

**URBANISATION AND THE DEVELOPMENT OF INFORMAL SETTLEMENTS
IN THE CITY OF JOHANNESBURG**

by

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DECLARATION

I Hasani Lawrence Ngonyama, student no: 3697380, hereby declare that this **URBANISATION AND THE DEVELOPMENT OF INFORMAL SETTLEMENTS IN THE CITY OF JOHANNESBURG** is my own and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete reference. This report has never been submitted before for any qualifications.

Signed by : -----

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DEDICATION

**THE STUDY IS DEDICATED TO THE FOLLOWING PERSONS WHO ARE THE
PILLARS OF MY STRENGTH:**

- Grandmother, Mrs Tsatsawani Nelly Ngonyama
- Mother, Mrs Mthavini Nwa' -Daniel Ngonyama
- Father, Risimati Jack Ngonyama
- Tsakani Susan Ngonyama
- Nyiko, Vutisani & Neriseko Ngonyama

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SUMMARY

South African urban areas are faced with a severe housing backlog. This situation could be attributed to many issues such as the lack of suitable land for housing and the existence of informal settlements. In some cases lack of suitable land for housing has also led to invasion of hazardous land. The informal settlement dwellers in the informal settlements are faced with development challenges such as poor infrastructure, lack of basic service provision and challenges regarding security of tenure. Consequently, government has responded to illegal occupation of land through evictions as the situation is understood to threaten the economy, the social and political stability and the management of the urban environment.

In order to address the scourge and growth of informal settlements, the National Department of Human Settlements has unveiled a housing strategy 2004 towards the informal settlement upgrading process. The informal settlement upgrading process is acknowledged as an effective means of eradicating informal settlements and improving the housing conditions of the poor in South Africa. The improvements of slums is now a Millennium Development Goal of the United Nations. The aim Millennium Development Goals is to substantially achieve target 11 by reducing the incidence of income poverty, hunger, gender disparity, child and maternal mortality, also by reducing the spread the spread of HIV/AIDs and incidence of malaria and reducing lack of access to water, sanitation and primary education. The aim of Millennium Development Goals is also to achieve significant improvement in the lives of at least 100 million slum dwellers in the world by 2020 as proposed in the “Cities Without Slums” initiatives (United Nations, 2000: 5). The upgrading of informal settlements is undertaken to assist in the realisation of the right to adequate housing and other human rights aspects such as access to water, sanitation and provision of security of tenure that prohibit forced eviction.

ABSTRACT

Urbanisation in South African cities is a worrying phenomenon. Cities such as the City of Johannesburg are faced with a severe housing backlog. This situation could be attributed to many issues such as lack of suitable land for housing, and the existence of informal settlements. This study has been undertaken to investigate whether the interventions implemented by City of Johannesburg Metropolitan Municipality to eradicate informal settlements are effective in addressing challenges faced by informal settlement dwellers. In South Africa, informal settlement upgrading process is acknowledged as an effective means of eradicating informal settlements. In this regard, interventions to eradicate informal settlements require extensive research in order to have proposals for future policy interventions. This study has been also undertaken to make some recommendations that might resolve the challenges of informal settlements in the City of Johannesburg.

KEYWORDS

- Informal settlements
- Informal settlement dwellers
- Interventions
- Challenges
- Upgrading of informal settlements
- Sustainable solution intervention
- Eradication of informal settlements
- Sustainable human settlements
- Land invasion
- Low-income housing
- Provision of land
- Security of tenure
- Provision of basic services
- City of Johannesburg Metropolitan Municipality.
- Sustainability
- Service delivery
- Urbanisation
- Local government
- Municipality
- Sustainable solution

6. List of acronyms and abbreviations

- BNG : Breaking New Ground
- CBD : Central Business District
- COJMM : City of Johannesburg Metropolitan Municipality
- CBO : Community-Based Organisation
- COHRRE : Centre on Housing Rights and Evictions
- DFA : Development Facilitation Act, 1995 (Act No. 67 of 1996)
- DoH : Department of Housing
- Dplg : Department of Provincial and Local Government
- IDP: Integrated Development Programme
- ISUP: Informal Settlement Upgrading Programme
- MDGs : Millennium Development Goals
- MEC : Member of Executive Committee
- NGOs : Non- Governmental Organisations
- NHSS: National Housing Subsidy Scheme
- PHP : People Housing Process

- RDP :Reconstruction and Development Programme
- RSA: Republic of South Africa
- SACN : South African Cities Network
- UNISDR : United Nations Development Programme
- UN : United Nations
- VIP : Ventilated Improved Pit (latrine)

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CHAPTER 1

1.1. INTRODUCTION AND BACKGROUND OF THE STUDY

Informal settlement dwellers in South Africa are faced with human settlement problems such as poor infrastructure (lack of electricity and poor drainage systems), limited access to basic services (water and sanitation) and lack of security of tenure. The dawn of democracy in South Africa in 1994 brought a change in housing delivery. Such change included the transformation of housing provision to provide a sustainable solution to informal settlements in South Africa. Since then, the South African national housing policy has aimed to address informal settlements through the *in situ* upgrading and the relocation of residents to formal housing (Department of Housing, 1994: 4-10; Khan & Thring, 2003: 17). The National Department of Housing (known as National Department of Human Settlements since 2010) unveiled a new housing strategy in September 2004, namely, Breaking New Ground Strategy (hereafter referred to as BNG). This housing strategy is a five-year plan intended to provide direction in the informal settlement upgrading process. This was followed by the Department of Human Settlements Strategic Plan 2009 to 2014.

According to the Department of Housing (2004: 17), the BNG is defined broadly as a formalisation of informal settlements in their original locations. As the foundation plan, the researcher will focus on this plan (BNG Housing Plan 2004). This plan has been perceived as a milestone in managing housing since 1994. The BNG provided funding instruments that facilitated a phased *in-situ* upgrading approach to informal settlements (see section 5.3 in Chapter five). According to Van Horen (2000: 101-112), upgrading informal settlements on an *in situ* project is a worldwide best practice, also applied in countries such as Brazil and Kenya. Upgrading informal settlements on an *in situ* programme refers to the provision of basic services such as water, sanitation, electricity and roads in the settlements. The BNG Housing Plan recommended an *in situ* upgrading of informal settlements located in land suitable for human settlement. However,

relocation is considered in circumstances where upgrading of informal settlements was impossible.

South African urban areas are presently faced with severe housing backlogs caused by the existence of unmanageable informal settlements throughout the country. According to Tomlinson (1999: 285), these informal settlements are usually established illegally without the consent of landowners, be it government or private landowners. The informal settlement dwellers are faced with insecurity of tenure on the land they reside on. For the purposes of this study, security of tenure means ownership or possession of title deeds, ownership of land or legal rights to occupy the land without fear of eviction. Some of these informal settlements are established in the areas not suitable for human settlement, where many problems such as destruction of structures by fire and floods were prevalent. These informal settlements were usually established on unsuitable and hazardous areas such as dolomite land, flood lines, mining dumps and river banks that compromise proper housing development (Tomlinson, 1999: 285).

Despite the South African government's efforts of providing formalised low-cost housing through the Reconstruction and Development Programme (hereafter referred to as RDP), informal settlements have persisted. The government's provision of RDP housing also served as an effort to provide a sustainable solution to informal settlements. The existence of informal settlements throughout South Africa is an indication of a policy need for a support strategy to eradicate these informal settlements. Eradicating informal settlements by 2014 is one of the South African government's strategic targets in line with the Millennium Development Goals (MDGs). As part of the South African national government's effort to address the shortage of housing and provide a sustainable solution to informal settlements, the South African government subscribes to the United Nation's Millennium Development Goals (MDGs) that aim, among the other things to eradicate informal settlements by 2020 globally (United Nations, 2000: 5).

The City of Johannesburg Metropolitan Municipality (hereafter referred to as COJMM)

situated in the Gauteng Province is also made up of the Johannesburg central business district (hereafter referred to as CBD) as its key economic hub. Gauteng Province is the South Africa's smallest province with limited land availability for housing development for the poor (<http://en.wikipedia.org/wiki/Johannesburg>) downloaded on the 27/02/2012. However, the COJMM is the largest populated city in South Africa. The city has been attracting millions of people due to its economic prospects and employment opportunities. According to a population census conducted in 2006, COJMM has 3.8 million residents. The current population size could be estimated at more than 7 million people in COJMM at the moment. The movement of people from rural to urban areas has contributed to the shortage of formal affordable housing for the poor and low-income households. Due to this shortage of housing, people have invaded vacant land and buildings to establish squatter camps in and around the outskirts of Johannesburg (Drakakis-Smith, 1995: 12).

It is COJMM's vision to eradicate and provide sustainable solution to informal settlements by 2014 (www.joburgnews.co.za). In this regard, it is the researcher's opinion that COJMM's vision of eradicating and providing a sustainable solution emanated from the National Department of Human Settlement Strategy Plan 2004. COJMM promotes a zero tolerance thinking towards illegal informal settlements and land invasions. In order to prevent the creation of illegal informal settlements, COJMM has tasked two departments to enforce the zero tolerance approach towards new land invasions and the formation of new illegal squatter camps. The COJMM Housing Department and Johannesburg Metropolitan Police Department have been empowered to demolish new illegal settlements promptly, as soon as they are discovered (www.joburgnews.co.za) downloaded on the 10/09/2008.

