of informal settlements. This will be broken down in to two sub-sections namely; defining informal settlements and reasons for living in informal settlements.

Defining informal settlements

The term 'informal settlement' has many definitions. A number of authors have offered definitions for the term, for example, Hindson and McCarthy (1994) defined informal settlements as settlements where residents are housed in self-constructed shelters and their land tenure is either informal or traditional. Huchzermeyer (1999) defined informal settlements in terms of the physical environment, because she maintains a settlement exists where there is a lack of basic infrastructure and services. According to the United Nations (UN), informal settlements are residential areas that meet all of the following criteria: poor quality of built environment; inadequate access to water and sanitation; overcrowding; and insecure tenure (Badiane, 2003). Informal settlements can also be understood as those settlements that are formed spontaneously at the edge of cities, or on pockets of marginal and within city boundaries, and are formed without legal recognition or rights (South African Cities Network, Undated).

The term 'informal settlement' has been referred to by different names. For instance, in South Africa it was referred to as 'squatting' until this term was replaced with 'unlawful occupation' after the 1994 legislation (Huchzermeyer, 2004). In Brazil, an informal settlement is referred to as a 'favela' - a popularly derived Brazilian term that has no equivalent in the technocratically inspired term 'informal settlement' *(Ibid)*. Generally, informal settlements are often referred to as squatter settlements, however, the term has also been referred to as shack housing in backyards either on serviced sites or on invaded land (Hart, 1992). 'Slum' is another word which is used to refer to informal settlements. The word slum was not widely used in South Africa because of its negative association with the Prevention of Squatting Act of the apartheid government in 1951. Another reason 'slum' is not used often is because referring to a community as a slum defines it in a way that justifies destroying it (Davis, 2006, as cited in Sibiya, 2007).

Not all informal settlements are the same, and this is why even the authors who have defined the term concentrated on its different aspects. Informal settlements differ based on types of shelter, kinds of informal tenure, their location and whether or not they are officially recognised (Hindson and McCarthy, 1994). The different types of informal housing that exist are spontaneous informal housing, and site and services informal housing (Hart, 1992). Spontaneous informal housing is characterised by the backyard shacks and free-standing informal settlements. Informal settlements are categorised under the site and services informal housing when there is a provision of services within that settlement, but the houses are informal (*Ibid*).

Although informal settlements are different as explained above, they share the following similar characteristics:

- Lack of basic municipal services - water, sanitation, waste collection, storm drainage, street lighting, paved footpaths, roads for emergency access
- High unemployment and low income levels of residents
- Low literacy levels of residents
- Malnutrition and rampant disease, such as HIV/Aids
- Environmental degradation
- Lack of social infrastructure within reach, such as schools, health facilities, child play areas, etc.
- High mortality rates and decreasing life expectancy of residents. Despite the fact that the average age of people in cities is increasing, the average age of informal settlement dwellers is decreasing because the youth suffer most from unhealthy conditions
- Lack of security of tenure
- Lack of community facilities (The World Bank Group, 2002).

Residents of informal settlements are extremely vulnerable because they do not have access to land, tenure, adequate shelter and services. Their vulnerability arises mostly because of their unsecured state of stay as they face the fear of being evicted everyday (Hart, 1992). The majority of informal settlements residents live in extreme poverty as they do not have access to bank

finance to afford decent housing (Huchzermeyer, 2004). Poverty and a negative living environment results in the high risk of disease and mortality that the informal settlement residents are faced with (South African Cities Network, undated).

Reasons for living in informal settlements.

Informal settlements are the result of an urgent need for shelter by the urban poor. The obvious reason people decide to live informal settlements is the fact that government cannot afford to provide for all those in need of housing (Huchzermeyer, 2006b). Because the poor do not have access to bank financing to afford decent housing, and the government cannot provide for all people in need of formal housing, the urban poor are forced to live in informal settlements (Dewar, 2002). This reason makes informal settlements a common phenomenon in urban areas; they are a manifestation of an urban development problem and, most importantly, they are not just a lack of housing or a physical condition, but a social process indicating urban poverty (Huchzermeyer and Karam, 2006). As it is the responsibility of the public sector, the legislative framework and the economy to provide conditions through which the urban poor may be housed formally, informal settlements are an indication of a failure of these three sectors (Huchzermeyer and Karam, 2006).

Informal settlements are the only settlement option for the poorest citizens as they represent the cheapest way in which they can have accommodation in urban areas. This is mostly applicable to young households who want to have their own dwellings where they can raise their families (Dewar, 2002). Usually, young individuals who migrated from rural areas to urban areas in search of employment opportunities opt to live in informal settlements, because they are the cheapest accommodation they can get in urban areas (*Ibid).* For some, informal settlement is their preferred option, for example, when they are in the city temporarily. In such cases, these people return to their original homes once they have accomplished what they were in the city for, , therefore it is unnecessary for them to find a permanent structure in which to live (*Ibid*).

Some people decide to live in informal settlements, because they are close to their places of employment. A common reason among informal settlements residents is that it is more affordable due to the low cost of rentals and services and because it is sometimes free to live in

informal settlements (Hart, 1992). This research will not adopt other terms that are used to refer to informal settlements such as squatter camps, back yard shacks, inner city slums, unlawful occupation, favelas etc. Therefore, the term 'informal settlements' will cover these variations. These definitions of informal settlements provide lenses through which one can see and understand what needs to be incorporated into the informal settlement intervention approaches if the aim is to achieve sustainable human settlement. The next section clearly demonstrates that dealing with informal settlements has to result in sustainable human settlement because the conditions and characteristics that make up an informal settlement are all addressed by the concept of sustainable human settlement. Therefore, the informal settlement intervention approach that was adopted in upgrading Ivory Park has to have elements of sustainable human settlements if we are to establish that it is a sustainable human settlement.

2.2.2 Sustainable human settlements

The term sustainable human settlements is embedded within the concept of sustainable development, that is defined by the World Commission on Environment and Development (WCED) as a "development that meets the needs of the present without compromising the ability of future generation to meet their own needs" (WCED, 1987 as cited in CSIR, 2002a:10). This definition is a widespread and acceptable definition of sustainable development.

There is often confusion with the meaning of sustainability and sustainable development, in most cases these two terms are seen to be describing two different ideologies. However, these terms, describe the same meaning. For instance, sustainability states that human beings should live in an environment that provides quality of life in a sense that all hierarchy needs should be met. In all these the basic requirement is that "all people should live in a safe, healthy and productive environment in harmony with nature and local cultural and spiritual values" (CSIR, 2002b:14). Sustainable development does not merely refer to a sustained development, but rather it refers to a development that needs to be pursued in order to achieve the state of sustainability (CSIR, 2002b). The idea behind sustainable development is that it is a process of achieving a balance between the demands of people and what is ecologically possible. The principles of sustainable development include economic, social, and environment aspects (*Ibid*). What is important within

these principles in order to achieve sustainable development is for the decision makers to make trades off, because they have conflicting requirements (CSIR, 2002b).

The report on sustainability of human settlements in South Africa (CSIR, 2002a: 13) defines sustainable human settlements as those settlements that "enable societies to live in a manner that supports the state of sustainability and principles of sustainable development" and that have "institutional, economic and social systems that will ensure the continued existence of those settlements". In addition, settlements are determined whether they are sustainable or not depending on the interaction of the following four patterns; physical structure, use, social, and operational patterns (CSIR, 2002b).

According to the Habitat Agenda, sustainable human settlements is "where all have access to adequate shelter, a healthy and safe environment, basic services and productive and freely chosen employment" (Springer, 1996: 7). This means that as much as sustainable human settlement is not all about housing provision, part of achieving sustainable human settlements is through the provision of adequate shelter for all. Therefore, the houses that are provided have to be sustainable. But, the sustainability of urban housing has the following different types; ecological, economic, social, technological, and cultural (Nazrul, 1996). Therefore, these have to be taken in to consideration when providing sustainable housing.

A South African definition of sustainable human settlements revolves around the idea that sustainable human settlement is more than housing provision. Sustainable human settlement is created when economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for existence, this is possible through a well managed entities (urban and rural) and hence, this practice result in sustainable development, wealth creation, poverty alleviation and equality (City of Johannesburg, 2006b). In addition, sustainable settlement is one where people enjoy secure tenure, can access basics such as water, sanitation, health care and education, and where people enjoy a safe environment and have easy access to safe, affordable public transport and one which provides sufficient economic opportunities (*Ibid).* Most importantly these benefits of sustainable human settlements should not be derived at the expense of the natural environment (*Ibid*).

The concept sustainable human settlement involves two agendas; the first one is that the government should respond to the demand for housing in the cities taking into consideration that the majority of households in need of accommodation are poor, in a sense that they lack resources to access bank finances in order to purchase bonded houses (City of Johannesburg, 2006a). This context puts the government in a position where it needs to move away from approaching settlement formation the way the previous local government did before 1995 in South Africa, by just rezoning the land for residential development, assembling land by extending requisite services and approving building plans with the assumption that the market would deliver for all (*Ibid)*. The main idea here is that the government should not approach settlements formation this way, because the majority of urban residents will end up residing in informal settlements, backyard shacks, and inner city slums (*Ibid*).

Secondly, the concept of sustainable human settlement involves creating conditions in which people can enjoy healthy, productive, and well-integrated urban lives. This is the idea that settlements should not just house people it should be "sustainable" in a sense that it should ensure that residents live in a safe, healthy, and dignified conditions, residents should have easy access to urban amenities, the ability to exercise their need for community and opportunities to realize their future aspirations (City of Johannesburg, 2006a).

The understanding of what constitute the achievement of sustainable human settlement provides lenses through which one will determine if Ivory Park, the case study for this report is a sustainable human settlement or not. The kind of informal settlement intervention approach that is adopted when upgrading Ivory Park is an important tool for making Ivory Park a sustainable human settlement and becomes useful if it addresses two most important factors for the creation of sustainable human settlements which are poverty and conditions for sustainable human settlement (healthy and safe environment, productive and well integrated urban lives, easy access to urban amenities, ability to exercise their need for community and opportunities to realize their future aspirations). Therefore, the next section of literature review discusses the various informal settlements intervention approaches that exists internationally, this discussion will be aiming to identify which approach provides for the achievement of sustainable human settlements. Hence,

one will locate which informal settlements intervention has been adopted in the upgrading of Ivory Park.

2.3 Informal settlements intervention approaches

The main aim of this section is to provide a discussion on broad informal settlement intervention approaches that exist internationally in order to establish what the literature says about various informal settlements interventions in relation to the creation of sustainable human settlements. To answer the research question- whether the creation of sustainable human settlements is achieved through an informal settlements upgrading approach - various international informal settlement intervention approaches need to be discussed. This section starts by giving an understanding of what is meant by informal settlements intervention. It then provides a brief discussion on international historical developments and various informal settlements intervention approaches in relation to the creation of sustainable human settlements.

Abbott (2002b) argues there is no clear or concise definition of informal settlements intervention. It therefore refers to "any sector-based intervention in the settlement that results in a quantifiable improvement in the quality of life of the residents affected," (Abbott, 2002b:18). This means that there is a range of potential interventions yielding a number of different informal settlement intervention approaches (Huchzermeyer, 1999).

The understanding of informal settlements intervention has traditionally fallen into either the Marxist or the liberal frameworks. These frameworks understand informal settlements differently and, therefore, proposed different informal settlements interventions. For instance, the Marxist framework understands informal settlements as "a manifestation of social exploitation by the dominant capitalist class," (Huchzermeyer, 1999:5). It proposes informal settlements interventions that focus on the sociopolitical, not on the physical dimension of the informal settlements, emphasising that mobilisation would bring societal change with regard to ending capitalist exploitation (Huchzermeyer, 1999).

A liberal framework accepts the continuum of the capitalist exploitation and so its informal settlements intervention aims to reduce the consequences of exploitation through coping

mechanisms for residents to survive on their minimal share in the economy (Huchzermeyer, 1999). The two frameworks were criticised for failing to put in place meaningful economic upliftment of the beneficiaries. It was then that informal settlements intervention approaches building on existing processes within the informal settlements, were suggested. The involvement of dwellers in the approach, which is broadly known as 'self-help', was the one that dominated as a move away from these two frameworks (*Ibid).*

The international informal settlements intervention mainstream has been informed by the 'market-driven' or 'neoliberal' insights which do away with the Marxist framework and adopt the liberal ideas (Huchzermeyer, 1999). The neoliberal framework consisted of the 'self-help' approach as developed by Turner in the 1960s and 1970s (Petras, Leiva, and Veltmeyer, 1994). This approach was reduced to technocratically defined 'sites and services' and 'upgrading' approaches (Huchzermeyer, 1999). These approaches left little space for social processes. The neoliberal framework formed became the reference point for the development of informal settlements intervention in many countries, South Africa being one of them (*Ibid).* Hence, a number of different informal settlements intervention approaches emerged. Some of the approaches are discussed as follows in the following sections.

2.3.1 Informal settlements upgrading approach

Informal settlements upgrading refers to interventions or programmes aimed at reducing or abolishing conditions of informal settlements to make them formal settlements. These interventions differ depending on the context of the settlement and place. Therefore, different authors have different views on what constitutes the process of upgrading an informal settlement. For instance, Cities Alliance Networks (2003) sees informal settlements upgrading as a process of intervention in the physical, social, economic, organisational, judicial and environmental improvements undertaken co-operatively and locally amongst citizens, community groups, businesses and local authorities. Abbott and Douglas (2001) say informal settlements upgrading should involve reducing the vulnerabilities of the people living in those settlements. Four elements of vulnerabilities to be reduced have been identified: physically marginalised environments, absence of opportunities for asset retention and growth, poverty from an individual's point of view (own poverty) and compromised space of those settlements (Abbott

and Douglas, 2001). The basic and simple meaning of informal settlement upgrading is the provisions of a package of basic services, for example, clean water supply, adequate sewerage disposal, and the building or improvement of housing for the poor and the legalising and regularising of properties in cases of insecure tenure (Abbott and Douglas, 2001).

The beginning of an upgrading process can be the physical improvement of streets, footpaths, drainage and solid waste collection, streetlights for security and night activities and electricity to homes (Cities Alliance Networks, 2003). At the secondary level, upgrading may also include dealing with social development needs through the provision of health facilities (clinics and hospitals), educational facilities, recreational facilities, tourist and local economic development services and environmental management programmes (The World Bank Group, 2001). The aim of the intervention programmes is to increase income-earning opportunities and the economic health of the community, with the belief that these would improve the livelihood of the residents (The World Bank Group, 2001). The overall upgrading of informal settlements in general includes the following actions:

- installing or improving basic infrastructure, for example, water reticulation, sanitation/waste collection, rehabilitation of circulation, storm drainage and flood prevention, electricity, security lighting and public telephones
- removal or mitigation of environmental hazards
- providing incentives for community management and maintenance
- constructing or rehabilitating community facilities such as health facilities, community open spaces
- regularising security tenure
- home improvement
- relocation/compensation for the small number of residents dislocated by the improvements
- improving access to health care and education as well as social support programmes to address issues of security, violence, substance abuse, etc.
- enhancement of income-earning opportunities through training and micro-credit schemes, and

- building social capital and the institutional frameworks to sustain improvements. (The World Bank Group, 2001; The Cities Alliance Networks, 2003)

Types of informal settlement upgrading

Within the informal settlements upgrading approach there are a number of approaches. Some of the approaches are as follows;

The *in-situ* informal settlement upgrading

There is a conventional and non-conventional *in-situ* informal settlement upgrading. The conventional *in-situ* informal settlements upgrading approach is regarded as the most challenging and complex as opposed to the 'quick fix' approaches such as Greenfield developments (Misselhorn, 2008). It is referred to as the redevelopment of informal settlements in a complete fashion with respect to housing, tenure and infrastructural services (*Ibid).* The *in-situ* informal settlements upgrading has the following characteristics:

- It entails an effort to retain as many residents on site as possible and to eliminate or minimise relocations
- It requires extensive and often challenging social engagement with local residents
- It is time consuming, typically taking between seven and 12 years (or even longer) from concept to completion based on actual case histories (although it must be appreciated that the time-frames for all housing projects, including green-fields projects, are
    - typically radically understated),Upgrading has become increasingly more complex with the passage of time as a result of the ongoing densification of informal settlements, increasing scarcity of alternative land,

  and growing dissatisfaction and political conscientisation of the urban poor (more challenging social processes). (Misselhorn, 2008:10)

Before the undertaking of such a project, the full range of project fundamentals has to be secured and the activities that are required in this regard are "extensive community interactions and workshops and the acquisition of community buying (preferably including a socio-economic survey/enumeration process, supplemented by focus group sessions to gain more qualitative

information on settlement dynamics and livelihoods strategies)" securing of land availability ; securing bulk services availability with preliminary cost estimates; completing a preliminary. environmental assessment and identifying no material constraints ; Geotechnical conditions assessment and confirmed as being adequate; preliminary town planning including preliminary layout, yield estimates, determination of possible relocation, and identification of relocations solutions; preliminary services layouts and services estimates; and planning and environmental approvals confirmed as achievable (Misselhorn, 2008:11). With regard to logistical issues of redevelopment in informal settlements where residents are already residing, the rollover and temporary relocation approaches are incorporated in the upgrading process/approach (Misselhorn, 2008).