Although COJMM has a zero tolerance approach to new illegal land invasions, in some instances, the existing informal settlements are found to be expanding (increasing the number of households and the population). It seems that this expansion usually takes place over weekends and public holidays when most of COJMM officials are not on duty.

The researcher assumes that the two above-mentioned departments established to curb informal settlements are not succeeding in their mandate. The assumption is made because continued visibility and existence of informal settlements in COJMM does not show any success in this regard.

The Centre on Housing Rights and Eviction (COHRE) (2005: 5) points that the South African government has passed a number of laws with regards to urban settlement management, including the *Constitution of the Republic of South Africa* (1996), the *Extension of Security of Tenure Act* 62 of 1962, the *Prevention of Illegal Eviction from and the Unlawful Occupation of Land Act* 19 of 1998, also known as PIE Act. Section 4(10)(11)(12) of the PIE Act prohibits the demolishing of any informal structures such as shacks and informal homes. This Act indicates that any evictions of illegal occupants of informal settlements are subject to court order. The court only provides court orders when conditions are deemed reasonable (Republic of South Africa, 1996).

As proven in the court case of Grootboom & others versus the Republic of South Africa (Case No. 6826/99), often, residents take advantage of the policy's "grey area" of the PIE Act that indicates that, once someone has erected a shack and occupied it for a day or more, municipal officials cannot demolish such a shack without a court order. When COJMM attempts to obtain a court order, the court usually insists that COJMM provide alternative accommodation before evicting anyone or demolishing shacks in a given vicinity. This situation highlights the need to respond proactively in order to eradicate informal settlements and to provide sustainable solutions to managing urban settlements (Tomlinson, 1994: 283). The prevalence of informal settlements in COJMM makes it difficult for COJMM to eradicate them informal because of the court requirements of providing informal settlement dwellers with alternative accommodation before they can be evicted. It is the researcher's opinion that COJMM usually does not provide alternative accommodation to all households that occupy illegal land or building or housing. This reality is attributed to the lack of housing resources.

COJMM's vision to eradicate informal settlements seeks to provide a sustainable solution to the needs of the poor to access adequate housing. Although there are many sustainable solution interventions in the eradication of informal settlements, one of the approaches is formalisation of informal settlements through *in situ* upgrading or relocation. In this study, relocation is perceived to be a sustainable solution. This study focuses on relocation as the main sustainable solution intervention as applied by COJMM in the Eikehof informal settlement.

1.2. AREA OF THE STUDY

The Eikehof informal settlement is part of 180 informal settlements within the COJMM. The Settlement is situated in Region F, Ward 23 of COJMM borders (see Figure 1 below). The Eikehof informal settlement is located in the Gauteng Provincial Government's land in the vicinity of the farm Eikehof 333 IQ. The farm Eikehof is approximately 220 hectares in size. In terms of topography, farm Eikehof 333 IQ is mostly flat. This settlement is situated at about 25km south of the Johannesburg CBD at corner of Vereeninging road (R82) towards Vereeninging and Nirvan road (R554) towards Lenasia. The informal settlement is situated relatively far from commercial and employment centres, putting residents at an economic disadvantage.

The Eikehof informal settlement has an estimated 1 493 households with an estimated population of about 6 000 inhabitants. The residents have no access to basic services (water and sanitation) and infrastructure (drainage systems and electricity) (see section 1.1). However, COJMM provides other make- shift services such as tanker tap water, pit latrines as well as chemical toilets (also referred to as portable toilets) in the settlement. There is one primary school and a crèche in the vicinity of the settlement. In an informal discussion, Mr Andries Hlapolosa, COJMM Area Manager of Housing (interviewed on the 16 February 2008) estimated that more than 50% of the population is unemployed. He also estimated that 30% of the population is employed in the nearby farms and industries. The remaining percentage of population is assumed that are self-employed. Mr Hlapolosa

also indicated that about 800 households were relocated to Lehae Housing Project Phase one between 2008 and 2009.

According to Pieterse (2008: 31), urban areas of developing countries such as South Africa are home to millions of people. In South Africa, cities like Johannesburg are experiencing unprecedented population surges. In the Johannesburg CBD, there is an influx of people from various places, which in many ways contributes to land invasions and informal settlements due to the shortage of houses for poor and low-income groups. It is against this background that this study is undertaken in COJMM area with a particular attention to the Eikenhof informal settlement. Figure 1 below indicates the COJMM map.

Figure 1: Map of City of Johannesburg Municipal boundaries



Source: (www.joburg.org.za) downloaded on the 10/09/2009.

The above map highlights all the regions of COJMM including that of region F where this study is undertaken. The next section discusses the purpose of this study

1.3. PURPOSE OF THE STUDY

The study is premised on the need for a sustainable solution for addressing and managing informal settlements in South Africa. The purpose of this study is to investigate the effectiveness of a sustainable solution intervention as applied by COJMM in addressing informal settlements with a particular reference to the Eikenhof Informal Settlement.

1.4. PROBLEM STATEMENT

In terms of the *Republic of South Africa Constitution of 1996*, the government is obliged to provide adequate housing for all its citizens within its limited resources. Section 26 of the 1996 *Constitution*, mentions that everyone has the right to have access to adequate housing (Section 26(1)). The government must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right (Section 26(2)). Section 2 of the *Housing Act 107 of 1997* compels all three spheres of government to give priority to the needs of the poor in respect of housing development (Section 2(1) (a)). In addition, all three spheres of government must ensure that housing development provides a wider choice of housing as reasonable as possible (Constitution of the Republic of South Africa, 1996).

The Eikenhof informal settlement was established illegally on unsuitable (dolomite) land. This settlement is situated in the area where it poses development challenges to informal settlement dwellers for proper housing development. According to Tomlinson (1999: 285), the informal settlements dwellers usually lack security of tenure, limited access to basic services (clean water and sanitation) and poor infrastructure (lack of electricity and drainage systems) (see section 1.1). The Eikenhof informal settlement was established illegally without the land owner's consent. This could mean that upgrading this informal

settlement will be difficult or eventually impossible. Due to unsuitability of the land in the Eikenhof informal settlement, it is clear that relocation should be recommended for the informal settlement (see section 1.2). While relocation has been recommended as sustainable solution interventions for the Eikenhof informal settlement, there are however some challenges (displacement of people and interruption of people's lives) in this regard. The following are challenges related to relocation, informal settlement dwellers who have already benefited from government housing projects do not qualify to be relocated to the RDP houses, foreign nationals do not qualify to obtain RDP houses and informal settlement dwellers who earn a monthly income above R3500 per month do not qualify for RDP, to qualify you need to be South African citizen, be 21 years old or more, in possession of South African identification book. In light of the abovementioned challenges, COJMM is compelled to provide alternative housing to affected informal settlement dwellers who do not qualify to obtain RDP houses.

It is the researcher's view that not all informal settlement dwellers in the Eikenhof informal settlement meet all the requirements to be relocated to RDP house It is also the researcher's view that there is acute scarcity of well-located land suitable for the development of low cost housing or land for partial or full-scale relocation in COJMM. In most city areas, land has already been developed and the remaining land is located far from urban centres where there are limited employment opportunities. Land closer to employment centres is expensive and not affordable for low-income housing development (Bond, 2000: 122).

In this regard, the research problem of the study is an attempt to investigate whether the sustainable solution intervention (relocation) is effective in addressing informal settlement challenges as applied by the COJMM in the Eikenhof informal settlement.

1.4.1. Research questions

The research problem to be investigated is contained in the following questions:

- ❖ Whether a sustainable solution (relocation) to the informal settlements upgrading programme addresses informal settlement challenges in the Eikenhof informal settlement.
- ❖ What are the development challenges faced by the Eikenhof informal settlements dwellers?
- ❖ Whether COJMM should seek other forms of sustainable solution interventions such as serviced sites to eradicate the Eikenhof informal settlement.

1.4.2. Study objectives

In order to appropriately address the research problem and questions above, it is imperative to identify specific study objectives. The objectives were articulated in the following manner:

- ❖ To investigate what kind of development challenges are faced by the Eikenhof informal settlement dwellers.
- ❖ To examine the extent to which a sustainable solution intervention (relocation and *in situ* upgrading) responds to and addresses informal challenges in the Eikenhof informal settlement.
- ❖ To examine the effectiveness of sustainable solution interventions as applied in the Eikenhof informal settlement eradication processes.
- ❖ To collect and analyse data in order to interpret the findings.
- ❖ To draw conclusions and make recommendations.

1.5. RESEARCH METHODOLOGY

The quantitative research method is employed in this study. According to Mouton and Marais (1990: 155), the research report in quantitative research methods contains some of the following features: charts, graphs, and table full of numbers that provide a condensed picture of data. The quantitative research method data is principally numerical. Data is usually gathered using more structured instruments such as a structured survey questionnaire. The researcher hand delivered questionnaires, meanwhile respondents completed on their own in his presence. The researcher clarified question only where it was necessary to do so. Research results provided little details on behaviour, attitudes, and motivation. The quantitative research methods are based on larger samples that are representative of the population.

1.6. UNIT OF ANALYSIS

Bless and Hinson-Smith (1995: 66) are of the opinion that a unit of analysis is the persons or groups of individuals (objects) from whom a social researcher collects data. The unit of analysis in this study is the Eikenhof informal settlement dwellers. Fouche and De Vos (1998:68) state that a selection of a unit of analysis happens almost automatically at the problem identification phase. The researcher believes that knowledge of the current state of a subject area ultimately determines the specific problem to be studied. This study focuses on the sustainable solution interventions applied by COJMM to address the informal settlement challenges faced by Eikenhof informal settlement dwellers. It is imperative to define terms and concepts that are constantly used in this study.

1.6.1. DEFINITION OF TERMS AND CONCEPTS

1.6.1.1. Security of tenure

Banerjee (2007: 1) and Hornby (2005: 1526) define security of tenure as the legal right to live in a house or use a piece of land. Security of tenure provides conditions under which

land or buildings are held or occupied either by an individual or community.

1.6.1.2. Household

Ballantyne & Oelofse (1999: 203) define household as family or all people who live together in the same house. In this study, household referred to shack dwellers residing in the same shack.

1.6.1.3. Sustainable human settlement

Agenda 21 (2002: 7) defines sustainable human settlements as those cities, town and villages and their communities which enable a person to live in a manner that supports the state of sustainability and the principles of sustainable development, and have institutional, social and economic systems that will ensure their continued existence.

1.6.1.4. Informal settlement

Staff (1993: 235) defines informal settlement (often referred to as squatter settlement or shanty town) as a dense settlement comprising communities housed in self-constructed shelters under conditions of formal or traditional land tenure. It is a common features of developing countries and are typically the product of an urgent need for shelter by the urban poor. As such informal settlement is characterised by a dense proliferation of small, makeshift shelters built from diverse materials, degradation of the local ecosystem and severe social problems.

1.6.1.5. Urbanisation

The concept urbanisation refers to two contexts, namely the demographic and the socio-cultural. The former refers to the promotion of growth, reduction of poverty, preserving the environment, supplying people's basic needs and maximising the income of the inhabitants of a town. The latter is also dynamic but relates to a change in lifestyle from rural to urban, which is associated with a change in values, attitudes and behaviour. Jones

(1975) argues that this socio- cultural context refers to the continuous process of exposure, interaction and changes that urban residents experience and whereby certain patterns of behaviour, lifestyle, value systems, ambitious and attitudes arise (Kok *et al*, 2003: 93; Morris, 1981: 1).

1.6.1.6. Programme

According to Van der Waldt (2001: 7), a programme is a portfolio of projects that aims to achieve a strategic goal of the organisation, planned and managed accordingly.

1.6.1.8. Project

Kerzner (2001: 71) states that a project is an undertaking that has a scheduled beginning and end, and normally has a purpose. While Garduner (2005: 1) defines a project as a temporary endeavour aimed at bringing a unique product and service. In other words, a project is a sub- activity of a programme.

1.7. LAYOUT OF CHAPTERS

The study has been divided into five sequential chapters.

Chapter1 provides an introductory background that sets out a problem statement and research problem, motivation, objectives and research questions.

Chapter 2 provides a literature review and discussion of the concepts used in the study. The chapter further discusses the definition of the concept of informal settlements to clarifying its use in the study. Thereafter, this chapter highlights studies conducted by other scholars in the field of the study, to indicate the existing body of knowledge.

Chapter 3 describes the research methodology, research design, data collection methods,

sampling, and the ethical considerations of the study.

Chapter 4 provides data analysis, findings and interpretation of the result of the study. The chapter also presents more specific and in-depth observation of the area of the study, living conditions and strategies used in the eradication of informal settlements through *in situ* upgrading and relocation as sustainable solution intervention in this regards.

Chapter 5 provides the conclusion and recommendations of the study.

1.8. SUMMARY

This chapter introduced background of the study, the location of the area of study, as well as the problem statement. The chapter briefly explained the historical background and the challenges contained in the area of the study. The chapter also highlighted the introduction of the Breaking New Ground Housing Strategy 2004. The objectives and the research methodology of the study were also highlighted. The terms and concepts constantly used in the study were also discussed. The next chapter deals with literature review to explain the context within which this study should be understood.

CHAPTER 2

LITERATURE REVIEW: UPGRADING OF INFORMAL SETTLEMENTS

2.1. INTRODUCTION

Chapter 1 has provided an introductory background to the study, highlighted the nature of the study and the problem to be investigated. The themes covered in Chapter 1 are the reasons for this study having been undertaken. The literature review of this study begins by conceptualising informal settlements from different perspectives. The purpose of this chapter is to discuss a literature review in relation to this study. This chapter also discusses a sustainable solution intervention as applied by COJMM in the eradication and upgrading of informal settlements. This discussion is necessary to provide an understanding of what other scholars have uncovered on providing a sustainable solution to addressing informal settlements challenges.

2.2. CONCEPTUALISING INFORMAL SETTLEMENTS

Huchzermeyer and Karam (2006: vii) define informal settlements as settlements of urban poor developed through the unauthorised occupation of land. Informal settlements are regarded as unhealthy and overcrowded blights on the urban landscape. Informal settlements are houses made out of non-durable materials such as plastics, woods, and scrap metal. Informal settlements are progressively becoming an ordinary form of accommodation for millions of people and are mostly found on the outer edges of larger cities. Huchzermeyer and Karam (2006: 41) further state that millions of households in the urban areas across South Africa live in informal settlements in order to gain access to basic facilities, economic opportunities, social and economic networks. In the case of this study, the Eikenhof informal settlement dwellers survive by doing temporary jobs in the neighbourhood areas, some conducting recycling businesses and some are formally

employed in the farms and industrial area in the vicinity (see section 1.2). Informal settlement dwellers usually invade unused land, former buffer strips, undeveloped land between formal township development, on the edges of new townships, on land allocated for public or commercial facilities that shows no signs of ever being developed for official purposes, and on unutilised and unprotected natural land.

Saane (2005: 47) posits that informal settlement areas are not surveyed and thus do not have property boundaries. The majority of informal settlements are located in areas that are not surveyed and in townships that have not been proclaimed. This situation of unproclaimed townships makes it difficult for the informal settlement dwellers to develop their informal settlements due to the lack of security of tenure. As such areas cannot be registered in the Surveyor General's office. The Surveyor General's office registers stands only in the formally proclaimed townships. The situation of unsurveyed informal settlements leaves these informal dwellers without security of tenure. Saane (2005: 47) further points out that the property value in the informal settlement areas is found to be low as compared to the property value in the formal housing (residential) areas.

Mashabane (1990: 9) argues that most informal settlement dwellers have no legal rights to be in the land they are occupying, except for land that has been given attention by being formalised or upgraded. A squatter (informal) settlement is an area in which people have built themselves houses without regard to survey boundaries, whether or not such boundaries have been established. These informal settlements may be as good as (if not better than) many houses built on surveyed plots to which the house owners have the rights of occupancy. However, most of the informal (squatter) areas have poor urban amenities compared to areas where houses are built on surveyed plots. Public facilities such as roads, schools, water and electricity facilities, refuse disposal services, surface water drainage, and septic tank-emptying services in squatter areas are markedly inferior to those in non squatter areas.

Carter (1989: 293) states that informal settlements are areas in which informal

settlements dwellers have built themselves houses without regard of conditions attached to the land. Carter (1989: 293) argues that most of the inhabitants in the informal settlements fall in the category of poor and cannot afford housing even of their own choice. However, informal settlements are symptom of historical and contemporary processes of social, economic, and political exclusion, both those specific to apartheid and those arising from contemporary process of South Africa's incorporation into the global economy. Carter (1989: 293) further defines informal settlements as settlements that present various forms of informality in relation to conventional urban development. As basic characteristic, the occupation of the land is unauthorised and the building of houses do not comply with building regulation.

For the purpose of this study, the researcher defines informal settlement as a residential area in an urban locality inhabited by the poor homeless people without access to tenured land of their own, and hence squat on vacant land, either privately or publicly owned. An informal settlement is generally characterised by the physical appearance of being poorly planned, lack of utilities and urban services. The literature review undertaken by some scholars on the issues of informal settlement eradication and upgrading are discussed in the following section.

2.3. THE SUSTAINABLE SOLUTION INTERVENTION OF INFORMAL SETTLEMENTS

The discussion in this chapter provides the evidence of studies undertaken in an attempt to obtain possible sustainable solutions for the informal settlement challenges in South Africa. Several studies on the upgrading of informal settlements have been undertaken. Mzimela (2009) undertook a study towards a Master of Public Administration degree at the University of Kwa Zulu- Natal, with the topic "Investigating the effectiveness of land subdivision in the informal settlement upgrading process". The research problem under investigation was to understand whether land subdivision is an effective method of upgrading informal settlements. The objectives of the study were to find ways that can be

used to minimise the relocation of informal settlement dwellers. One of the study objectives of Mzimela (2009) study was to enquire if land subdivision can be an approach that could be adopted as the quickest alternative to the informal settlements upgrading process.