The phased housing programme falls in the *in-situ* upgrading of the informal settlements. A good example of this approach is the Mayibuye Programme in Gauteng (Engelbrecht, 2003). The first step towards upgrading in this programme is the purchase of the land by the residents who are already living in the settlement, and the second is the installation or upgrading of electricity, water, sewerage reticulation and roads (Engelbrecht, 2003). In essence, the phased housing programme recognises that housing is not the first priority for informal settlements residents. For example, in four informal settlements in Gauteng, the provision of housing was not identified as the first priority in the upgrading process by residents. In Eatonside, water and electricity were identified as the first priority, with housing being in the fourth (CASE, 1998a). The residents of Soshanguve Extension Four identified tenure security and electricity as their first priority in the upgrading, and provision of housing was identified as the sixth priority (CASE, 1998b). In Albertina, the provision of electricity and health services were identified as the first priorities, and housing as the fifth (CASE, 1998c), and in Johandeo, electricity and sanitation were in the first prioritywhile housing provision was identified as the third (CASE, 1999).

The phased housing programme has three phases. The first is the land release which is divided into three categories: land related issues; pre-planning investigations and township establishment; and waiting lists, subsidy administration and transfers (Engelbrecht, 2003). The second phase is the installation of services which deals with funding, level of services, interim versus permanent services, timing of service interventions, design issues and *in-situ* construction

of services (Engelbrecht, 2003). The third phase is the construction of houses which involves funding arrangements, housing support centres and timing of housing interventions (Engelbrecht, 2003).

The non-conventional *in-situ* upgrading is starting to receive more attention given the challenges and complexities arising from conventional *in-situ* upgrading (Misselhorn, 2008). This upgrading takes two main forms. The first is the provision of interim relief measures and/or the initial upgrading measures that address the key needs. The key needs are usually fire protection, basic sanitation, access to portable water, solid waste removal, basic health care, and improved internal access ways (for example, for emergency vehicles) (*Ibid*). The second is the utilisation of different methods and housing typologies in the delivery of a full upgrade solution. It includes elements aimed at increasing densities and minimising relocations, which are denser housing forms (double storey units or attached units), reduced levels of internal services and alternative forms of tenure (*Ibid).*

ii) Self-help/community-driven process

The self-help/community-driven process was previously known as the 'people's housing process'. This upgrading approach is a slower delivery method (Misselhorn, 2008). The advantages that this approach offers are the fact that the residents of a settlement being upgraded have greater ownership and control of the housing process. During the design process, the local residents have an opportunity to participate fully, mobilisation and realisation of local social capital, and as a result of sweat equity and/or a more cost effective construction process, there is a possibility of a bigger or more valuable housing product (*Ibid*). An example of a self-help/community-driven approach in South Africa is the People's Housing Process (PHP) which is a state-assisted, self-help housing programme. In this approach, the housing construction in the communities is organised by the community members themselves and this programme aims to support this initiative (Engelbrecht, 2003). In this approach, the government provides land and basic infrastructure/services while the community provides/contributes to/constructs the dwelling (*Ibid*).

Relocations

Relocations can be temporary or permanent; temporary referring to a temporary relocation area and permanent referring to a Greenfields project site. Both temporary and permanent relocations may be inevitable (Misselhorn, 2008). The relocation, which is often to the worst located land of the entire settlement, should be the last resort and only under special circumstances such as health and safety risks to residents (*Ibid).* Relocations have the potential to stall or terminate a project if they are not available and ready when the project construction commences, therefore, if relocations are necessary - either permanent or temporary - they should be planned for and scheduled as part of the project preparation process (*Ibid).* Due to high competition in the allocations of housing opportunities, it can be very challenging when it comes to allocation of relocations destinations. Therefore, forward planning and adequate political buy-in in respect of relocation, should be taken as a very crucial step (*Ibid).*

From understanding the informal settlements upgrading approach, it is established that informal settlements upgrading leads to the creation of sustainable human settlements as the intervention does not only focus on the improvement or provision of housing. The informal settlements intervention focuses on addressing many issues that are concerns in the informal settlements, such as provision of basic services, formalising the land, securing tenure, improving employment and educational opportunities, and improving access to health and educational facilities. However, not all types of informal settlements upgrading leads to the creation of sustainable human settlements. For instance, it has been identified that *in-situ* upgrading provides a stronger case for the creation of sustainable human settlements as compared to self-help/community-driven approaches and relocations.

2.3.2 Externally designed comprehensive interventions approach

The externally designed comprehensive interventions are those that are either driven by external agencies or the government which seeks "within a relatively short period, to transform an illegal and sub-standard environment to acceptable standards through a capital-intensive intervention"' (Huchzermeyer, 1999:49). An example of this intervention is the Comprehensive Slum

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Improvement Programme in Madras, India, initiated by the World Bank in 1977 (Hasan and Vaidya, 1986) and the George Settlement in Lusaka, Zambia (Rakodi and Schlyter, 1981). An example where this intervention is practised by government is the Alvorada upgrading project in Belo Horizonte, Brazil (Abbott, 2002b). The externally comprehensive interventions have serious failings and therefore cannot be used as the basis for replicable intervention approaches.

Though the externally comprehensive intervention approach has many failings is more like the informal settlements upgrading approach, because it is an improvement of an illegal and subs-standard environment to acceptable standards (Huchzermeyer, 1999). This approach has characteristics for the achievement of sustainable human settlements. The improvement of illegal and sub-standard environments to acceptable standards by external agencies or government, addresses the first criterion for the creation of sustainable human settlements (the government taking into consideration that people in need of housing are poor and do not have access to bank resources to afford decent housing.) This capital-intensive intervention approach improves illegal settlements, where the majority of poor people reside. This approach also addresses the second criterion for the creation of sustainable human settlements because an acceptable environment results in healthy, productive and well-integrated urban lives, which is the basis for the creation of sustainable human settlements.

2.3.3 Eradication and demolition approach

The demolition and replacement by public housing was the dominant approach to informal settlements in the 1950s and 1960s around the world. The idea behind this approach was that at the end, it would eliminate informal settlements (Pugh, 1995 as cited in Abbott, 2002b). However, expected results were not met by this approach provided that urbanisation, informal settlement growth and overcrowding increased. It was then that Turner proposed a shift to greater autonomy or dweller control in the production of housing, and governments in developing countries pressured the World Bank to extend its range of development loans to urban infrastructure and housing (Pugh, 1995:64 as cited in Abbott, 2002b). Then the World Bank responded by introducing the 'self-help' approach to housing delivery as opposed to social housing, and the mechanism for delivery was sites and services and *in- situ* slum upgrading (Pugh, 1995 as cited in Abbott, 2002b).

The sites and services schemes did not result in sustainable housing delivery. Therefore, there was a policy shift within the World Bank. The policy shift was to incorporate a wide ranging set of issues and, therefore, the World Bank installed an approach that has had long-term impact (Abbott, 2002b). This policy shift resulted in the development thinking of approaching the informal settlements through a twin approach (linking the sites and services scheme with slum upgrading) and the notion of treating informal settlements as formal settlements (*Ibid).*

The eradication and demolition approach to informal settlements does not lead to the creation of sustainable human settlements, because the creation of sustainable human settlements involves creating communities where "all have access to adequate shelter, a healthy and safe environment, basic services and productive and freely chosen employment" (Springer, 1996:7). The achievement of sustainable human settlements does not involve destroying already existing communities and leaving urban poor people with no place to stay; it involves improving settlements. In cases where settlements are situated in areas where the development of housing will not be sustainable, a positive approach is to relocate residents to Greenfields developments, where people enjoy secure tenure, can access basics such as water, sanitation, health care and education, enjoy a safe environment, have easy access to safe, affordable public transport, and one which provides sufficient economic opportunities (City of Johannesburg, 2006b*)*. Therefore, the achievement of sustainable human settlements is not possible through the eradication and demolition approach.

2.3.4 Support-based interventions approach

Within the support-based interventions there are government-initiated support-based interventions and NGO-initiated support-based interventions (Huchzermeyer, 1999). A good example that demonstrates the government-initiated support-based intervention is the Million Houses Programme in Sri Lanka (see Sirivardana and Lankatilleke, 1988) and the holistic planning development of the Favelas of Belo Horizonte from the Alvarado Programme (Abbott, 2002b). The best example that demonstrates the NGO-initiated support-based intervention is the Orangi Pilot Project in Pakistan (see Hasan and Vaidya, 1986 and Environment and Urbanisation, 1995). There are a number of elements that have been identified for the successes

of projects undertaken through NGO-initiated support-based interventions. The strong commitment to the community-driven developments is one of the elements that have been identified to be behind the success of these projects. However, the preference is for NGO-driven, community-based support (Huchzermeyer, 1999).

To a certain extent, this approach addresses the conditions for the creation of sustainable human settlements. Though the intervention driven by the government within this approach focuses on dealing with informal settlements through the provision of houses to the poor, the NGO-driven intervention shows strong commitment to community-driven developments. This basically addresses the condition for the creation of sustainable human settlements which states that settlements should not just house people but should be 'sustainable' in a sense that they should ensure that residents live in safe, healthy, and dignified conditions; residents have easy access to urban amenities, the ability to exercise their need for community and opportunities to realise their future aspirations (City of Johannesburg, 2006a). The strong commitment to community-driven developments tells us that this approach provides for community members to be the ones who identify priorities in the improvement process of the settlement.

2.3.5 Community-driven development approach

The community-driven development approach, which is embraced primarily by NGOs, is regarded as the most appropriate informal settlements intervention approach (Huchzermeyer, 1999). However, this approach has its own flaws - its location within an empirical framework leaves it open to criticism, as with the technocratic approach. The criticism in this regard is of the fact that success is viewed subjectively. Another flaw in this approach is that it relies only on principles, and the fact is that policies underpin development and principles alone cannot lead to significant informal settlement upgrading (*Ibid)*. Its final flaw is with regard to its provision for the communities to take all decisions (Abbott, 2002b). According to Abbott, 1996 model of community participation, there are different arenas of community participation. For instance, there is an arena where all stakeholders have to be involved in decisions and where decisions have to be taken by communities themselves. This approach does not provide for a clear understanding of where communities must take decisions (Huchzermeyer, 1999).

The creation of sustainable human settlements is achievable through the community-drive development approach. This is because the community members are the ones who drive the development by identifying priorities in the settlement improvement. This approach results in the creation of sustainable human settlements through enabling societies to live in a manner that supports the state of sustainability and principles of sustainable development and that have 'institutional, economic and social systems that will ensure the continued existence of those settlements,' (CSIR, 2002b)

2.4 Conclusion

This chapter consisted of two sections - the first focused on providing an understanding of key concepts used in the study, namely informal settlements and sustainable human settlements. In this section, it was established from the literature that there is a relationship between informal settlements and sustainable human settlements. The characteristics of informal settlements are land tenure is either traditional or informal; lack of basic infrastructure and services; poor quality of built environment; inadequate access to water and sanitation; overcrowding and insecure tenure; lack of urban amenities within reach such as economic, social, health and educational facilities; environmental degradation; high unemployment and low income levels of residents. These factors are addressed by the concept of sustainable human settlements.

This means that the achievement of sustainable human settlements results in the elimination of informal settlements. It is clearly demonstrated in the literature that the above-mentioned characteristics of informal settlements are addressed by the elements for the achievement of sustainable human settlements. These are: settlements where all people have access to adequate shelter; a healthy and safe environment; basic services such as water, sanitation, health care and education; productive and freely chosen employment; safe and affordable transport that provides sufficient economic opportunities; and urban amenities and where people enjoy secure tenure and have the ability to exercise their needs for the community and opportunities to realise their future aspirations. From the literature it was established that sustainable human settlements are not all about housing provision, but rather that the achievement of sustainable human settlements requires that economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for existence. A sustainable human settlement

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would result in sustainable development, wealth creation, poverty alleviation and equality. Another requirement for the achievement of sustainable human settlements is that the government must take into consideration that the majority of urban residents in need of housing are poor. Lastly, what is important is that all these benefits of sustainable human settlements should not be derived at the expense of the natural environment.

Therefore, because Ivory Park, a case study area, is an informal settlement that is going through a process of upgrading, the elements for the creation of sustainable human settlements are used as criteria to determine whether the upgrading of Ivory Park leads to the creation of a sustainable human settlement. This will be done by determining whether the characteristics of informal settlements still exist in Ivory Park or not, and whether the elements for the creation of sustainable human settlements are being addressed through the informal settlement upgrading approach adopted. The findings will be presented in chapter five of this research report.

The second section dealt with the discussion of informal settlements intervention approaches and it was established from this that informal settlements upgrading is one of the informal settlements intervention approaches that leads to the creation of sustainable human settlements. This is due to the fact that informal settlements upgrading processes involve the achievement of the following: the provision of basic services such as water, sanitation, health care and education; improvement/building of housing for the poor; legalising and regularising properties to ensure secured tenure; installing of electricity, security lighting, and public telephones; removal of hazards; improving access to health care and education; and enhancement of income-earning opportunities. These elements described above are directly addressed by the concept of sustainable human settlements as is clearly demonstrated in the summary of what constitutes a sustainable human settlement.

However, not all informal settlements upgrading approaches lead to the creation of sustainable human settlements. It was established that the *in-situ* informal settlements upgrading approach has the strongest elements that lead to the creation of sustainable human settlements as compared to self-help/community-driven approaches and relocations. This is because the *in-situ* upgrading

is a phased process that results in redevelopment of informal settlements in a complete fashion with respect to housing, tenure and infrastructural services.

In a nutshell, the finding from the literature is that informal settlements have characteristics that are addressed by the concept of sustainable human settlements. Therefore, there is a relationship between these key concepts used in the study, and the informal settlements upgrading approach addresses elements which lead to the creation of sustainable human settlements. Therefore, this means that if an informal settlements upgrading approach, especially *in-situ* upgrading, is adopted in the improvement of an informal settlement, that settlement should result in becoming a sustainable human settlement.

Chapter 3: South African informal settlements intervention policy framework

3.1 Introduction

This chapter aims to review policies that include the informal settlements intervention adopted in South Africa during the upgrading of Ivory Park. This review is provided, firstly, through the provision of historical perspective on the development of informal settlements intervention approaches adopted in South Africa. Secondly, by providing a review of national and provincial housing policies that include the informal settlements intervention approaches adopted in South Africa from the beginning of the upgrading process of Ivory Park. The main question behind this chapter is: do the informal settlements intervention approaches adopted during the upgrading of Ivory Park include elements for the creation of sustainable human settlements?

3.2 The history of the informal settlements interventions adopted in South Africa

This section unpacks the history of the development of the informal settlements intervention approaches adopted in South Africa during the first decade of democracy. This section aims to do this through the discussion of how the informal settlements intervention approach that existed in the first decade of democracy in South Africa came to be adopted. The reason for this section is to provide the basis for answering the research question, because the upgrading of Ivory Park started during the period of the adoption of this informal settlement's intervention approach.