Mzimela (2009) found that Tongaat Local Municipality made attempts to formalise the informal settlement areas through the provision of the RDP houses in the subdivided stands. The subdivision of land was intended provide each household with free standing stand. The thinking was that once households have been given stands they could able to upgrade their informal settlement by improving their houses in the eMagweveni informal settlement. According to Mzimela (2009) the system of informal settlement upgrading was planned in a way that concentrated on removing (relocating) all the informal settlements dwellers to RDP housing, using the system of one RDP house per one shack (household). This approach would be practical by the demolition of shacks as soon as the shack dwellers are allocated the RDP houses. However, Mzimela's (2009) study discovered that the project failed to eradicate the informal settlements because the demolition of shacks was not undertaken. It was discovered that not all informal settlement dwellers qualified to be allocated RDP houses. There was no evidence noted that indicated the decrease of shacks after some of the eMagwaveni informal settlements were relocated. Instead, it seems that shacks within this informal settlement increased. This situation indicates that the intervention employed, namely, subdivision of the land is ineffective in the eradication of informal settlements.

While Mzimela's study (2009) enriches the body of knowledge around the challenges of upgrading informal settlements, the study does not provide a definite answer to the plight of all informal settlements dwellers that can be used at the eMagweveni informal settlements. The subdivision of land applied in the eMagwaveni informal settlement failed as the informal settlement still exists even after the subdivision has been done. The approach of subdivisions could be misleading because it did not outline the challenges faced by the Tongaat Local Municipal officials in trying to upgrade abovementioned

informal settlement.

It is the opinion of the researcher that prior to establishment of the township, engineering officials would have to be sent to inspect the geotechnical formation of the soil to determine whether the land where townships are to be established is suitable for residential purposes. The inspection of geotechnical information is regarded as a township development process in this study. When undertaking the subdivision approach, the township establishment process must under no circumstances be compromised. There should be approval of the general plan of the area, surveying and pegging of stands, the approval of the services design and standards by the municipality and the actual proclamation of the town must be pursued (www.joburg.org.za) downloaded on the 21/01/2010.

Another study conducted by Dlamini (2009) for his qualification of Master in Civil Engineering at the University of Kwa Zulu-Natal, with the topic “*In-situ* upgrading of informal settlements using the Sectional Title Schemes of Duplexes (high rise buildings) sought to investigate whether the building of duplexes (high rise buildings) can be a sustainable solution to a lack of housing for the urban poor in South Africa.

Dlamini (2009) examined the implementation of the sectional scheme (duplexes or high rise structures) in the densely populated informal settlement. The study area for this research was in Kennedy Road informal settlement in Kwa Zulu-Natal Province. The settlement was chosen because it is densely populated and could be used to measure how much space could be saved if the approach of high rise was utilised. Dlamini’s (2009) study concluded that sectional title conserves enough land that the can be used for some other activities that the community did not own before. Dlamini’s (2009) study contributes much in the body of knowledge about a sustainable solution in addressing informal settlement problems.

Mlotshwa (2008) also undertook a study towards a Master of Public Management at the

University of Witwatersrand, with the topic “Understanding of informal settlements in South Africa”. The purpose of the research was to investigate the reasons for the steady increase of informal settlements at eThandukukhanya. The area of focus that has been identified for this research paper is the eThandukanya informal settlement on the outskirts of the town Piet Retief in Mpumalanga Province in South Africa.

Mlotshwa’s (2008) study was meant to assess whether the provision of low-cost housing would have an effect on migration, and whether formalising informal settlements by building low-cost (RDP) housing would assist in ensuring that these informal settlements are eradicated by 2014 or whether such an approach would merely serve to perpetuate the spread of informal settlements. The study found that informal settlements present diverse conditions across and within settlements. These include individual households, reasons for residing in an informal settlement, the established relationship to the land and its level of physical risk. The study concluded that the provision of RDP houses is not a solution to the plight of informal settlement dwellers. Mlotshwa’s (2008) study recommended that strict laws would have to be developed to prevent the mushrooming of more informal settlements. It is asserted that policies should encourage progressive upliftment of people’s lives.

Mlotshwa (2008) believed that legislation would assist in ensuring that informal settlements do not continue to expand, and could support the efforts of the National Department of Human Settlement to provide a sustainable solution intervention to informal settlements by 2014. In this regard, the researcher concurs with Mlotshwa’s (2008) research outcome. The researcher believes that various municipalities should develop and implement tight regulations in the form of legislation to curb informal settlements. The legislation can be used as a sustainable solution intervention towards informal settlements.

Msipha’s (2007) study reviewed the implementation of the informal settlement upgrading programme using the N2 Gateway Project of Cape Town as a pilot project. The research

question addressed by the study was to understand the successes and failures of the N2 Gateway Project as a pilot project for implementing the informal settlement upgrading programme. In this study, Msipha (2007) relates experiences with the implementation of informal settlement upgrading programme. Such experiences show that there are several factors that determine the success or failure of a project such as the N2 Gateway Project. The following factors were discussed as determining success or failures: project planning, participants, team skills, human factors, unrealistic timeframe and scope creep.

Msipha's (2007) study viewed community involvement as key for the successful implementation of the project as it ensures that there is buy-in and sustainability of the project. However, often communities are excluded in their development projects in favour of market-driven approaches. Msipha (2007) argued that the exclusion of communities tends to lead to various communities contesting for housing delivery by the state, as there is a realistic fear that they will also be excluded from housing delivery projects.

Maloka (2006) also undertook a study towards a Masters of Management at the University of Witwatersrand, with the topic 'The viability of local government informal settlement upgrading strategies.' The primary question of the study is how viable the current informal settlement upgrading strategy of the Ekurhuleni Metropolitan Municipality is? According to Maloka (2006), various municipalities in South Africa are under consistent criticism for their inability to deliver low cost housing to poor citizens who do not own houses, and who end up living in hazardous environments such as shallow mine dumps. The informal settlement dwellers were found to be living in areas that are generally uninhabitable for human beings. The purpose of Maloka's study was to determine the viability of informal settlement upgrading strategies of the local government (municipalities) in South Africa.

Maloka's (2006) study found that informal settlement dwellers have participated in the strategy formulation since its conception to its implementation. The strategy is

comprehensive in its social processes or sociological approach as well as in its international and national framework policy thrust, but lags behind in micro strategic planning and implementation processes. Other critical findings indicate that municipalities lack resources, (in particular financial resources), staff capacity, and inter-departmental cooperation. These factors have adverse effects on the informal settlement upgrading strategy and constitute what would make the strategy not viable. This study proposed the review of micro strategic planning and implementation, pursuance of accreditation as well as continuously adaptation to international slums or informal settlements improvement strategies and policy imperatives. Accreditation of local municipalities is perceived as an important vehicle that can enhance speedy implementation of the South African national low income housing policy shift dubbed “breaking new ground”.

Although some studies have been undertaken by various scholars regarding the eradication and upgrading of informal settlement, still, there is a need for a further conduct of the research to investigate suitable ways to address informal settlement challenges. It was realised that most studies undertaken sought to remedy the symptoms of the informal settlement challenges, rather than providing sustainable solution interventions. The researcher believes that the acquisition of suitable land for low-cost housing development and the provision of security of tenure would be a proper direction to take towards sustainable human settlement. Provision of suitable land and security of tenure followed by sustainable service provision and infrastructure could improve the livelihoods of informal settlement dwellers. Since the provision of housing is attached availability of suitable land, tenure options (ownership, use and lease) need to be protected. The eradication of informal settlements will not be successful without adequate availability of land and effective interventions. The literature review indicates that the challenges of the informal settlements are dynamic, therefore municipalities should use various sustainable solution interventions according to the merits of each situation.

2.4. CONCLUSION

This chapter has reviewed the literature on the eradication and upgrading of informal settlements. The review indicates some strengths and weaknesses in relation to informal settlements sustainable solution interventions used in the eradication of such informal settlements. From the preceding literature review, critique as well as discussions from various scholars, and several observations can be drawn. Being far from arriving at the solution, municipalities must employ multiple intervention strategies. The strategic thrust of dealing with informal settlements is influence by different interventions. The informal settlement upgrading strategies of municipalities are influenced by complex as well as multiple factors. Informal settlements must be integrated into the broader urban fabric to overcome special, social and economic exclusion. COJMM has made some attempts to eradicate informal settlements. However, there are still some challenges to be faced in this regard. The literature has indicated a need for comprehensive methods for dealing with these challenges. Tight legislation in form of policy and regulations is need in dealing with the challenges of informal settlements. It is important to undertake a discussion on a research design and methodology to indicate how the study conducted.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

In chapter 2, the literature review was undertaken to understand how similar research problems relating to informal settlements was investigated by other scholars. The purpose of this chapter is to outline research methodology in detail for the current research. The outline of research methodology comprises of research design, sampling, the data collection and data analysis as used in the study. This discussion is an attempt to provide a methodological trajectory and choices in order to validate data collected as well as its interpretation.

3.2. RESEARCH DESIGN AND METHODOLOGY

The researcher, through an appropriate research design and research methods determines research procedures and choice of the research method to be used, either a quantitative or a qualitative research or combination of both methods can be used in conducting the research project. In this study, quantitative research design is employed. Quantitative research design and its research methods as well as data collection tool are discussed in details below.

3.2.1. Quantitative research design

Mouton (2001: 155) defines research design as a research plan of how one intends conducting the research. Huysamen (1994: 10) specifies that research plan is a blue print that provides a framework according to which data is to be collected. Brynard and Hanekom (1997: 28) state that research design necessitates a reflection of careful planning, structuring and execution of research in order to comply with the demand of

truth, objectivity and validity. The researcher should through an appropriate research design take a decision to execute a research project. Burns (2000: 145) mentions that a research design is a plan aimed at enabling the researcher to obtain answers for research questions. For the purpose of this study, research design is defined as a blue print according to which the data is collected to investigate the research hypothesis or question in the most economic manner. As outlined in section 1.4, the main question of the study seeks to investigate a sustainable solution intervention for COJMM to address its informal settlement challenges.

3.2.2. Research methods

Mouton and Marais (1990: 157) mention two types of research methods mostly used when undertaking research, namely: quantitative and qualitative methods. Mouton and Marais (1990: 157) state that qualitative methods are those approaches in which the procedures are not as strictly formalised, while the scope is more likely to be undefined, and a philosophical mode of operation is usually adopted. Qualitative research produces descriptive, explanatory and analytical data, such as spoken or written words. Neuman (2000: 121-155) posits that the qualitative research also helps to answer questions about the complex nature of a phenomenon, with the intention to describe and understand such a phenomenon from the respondents' perspective.

Mouton and Marais (1990: 157) further indicate that quantitative method is the approach that is formalised and controlled, with an exactly defined range and relatively close to the discipline of the physical sciences. Quantitative methods are approaches that deal with data that is quantifiable and principally numerical. Quantitative research is categorised with experiments, surveys and content analysis.

Despite the fact that there are two types of most used research methods, this study mainly employed quantitative research design. The reason for employing a quantitative design is intended to select samples that represent the population of the area of the study

in order to generalise the findings. The rationale of using a quantitative research method is also premised upon the work of Ader, Mellenberg & Hand (2008: 7) who argue that quantitative research methods are suitable when undertaking the study that is targeting particular community. This study is targeting the Eikenhof Informal Settlement community. The quantitative research method would also develop efficient and appropriate statistical model for complex social science data.

Quantitative research method improves the efficiency of random effects modeling and allows realistically problems to be analysed. De Vos (1998: 171) argues that in quantitative research predictions are made and tested. The aim of quantitative research is to formulate explanatory theories that are predictive and testable. Quantitative research provides an objective basis for evaluating claims of relationships. According to Ader, Mellenberg & Hand (2008: 7) quantitative research methods provide the following advantages: the cost is reasonably low and data collection is faster when sampling is used instead of surveying the entire population. Quantitative (survey) research often uses questionnaires as a data collection method and measuring instruments.

In this study structured questionnaires were employed to collect data. Quantitative research is used to quantify results of the study. Numbers were assigned to all answers provided in the questionnaires and attitudes of individual participants were measured and quantified in this study. Quantitative research was also employed to examine relationships between and among variables. Questionnaires provided a measuring instrument for testing a theory and the perceived qualities of results of the study. It also led to meaningful interpretations of data. Since data is smaller in quantitative research, it has made it possible to ensure homogeneity and improved the accuracy and quality of data. While undertaking this study, the abovementioned factors manifested.

3.2.3. Data collection

Bourgues & Fielder (1995: 3) mention three types of questionnaires that can be used as a

data collection method, namely: structured questionnaires, unstructured questionnaires and semi-structured questionnaires. Hall & Hall (1996: 99) define a questionnaire as a set of questions for respondents to complete themselves. Although there are three kinds of questionnaires, this study, employed a structured questionnaire to collect data. The researcher visited each informal settlement household and distributed questionnaires to participants of the study with a view to interpret questions in various African languages when necessary and to observe the process of questionnaire completion. The respondents of the study were presented with many questions along with options from which to choose. The presence of the researcher also assisted in providing guidance to the respondents who needed clarification of some of the questions. The researcher was accompanied by one of the community leaders while visiting households. Gray (2004: 210) advises that the researcher's role in structured questionnaire surveys is to give guidance to some of individual participants in the completion of the questionnaires. The researcher limited his contribution to the completion of questionnaires to the absolute minimum. De Vos (1998: 171) advises that when employing questionnaires as data collection method, the researcher should remain in the background and can at most encourage the respondents with a few words to continue with their contribution, or lead them back to the subject.

In some instances, questionnaires were left with the respondents to complete and the researcher collected completed questionnaires the following day as agreed with respondents. Where respondents experienced some difficulties with questionnaires, the researcher clarified that when coming back to collect the completed questionnaires. As advised by Ader, Mellenbegh & Hand (2008: 7), this data collection phase was fairly quick and costs involved were reasonable.

3.3. SAMPLING

Bless & Higson-Smith (2000: 84) define sampling as a technical accounting device to rationalise the collection of information and to choose in an appropriate way the

restricted set of objects, persons and events from which the actual information will be drawn. Mouton (1996: 134) also refers to sampling as the process of selecting objects or phenomena when it is impossible to have knowledge of the entire population of the phenomena. It is also regarded as the process of drawing conclusions about unknown population parameters from the known sample statistic. Therefore, sampling means taking any portion of a population as representative of that population.

Bless & Higson-Smith (2000: 84) indicate that sample is a subset of the whole population which is actually investigated by the researcher and whose characteristic will be generalised to the entire population. Strydom & De Vos (1998: 191) mention that the use of samples may result in more accurate information than what might have been obtained if one studied the entire population. The main reason for sampling is feasibility and representativeness of the population target. To ensure that data collection activities are undertaken and completed, a sample from the target population is usually determined. Patton (1990: 169) asserts that when a study deals with a large community, sampling should be considered. In this study, respondents were ideally selected by means of randomised sampling method.

The type of sampling employed in this study is probability sampling. Seaberg (1988: 254) writes that in probability sampling each person in a population has the same known probability of being selected. In addition, the selection of persons from a population is based on some form of random procedure. The following are some well known probability sampling methods: simple random sampling, systematic sampling, stratified random sampling, cluster sampling, purposive sampling and panel sampling. Hence, stratified random sampling procedure has been followed. Stratified random sampling means dividing the population into different groups, strata, which are mutually exclusive of same characteristics, such as gender, race, home language or age. The table below indicates the stratified sampling that has been applied to the Eikenhof informal settlement.

Table 3.1: Stratified random sampling applied in the Eikenhof Informal Settlement

Population	Gender	Targeted population	Proportion sample	Income	Age
6 000	Male =50 Female =50	100	50 (50%)	R1 500 –R3 500 and above per month	18-70

The total number of estimated households was 1 493 with an estimated population of about 6 000 residents. The Eikenhof informal settlement population was too large for the researcher to cover it all. Grinnell & Williams (1990: 127) state that in most cases a 10% sample population should be sufficient for controlling errors. In this case, the researcher used 100 residents as sample (refer to Table 3.1. above.) that represented more than 30% of the population for the area of study. This means that the sample has approximate characteristics of the population relevant to the study in question (see Table 4.1. in Chapter 4).

Studying a sample was more convenient than studying the entire population. The sampling groups were divided into strata according to gender, age and income bracket. According to Grinnell & Williams (1990: 127) it is sufficient to use 30% of sampled participants when basic statistical procedure is to be performed in any study. In this study similar approach was used. Samples included in this study focused on males and females ranging from the age of 18 to 70 years old who earn between R1 500 to R3 500 per month (see Chapter 4 section 4.2.). The selection of residents accommodated various age groups and different income brackets. The researcher has selected a proportional stratified random sampling in order to draw sampling units from a stratum in proportion to the population size. In Chapter 4, table 4.1 further provides biographical details and the profile of the Eikenhof informal settlement dwellers.

3.4. DATA ANALYSIS

Gray (2004: 210) defines data analysis as a process of breaking down collected data into smaller units to reveal their characteristic elements and structures. Analysis also helps to gain new insight into the phenomena under investigation. This insight is relevant in this study as it is an attempt to investigate a sustainable solution intervention of COJMM in addressing informal settlement challenges. Babbie (2001: 10) defines data analysis as a process of making sense from what have been collected or observed. According to De Vos and Fouche (1998: 202) in a well-designed research study, the question of what to do with the data should be anticipated and the data analysis is planned well before the data was collected. De Vos and Fouche (1998: 203) mention that data analysis is an important phase in interpreting research findings. Data analysis means the categorising, ordering, manipulating and summarising of data to obtain answers to research questions. Questionnaire and standardized scale were used in collecting and measuring data.

The data is analysed using the Statistical Package for the Personal Computer (SPSS). Hudson and Hudson (1994: 40) indicate that SPSS is an interactive statistical package that enables a person to enter, manage, and analyse both simple and complex sets of data. Data analysis in the quantitative paradigm entails the analyst breakdown data into constituent parts to obtain answers to the research questions and to test research hypotheses. Creswell (1998: 157) also emphasises the usefulness of computer programs in the data analysis process. One such computer based data analysis programme is univariate analysis.