3.2.1 The development of the informal settlements intervention that existed in the first decade of democratic South Africa

The informal settlements intervention approach that existed in the first decade of a democratic South Africa was introduced by Urban Foundation through the policy of 'orderly urbanisation'. This policy replaced the 'influx control' policy which restricted African (Black) access to urban areas (Copper, 1987:342). In the late 1980s the Urban Foundation submitted a proposal to fund a delivery of serviced sites within the 'orderly urbanisation' policy framework and the government accepted this proposal in 1990 (Huchzermeyer, 2004). The IDT's funding mechanism, which was set up to implement the approach developed by Urban Foundation, provided for a uniform 'capital subsidy' which covered a peripherally located services site with freehold tenure. (*Ibid*).

The National Housing Policy adopted in South Africa after the 1994 elections emphasised the content of the 'orderly urbanisation' policy. The individual once-off capital subsidy was increased to include the provision of a basic 'top structure' or house; usually it was a one-roomed structure (Huchzermeyer, 2004). More details on National Housing Policy and Strategy for South Africa will be discussed fully in the section focusing on the overview of housing policies.

The informal settlements intervention in South Africa was determined by the market driven delivery of new housing units. The informal settlements were dealt with through the delivering of sufficient standardised housing units, ignoring important socioeconomic, sociopolitical and socio-spatial dimensions of informal settlements. This, therefore, made it difficult to implement the subsidy that would respond to the realities of informal settlements and build and strengthen existing community organisations and localised ideas. (Huchzermeyer, 2004)

The mass production of public housing intervention informed by the 'market-driven' or neoliberal framework failed to meet the target population's needs in scale, cost and location. Hence, it was not effective in dealing with informal settlements (Huchzermeyer, 2004). From this it was understood that informal settlements intervention should be built on existing processes, treating the intervention as a process rather than a product, and acknowledging that

individual needs differ and therefore cannot be met by standardised procedures and products (Huchzermeyer, 1999).

South Africa did not adopt the whole twin approach (linking sites and services and slum upgrading) of the informal settlements intervention proposed by the World Bank; it adopted one part of it which is sites and services (Huchzermeyer, 2004). Through the twin approach, the development of new informal settlements was to be prevented by the delivery of sites and services, and scale and the existing inadequate and illegal housing, infrastructure, and tenure conditions were to be dealt with through slum upgrading (*Ibid).*

The focus of the informal settlements intervention on delivery of sufficient standardised housing units in South Africa makes it not ideal for the achievement of sustainable human settlements, because it ignores the important socioeconomic, sociopolitical and socio-spatial dimensions of informal settlements. The idea behind the achievement of sustainable human settlements is that settlements should not just house people but should be 'sustainable' in that it should ensure that residents live in a safe, healthy, and dignified condition, have easy access to urban amenities, the ability to exercise their need for community and opportunities to realise their future aspirations (City of Johannesburg, 2006a). Therefore, the informal settlements that were upgraded during the first decade of democracy in South Africa did not result in sustainable human settlement and the upgrading of Ivory Park started during this decade.

3.3 The review of policies that include the informal settlements intervention approaches

This section aims to provide a review of policies that include approaches to the informal settlements intervention in South Africa. The inquiry in this research is whether the informal settlement upgrading led to the creation of sustainable human settlements using a case study of Ivory Park, Johannesburg. The policies that are reviewed in this section are as follows: National Housing Policy and Strategy for South Africa (1994), Breaking New Ground, A Comprehensive Plan for the Development of Sustainable Human Settlement" (2004), and Gauteng Department of Housing: Five-Year Strategic Plan (2004-2009). The main aim of reviewing these policies is to

establish whether they provide for the achievement of sustainable human settlements, through evaluating whether the informal settlements intervention approaches embedded within these policies address the conditions for the achievement of sustainable human settlements. This will ultimately provide some foundation for answering the research question.

3.3.1 Overview of National Housing Policy and Strategy for South Africa (1994).

Towards the end of the apartheid government in 1992, a national housing forum was established to develop a new housing policy and strategy for South Africa (Khan and Thring, 2003). Through this policy the government had a vision to achieve 'the establishment of viable, socially and integrated communities situated in areas allowing convenient access to economic opportunities as well as health, educational and social amenities,' (Department of Housing, 1994:21). The government aims to provide all South African residents with a residential structure that has a secured tenure and it is permanent. It also aims to provide them with access to portable water, adequate sanitary facilities (including waste disposal), and domestic electricity supply (Department of Housing, 1994). Overall, it aims to achieve a non-racial, non-sexiest, democratic and integrated society in the shortest possible period of time (*Ibid*).

Key substantive approaches and initiatives



There are key substantive approaches and initiatives through which the policy aims to achieve its goals. These key approaches and initiatives are as follows: stabilising the housing environment; institutional arrangements; subsidies; savings; housing support; housing credit; land and the housing development process; and infrastructure and service standards. The key substantive approaches and initiatives that will be elaborated on in this section are the ones that speak directly to the research question.

1. Subsidies

The high levels of unemployment, relatively low wage level and levels of costs for the provision of housing, contribute to the major problem of affordability regarding the state's ability to provide subsidies that are sufficient to cover the costs of delivering a formal house to every

South African in need of housing (Department of Housing, 1994b). Therefore, the subsidies provided to individuals through this policy are limited. Hence, there are conditions for an individual to qualify for a subsidy. For instance, an individual must be a legal South African resident or in possession of a permanent resident permit; an applicant must be married or living with another person or they have to be a single person with proven financial dependents; an applicant must be over 21 years old and must be in sound mind; a monthly household (joint spouses) income must not exceed R 3 500 per month; an applicant must not have received a housing benefit from the government previously except for a consolidation subsidy or when a person is disabled; and a person must not own a house or have owned a house previously (*Ibid).* The government subsidy targets the poorest of the poor, and the policy approach is to introduce a higher category of subsidy for the lower end of the market (Department of Housing, 1994b).

The government, through subsidies, is aiming to provide the poorest of the poor with the security of tenure, access to basic services and possibly a starter formal structure. Because its target is poor people it introduced a forth (higher) level of subsidy that will provide for households whose their income is less than R800 a month (Department of Housing, 1994a). The levels of subsidy are in the manner that households whose income is low get a higher subsidy and the ones with higher income receive a lower subsidy.

The government envisages retaining a subsidy that meets the criteria of transparency, ease of budgeting, fiscal discipline and the ability to provide the individual with the maximum freedom of choice and benefit as a national subsidy approach (Department of Housing, 1994b). There are different types of subsidies programmes that are proposed for this policy. Among these programmes, there is one that provides for the acquisition of building materials, building a starter structure, expanding an existing starter structure, off-setting in part or in full, a housing loan obtained by the beneficiary, and paying a deposit in order to gain access to a housing loan (*Ibid*).

2. Infrastructure and service standards.

Because the institutional arrangements that were in place are characterised by fragmented responsibility at national level, an absence of authorities at provincial level and varying degree of functionality at local government level, resulted in the lack of water and sanitation provision

(Department of Housing, 1994a). Through this policy the government aims to enable an effective institutional structure so that the provision of water and sanitation can be possible. Therefore, it envisaged important principles that have to be included when reforming institutional arrangements (*Ibid*).

With regard to standards, there are two categories namely the environmental standards and physical engineering standards. This policy envisages that it will have regional variations due to the costs implications of setting standards (Department of Housing, 1994a). There are the existing standards that have to be used as a point of departure for environmental standards which are: SABS 241 (1984) Water for Domestic Supply: for water quality standards; Water Act (Act 54 of 1956) as amended: for sewerage effluent quality for discharge into water courses; Health Act (Act 63 of 1977) for the maintenance of public health; and Environment and Conservation Act (Act 73 of 1989) as amended for solid waste (*Ibid*). The structural tensions resulted in confusion in the responsibilities of developers, township applicants and local government bodies to provide internal and external engineering services and the levels and standards of engineering services to be provided in a particular housing development. Therefore, conflict resolution is needed in this regard (Department of Housing, 1994). Chapters six to ten of the 'Red Book' should be used as a basis for determining these standards (*Ibid*).

This policy, with regard to the creation of sustainable human settlements, has conflicting measures. Some of the propositions in this policy address the conditions for the creation of sustainable human settlements and some do not have. For instance, the vision of this policy provides for the creation of sustainable human settlements, because it aims to achieve this. It also aims to provide all residents with a permanent residential structure and secured tenure, access to water, sanitation and electricity.

However, another goal of the policy does not provide for the creation of sustainable human settlements, because it aims to deliver 338 000 units per annum and it is believed that it will eventually achieve one million units in five years (Department of Housing, 1994c). It is therefore supply driven rather than demand driven, and quantity rather than quality driven.

Therefore, the standpoint about this policy with regard to the creation of sustainable human settlements will be explained through the criticisms that emerged after ten years of implementation. The main critique is the fact that it does not have the ability to produce sustainable human settlements because its informal settlements intervention approach is supply driven rather than demand responsive (Huchzermeyer, 2004). The shortcomings of this policy are the emphasis on standardised delivery of housing units which consisted of a residential plot with freehold tenure, onsite services and a minimal house; the ignorance of community-based strategies for the improvement of informal settlements; lack of support-based approaches; and being trapped in the product-oriented paradigm (*Ibid*). This simply emphasises the fact that the informal settlements intervention approach proposed through this policy does not lead to the creation of sustainable human settlements.

3.3.2 Overview of 'Breaking New Ground', a Comprehensive Plan for the Development of Sustainable Human Settlements (2004)

'Breaking New Ground', a Comprehensive Plan for the Development of Sustainable Human Settlements (2004), is a policy that has been proposed after the realisation of the faults of National Housing Policy and Strategy for South Africa (1994). The main aim of Breaking New Ground is to achieve sustainable human settlements and make significant changes in the country's increasing housing backlog (Department of Housing, 2004). The broad vision of Breaking New Ground is to make the vision of the Department of Housing stronger through the promotion of a non-racial and integrated society through the development of sustainable human settlements and quality housing (Department of Housing, 2004:7).

1. From housing to sustainable human settlements

To achieve the objective of utilising housing as an instrument for the development of sustainable human settlements, the Department of Housing has introduced the following mechanisms: progressive informal settlement eradication; promoting densification and integration; enhancing spatial planning; enhancing the location of new housing projects; supporting urban renewal and inner city regeneration; and developing social and economic infrastructure (Department of Housing, 2004).

Through the mechanism of progressive informal settlement eradication, the Department of Housing aims to integrate informal settlements into the broader urban fabric in order to overcome spatial, social and economic exclusion. "The new human settlement plan adopts a phased *in-situ* upgrading approach to informal settlements, in line with international best practice" (Department of Housing, 2004:12). The informal settlements upgrading through the *in-situ* upgrading in desired locations, and relocations where development is not desirable or possible, is supported by the new human settlement plan. The upgrading supports a range of tenure options and housing typologies (Department of Housing, 2004).

The mechanism 'promoting densification and integration' is introduced through this policy to integrate previously excluded groups into the city and ensure the development of more integrated, functional and environmentally sustainable human settlements, towns and cities. The new settlement plan has the following interventions: "densification policy, residential developments permits and fiscal incentives" (Department of Housing, 2004:12-13). To achieve sustainable human settlement through a mechanism entitled 'enhancing spatial planning' the broader spatial restructuring framework that incorporates the principles of the National Spatial Development Plan and the National Urban Strategy, is needed. Therefore, what lies at the heart of achieving sustainable human settlement is greater coordination and alignment of various planning instruments and economic policies (Department of Housing, 2004).

Through the mechanism 'enhancing the location', the policy aims to address the fact that the location of housing projects reinforces apartheid spatial settlement patterns through the following interventions: accessing well-located state-owned and parastatal land; acquisition of well-located private land for housing development; funding for land acquisition; and fiscal incentives (Department of Housing, 2004). Since the renewal of inner city areas focussed on commercial and high-income residential property, redevelopment results in the exclusion of residents because of the construction of dwelling units that they cannot afford. The Department aims to support the urban renewal and inner city regeneration by achieving affordable inner-city interventions: encouraging social (medium-density) housing, and increasing effective demand (*Ibid*).

In the mechanism 'developing social and economic infrastructure', to move towards the more holistic approach of development of human settlements that includes the provision of social and economic infrastructure, and away from a housing-only approach, the new housing plan proposes the cluster concept to incorporate the provision of municipal facilities such as parks, playgrounds, sports field, crèches, community halls, taxi ranks, satellite police stations, municipal clinics and informal trading facilities (Department of Housing, 2004). To ensure that the facilities are appropriately targeted, the need for social/community facilities has to be determined by municipalities through a community profile and facilities audit (Department of Housing, 2004). The new funding mechanism that will focus on informal settlement upgrading projects and completed housing projects still lacking social facilities will be introduced to fund the development of the primary social/community facilities (*Ibid*).

The mechanism 'enhancing the housing product' aims to develop appropriate settlement designs and housing products to ensure appropriate housing quality. The new housing plan envisages enhanced settlement design, enhanced housing design and addressing housing quality (Department of Housing, 2004).

2. Existing and new housing instruments

There are three housing instruments that this policy looks at which comprise the informal settlement upgrading instrument, the social (medium-density) housing instrument, and developing a rural housing instrument (Department of Housing, 2004). For the purposes of this research, the focus will be on the informal settlement upgrading instrument.

When this policy was proposed, there was recognition that the existing housing programme would not secure the upgrading of informal settlements. That is why in dealing with informal settlements; 'Breaking New Ground' proposes a move away from a neglect or conflict response to one of integration and cooperation that will eventually lead to the stabilisation and integration of informal settlements into a broader urban fabric (Department of Housing, 2004).

The phased *in-situ* upgrading approach to informal settlements, in line with international best practice, is adopted in the new housing plan. Therefore, the eradication of informal settlements in

desired locations through *in-situ* upgrading, coupled with relocations where development are not desirable or possible, is supported by the new housing plan (Department of Housing, 2004). The following are interventions that are required for an informal settlement upgrading programme: a new funding mechanism for informal settlement upgrading; implementation; redirecting the peoples' housing process; and a new funding mechanism for PHP and institution building (*Ibid*).

The new funding mechanism for informal settlement upgrading is introduced to support upgrading on an area-wide, as opposed to individual, basis. The Department of Housing's aim is that this new funding mechanism would enhance the community participation in all aspects of development solution, would minimise disruption, and maintain the fragile community networks (Department of Housing, 2004). The upgrading of informal settlement would be supported through a phased process. Phase one is when the surveying of the community, in terms of determining the housing and infrastructure needs of the community, takes place. The geotechnical and physical suitability of the land for *in-situ* upgrading is also undertaken in phase one (*Ibid*). The provision of basic services, social amenities and secure tenure to the entire community is a focus of phase two (*Ibid*). The development of housing takes place in phase three, the houses are built in response to community demand and may take variety of forms, and they would be constructed through mutual aid and community self help or local constructors (*Ibid*).

3. Job creation and housing

Housing delivery aims to alleviate income poverty through the provision of jobs within the construction sector. "The Expanded Public Works Programme (EPWP) is a nationwide programme that includes government interventions in five sectors which are economic, social, environment, culture, and infrastructure" (Department of Housing, 2004:25). The scope of the infrastructure sector that is in line with the EPWP is what the Department of Housing's programmes forms part and parcel of (Department of Housing, 2004). Job creation would be maximised in the new human settlement plan through the following: job creation strategy; labour intensive guidelines; suitability assessments and targets; on-site materials production; capacity building for job creation; and enhancing capacity (*Ibid*).

The main aim of proposing 'Breaking New Ground', a Comprehensive Plan for the Development of Sustainable Human Settlement (2004), was to address the faults of the National Housing Policy and Strategy for South Africa (1994). The government aims to do this through incorporating three fundamental changes, namely to move away from 'breadth to depth', a shift from supply to demand-side delivery (from Greenfield developments to *in-situ* upgrading), and the concentration of policy on the people housing process.

'Breaking New Ground' addresses the components of sustainable human settlements as it aims to achieve sustainable human settlements through various objectives and mechanisms. One of the ways that this policy aims to achieve sustainable human settlements is through the upgrading of informal settlements utilising the phased *in-situ* upgrading approach (Department of Housing, 2004). This says that the informal settlements intervention approach proposed through 'Breaking New Ground', which is an informal settlement upgrading through phased *in-situ* upgrading, leads to the creation of sustainable human settlements.