Univariate analysis is a simplest form quantitative (statistical) data analysis whereby a variable is described and analysed according to how many subjects fall into a given attribute categories. Basically this means that all the data gathered on the variable needs to be summarised for easy comprehension and utilisation. Univariate analysis was used in this study to organise the raw data into cross tabulation. In this study a basic way of presenting univariate data was used to create a frequency distribution of individual cases,

which involved presenting the number of attributes of the variable studied for each case observed in the sample. This has been done in the table format, with a bar chart or a similar form of graphical representation. Babbie (2009: 426- 433) states that in statistic, a frequency distribution is an arrangement of values that one or more variables take in a sample. Each entry in the table contains the frequency or count of the occurrence of values within a particular group or interval, in this way, the table summarises the distribution of values in the sample. Anderson (2007) used univariate analysis when undertaking research for Canadian Journal of Fisheries and Aquatic Sciences. Cooper and Tony (1993: 50 –51) support the usage of univariate analysis because it is used in the first stage of research in analysing the data at hand before being supplemented by more advanced inferential bivariate or multivariate. In this study analysis was carried out with the description of a single variable and its attributes of applicable unit of analysis. According to Babbie (2009: 426- 433) univariate contrasts with bivariate analysis.

Having discussed data analysis, it is also important to discuss both the validity and the reliability of the study. The next section discusses the validity and the reliability of this study.

3.4.1. Validity and reliability of the study

Burns (2000: 388) states that both validity and reliability are crucial in the study since they have a direct impact on its credibility and can be used to determine whether the study is valuable or not. According to Brynard and Hanekom (1997: 28) validity refers to whether or not something actually measures what it claims to measure. Hall & Hall (1996: 43) define validity as the extent to which a test measures what the researcher intends to measure. The long period the researcher spent in the research field collecting information also contributes to the trustworthiness of the research and the verification methods used to influence the accuracy of research. In this study, the researcher has also used audit trials to conduct self-reflection regarding his views, biases, theoretical orientation and relationships. The researcher has used raw data such as field notes and

documents to synthesise themes, definitions and the interpretation of the study outcome. The researcher took into consideration the guidance and advices of his study supervisors (Professor KG Phago & Mr B Hanyane). Professor Phago and Mr Hanyane are experienced researchers who are knowledgeable in this regard. The two are lecturers and researchers at Unisa.

Reliability is closely related to validity. Reliability is the extent to which research yields the same results again when similar approaches are used at same time. This means that if data is reproduced when using the same measurement or instrument with similar circumstances, then the data collection can be deemed reliable. According to Merriam (2002: 25) internal validity looks at how congruent with reality one's findings are, that is in a comparison between the concepts and reality. In this study, the understanding of reality is the researcher's interpretation of the phenomena of reality. Therefore, it is important to understand the perspectives of those involved, uncover the complexity of human behaviour in context, and present a holistic interpretation of what is happening.

3.5. ETHICAL CONSIDERATIONS

De Vos (1998: 24) defines ethics as a set of moral principles which are suggested by individual or a group, that are widely accepted and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors and other researchers and students. Ethical concerns are necessary in social science research. The social science researchers should abide by clearly ethical principles or considerations. When starting with this study, the researcher sought permission to conduct the study and this was granted by COJMM (see appendix 1). Later, prior to data collection, the researcher also approached the Eikenhof informal settlement leadership for permission to conduct a survey in order to collect data. The permission to conduct survey was granted by community leaders. A consent was obtained from all respondents who participated in the study. The study follows the rules of ethical consideration and adheres to the rules of informed consent, voluntary participation and

privacy, the values of anonymity and confidentiality.

3.5.1. Informed consent

According to Burns (2000: 138) all participants have the right to be informed about the nature and consequences of experiments in which they are involved. This means that research subjects must be fully informed about the research in which the interview is going to be used. The researcher informed all the participants or respondents about the purpose of the study. The purpose of this study was to obtain first hand information on whether COJMM interventions are effective in addressing the informal settlements challenges (see section 1.3). Participants of this study were voluntary and no one was forced in anyway to partake in it. Through the help of community leaders, participants were informed and invited to take part in the study. Those who were willing to take part were requested to give permission and signed the consent forms for their participation. Even though the researcher explained in detail what the study was all about, participants did not agree to sign the forms. Participants were made aware that they were free to withdraw from the study should they choose to do so and that they would not be penalised for doing so. Participants preferred to take part in the study without signing any form.

3.5.2. Privacy and voluntary participation

According to Bless & Higson-Smith (2000: 102) researchers often invade personal privacy. Participants have a right to withhold any information they wish to. Hence it is important that people agree voluntarily to participate in a particular study or rather refuse to divulge certain information. Participants were informed that their participation in the study was voluntary. Participant's right to privacy was observed throughout the study during the distribution of questionnaires. Information obtained from participants was treated as confidential. Participants were not forced to participate in this study and they have participated voluntarily.

3.5.3. Anonymity and confidentiality

Bless & Higson-Smith (2000: 103) argue that many people are willing and prepared to divulge information of a private nature provided that their names are not mentioned. The participants were assured that the researcher is the only person who is aware of their identities. Dane (1990: 51) advises that names of the participants in the study should be omitted to ensure anonymity. Confidentiality issues were taken into account throughout the data collection process. Information obtained from participants was treated confidentially and respondents' identities were protected in this study. The issues of confidentiality were clarified in the beginning to enable the participants to provide honest and complete information willingly.

3.6. CONCLUSION

The aim of this chapter was to focus on the way in which data was collected. This study followed the social science research principles. The researcher requested permission to undertake this study from both COJMM and the leadership of the Eikenhof informal settlement. Permission was granted. This chapter also discussed research methods used in the operationalisation of the study. The study used quantitative research approaches in an attempt to produce findings that are precise. The survey research design was useful in this study, since questionnaires were used to collect data. In this study, the rules of informed consent and voluntary participation were observed. The study has also taken into consideration the principles of privacy, the value of anonymity and confidentiality.

CHAPTER 4:

FINDINGS AND INTERPRETATION OF RESULTS

4.1. INTRODUCTION

Chapter 3 elaborated on the research design and the research methodology undertaken to justify the manner in which data collection was handled in this study. This chapter encompasses the next step in the research processes, namely: data analysis and interpretation of results of the study. The purpose of this chapter is to provide the necessary details regarding how data was analysed and interpreted. The relevance of the findings will be discussed in this chapter, and brought together as final conclusion and recommendations in Chapter 5. In order to describe a sustainable solution intervention of COJMM to address informal settlement challenges. This chapter started by analysing the biographical details of the participants and described the living conditions of residents in the Eikenhof informal settlement. This was followed by a discussion of the role played by COJMM in service delivery in the Eikenhof informal settlement.

4.2. BIOGRAPHICAL DETAILS

During the time of the study, the Eikehof informal settlement had an estimated 1 493 households with an estimated population of about 6 000 people (see section 1.2). It was therefore, assumed that each house had about four occupants. It was discovered that a hundred percent of the participants in the Eikenhof informal settlements were African people and no Indians, Coloureds or Whites interviewed or found in Eikenhof informal settlement. Although a sample of 100 inhabitants of informal settlement was used, only 35 residents participated (see Table 4.1.). Table 4.1 below indicates how data was analysed in this study.

Table 4.1: Biographical details and analysis of respondents from the Eikenhof Informal Settlement

Biographical Background (n=35)			
Gender (n=35)		Household Income (n=35)	
Male	16(46)	R0-R 1 500	15(43)
Female	19(54)	R1 5001-R 3 500	5(14)
Educational level		R3501-R 5 000	0(0)
Primary school level	20 (57)	Other	0(0)
Secondary school level	5(20)	Province of Origin (n=35)	
Diploma/Degree level	0(0)	Eastern Cape	7(16)
Post graduate level	0(0)	Free State	5(14)
Age	Duration stayed	Gauteng	13(37)
18-20=0(0)	0- 1year=5(17)	Limpopo	2(6)
21-30=8(23)	1-5years= 10(29)	Mpumalanga	5(14)
31-44=18(53)	6-10years=10(29)	Northern Cape	0(0)
45-65=9(24)	11-15year=6(17)	North West	0(0)
66 and above=0(0)	16years and more=4(11)	Kwazulu-Natal	3(20)

When analysing the above biographical details of the informal settlement dwellers in the Eikenhof informal settlement, it was found that this informal settlement consisted of a large number of young women aged between 18 and 45 years. It was found that these informal settlement dwellers came from different provinces in South Africa. The study discovered that these informal settlement dwellers came from various parts of South Africa. It was found that thirteen of informal settlement dwellers came from Gauteng

Province, seven came from Eastern Cape, five came from Free State and other five came from Mpumalanga. It was further discovered that three informal settlement dwellers came from Kwazulu Natal while the remaining two came from Limpopo. The study found that the unemployment rate was rife in the Eikenhof informal settlement, (see Table 4.1 above). The income bracket of the Eikenhof informal settlement dwellers was characterised by a below average income level estimated at \$2 per day. This was also an indication of the high levels of poverty in the area. The study found that most households in the Eikenhof informal settlement earned a monthly income ranging between R1 500 and R3 000. It was also found that the large number of the Eikenhof informal settlement dwellers depended almost entirely on government grants such as a child grant, pension or disability grant. It is estimated that about 14% of informal settlement dwellers were found to be in the formal employment sector with a combined income of more than R3 000 per month. The majority of the Eikenhof informal settlement dwellers survive by working temporary jobs that have little or no job security.