3.3.3 Overview of Gauteng's Five-Year Strategic Plan (2004-2009)

The Gauteng Department of Housing aims to strengthen the mandate of the 'Breaking New Ground' strategy and implement it in full. Therefore, the strategy adopted by the Gauteng Department of Housing supports the key principles of the policy 'Breaking New Ground' discussed in the previous section. This is emphasised in the provincial department's vision of achieving "a province where all households inhabit quality homes in vibrant and sustainable communities" (Gauteng Department of Housing, 2004:11). The provision of appropriate services, housing in targeted precincts and communities working in partnership with stakeholders, is the Gauteng Department of Housing's vision (Gauteng Department of Housing, 2004).

In realising its overall goal of creating sustainable housing and human settlements and the development of vibrant communities, the Gauteng Department of Housing's five-year strategic plan aims to strengthen its efforts in meeting the needs of individuals who are poor, socially excluded and vulnerable (Gauteng Department of Housing, 2004). The sustainable housing that the Gauteng Department of Housing aims to build would have a secure tenure in a safe and

healthy environment. It recognises that the eradication of poverty is complex and it requires various interventions that go beyond the provision of physical structures (Gauteng Department of Housing, 2004). That is why the Gauteng housing delivery has shifted from concentrating on the number of houses it provides (quantity) to the enhancement of quality of the houses that it delivers *(Ibid).*

The focus areas for the Gauteng Department of Housing's Five-Year Strategic Plan (2004-2009) are to formalise all informal settlements capable of being formalised by 2009, densify existing locations, redevelop all hostels in Gauteng by the year 2009, seek and provide alternative accommodation, and regenerate urban areas through integrated development strategies. An overall focus area is to fight poverty, create work and continue to build a better life for all (Gauteng Department of Housing, 2004)

The Five-Year Strategic Plan aims to break new ground in housing delivery by emphasising five key pillars which are as follows: quantity and quality as mutually inclusive in housing delivery; participatory development; reinforcing sustainable and vibrant communities through urban form and designs; rental and social housing in providing alternative tenure options for the residents of Gauteng; and promoting good governance (Gauteng Department of Housing, 2004).

To implement the Five-Year Strategic Plan objectives which are based on the above key pillars, the Department of Housing aims to utilise the following focus programmes/sub-programmes: good urban governance; upgrade of informal settlements; urban regeneration; rental and social housing (Gauteng Department of Housing, 2004). The programme management offices that are within the Department at local municipal levels will enhance the capacity for municipal officials, counsellors and emerging contractors through the implementation of good urban governance *(Ibid).* The Department will ensure that housing delivery is integrated within local municipal planning processes through its contribution on the municipal housing development plans *(Ibid).*

In the programme upgrade of informal settlements, the Provincial Department aims to formalise informal settlements that are capable of being formalised by 2009 through an incremental approach that would be followed by eradication by 2014 (Gauteng Department of Housing,

2004). The sub-programmes under the upgrade of informal settlements are water and sanitation infrastructure (essential services); community builder; people's housing process; and community and social amenities (Gauteng Department of Housing, 2004).

The Five-Year Strategic Plan's vision is achieving sustainable human settlement as it is informed by 'Breaking New Ground', whose main goal the creation of sustainable human settlements. This plan has elements for the achievement of sustainable human settlements. For instance, it aims to build a sustainable housing and human settlement process that would achieve housing with secure tenure, within a safe and healthy environment, and the development of viable communities for all people.

The informal settlements intervention approach proposed through the National Housing Policy and Strategy for South Africa (1994) has been identified to be weak in terms of achieving sustainable human settlements. However, the policy proposed after this one includes an informal settlements intervention approach that leads to the creation of sustainable human settlements, and it informed Gauteng's informal settlements intervention approach. The upgrading of Ivory Park is an ongoing process. It continued with the adoption of strategy proposed by 'Breaking New Ground'. Therefore, the challenge in this regard is how the mistakes made by National Housing Policy and Strategy (1994) were rectified in the upgrading of Ivory Park and how the changes proposed in 'Breaking New Ground' were incorporated into the upgrading of Ivory Park.

3.4 Conclusion

This chapter aimed to establish if the informal settlements intervention approaches embedded within national and provincial housing policies provides for the creation of sustainable human settlements. The findings from the literature is that the informal settlements intervention approach is not specifically stated in the National Housing policy and Strategy for South Africa (1994), therefore it makes it difficult to evaluate whether it addresses the conditions for the creation of sustainable human settlements.

However, the vision and key substantive elements discussed in the policy gives an idea of whether the policy can/cannot achieve the creation of sustainable human settlements. From the

literature, the finding is that this policy does not lead to the creation of sustainable human settlements, even though the vision of this policy is to achieve the "the establishment of viable, socially and integrated communities situated in areas allowing convenient access to economic opportunities as well as health, educational and social amenities" (Department of Housing, 1994a:21)and aims to provide all residents with a permanent residential structure and secured tenure; access to water, sanitation and electricity of which these are basically the conditions for the creation of sustainable human settlements.

This policy still does not lead to the creation of sustainable human settlements because after ten years of implementation, a number of criticisms emerged. The main criticism was that this policy was unable to produce sustainable human settlements, because its informal settlements intervention approach is supply driven rather than demand responsive (Huchzermeyer, 2004) and the shortcomings provided for this policy emphasise this fact. Those shortcomings are the emphasis of standardised delivery of housing units which consisted of a residential plot with freehold tenure, onsite services and a minimal house; the ignorance of community-based strategies for the improvement of informal settlements; lack of support-based approaches; and being trapped in the product-oriented paradigm (*Ibid*).

The findings from the literature is that the informal settlements upgrading approach proposed through 'Breaking New Ground' leads to the creation of sustainable human settlements. This is because the approach is informal settlements upgrading through the phased *in-situ* upgrading approach to the informal settlements. It has been established in chapter two that this type of informal settlement upgrading is the one that has conditions which lead to the creation of sustainable human settlements as compared to self help/community driven approaches and relocations.

What emphasises this point is the fact that the phased *in-situ* upgrading supports a range of tenure options and housing typologies and this means that this informal settlements upgrading approach is not demand-driven but rather supply-driven and hence, takes into consideration the individual needs of the community members. This means that an informal settlement that has been upgraded using the phased *in-situ* upgrading will result in sustainable human settlements.

The informal settlements intervention approach proposed through Gauteng's Five-Year Strategic Plan is the same as the one proposed through 'Breaking New ground', a Comprehensive Plan for the Development of Sustainable Human Settlements (2004), because the former is informed by the latter. This means that the informal settlements intervention approach proposed through Gauteng's five year strategic plan leads to the creation of sustainable human settlements.

The upgrading process of Ivory Park started in 1996 and it is still continuing. This means that the conditions proposed by National Housing Policy and Strategy for South Africa (1994) was practised in the upgrading of Ivory Park. If we are to establish that Ivory Park is a sustainable human settlement, the upgrading process has to have moved away from conditions proposed by national housing policy and strategy for South Africa (1994) to adopt the phased *in-situ* upgrading. Therefore, whether or not the upgrading of Ivory Park utilised the phased *in-situ* upgrading will be presented in the findings in chapter five.

Chapter 4: Research methods

4.1 Introduction

This chapter aims to discuss the research method that has been employed to find out if the upgrading of Ivory Park led to the creation of sustainable human settlements. Ethical issues and limitations that are associated with the method employed for the undertaking of this research will be discussed in this chapter. Because this investigation was undertaken using a case study, the case study area which is Ivory Park will be introduced in this chapter to familiarise the reader with its most important components, such as location, population size, and economic profile, which are critical to answering the research question.

4.2 Research approach

The researcher employed a qualitative research method in undertaking this study. This type of research method was employed because such a methodology enabled the researcher to collect data that was needed to answer the research question from local population's perspective (Denzin and Lincoln, 2000), and also to gain a contextual perspective that would have not been gained through a quantitative research method (Yin, 2003). The qualitative research method excels in obtaining specific information about values, opinions, behaviors, and social contexts of particular populations (Denzin and Lincoln, 2000). It was seen necessary to adopt a qualitative research method to undertake this research, because it is effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity and religion (*Ibid).* Through qualitative research methods, the researcher uses a variety of data gathering methods to investigate the particular case study in depth, and then produces evidence that leads to understanding of the case and answers research questions (Yin, 2003).

In this descriptive research method, the research is undertaken using a case study approach. The case study research method gives the researcher an opportunity to understand complex issues and examine contemporary real-life situations (Yin, 2003). This study involves the investigation of Ivory Park as a case study area to find out if the upgrading of informal settlements leads to the creation of sustainable human settlement in South Africa.

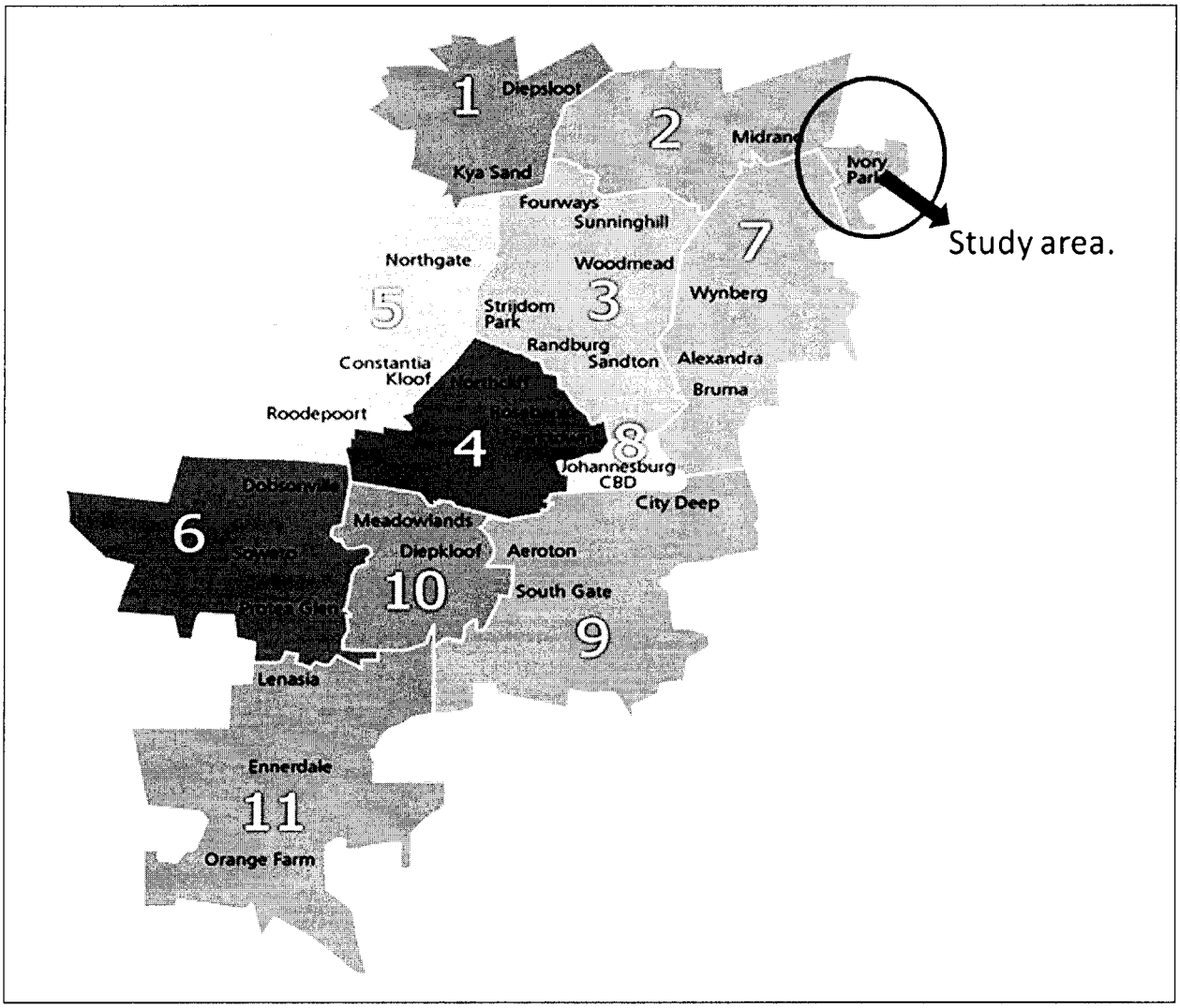
A case study approach

A case study approach, as defined by Yin (1984), is an investigation of an empirical enquiry of a contemporary phenomenon where multiple sources of evidence are used and where the boundaries between phenomenon and context are not clearly evident. The case study area of this research is Ivory Park which is described below.

Description of a case study area

The case study area, Ivory Park, is situated in the north of Johannesburg and falls within the City of Johannesburg's Region A, together with other areas such as Vorna Valley, Glen Austin, Halfway Gardens and Halfway House Estate, Kyalami and Ebony Park (Abraham, 2005). It was named Region A after the 2006 municipal elections where the City of Johannesburg reduced its 11 administrative regions to seven- Region 1 and Region 2 were combined to form Region A (Mohamed, unpublished). Ivory Park is located 3 km to the east of Midrand Central Business District (CBD) and the N1 motorway. The roads that are to the west, east and south-west of Ivory Park, connect Midrand to Olifantsfontein, connect Kempton Park to Pretoria, and Kempton Park to Midrand, respectively (Burger and Waluk, 1996). Ivory Park is the most populated area in Midrand. To the north of Ivory Park sits large industrial and residential areas, namely Olifantsfontein and Clayville. Winnie Mandela informal residential area is found in the north-east of Ivory Park, and Thembisa sits at its east and south-east borders. A medium to high-density residential area, Rabie Ridge, is found at the south-west of Ivory Park. To the west one finds the Austin View and President Park agriculture holding which is composed of cluster and townhouse developments *(Ibid)*. The location of Ivory Park is clearly shown on the map in Figure 1 (below):

Figure 1: Map of the city of Johannesburg, showing the location of the case study area.

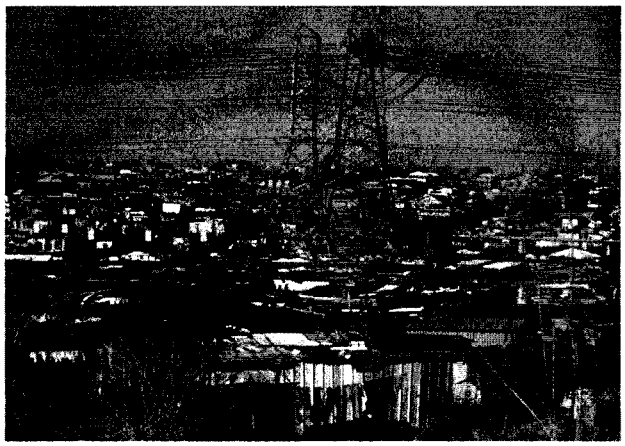


Ref: Redrawn by author from www. maps.google.com

Ivory Park is divided in to three wards- ward 77, ward 78 and ward 79. It was established in 1990 as a transitional location for Thembisa residents while Thembisa was being upgraded (Zitha, pers. Com., 2009). However, people from other areas built themselves shacks, and when Thembisa residents moved back to Thembisa after the development, those people from other areas remained behind while more people came in, developing into the community now referred to as Ivory Park (*Ibid*). The population of this area grew quickly because of the migration of job seekers in search of economic opportunities. This area attracted job seekers because it is close to

the fastest growing economic centre in South Africa, known as Midrand (Tomlinson, 2003). As a result, this area is dominated by poor, black Africans who make up 97% of the area's population - the remaining 3% is composed of Indians and coloureds (Statistics South Africa, 2003). The photo below (Figure 2) shows the settlement of Ivory Park.