It was established in this study that the majority of the respondents (57%) of the Eikenhof informal settlement population were functionally illiterate, with only 20% having a secondary level of education and with no tertiary level education (see Table 4.1.) It was discovered that the low levels of education usually constrain chances of informal settlement dwellers to secure decent and well paying employment. The study discovered that some residents were involved in recycling, hawking and running tuck shop businesses to earn a living. Due to the low income levels, most informal settlement dwellers' standard of living was found to be low. Some of the Eikenhof informal settlement dwellers were found to be left with little surplus or no money for households expenses after meeting their families basic needs of food and clothing. These informal settlement dwellers were found to vary in the duration of their stay in the Eikenhof informal settlement. The duration of stay was estimated between one month to sixteen years (see Table 4.1). Since the biographical details of the Eikenhof informal settlement dwellers have been analysed and discussed, it is also necessary to discuss the living conditions in the area of study. The next section discusses the living conditions in the

Eikenhof informal settlement.

4.3. LIVING CONDITION AND SERVICE PROVISION

The actual conditions in which people were forced to live also affected their daily experiences. The study revealed that many informal settlement dwellers in the Eikenhof informal settlement were faced with insecurity of tenure (this has to do with the legality or ownership of land), lack of basic services (water and sanitation) and infrastructure (electricity and drainage systems). There is a lack of paved road and safe building structures (see section 1.1). The materials used to erect houses in this informal settlement were mostly non-durable, and sometimes in a dilapidated condition. It was noticed that shacks in the Eikenhof informal settlement were constructed using materials such as mud bricks, tin-sheets, asbestos sheets, bamboo, gunny bags, and plastic sheets. In most cases houses are overcrowded and residents have limited access to formal economic activities. In light of the above, the informal settlement dwellers were faced with the possibility of shacks collapsing, challenges of fire related damages, storms and heavy rain damages.

It was also observed by the researcher that most shacks in the Eikenhof informal settlement were usually erected as single-room units with an inadequate ventilated space. Most shack designs were so small in size, estimated at about 20m². It was estimated that each shack had an average of four occupants. Such a situation leads to an acute congestion. While undertaking this study, it was found that the Eikenhof informal settlement was provided with 20 tanker water taps and 80 chemical (portable) toilets for an estimated 1 493 households with approximately 6 000 people sharing these facilities (see section 1.2). In the Eikenhof informal settlement, there was one crèche facility and one primary school at the time when the study was conducted. There were no social amenities or facilities such as a church, a secondary school, post office, clinics, parks and no shopping centre nearby. The community in the Eikenhof informal settlement depended largely on tuck-shops for groceries otherwise they had to travel far distance to the Johannesburg CBD or Lenasia business area for shopping

The Eikenhof informal settlement presented disadvantages in terms of access to school, to livelihoods and to access recreational amenities and to the job market. It was the observation of the researcher that transportation was a major challenge in this informal settlement. It was found that the mode of transport was mainly minibus taxis. This informal settlement also presented less opportunity for the people to access other mode of public transport such as train. It was likely that minibus taxi transport was not affordable to informal settlement dwellers considering their income bracket as indicated in Table 4.1. It was quite clear that some of the informal settlement dwellers had to walk long distances to access employment opportunities and shopping complexes and other areas.

The purpose of this study was to investigating whether the sustainable solution intervention (relocation) was effective in addressing informal settlements development challenges as applied by COJMM in the Eikenhof informal settlement. It was found that COJMM sustainable solution intervention applied was ineffective in responding to and address the informal settlement development challenges (provision of security of tenure, provision of infrastructure (road, drainage systems, electricity) and basic services (water and sanitation) in the Eikenhof informal settlement. COJMM could not provide permanent basic services (water and sanitation) and infrastructure (electricity and drainage systems) because of the insecurity of tenure on the land and the prevalence of dolomatic conditions in the Eikenhof informal settlement.

Since the living conditions of informal settlement dwellers have been discussed, it is also important that the role of COJMM should be discussed to show how it intended to provide basic services to the Eikenhof informal settlement dwellers. The next section discusses the role played COJMM in informal settlement upgrading programmes.

4.4. THE ROLE OF THE COJMM IN THE INFORMAL SETTLEMENT UPGRADING PROGRAMMES

In terms of Chapter seven of the Constitution of Republic of South Africa, the duties and objectives of municipalities in South Africa are to provide proper basic services that are sustainable (Republic of South Africa, 1996). It was found that COJMM developed a vision to become a world class African city. In order to achieve its vision, COJMM needs to improve service delivery by providing adequate housing, electricity, water and sanitation that is sustainable. It was discovered that residents in the Eikenhof informal settlement were not provided with adequate water tanker taps, refuse collection and chemical toilets by COJMM. Provision of inadequate services by COJMM in the Eikenhof informal settlement was an indication that COJMM was failing to carry out its constitutional mandates. The following were some of basic services COJMM supposed to be providing: housing, electricity, dumping sites and refuse collection, water and sanitation. These services are discussed in detail in the following sections in order to determine success and failure of COJMM in service provision.

4.4.1. Housing provision

Housing Provision delivered through the municipalities in South Africa is the responsibility of the National Department of Human Settlements and provincial government (Republic of South Africa, 1996). The provision of housing should not be based on erecting and providing houses only, but it should also address social and economic challenges as well. Housing development projects should be located on a suitable land closer to transport points and employment centres. It is the researcher's opinion that the housing development projects must provide employment and economic opportunities for informal settlement dwellers and provide all necessary amenities such as schools and clinics to the community.

This study considers the low-cost (RDP) housing as a necessary service that the Eikenhof

informal settlement dwellers were expecting to obtain from COJMM. Although it was mentioned in this study that several residents were unemployed, the income bracket of informal settlement dwellers who were employed was ranging between R1 500 and R3 000 per month (see section 4.2), and it was therefore, estimated that only about 70% of the residents would qualify for the low- cost (RDP) housing subsidies according to the government criteria (see section 1.4). The researcher is of the opinion that the remaining percentage did not qualify for housing subsidies due to various reasons. The *Housing Act* 107 of 1997 stipulates the qualification criteria to be used when providing housing subsidies to beneficiaries. In order to qualify for a housing subsidy, the informal settlement dwellers should meet the following requirements. A person must:

- ❖ be a South African citizen.
- ❖ be 21 year or older.
- ❖ be married or habitually cohabit with a partner.
- ❖ be single and have financial dependents.
- ❖ not be earning more than R 7000.00 per household.
- ❖ not received a government subsidy before.
- ❖ not owned a house in the past (Housing Act of 1997).

The abovementioned factors are the qualifying criteria of obtaining the RDP houses. It is the researcher's general view that informal settlement upgrading projects are not contributing positively towards the eradication of informal settlements. In the case of the Eikenhof informal settlement, it was noticed in this study that when one household is relocated, new dwellers come and occupy the same space. The occupation of such vacant space makes the researcher to assume that COJMM has no sustainable solution to prevent further illegal occupation of such land after the informal settlement dwellers have been officially relocated. It is evident that informal settlements in the COJMM cannot be easily reduced or eradicated when one looks at the sustainable solution intervention (relocation) applied in the Eikenhof informal settlement.

COJMM relocated several households from the Eikenhof informal settlement to the Lehae Housing Project Phase one, yet, the settlement still exists. The researcher believes that the failure to eradicate the Eikenhof informal settlement is caused by COJMM attempts to accommodate beneficiaries from different informal settlement at once in the same housing project, yet there is no sufficient land suitable for low-cost housing. It is the researcher's view that informal settlements in COJMM cannot be eradicated by the 2014 target.

4.4.2. Provision of electricity

It was found that there is no provision of electricity in the Eikenhof informal settlement. The researcher assumes that COJMM could not provide electricity Eikenhof informal settlement because it is situated on the land not suitable for residential purposes (see section 1.1). In Eikenhof informal settlement there is a prevalence of dolomite that could be harmful to informal settlement dwellers. The researcher assumes that COJMM could not provide electricity in Eikenhof informal settlement because the land was occupied illegally by residence without security of tenure. It is also the researcher's view that lack of electricity is considered to be putting the health and lives of informal settlement residents at risk. It is likely that informal settlement dwellers stay in the informal settlements because they have nowhere else to stay while looking for better employment opportunities. The Eikenhof informal settlement dwellers experienced this reality. In the light of the above, the study suggests that informal settlement dwellers are aware of health risks they are facing while living in the informal settlements. In this sense, the researcher also believes that informal settlement residents are hoping to be provided with low cost (RDP) houses or relocated to a well established township.

Since there was, and perhaps still there is a lack of electricity provision in the Eikenhof informal settlement, it is a fact that informal settlement dwellers were compelled to use fire-woods, gas, paraffin stove to cook and also to use candles to light their households at night. This situation of the lack of electricity provision by COJMM could easily lead to

shack fire, especially during winter seasons. The study perceived the lack of electricity provision to be unfair practice, because accessing basic services such as electricity is one of the basic human rights. The researcher views electricity provision as an important basic service because it plays an important role in preventing shack fires. The researcher is also of the view that the lack of electricity compromises the informal settlement dweller's safety and contributes towards criminal activities in the settlement.