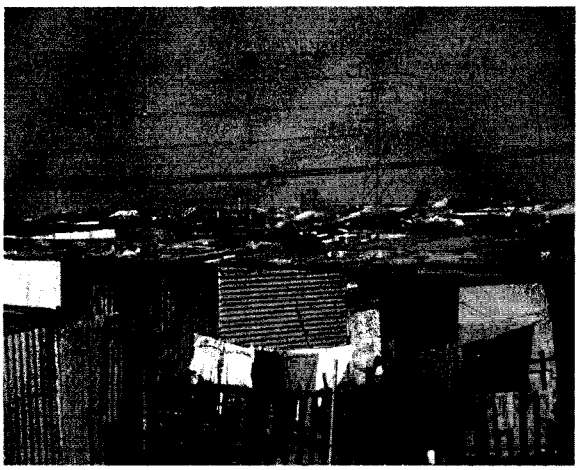
Figure 2: A photo showing the Ivory Park township



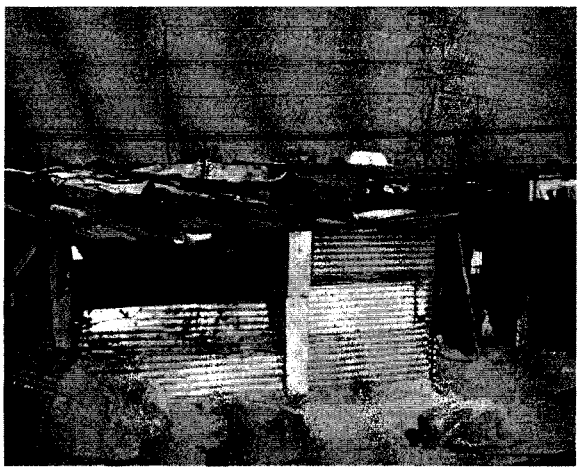
Source: Nethavhakone, 2009

The inadequate access to formal housing and basic services, high levels of unemployment and low household income characterises Ivory Park. When it comes to formal unemployment, Ivory Park has the highest number of unemployed compared to the rest of the region A. For instance, in 2001 statistics showed that 53% of the population was unemployed whereas throughout the region, this figure was 29%, and only 5% in Kyalami (Statistics South Africa, 2003). The household income is very low in Ivory Park. It was recorded that 89% of households earned between R0 and R38 400 per annum, and 10% earned between R 38 401 and R 614 400 per annum (*Ibid.*). The lack of access to housing and basic services is a challenge in Ivory Park, and in 2001 it was recorded that 60% of households were living in shacks, and only 10% of families had running water inside their dwellings *(Ibid).* In 2002, Ivory Park had a population of 196 000 and it was estimated that 90% were staying in shacks (Thale, 2002). The photo below (Figure 3) shows that the majority of residents of Ivory Park live in shacks.

Figure 3: Photos showing that the settlement of Ivory Park is dominated by shacks



Source: Nethavhakone, 2009



Source: Nethavhakone, 2009

4.2.1 Data collection method

In order to answer the research question, this study used in-depth interviews, observation and document study data collection techniques. Firstly the researcher conducted formal interviews with the Ivory Park councillors, namely; Petros Zitha, Titus Mabotja, Joe Mahlanga, and John Mahlangu and one of the people who were involved in the upgrading of Ivory Park at the beginning stage known as Lance Fenn, using an open-ended interview questions structure. However, the researcher is well aware of the fact that using Ivory Park councillors as the primary sources for data gathering will lead to biased data. The assumption is that Ivory Park councillors will try and portrait a favourable state of Ivory Park's upgrading process. This is because it is their job and their job and they will obviously try to demonstrate that they are doing a good job even though it is not necessarily the case. That is why the researcher also used secondary data collected through observation and document reviews (this is discussed in paragraphs that follows), in order to supplement and verify the information provided by Ivory Park councillors. The questions that were asked were relevant to the research topic in order to gain reliability from the answers that were provided. This is because, as said by Bless and Higson (1995), the more relevant the questions asked the greater the quality of the case study. The use of open-ended

questions enabled the interviewees to elaborate more on their answers, as the subject matter was broad and needed more exploration. It also enabled the researcher to gain more information and to adjust and add questions during the interviews. The data which the researcher was most interested in finding related to whether the conditions established from the literature that contribute to the creation of sustainable human settlement, are being addressed in the upgrading of Ivory Park, and to determine which housing polices (national and provincial) are informing the upgrading of Ivory Park. Therefore, open-ended interview questions were designed around determining those issues; however, issues that arose from the interview were added and explored by the researcher.

Secondly, the researcher used the observation technique to collect data. There are two types of observation, namely simple observation and participatory observation. Simple observation "involves the unobtrusive and systematic observation of the phenomenon of interest," (Bless and Higson-Smith, 1995:43). Participatory observation is when the researcher joins the group of people being investigated in order to better observe and understand their behaviour, feelings, attitudes or beliefs. In this study a simple observation technique was utilised. The research observed the state of Ivory Park as a community in terms of the following: the environment; quality of houses; the provision of houses; the provision of basic services; easy access of urban amenities such as crèches, schools, universities, churches, sports grounds, community halls, clinics and hospitals; and the development projects that are said to be underway in Ivory Park. The observation was conducted to supplement the findings from interviews and documents.

Thirdly, the study of documents was utilised to collect data. Data collected through document study is referred to as the secondary data. The researcher used documents that contain information about the upgrading of Ivory Park and projects that are taking place in Ivory Park. The use of this data collection method was inadequate since the purpose of its collection was different from the purpose of this study. The most adequate method is one that relies on primary data, where the researcher collects her own data that is directed towards her research topic. Therefore, the researcher made minimal use of secondary data to avoid contaminating the research with biases that might not be known to the researchers who were involved in the collection of such data (Bless and Higson-Smith, 1995). Primary data collected in this research

was gathered from in-depth interviews of which Ivory Park councillors were dominating. The researcher is aware of the fact that this also brings an issue of biases in the information gathered. However, secondary data collection through observation and document study has been used to achieve balance in the information provided by councillors.

4.2.2 Ethical considerations

For the purposes of this research, obtaining informed consent of the participants was vital. The councillors who were interviewed were fully briefed about the aims of the research and the purpose for which the research was conducted. They were thus given the right to agree or not to agree to be part of the research. The researcher gave the interviewees a section of the research report that contained information that was based on the interviews conducted with them, to show that the researcher had no intention of producing false information in the name of the participants. The councillors were told that if they wished to view the final copy of the report, it would be provided to them The questions that were asked in the interview did not instruct the participants to reveal any information about themselves that might be private and uncomfortable as the study was only concerned about the area of Ivory Park, and not about individual issues. Therefore, the participants were not made to feel uncomfortable in any way.

Since the information that the participants provided in the interviews did not threaten their positions in any way, they agreed to have their real names mentioned in the research report. When it comes to the ethical consideration of confidentiality, the participants were assured that the information they provided in the interviews would only used for the stated purposes of the study and that no any other person would have access to interview data. The researcher took into consideration the anonymity and confidentiality ethical considerations, because participants' protection and continuous trust is of paramount importance.

4.2.3 Limitations of the study

Time was a factor that limited this study, because establishing if some of the conditions that contribute to the creation of sustainable human settlements such as if Ivory Park is a safe place, could have been better researched by conducting interviews with a sample of residents of Ivory Park, rather than relying on information provided by councillors and from documents. None the

less, this does not compromise the conclusions reached in the study; rather it leaves room for further research that shall deepen on this subject. Another limitation was due to non co-operation from some councillors in Ivory Park - few participated in the study. If all councillors of Ivory Park participated in the study it would have emphasised the reliability of the collected data. However, the ability to answer the research question was not weakened by this. Another limitation centred on the process of observations it was very challenging for the researcher to take photos. It was apparent to the researcher that residents were uncomfortable with a stranger taking photos of their settlement. The researcher was frightened by this, resulting in poor quality of photos taken from imperfect vantage points. Also, the researcher could not afford to hire a professional photographer because of a lack of finance funding for this research.

4.3 Conclusion

This chapter gave a general description of the research method employed in undertaking this research. To summarise, this research was conducted using a qualitative research method, because the type of research question requires thick information in a descriptive manner. Therefore, a qualitative research method was more appropriate to answer the research questions than a quantitative research method. Data was collected using in-depth interviews, observation and document analysis. Because this research adopted the case study approach, a brief description of the case study, Ivory Park, was provided in this chapter. A case study description was provided to familiarise the reader with Ivory Park's location, population size and economic profile, because these aspects are fundamental to answering the research questions. The description of a case study also serves as a background for readers to understand the findings discussed in the coming chapter. This chapter was concluded by discussing the research ethical issues that were considered in the conducting of this research, because if those ethical issues were not considered, they might badly affect the outcomes of the research to be discussed in the next chapter. The limitations that the researcher came across during conducting the research were also discussed in this chapter.

Chapter 5: Findings: presentation and discussion

5.1 Introduction

The previous chapters provided an understanding of the research topic from the literature and the following were established: there is a relationship between informal settlements and sustainable human settlements; informal settlements upgrading is one of the approaches that leads to the creation of sustainable human settlements; the conditions proposed through the National Housing Policy and Strategy for South Africa (1994) do not lead to the creation of sustainable human settlements; and the informal settlements intervention approach which is phased *in-situ* upgrading proposed through 'Breaking New Ground' a Comprehensive Plan for the Development of Sustainable Human Settlements (2004) and Gauteng's Five-Year Strategic Plan (2004-2009) leads to the creation of sustainable human settlements. This understanding set premises with which to determine whether Ivory Park is a sustainable human settlement or not.

This chapter aims to present research findings from interviews, observations and desktop study. The research findings that will be presented in this chapter aim to determine whether the upgrading of Ivory Park led to the creation of sustainable human settlement, through determining if the following elements for the creation of sustainable human settlements are present in Ivory Park: settlements where all people have access to adequate shelter; a healthy and safe environment; basic services such as water, sanitation, electricity, health care and education; productive and freely chosen employment; safe and affordable transport that provides sufficient economic opportunities; and urban amenities and where people enjoy secure tenure and have the ability to exercise their need for the community and opportunities to realise their future aspirations. Another element for the creation of sustainable human settlements is that the government must take into consideration that the majority of urban residents in need of housing are poor. Lastly, what is important is that all these benefits of sustainable human settlements should not be derived at the expense of the natural environment. The findings will also be presented to determine whether the elements for a phased *in-situ* upgrading approach proposed in 'Breaking New Ground' were addressed in the upgrading process of Ivory Park.

5.2 Access to formal housing dwellings

As was discussed, the majority of Ivory Park residents are poor as a result of many factors including high levels of unemployment. It was discovered from the interviews carried out that residents of Ivory Park who are not able to access bank finances in order to purchase bonded houses, are provided with an opportunity to own a formal housing structure. The government is doing this through housing policies that propose the provision of subsidies that will enable poor people to own a formal housing structure.

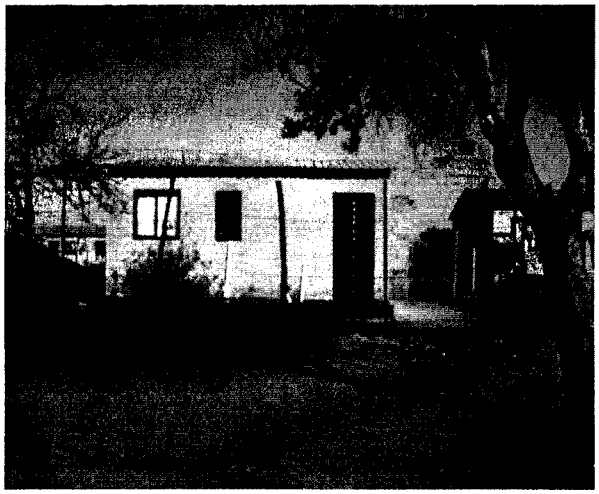
The houses that are provided to poor people in Ivory Park are all the same. Each unit is 636 square metres in size, with a toilet inside the house, two bedrooms, a lounge and a kitchen. The only difference is colour (Zitha, pers.com, 2009). There is a scheme that affords people to access different housing typologies, but in Ivory Park there is no land available for these kinds of developments, and this is why government subsidised houses are identical (Mabotja, pers.com, 2009). Housing provision in Ivory Park is proceeding slowly because of the processes involved in regularisation of the land, therefore few households have been provided with formal housing and the majorities are still waiting for their houses (*Ibid).*

Ivory Park residents who meet the following criteria qualify for a full housing subsidy: legal South African residency or in possession of a permanent residence permit; married or living with another person, or a single person with proven financial dependents; over 21 years old and in sound mind; a monthly household (joint spouses) income not exceeding R3 500 per month; have not received a housing benefits from the government previously except for a consolidation subsidy or when a person is disabled; and not the owner of a house currently or previously (this does not apply if a person is disabled or a person owns a vacant stand that was obtained through the Land Restitution Programme); have acquired a residential property for the first time without Government assistance and the house/dwelling on the property, if any, does not comply with the Norms and Standards in respect of Permanent Residential Structures (Zitha, pers. Com., 2009).

These conditions to qualify for a housing subsidy leave other residents of informal settlements unable to access housing. Ivory Park has a population of 196 000 and 40% of this population are

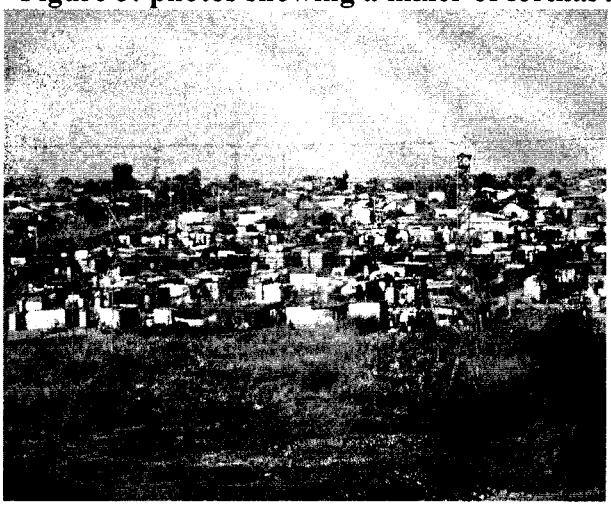
formally unemployed, and 65% of the formally employed earn R800 a month. Because the government's housing subsidy does not cater for all Ivory Park residents, about 90% of them live in shacks (Sugrue, 2000). That is why Ivory Park township comprises both formal and informal houses, as is shown in Figures 4 and 5.

Figure 4: Photo showing government subsidised houses in Ivory Park

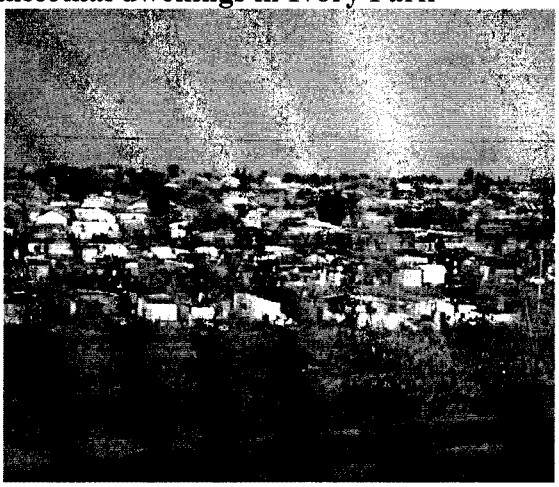


Source: Nethavhakone, 2009

Figure 5: photos showing a mixer of formal and informal dwellings in Ivory Park



Source: Nethavhakone, 2009



Source: Nethavhakone, 2009

The conditions to qualify for a housing subsidy and the processes of regularisation are probably the reason the majority of Ivory Park residents still do not have access to formal dwellings,

despite the process of upgrading beginning in 1996. The table below (Table 1) shows the progress that has been made in terms of housing provision in Ivory Park from 1996 to 2001.

Table1: progress in housing (formal dwelling) provision in Ivory Park

Year	Formal	Informal	Traditional	Other	Total households
1996	179	4620	16	15	4872
2001	1506	13890	453	57	15906
% change	741.34	200.65	2.731.25	280.00	226.48

Source: Compiled by author from Statistics South Africa, 2003

From the table above, it is clear that progress in terms of housing provision is very slow in Ivory Park. The number of households residing in informal dwellings has increased from 4620 in 1996 to 13 890 in 2001, and in 2001, the number of households living in informal dwellings exceeds those residing in formal dwellings. In 2001, households living in informal dwellings numbered 13 890 compared to only 1506 households in formal dwellings (Statistics South Africa, 2003). This means that there is no significant progress in terms of providing all people of Ivory Park with access to formal housing.

However, it has been recognised in Ivory Park that even households who have a joint income of more than R3500 per month still cannot afford bonded houses or to build their own. Therefore, there is a new scheme that is being implemented in Ivory Park and it aims to provide housing subsidies to households who have a joint income of R3501- R7000 per month. The people who fall within this income bracket (R3501- R7000) qualify for low-cost housing. Through this scheme, the government will provide these people with a subsidy that will help them pay for bonded houses (Mahlanga, pers. Com., 2009). The people who qualify for a housing subsidy under the new scheme will have to move out of Ivory Park and relocate where such houses are available. This is because Ivory Park is overcrowded and there is no land available for new housing projects that would cater for households that fall in this income brackets. The new scheme will create space for people who are currently invading the land that is not designated for

settlements, because it would then be possible for these people to be provided with registered stands. This scheme is beneficial for the overall Ivory Park status considering the fact that Ivory Park is faced with overcrowding (Zitha and Mahlangu, pers. Com., 2009).

A condition for the creation of sustainable human settlements is that all people should have access to housing, and that the government should take into consideration that the majority of people in need of housing are poor – this is not fully addressed in the upgrading process of Ivory Park. Although the government provides subsidies to people who fall under different income brackets, other residents of Ivory Park who are not south Africans, are under the age of 21 years old; are not married or living with partner; are single but do not have dependents, are not able to own formal houses because they do not qualify for a housing subsidy.

The housing developments that are happening in Ivory Park are largely informed by the 'Breaking New Ground', because the houses are being built as a response to individual needs. However, these individual needs are categorised according to income brackets. It is evident that Ivory Park is addressing individual needs because households with a joint income of R3501-R7000 are provided with a different subsidy. However, due to the challenge of land availability because of overcrowding these people will have to be relocated to areas where the types of houses they qualify for are available. Therefore, effort is being made to create different housing typologies in Ivory Park based on peoples' needs, as land availability for new housing projects is a challenge. Regardless of this, city is proposing to build houses where people will have to pay rent but the whole family will be allowed to stay in those houses, unlike during the previous government's hostels in which women and children were not allowed (Mahlangu, pers. Com., 2009). This overall shows the effort to have different housing typologies in Ivory Park that are based on individual's needs.

5.3 Ivory Park's environment

Environment of the settlement as a condition for the creation of sustainable human settlements refers to settlements that are safe and healthy. 'Safe' refers to a settlement where there is no crime and where the government makes an effort to ensure a low level to crime in the area, for example, by providing street lights and strengthening the police force. A settlement that is healthy is where residents have access to health facilities, such as clinics and hospitals. It is a settlement where there is a working waste management system to ensure the good health of community members.

5.3.1 A safe environment?

The state of crime in Ivory Park has improved according to Mabotja and Mahlanga (pers. Com., 2009). Ivory Park was a no go area, it was regarded as a 'hot spot' for criminal activities, However, now it is considered a safe area (Mahlangu, pers. Com., 2009). In the pilot study that was conducted between November 1997 and January 1998 by the Human Science Research Council, it was found that crimes were committed in Ivory Park against women and children but were never reported (Schurink, 1998). This is evident through the comparison of recorded crimes in the police records and recorded crimes by the Human Sciences Research Council because, out of the 33% of crimes that were recorded by the Human Sciences Research Council only 20% of all crimes committed against residents of Ivory Park were recorded in the police statistics for 1997 covering police stations servicing Ivory Park (*Ibid).*

However, there is an improvement in the situation in Ivory Park, because in 2003 a victim centre was opened. This victim centre houses abuse, rape and domestic violence victims. It is situated near the local police station in Ivory Park (BuaNews, 2003). This centre aims to provide abuse and rape victims a safe and friendly environment where they can relate their ordeals in confidence, and ultimately the centre would restore the dignity and pride of the victims (*Ibid).* This encourages the reporting of crimes in and around Ivory Park.

It is clear that government recognised that state of crime in Ivory Park was devastating as it was also emphasised by ward councilor Zitha in an interview, because the first police station built under ANC-government rule was done so in Ivory Park. The government says that through this police station, it is showing its commitment to providing much needed safety and security services to all races, social classes and stratas. The overall aim of building this station was to reduce crime, especially serious crime such as rape, murder and robbery (Musi and Maluleke, 1998). These all shows the efforts that have been put into improving safety in Ivory Park.

Another way of reducing crime in Ivory Park is through the provision of jobs to the unemployed, especially the youth. Through the construction of June 16 Road, where about 34 local residents were provided with employment, many youth were trained to become entrepreneurs (constructors) through a programme by the City of Johannesburg in conjunction with Umsobomvu Youth Fund. This training enabled the youth of Ivory Park, who might have ended up being involved in criminal activities, an opportunity to do something useful with their lives (Mahlanga and Mabotja, pers.com., 2009). The housing development project that is currently underway also afforded many residents of Ivory Park with employment opportunities. All of these seem to have had a positive impact on the reduction of crime in Ivory Park.

The table below (Table 2) emphasises the fact that the upgrading process of Ivory Park has provided residents with employment opportunities, in an effort to reduce crime. This is because during the upgrading, the number of residents who were employed increased, and more people were employed than unemployed. For example, the number of residents who were employed increased from 5507 in 1996 to 11 475 in 2001, whereas the number of residents who were not employed increased from 3452 in 1996 to 10287 in 2001.

Table 2: showing number of Ivory Park residents who were employed in 1996 and 2001.

Year	Employed	unemployed	Not economically active
1996	5507	3452	2123
2001	11475	10287	4899
% change	108.37	198.00	130.76

Source: Compiled by author from Statistics South Africa, 2003

From the interviews, it was found that the installation of street lights has reduced crime and made Ivory Park far safer. Johannesburg's Executive Mayor Amos Masondo visited Ivory Park in November 2006 to announce the naming and lighting of 1126 streets (Dlamini, 2007). According to councilor Zitha, almost all the streets in Ivory Park have lighting - very few streets still need to have lights installed. This project cost about R480 000. Other projects undertaken included the installation of 105 street light poles at a cost of R787 500 by City Power and the installation of over 207 streets light poles at a cost of R3.5 million during the 2005-2006 financial year. During the 2006-2007 financial year, there 560 streetlight poles were installed by City Power (*Ibid).* These projects demonstrate an effort by City of Johannesburg to make Ivory Park a safe place.

5.3.2 A healthy environment?

In 1999, when the Midrand State of Environment was produced by the Department of Environmental Affairs and Tourism (DEAT), Ivory Park consisted of a high-density, low-income community with inadequate infrastructure and services, resulting in a degraded and sensitive environmental situation (Department of Environmental Affairs and Tourism, 1999). During the period in which this report was compiled, Ivory Park had little or no waste management services. Littering and illegal dumping are the main waste problems in Ivory Park (*Ibid).*

The households refuse removal by the municipality on a weekly basis has improved in Ivory Park since the upgrading process started in 1996 as shown in the table below (Table 3). For instance, the number of households where refuse is removed weekly by the municipality has increased from 4216 in 1996 to 10 665 in 2001.

Table 3: Number of households receiving refuse removal from municipality in Ivory Park on weekly basis

Year	Refuse removal weekly
1996	4216
2001	10665
% Change	152.96

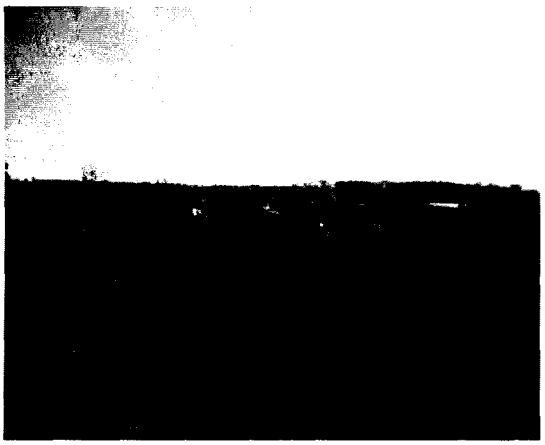
Source: Compiled by author from statistics South Africa, 2003

However, the current situation in Ivory Park with regard to waste management is not a pleasant one, as shown in photos below (Figure 6). Littering and illegal dumping occurs and waste is not controlled.

Figure 6: Photos showing littering and illegal dumping in Ivory Park



Source: Nethavhakone, 2009



Source: Nethavhakone, 2009

However, despite these disturbing environmental situations in Ivory Park, there is a project that is aimed at achieving a healthy environment there. The project is the greening of Ivory Park which will make sure that open spaces are created; grass cutting takes place, storm water channel maintenance, and maintenance of parks. Because of this project, Councilor Mabotja maintains that Ivory Park is a healthy environment. The 702 Greens Project took place in Ivory Park in 2006. Through this project unemployed dwellers were trained at Thuthukani Hall to become Community Based Educators (CBEs) (Food Tree for Africa, 2009). These people educate the community of Ivory Park about the importance of keeping the environment clean.

One of the conditions for the creation of sustainable human settlements, namely, achieving a safe and healthy environment, has not been fully achieved through the informal settlement intervention approach in Ivory Park. It has been partially fulfilled, however, in that Ivory Park is a safe environment, but not a healthy one. Presently, Ivory Park is considered a relatively safe environment as compared to the past, as affirmed by Ivory Park councilor Mahlangu. Crime has been reduced through job creation and the installation of street lights. However, when it comes to achieving a healthy environment recent photos show that the situation in Ivory Park with regard to illegal dumping is not improving. Therefore, a safe environment has been achieved through the upgrading process of Ivory Park, whereas a healthy environment has not.

5.4 Access to basic services

Access of all residents to basic services is one of the conditions for the creation of sustainable human settlements, and refers to access to services such as sanitation, water and electricity. From interviews conducted with Lence Fenn, one of the people who was part of the upgrading process of Ivory Park, and Ivory Park councilors, it was found that basic services such as sanitation, water and electricity in Ivory Park are fully provided. However, statistics from Statistics South Africa Ward Profiles 2003, comparing the 1996 and 2001 census shows that there are still households in Ivory Park that do not have access to basic services.

With regard to the provision of sanitation facilities during the period 1996 to 2001, there was an improvement in provision of flush toilets, flush septic tank toilets, chemical toilets, VIP, and bucket latrine, and a reduction in provision of pit latrine toilets. There were, however, households that did not have access to any type of sanitation facilities. This is demonstrated in table below (Table 4):

Table 4: Number of households who had access to sanitation facilities in 1996 and 2001 in Ivory Park

Year	Flush toilet	Flush septic tank	Chemical toilet	VIP	Pit latrine	Bucket latrine	none
1996	807	-	-	-	417	2722	937
2001	5850	648	9	33	27	8757	599
% Change	624.91	-	-	-	-93.53	221.71	-38.01

Source: Compiled by author from Statistics South Africa, 2003

Findings from Statistics South Africa Ward Profiles 2003 demonstrate that all households of Ivory Park had access to water in the years 1996 and 2001. The interviews with Fenn and Zitha affirmed that currently in Ivory Park, all residents have access to water. During the years 1996 and 2001, Ivory Park residents had access to different types of water facilities and since the upgrading of Ivory Park started in 1996, access to some water facilities increased while access to others decreased. For instance, the number of households that had access to water from a dwelling, inside a yard, a communal stand over 200 m away, a rain tank, and a river/stream increased between 1996 and 2001, whereas the number of households who had access to water from a community stand, a borehole, a spring, and a water vendor decreased from 1996 to 2001. This is shown in Tables 5 and 6 below.

Table 5: Increased access to water facilities in Ivory Park from 1996 to 2001

Year	Dwelling	Inside yard	Rain tank	River/stream	Stand over 200m
1996	17	428	-	-	-
2001	771	5787	363	6	1491
% Change	4.435.29	1.252.10	-	-	-

Source: Compiled by author from Statistics South Africa, 2003

Table 6: Decreased access to water facilities in Ivory Park from 1996 to 2001

Year	Community stand	Borehole	Spring	Water Vendor
1996	1675	29	78	2656
2001	726	6	6	1926
% Change	-56.66	-79.31	-92.31	-27.48

Source: Compiled by author from Statistics South Africa, 2003

Not all residents of Ivory Park have access to electricity. Some households rely on other forms of energy such as gas, paraffin, candles and solar for lighting. Though some households do not have access to electricity, the ones who had, they increased from 1996 to 2001. This is shown in the table below (Table 7). From an interview with Mahlangu and Mahlanga, it was confirmed the provision of electricity in Ivory Park improved as a result of the upgrading process.

Table 7: Number of households in Ivory Park who had access to electricity in 1996 to 2001

Year	Access to electricity
1996	1587
2001	5718
% Change	2.60

Source: Compiled by author from Statistics South Africa, 2003

The statistics provided from Statistics South Africa Ward Profiles 2003 shows that the upgrading process of Ivory Park led to the provision of basic services. However, during the period of 1996 to 2001 it was found that not all residents of Ivory Park had access to sanitation facilities and electricity. Only water facilities were accessible to all residents. Therefore, the upgrading process of Ivory Park does fulfill the condition for the creation of sustainable human settlement which states that all people must have access to basic services such as sanitation, water and electricity.

5.5 Convenient access to urban amenities

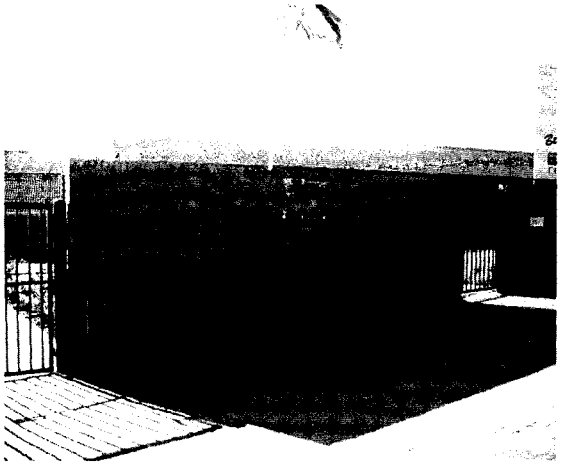
Another way of determining if a settlement is a sustainable human settlement is by assessing if residents have easy access to urban amenities such as educational, economic, health and social amenities. This is when residents do not have to travel in order to get to nearest urban amenities mentioned above. Therefore, if we are to say that Ivory Park is a sustainable human settlement, urban amenities should be within walking distance for residents.

5.5.1 Educational amenities

The residents of Ivory Park have convenient access to educational amenities, because there are enough schools and crèches for the children and youth of Ivory Park. The schools and crèches are considered accessible because they are within walking distances of residents. When it comes to achievement in education for learners, quality educational facilities are very critical. At Ivory Park there is evidence that the government is committed to improving the quality of education facilities. For example, the opening of a secondary school (see Figure 7 below) which took place on 24 September 2005. At that opening ceremony, the Department of Education stated that quality education refers to the provision of appropriate facilities and resources to support learning, i.e. textbooks, libraries, laboratories, e-learning facilities and chalk (Department of Education, 2005).

The community members were urged to participate in protecting the facilities of the schools in Ivory Park, in an attempt to ensure that the children and youth of Ivory Park continue to have access to quality education. There are also educational programmes that are run in Ivory Park that are not targeted at youth and children only. For instance, the CBEs who were trained through the 702 project run educational programmes that are aimed at educating Ivory Park residents about the importance of greening of the area.

Figure7: Photo showing the secondary school of Ivory Park



Source: Nethavhakone, 2009

The figures from Statistics South Africa Ward Profiles 2003 show that since the beginning of the upgrading process in Ivory Park, there has been progress in attendance at schools because the number of residents who completed different levels of education, such as higher, grade 12, secondary, and completed primary, increased from 1996 to 2001. This is shown in Table 8 below.

Table 8: Number of Ivory Park residents who completed different levels of education from 1996 to 2001.

Year	Higher	Grade 12	Secondary	Completed primary
1996	114	2387	4468	865
2001	522	6337	10563	2082
% Change	357.89	349.68	136.68	140.69

Source: Compiled by author from Statistics South Africa, 2003

The findings from interviews and desktop study show that there is easy access to educational amenities in Ivory Park, because the schools and crèches are within walking distance for residents. The convenient access to educational amenities has increased attendance at schools.

Convenient access to educational amenities is one of conditions for the creation of sustainable human settlements. Therefore, the upgrading process of Ivory Park fulfils this condition.

5.5.2 Economic amenities

The findings with regard to convenient access to economic amenities are that residents of Ivory Park have easy access economical amenities. This is because Ivory Park is situated about 30 km from Midrand, which is the fastest growing industrial area. There are many employment opportunities in Midrand, and many of the residents of Ivory Park moved there to be closer to economic opportunities. However, the unemployment level is still high in Ivory Park, sitting at 40%. The majority of the unemployed are women and the youth (Statistics, 2003). There are many reasons that underlie this situation in Ivory Park and one of them is a lack of education and skills.

In realisation of this challenge, the City of Johannesburg in conjunction with the Umsobomvu Youth Fund, train the residents of Ivory Park through development projects, such as housing development, Gautrain projects and road construction projects (Zitha, pers. Com., 2009). Through the Gautrain projects a lot of Ivory Park residents were trained and will obtain permanent employment at the Gautrain stations (*Ibid).*This training equips the residents of Ivory Park with skills and experiences that are needed in the job market, making them employable and enabling them to benefit from the fastest growing industrial area - Midrand - which is closer to them. As a result of the training, some of the youth have become entrepreneurs and have their own construction companies. This has led to improvement with regard to access to employment of residents of Ivory Park. Table 9 below demonstrates that the number of people who were employed in 1996 increased significantly by 2001.

Table 9: Increased number of Ivory Park residents who were employed in 1996 and 2001

Year	Employed	unemployed	Not economically active
1996	5507	3452	2123
2001	11475	10287	4899
% change	108.37	198.00	130.76

Source: Compiled by author from Statistics South Africa, 2003

There are enough efforts underway to allow Ivory Park residents access to economic opportunities even though by virtue of their education, skills and experience, they are unable to benefit from the fastest growing industrial area in South Africa. Convenient access to economic amenities by all residents is one of the vital elements for the creation of sustainable human settlements. Though the unemployment level is still high in Ivory Park, the programmes in place to enable residents to benefit and access economic opportunities demonstrate the commitment from the government to make an Ivory Park a sustainable human settlement.

5.5.3 Health amenities

In Ivory Park there many clinics are available and are within walking distance for Ivory Park residents (Mabotja, pers. Com., 2009). The residents of Ivory Park also have access to a hospital which is located in Thembisa. Thembisa is not very far from Ivory Park as can be seen on the map provided earlier in this report. The transport system available both in Thembisa and Ivory Park make the hospital in Thembisa easily accessible to both residents in both areas. The residents do not have to wait long for taxis from both areas in order to travel to the hospital (*Ibid)*. However, the researcher's assessment is that the travelling must be difficult for the aged, and unfortunately the aged are the ones who make use of health facilities frequently. The Department of Transport is aiming to improve transportation in area by introducing buses.

The condition for the creation of sustainable human settlements which demands access to health amenities by all residents has not been fully achieved through the upgrading process of Ivory Park. Even though clinics are within walking distance residents have to rely on taxis to access a hospital. This is a challenge, especially for old people who are the ones who make use of health facilities frequently. Therefore, the upgrading process of Ivory Park has not resulted in the provision of easy access to health amenities.

5.5.4 Social amenities

Social amenities refer to aspects such as sports grounds, crèches, schools, community halls, play grounds and parks. There is easy access to such amenities in Ivory Park, and there are both formal and informal sports grounds in the area. The City of Johannesburg is determined to

formalise the informal grounds so that Ivory Park residents have the opportunity to PSL games (Mahlanga, pers.com., 2009). Well-developed recreational centres and parks are available, which are useful, especially for children. A community hall in Ivory Park hosts activities such as church services, functions, indoor activities, pensions/grants pay outs, soccer, netball, and cricket games. Thus, residents of Ivory Park have easy access to social amenities.

The easy access that Ivory Park residents have to social amenities addresses that condition for the creation of sustainable human settlement. The developments in Ivory Park started in 1998 when the National Housing Policy and Strategy for South Africa was in place. However, most developments taking place in Ivory Park are informed by 'Breaking New Ground' because of the delays in the proclamation processes. The point is, 'Breaking New Ground' is a new human settlement plan that is designed to create sustainable human settlement. In this policy it is outlined that one of the factors of a sustainable human settlement among is a settlement where people have easy access to social amenities. Therefore, the upgrading process of Ivory Park is leading to the creation of sustainable human settlement.

5.6 Quality of houses and secure tenure

This research has found that the houses being built in Ivory Park are good quality. City of Johannesburg inspectors are monitoring the quality of the materials being used to build houses in Ivory Park (Mahlangu, pers. com., 2009). All the construction companies undertaking housing developments in Ivory Park have to be registered in the NHBRC before they can be awarded a contract. If it is found that a contractor is using cheap materials, his/her certificate will be disqualified (*Ibid*). These measures are in place to ensure the high quality of houses built in Ivory Park.

The issue of providing secured tenure is of paramount importance in Ivory Park, in terms of the City of Johannesburg's aim to inspire a sense of ownership in individuals' houses. The tenure that is provided to residents of Ivory Park is the fullest type of tenure option where residents own the piece of land and a house (Mabotja, per.com, 2009). However, the City of Johannesburg is

currently busy completing the issues of title deeds, and not all people have the rights to both the land and the house. Some of the houses are still being built.

'Breaking New Ground' aims to achieve sustainable human settlement through the provision of quality housing. The findings from interviews show that the upgrading process of Ivory Park has led to the production of quality housing, because government is committed to producing quality housing. However, the production of quality houses for all residents has not been achieved in Ivory Park because of the slow processes of regularisation.

Another element for the creation of sustainable human settlement is the provision of secured tenure to all residents. The findings are that residents of Ivory Park are provided with the fullest tenure option. Though not all households have been given houses with title deeds, the City of Johannesburg is showing commitment to do so for all residents. Thus, the upgrading process of Ivory Park does not fully address this condition for the creation of sustainable human settlement

5.7 Conclusion

In this chapter the findings for the enquiry as to whether the upgrading of informal settlements leads to the creation of sustainable human settlement were presented. The summary of these findings is that access of all people to formal housing is one of the conditions for the creation of sustainable human settlements. From interviews and desktop study it has been found that the upgrading process of Ivory Park is failing to provide all residents with access to formal housing. Although the government is providing housing subsidies to poor residents of Ivory Park to ensure access to formal housing, not all residents qualify for a full housing subsidy and as a result, by 2001, it was found that the majority of residents were living in informal dwellings, according to Statistics South Africa, Ward Profile. Therefore, access of all residents to formal housing through the upgrading process of Ivory Park has not been achieved.

The condition for the creation of sustainable human settlements which demands the achievement of a safe and healthy environment was partly achieved through the upgrading process of Ivory Park. There is evidence that a safe environment is being achieved in Ivory park because Statistics South Africa Ward profiles 2003 shows that job provision has increased between 1996 and 2001,

and the provision of jobs reduces crime. Interviews with counselor Zitha affirmed that street lights have been installed in Ivory Park, thereby reducing crime. However, a healthy environment was not achieved in Ivory Park as a result of illegal dumping, as shown in photos taken of the settlement recently.

The upgrading process of Ivory Park does not fulfill the requirement for the creation of sustainable human settlements which demands access for all residents to basic services such as sanitation, water and electricity. From Statistics South Africa Ward Profiles 2003, it is evident that not all residents of Ivory Park had access to sanitation and electricity during the censuses of 1996 and 2001, it was only with regard to water that all residents had access, albeit to different types of water facilities. Interviews conducted with Fenn and Zitha revealed that even now, not all residents of Ivory Park have access to sanitation and electricity, but the upgrading process is improving the situation.

The demand that all residents should have access to urban amenities for the creation of sustainable human settlement is not fully addressed through the upgrading process of Ivory Park. This is because even though residents have easy access to educational, economic and social amenities, they are faced with problems in terms of accessing health facilities, especially the elderly since they rely on taxis to get to the nearest hospital. However, the easy access to educational and economic amenities increased the number of residents who attended schools from 1996 to 2001, and the number of residents who were employed in Ivory Park. Unfortunately, the easy access to educational, economic and social amenities for residents alone does not satisfy the requirements of sustainable human settlement.

The upgrading process of Ivory Park does not fully address the condition for the creation of sustainable human settlement that all residents should have access to quality of housing and secured tenure. This is because not all residents in Ivory Park current have access to formal housing and secured tenure as a result of long processes of regularisation.

The findings in this chapter demonstrate that the upgrading process of Ivory Park did not lead to the creation of a sustainable human settlement. This is because all elements for the creation of sustainable human settlements have not been fully addressed through the upgrading process of Ivory Park. The creation of a sustainable human settlement cannot be achieved while such elements remain unaddressed, as in the case of the upgrading process of Ivory Park.

Chapter six: Summary and conclusion

6.1 Introduction

To find out if informal settlements upgrading leads to the creation of sustainable human settlements using a case study of Ivory Park, Johannesburg, required the following: the establishment of the relationship between informal settlements and sustainable human settlements; determining if informal settlements upgrading approach is one of the informal settlements intervention approaches that leads to the creation of sustainable human settlements; and finding out if the informal settlements intervention approaches proposed by National Housing Policy and Strategy for South Africa (1994), 'Breaking New Ground', a Comprehensive Plan for the Development of Sustainable Human Settlements (2004) and Gauteng's Five-Year Strategic Plan leads to the creation of sustainable human settlements. This chapter summarises findings from the literature and what was found on the ground in the upgrading process of Ivory Park, in this regard. A conclusion is then reached on whether the hypothesis was confirmed or disproved. Lastly, recommendations will be made on what can be included in the informal settlements upgrading approach, in order to yield exceptional results in sustainable human settlements, and what might be included in future housing policies so that informal settlements interventions lead to the creation of sustainable human settlements.

6.2 Summary and conclusion

The enquiry in this study was to find out broadly if the adoption of Habitat Agenda by South Africa resulted in the creation of sustainable human settlements with regard to the intervention in informal settlements. In the Habitat Agenda, it was established that an informal settlements upgrading approach leads to the creation of sustainable human settlements. Therefore, it means that if a country adopts an informal settlements upgrading approach in dealing with informal settlements, those informal settlements will become sustainable human settlements. This research examined this understanding using a case study in South Africa - Ivory Park - to determine if the upgrading process of that informal settlement led to the achievement of sustainable human settlements.

From literature, it was first established that there is a relationship between informal settlements and sustainable human settlements. The relationship focuses on the following aspects of informal settlements: land tenure (either traditional or informal); lack of basic infrastructure and services; poor quality of built environment; inadequate access to water and sanitation; overcrowding; lack of urban amenities within reach, such as economic, social, health and educational facilities; environmental degradation; high unemployment and low income levels of residents.

The literature consulted argues that sustainable human settlements are only created when all inhabitants have access to the following: adequate shelter; a healthy and safe environment; basic services such as water, sanitation, health care and education; productive and freely chosen employment; safe and affordable transport that provides sufficient economic opportunities; urban amenities; where people enjoy secure tenure and have the ability to exercise their need for the community, and opportunities to realise their future aspirations. From the literature, it was also established that sustainable human settlements are not all about housing provision; rather, the achievement of sustainable human settlements requires that economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for existence, thus resulting in sustainable development, wealth creation, poverty alleviation and equality. Another requirement for the achievement of sustainable human settlements is that the government takes into consideration that the majority of urban residents in need of housing are poor. Lastly, what is important is that all these benefits of sustainable human settlements should not be derived at the expense of the natural environment.

It was also established from the literature that an informal settlements upgrading approach is one of the informal settlements intervention approaches that leads to the creation of sustainable human settlements. This is due to the fact that an informal settlements upgrading process involves the provision of basic services such as water, sanitation, health care and education; improvement/building of housing for the poor; legalising and regularising properties to ensure secured tenure; installing of electricity, security lighting, and public telephones; removal of hazards; improving access to health care and education; and enhancement of income-earning opportunities. And these elements described above are directly addressed by the concept of

sustainable human settlements as it is clearly demonstrated in the summary of what constitutes a sustainable human settlement.

However, not all types of informal settlement upgrading approaches lead to the creation of sustainable human settlements. It was established that the *in-situ* informal settlements upgrading approach is more like to result in the creation of sustainable human settlements as compared to self-help/community-driven approach and relocations. This is because the *in-situ* upgrading is a phased process that results in redevelopment of informal settlements in a completion fashion with respect to housing, tenure and infrastructural services.

Lastly, findings from the literature about the informal settlements intervention approaches proposed by housing policies were discussed. The informal settlements intervention approach is not specifically stated in the National Housing Policy and Strategy for South Africa (1994), and after ten years of implementation, there were many criticisms of this policy. These included the fact that it is unable to produce sustainable human settlements because its informal settlements intervention approach is supply-driven rather than demand responsive (Huchzermeyer, 2004). The policy's shortcomings emphasise these points - the emphasis of standardised delivery of housing units, which consisted of a residential plot with freehold tenure, onsite services and a minimal house; the ignorance of community-based strategies for the improvement of informal settlements; lack of support-based approaches; and being trapped in the product-oriented paradigm (*Ibid*).

The informal settlements upgrading approach proposed through 'Breaking New Ground', a Comprehensive Plan for the Development of Sustainable Human Settlements (2004) leads to the creation of sustainable human settlements. This is because the approach focuses on informal settlements upgrading through the phased *in-situ* upgrading approach. It has been established in chapter two that this type of informal settlements upgrading approach is most likely to lead to the creation of sustainable human settlements as compared to self-help/community-driven approaches and relocations.

What emphasises this point is the fact that the phased *in-situ* upgrading supports a range of tenure options and housing typologies and this means that this informal settlements upgrading approach is not demand-driven, but rather supply-driven, and thus takes into consideration the individual needs of the community members. This means that an informal settlement that has been upgraded using the phased *in-situ* upgrading will result in a sustainable human settlement.

The informal settlement intervention approach proposed through Gauteng's five year strategic plan is the same as the one proposed through 'Breaking New ground' because the former is informed by the latter plan. This means that the informal settlements intervention approach proposed in Gauteng's five year strategic plan leads to the creation of sustainable human settlements.

In a nutshell, these findings from the literature say that if an informal settlement is upgraded utilising the informal settlements upgrading approach- the *in-situ* upgrading - then that informal settlement will be transformed into a sustainable human settlement. Based on this knowledge the researcher utilised a qualitative research method, i.e. a case study approach and consultation of documents to find out if the upgrading process of Ivory Park adhered to elements critical to the creation of sustainable human settlements.

The findings on the ground about the upgrading process of Ivory Park were categorized in terms of the elements for the creation of sustainable human settlements. The findings showed that through the upgrading of Ivory Park, some of its residents were being provided with government-subsidised houses, which is one condition for the creation of sustainable human settlements. However, not all residents would receive a house because there are conditions to qualify for a housing subsidy. Therefore, access of all people to housing as a condition for the creation of sustainable human settlements, has not been fulfilled in Ivory Park.

From Statistics South Africa Ward Profiles 2003, it was discovered that though some households are being provided with formal housing structures through the upgrading process of Ivory Park, the majority of people continue to live in informal dwellings (shacks). For instance, in 1996 households that resided in informal dwelling numbered 4620, and in 2001 this increased to

13 890. It was also found that after five years of upgrading process in Ivory Park, the number of households living in informal dwellings was more than those living in formal dwellings. For instance, households living in informal dwellings in 2001 numbered 13 890 while only 1506 people households resided in formal dwellings. Thus, the upgrading process of Ivory Park has not led to the creation of sustainable human settlements, because it is failing to provide all residents of Ivory Park with access to formal dwellings.

From interviews, it was established that enough being done through the upgrading process of Ivory Park to consider that area a safe environment. The informal settlement intervention approach in Ivory Park is reducing crime by creating jobs, and this has achieved the provision of employment opportunities to residents. This is because the number of employed residents has increased since the upgrading of Ivory Park started. For instance, in 1996, 5507 residents were employed, and in 2001 the number increased to 11 475 people. This is greater than the number of unemployed residents in Ivory Park during this period. The City of Johannesburg, through the process of upgrading Ivory Park, aims to achieve a safe environment through the provision of street lights and this research's findings show that it has achieved this (interview with ward counselor Zitha). This means that the achievement of a safe environment in Ivory Park as a condition for the creation of a sustainable human settlement has been achieved.

The findings from interviews and desktop study prove that the upgrading process of Ivory Park has resulted in the provision of households with access to basic services such as sanitation, water and electricity. Though not all residents of Ivory Park have access to sanitation and electricity, statistics from Statistics South Africa Ward Profiles 2003 demonstrate that there was a huge difference in terms of provision of such services from 1996 to 2001. This means that the access of all people to basic services, as one of the elements for the creation of sustainable human settlements, has not been achieved through the upgrading process of Ivory Park.

The findings from interviews and desktop study demonstrate that the upgrading process of Ivory Park resulted in the provision of easy access to urban amenities, such as educational, economic and social. It is only with regard to access to health facilities that it was found that residents were faced with challenges in terms of accessing hospitals as they were dependent on taxis to get to

the nearest hospital. This means that the upgrading process of Ivory Park does not fully address this condition for the creation of sustainable human settlement, which states that all residents should have easy access to urban amenities.

The last finding from the interviews is that the condition that all residents have access to quality houses and secured tenure in order for the settlement to be considered a sustainable human settlement, has not been fully addressed through the upgrading process of Ivory Park. This is because, the processes of regularisation are taking a long time in Ivory Park and therefore not all residents currently have access to housing. Also, the City of Johannesburg is still dealing with the issue of providing secured tenure to all residents of Ivory Park.

The findings from interviews and desktop study presented here demonstrate that the upgrading process of Ivory Park has not led to the creation of a sustainable human settlement. The elements necessary for the creation of sustainable human settlement have not been fully addressed through the upgrading process of Ivory Park. There are reasons for this, however, the achievement of sustainable human settlement requires that all elements for the creation of sustainable human settlement are achieved.

References

Abbott, J. (1996) *Sharing the city: Community Participation in Urban Management*, London: Earthscan.

Abbott, J. (2002a) 'A methodological-based planning framework for informal settlement upgrading', *Habitat International*, vol. 26, no. 3, Pp 317-333.

Abbott, J. (2002b) 'An analysis of informal settlements upgrading and critique of existing methodological approaches', *Habitat International*, vol. 26, no. 3, Pp 303-315.

Abbott, J. and Douglas, D. (2001) *A Methodological Approach to the Upgrading, In situ, of Informal Settlements in South Africa*. South Africa: University of Cape Town Press.

Abraham, A. (2005) *Things to look up for Ivory Park,* http://www.joburgnews.co.za/2005/jul/jul25_ivorypark.stm, 25 May 2009.

Bless, C. and Higson-Smith, C. (1995) *Fundamentals of social research methods: An African perspective*, 2nd edition, Cape Town: Juta & Co, Ltd.

Burger and Waluk Town Planners (1997) *Ivory Park Status Quo*, Johannesburg: Burger and Waluk printers.

Centre on Housing Rights and Evictions (COHRE) (2005) *Any Room for the Poor? Forced Evictions in Johannesburg*, South Africa, Geneva: Centre on Housing Rights and Evictions.

Cities Alliance Network (2003) *Cities without Slums: What is slum upgrading? From without Slums Action Plan*, http://www.citiesalliance.org/citiesalliancehomepage.nsf, 14 March 2008.

City of Johannesburg (2006a) *Sustainable Human Settlements*, http://www.joburg-archive.co.za/2006/pdfs/final_term/Chapter7.pdf, 03 March 2008.

City of Johannesburg (2006b) *Creating Sustainable Human Settlements in the Inner City*, http://www.joburgnews.co.za/citichat/2006/mar6_citichat6.stm. 03 March 2008.

Community Agency for Social Enquiry (1998a) *A Baseline Study of Eatonside and Albertina.* Vol. 1, March, Johannesburg: CASE.

Community Agency for Social Enquiry (1998b*) A Baseline Study of Soshanguve South Ext. 4 and Johandeo,* Vol. 2, August, Johannesburg: CASE.

Community Agency for Social Enquiry (1998c) *First Follow-up Surveys at Eatonside, Albertina, Soshanguve South Ext. 4 and Johandeo,* Vol. 3, December, Johannesburg: CASE.

Community Agency for Social Enquiry (1999) *Second Monitoring Survey at Albertina, Eatonside, Soshanguve South Ext. 4 and Johandeo,* Vo.l 4, November, Johannesburg: CASE.

Cotton, A. and Franceys, R. (1991) *Services for shelter, Liverpool Planning Manual 3*, Liverpool: Liverpool University Press in association with Fairstead Press.

Creamer Media (2005) *Speech by the Minister of Education Ms Naledi Pandor, at the opening of Ivory Park Secondary School.* Johannesburg: Issued by the Department of Education, http://polity.org.za/article/pandor-opening-of-ivory-park-secondary-school-24092005-2005-09-24, 10 May 2009.

CSIR (2002a) *Report on Sustainability Analysis of Human Settlements in South Africa-November 2002*, Pretoria: CSIR.

CSIR (2002b) *The International Sustainability Debate in CSIR Report on Sustainability Analysis of Human Settlements in South Africa-November 2002*, Pretoria: CSIR.

Davis, M. (2006) *Planet of Slums*, New York: Verso.

Denzin, N. K. and Lincoln, Y.S. (eds.) (2000) *Handbook of Qualitative Research*, London: Sage Publications.

Department of Housing (1994a) *National Housing Policy and Strategy for South Africa (1994),* Pretoria: Department of Housing.

Department of Housing (1994b) *Subsidy Information*, http:// www.housing.gov.za, 09 May 2009.

Department of Housing (1994c) *White Paper on National Housing Policy and Strategy for South Africa (1994)*, http:// www.housing.gov.za, 06 February 2009.

Department of Housing (2000) *South African Country Report to the Special Session of the United Nations General Assembly for the Review of the Implementation of the Habitat Agenda*, Pretoria: Department of Housing.

Department of Housing (2004) *'Breaking New Ground', A Comprehensive Plan for the development of Sustainable Human Settlements (2004),* Pretoria: Department of Housing.

Department of Housing (2004b) *National Housing Programme: Upgrading of Informal Settlements. National Housing Code, Chapter 13*, Pretoria: Department of Housing.

Department of Housing (2005) *National Housing Programme: Upgrading of Informal Settlements. National Housing Code, Chapter 13,* Pretoria: Department of Housing.

Dewar, D. (2002) *Working with Informality in Urban Settlements*. Unpublished Paper. Planning Africa Conference, September 2002.

Dlamini, N. (2007) *Progress can be seen at Ivory Park*, http://www.joburgnews.co.za/2007/jul/jul27_ivorypark.stm, 14 May 2009.

Engelbrencht, C (2003) 'A Preliminary Assessment of the Phased Housing Programme in Gauteng', in Khan, F. and Thring, P. (eds.) *Housing Policy and Practice in Post-Apartheid South Africa*, Sandown: Heinemann Publishers (Pty) Ltd.

Federal Ministry for Regional Planning, Building and Urban Development (eds.) (1996) *Human settlements Development policy: National Report Germany (Habitat II),* Michaelshof: Federal Research Institute for Regional Geography and Regional Planning.

Food Tree for Africa. *702 Greens Ivory Park* (no date indicated), http:// www.trees.co.za/702-radio-greens.html, 5 May 2009.

Gauteng Department of Housing (2004) *Gauteng Department of Housing: Five Year Strategic Plan (2004-2005)*, Johannesburg: Gauteng Department of Housing.

Harrison, P. (1992) 'The policies and politics of informal settlement in South Africa: A historical perspective', Africa *Insights*, vol. 22, no.1, Pp 14-22.

Hart, T. (1992) 'Informal Housing in South Africa: An overview in South Africa in Transition'. *Environmental Law* Series No.1, Verloren van Themaat Centre.

Hasan, A. and Vaidya, C. (1986) 'Two approaches to the improvement of low-income urban areas-Madras and Oringi', *Habitat International*, vol. 10, no.3, Pp 225-234.

Hindson, D. and McCarthy, J. (1994) *Here to Stay: Informal Settlements in Kwazulu-Natal*, University of Natal: Indicators Press.

Hindson, D. and McCarthy, J. (1994) 'Defining and Gauging the Problem', in Hindson, D. and McCarthy, J. (eds.) *Here to Stay: Informal Settlements in Kwazulu-Natal*, University of Natal: Indicator Press.

Huchzermeyer, M,. Karam, A,. Stemela, I,. Siliga, N. and Frazenburg, N. (2006) 'Policy, Data and Civil Society: Reflections on South African Challenges through an International Review', in Huchzermeyer, M. and Karam, A. (eds.), *Informal Settlements: a Perpetual Challenge*, Cape Town: UCT Press.

Huchzermeyer, M. (1999) *The exploration of appropriate informal settlement intervention in South Africa: contributions from a comparison with Brazil.* Thesis, PhD, University of Cape Town: Department of Sociology.

Huchzermeyer, M. (2004) *Unlawful Occupation. Informal Settlements and Urban Policy in South Africa and Brazil,* Eritrea: African World Press Inc.

Huchzermeyer, M. (2006a) *The Struggle for In Situ Upgrading of Informal Settlements: Case Studies from Gauteng.* Paper presented at the Southern African Housing Foundation Conference and Exhibition, Cape Sun, 9-11 October 2006.

Huchzermeyer, M. (2006b) The New Instrument for Upgrading Informal Settlements in South Africa: Contributions and Constraints, in Huchzermeyer, M and Karam, A. (eds.) Informal *settlements? A perpetual challenge*, Cape Town: UCT Press.

Huchzermeyer, M. and Karam, A. (2006) The Continuing Challenge of Informal Settlements: An Introduction, in Huchzermeyer, M. and Karam, A. (eds.), *Informal settlements? A perpetual challenge*, Cape Town: UCT Press.

Khan, F. and Thring, P. (eds.) (2003) *Housing Policy and Practice in Post-Apartheid South Africa*, Sandown: Heinemann Publishers (Pty) Ltd.

Kramer, M. (2006) *Dispossessed: Life in our world's urban slum,* New York: Orbis books.

Midrand Green City Projects/IUCN South Africa (1999) *Midrand State of Environment Report-1999,* http://www.environment.gov.za/soer/reports/midrand/soemid_2.pdf, 03 February 2009.

Misselhorn, M. (2008) *Position Paper on Informal Settlements Upgrading. Draft Part of a Strategy for the office of the South African Presidency*, http:// www.pptrust.co.za/Documents/Informal_Settlement_Paper.pdf, 14 March 2009.

Mitlin, D. and Satterthwaite, D. (1990) *Human settlements and sustainable development: The role of human settlements and of human settlements policies in meting development goals and in addressing the issues of sustainability at global and local levels*, Nairobi: United Nations Centre for Human settlements (Habitat).

Musi, M. and Maluleke, D. (1998) *Speech by Paul Mashatile, MEC of the Ministry for Public Safety and Security at the opening of the Ivory Park police station*, Issued by Ministry for Public Safety and Security.

Nazrul, I. (1996) 'Sustainability Issues in urban housing in a low-income country: Bangladesh', *Habitat International*, Vol. 20, no.3, Pp. 377-388.

Our Pledge. *Ivory Park-Habitat for Humanity*, http://www.monsanto.co.za/en/layout/our_pledge/ivory_park/defaultasp, 20 June 2009.

Payne, G. and Majale, M. (2004) *The Urban Housing manual: Making Regulatory Frameworks Work for the Poor,* London: Earthscan.

Petras, J,. Leiva, F. and Veltmeyer, H. (1994) *Democracy and Poverty in Chile. The Limits to Electoral Politics*, Oxford: Westview Press.

Pillay, U, Tomlinson, R. and du Toit, J. (eds.) (2006) *Democracy and Delivery: Urban Policy in South Africa,* South Africa: HRSC Press.

Pugh. (1995) 'The Role of World Bank in Housing', in Aldrich, B, and Sandhu, R. (eds.) *Housing the Urban Poor: Policy and Practice in Developing Countries*, London: Zed Books.

Rakodi, C. and Schlyter, A. (1981) *Upgrading in Lusaka: Participation and Physical Changes*, Sweden: The National Sweden Institute for Building Research.

Schurink, M.E. (1998) 'Crimes committed against women and children: high levels need a forward approach', *Nedbank ISS Crime Index*, Vol 2, no.5, Sept-Oct.

Seidman, I. (2005) *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences,* 3rd edition, London: Teachers College Press.

Sibiya, P. N. (2007) A discourse Analysis of Various Rationalities at play in the Approach to Informal Settlement in South Africa. Research Report, Bachelor of Science Town and Regional Planning, Johannesburg: University of the Witwatersrand.

Sirivardana, S, and Lankatilleke, L. (1988) *Some Key Issues in the Participatory Planning and Management of the Urban Low-Income Housing Process*, Sri Lanka: National Housing Development Authority, Ministry of Local Government and Housing Construction.

South African Cities Network (Undated). *People and Places: An Overview of Urban Renewal.*

Springer, J. (1996) *Cities and Homes for All: The Habitat Agenda: United Nations Conference on Human Settlements (Habitat II), Istanbul, Turkey 3-14 June 1996*, Nairobi: United Nations Centre for Human Settlements.

Statistic South Africa. (1996) *The People of South Africa: Population Census*, 1996, http://www.statssa.gov.za/census01/Census96/HTML/default.htm, 3 January 2009.

Sugrue. (2000) *Midrand Ecocity Project*, http://www.sustainablesettlement.co.za/event/SSBE/Proceedings/Midrand%20EcoCity%20Project%20document.pdf, 15 April 2008.

Taylor, K. and Cotton, A. (1993) *Urban Upgrading and Procedures for Pakistan*, Loughborough: WEDC.

Thale, T. (2002) *Ivory Park gets a community centre*, http:// www.joburgnews.co.za/june_2002/ivory_park.stm, 28 June 2009.

The World Bank Group and Cities Alliance. (1999-2001) *'Upgrading Urban Communities: a resource for practitioners'*, in the main upgrading web page (topics covered: What is Urban Upgrading? Doing Urban Upgrading, Case Examples, Issues and Tools, Resources). http://web .mit.edu/urbanupgrading, 14 February 2009.

UN-Habitat. (1996) *Istanbul Declaration on Human Settlements: General Assembly resolutions* 51/177 of 16 December 1996 and 53/242 of 28 July 1999, http://www.unhabitat.org/downloads/docs/407-ISTANBUL_DECLARATION_ON_HUMAN_SETTLEMENTS-Istanbul_Declaration.pdf, 4 March 2008.

UN-Habitat. (2001) *Cities in a Globalizing World: Global Report on Human Settlements 2001*, London: Earthscan.

United Nations Centre for Human Settlements (Habitat). (1989) *Urbanization and Sustainable Development in the Third World: an unrecognized global issue,* Nairobi: United Nations Centre for Human Settlements.

United Nations Centre for Human Settlements. (1996) *Daily Press Postings from Habitat during Istanbul. United Nations Centre for Human Settlements*, http:// www.un.Org/conferences/Habitat, 09 May 2009.

United Nations Centre for Human Settlements. (1996) *The Habitat Agenda and Istanbul Declaration*, New York: United Nations Centre for Human Settlements.

United Nations Centre for Human Settlements. (1997) *Report of the Second United Nations Conference on Human settlements (Habitat II), Istanbul, Turkey 3-14 June 1996,* New York: United Nations Centre for Human Settlements.

United Nations Development Programme. (Undated) *Millennium Development Goals* (MDGs), http:// www.undp.org/mdg, 15 February 2009.

Van der Vegt, H., Ter Heide, H., Tjallingtii, S. and Van Aphen, D. (eds.) (1994) *Sustainable Urban Development: Research and Experiments*, Netherlands: Delft University Press.

World Commission on Environment and Development (Bruntland Commission) (1989) *Our Common Future.* World Commission on Environment and Development.

Yin, K. (2003) *Application of Case Study Research,* 2nd edition, London: Sage Publications.

Yin, K. (1994) *Case study Research: Design and Methods,* 2nd edition, London: Sage Publications.

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