4.4.3. Dumping sites within Eikenhof informal settlement

Closely linked with water and sanitation challenges, is the issue of refuse collection and solid waste management in the Eikenhof informal settlement. This informal settlement was unhygienic because there were no designated waste management sites. Due to the lack of designated waste management sites, the residents dumped rubbish everywhere that may lead to health hazard. Although it was discovered that COJMM was scheduled to collect garbage on a weekly basis, in some cases, it did not collect refuse on time, especially during rainy seasons. When refuse collectors delay to collect refuse, the situation led informal settlement dwellers to place filled refuse bags closer to their households. Some residents were compelled by circumstances to dump waste near their residing sites because there were no sites designated for dumping purposes. It was discovered that there were no skips allocated in this informal settlement to place refuse bags. It was found during the study that COJMM was providing refuse bags to all households of the Eikenhof informal settlement. The researcher holds the opinion that the lack of proper waste management and allocation sites can lead to health problems such as skin diseases and malaria. The researcher believes that health problems can be avoided by keeping the informal settlement tidy and sanitised.

4.4.4. Provision of sanitation and toilets

The study found that there was a lack of proper sanitation and flushing toilets in the Eikenhof informal settlement. Private toilets do not exist at all in this informal settlement.

It was discovered that COJMM had provided 80 chemical common toilets as a temporary measure. Residents had to share available public chemical toilets. Taking into consideration the number of households in the settlement and the number of available chemical toilets to be shared by households, toilets available seemed to be inadequate. It was estimated that about 18 households had to share one common toilet due to lack of sufficient toilets.

Some of the households were situated far from where these common toilets were allocated. Therefore, this situation led the researcher to assume that some residents who stayed far from common toilets used the nearby bushes instead. It was also suspected by the researcher that women and children who go into the bushes were susceptible to criminals in the area. It is the researcher's opinion that the lack of adequate toilets and a sewage system could also contribute to health problems. It was noticed that the community toilets in the Eikenhof informal settlement were generally filthy and insanitary.

4.4.5. Provision of water and lack of paved roads

It was found that the Eikenhof informal settlement had no infrastructure such as tarred roads, only gravel roads were available that were not well maintained. The lack of paved roads made it difficult for shack dwellers to walk during rainy seasons. Puddles and slush were common after every rain shower. It is the researcher's opinion that stagnant water and mud may increase the health risks of vulnerable community members such as children. It was found that almost all households in the Eikenhof informal settlement had no individual water supply. The study discovered that COJMM had provided 20 public tanker taps in the Eikenhof informal settlement for residents to share (see section 4.3). In order to find out how COJMM deals with the service provision, it is appropriate to discuss how information was disseminated to the community. The next section discusses how COJMM disseminates of information.

4.5. DISSEMINATION OF INFORMATION

While undertaking this study, it was discovered that COJMM had not done enough to communicate information about the informal settlement upgrading policy to the majority informal settlement dwellers in the Eikenhof informal settlement. The necessity of COJMM to share information with the community regarding service delivery cannot be over emphasised. The sharing of information could assist COJMM in the planning stage of service provision. In order to achieve the goal of upgrading the informal settlement, COJMM needed to have an appropriate communication strategy. A communication strategy will assist COJMM to have a better planning framework and to have better housing design criteria in the Eikenhof informal settlements. Community projects depend largely on the dissemination of information among all parties concerned. Once all stakeholders have shared the information, planning of land provision, infrastructure, transport, housing, community and service facilities could be provided based on sound financial and technical principles. Dissemination of information sessions could lead to all stakeholders to participate in community development and planning processes. This is the stage where residents should take economic realities for any project into account. Once the information is disseminated and community has participated in the initial stage of planning of any community developments, it is advisable that COJMM should note the perceptions of the participants in order to understand the community's needs, so that it can plan and provide services according to those needs. It is for this reason that the next section discusses the perceptions of the participants of this study.

4.6. PERCEPTIONS OF PARTICIPANTS

The researcher believes that knowing community perceptions would enable COJMM to evaluate whether the needs of the community will be met in the projects to be planned and implemented in future. Perceptions can assist a municipality to plan according to people's needs. The researcher is of the view that informal settlement dwellers view COJMM as a parent who cannot stand to see his/her children without a proper roof over

their heads. The researcher also believes that COJMM would not allow its citizens to live in the informal settlements that are not sustainable. As mentioned in this study, COJMM as a municipality has a mandate to provide basic services such as housing, water and sanitation the community (see section 1.4).

It was the researcher's observation that more often than not, where there is a new development of low-cost housing projects closer to an informal settlement, it was the researcher's observation that informal settlements usually expand (number of shacks increases). While some households of the Eikenhof informal settlement were relocated to the Lehae Housing Project Phase one, the researcher observed that the informal settlement dwellers have created the means to force COJMM to relocate and provide them with RDP houses. It was noticed that some households would intentionally erect their shacks in a more hazardous section of the informal settlement in order to be considered first for relocation. In light of the above, it is the researcher's observation that households situated in hazardous areas such as flood lines and sloppy areas are considered and usually receive first preference to be allocated with RDP houses regardless whether such households were the last in the data demand base or waiting lists.

The study found that some informal settlement dwellers who migrated in the Eikenhof informal settlement were in the best position to increase their chances of accessing RDP houses. Qualifying beneficiaries in the informal settlements usually are allocated with RDP houses where possible. In consideration of the above, it is only few households that can opt to move to other areas if such a move improves their chances of securing employment and increases their chances of accessing proper housing. As the perceptions of the participants were discussed in this section, it is equally important to know the reasons why people opt to live in the informal settlements. The following section discusses the reasons why people stay in the informal settlements.

4.7. REASONS FOR STAYING IN THE INFORMAL SETTLEMENTS

Once the reasons for staying in the informal settlements such as the Eikenhof are clear, that would enable COJMM to plan and implement projects according to the community's needs. It may also assist COJMM to devise plans to prevent future land invasions. When analysing the biographical details of the Eikenhof informal settlement dwellers, it became obvious that there were factors encouraging people to migrate to informal settlement in urban areas. The assumption of the study is that one of these factors includes opportunity to secure better stable job opportunities in urban areas as compared to the rural areas.

The researcher believes that the majority of informal settlement dwellers stay in the informal settlements such as the Eikenhof informal settlement due to their poor social and economic conditions that they were subjected to in the rural areas. The majority of informal settlement dwellers in the Eikenhof informal settlement were unemployed, therefore, staying in this informal settlement suit them better, because people pay little or no rent at all. Some informal settlements were located not far from industrial areas, meaning that informal settlement dwellers may pay less or no transport fees at all should they find jobs there. The researcher believes that some informal settlement dwellers have nowhere to go and staying in the informal settlements was the only option they had while looking for employment.

It is important to recognise that some of the informal settlement dwellers stay in the informal settlements such as Eikenhof because they can not afford mortgaged houses as they were not employed or they have other financial challenges. Unfortunately, the migration of people into the informal settlements contributed to the shortage of houses in urban areas. The shortage of housing had resulted in an increase of informal settlements in urban areas. In this study, the shortage of land for low-cost housing is perceived to be one of the contributing factors in relation to invasion of unsuitable land. People who qualify to obtain RDP houses are motivated to migrate to informal settlements by the prospect of obtaining RDP houses. When analysing the survey outcome of the Eikenhof

informal settlement, it was discovered that since the Lehae Housing Project started, people have continued to migrate into the Eikenhof informal settlement. It was found that new migrants also moved into stands where other households had stayed before they were relocated to the Lehae Housing Project. Therefore, the researcher believes that provision of RDP houses will remain the focus of attraction to new informal settlements dwellers. Since the reasons for staying in the informal settlement were discussed, it is equally imperative to discuss and explore the option of providing alternative housing in the next section.

4.8. PROVISION OF ALTERNATIVE HOUSING

The researcher assumes that it is better to know both the perceptions and reasons why people decide to move and stay in the informal settlements. This might assist COJMM to assess whether it is necessary to provide a sustainable solution intervention of alternative housing. The researcher notes that there are various options of housing typologies such as rental (social) housing and self-help housing that can be promoted by COJMM. As it was noted that the majority of the Eikenhof informal settlement dwellers were unemployed (see section 1.2), therefore, it was assumed that most residents do not qualify for the these housing typologies. The researcher believes that people decide to move into the informal settlements because they are aware that there is a possibility that households living in the informal settlements are provided with the low cost (RDP) housing free of charge. The researcher believes that obtaining low cost (RDP) houses free of charge was also one of the motivating factors for people to migrate to informal settlements such as the Eikenhof. Invariably, the researcher perceives the provision of low cost (RDP) housing currently as the only sustainable solution intervention available for the Eikenhof informal settlement dwellers.

Having discussed possible reasons for staying in the informal settlements and the alternative housing provision, it is equally important to discuss the intervention of the COJMM in the informal settlement upgrading process. The following section discusses

the interventions implemented by COJMM in the informal settlement upgrading process.

4.9. INTERVENTIONS OF COJMM IN THE INFORMAL SETTLEMENT UPGRADING PROCESS

In this study, the formalisation and regularisation of informal settlements is identified as one of the sustainable solutions on the eradication and upgrading of informal settlements (see section 1.2 in Chapter 1). The programme of formalisation of the informal settlements has three key elements: legal recognition of informal settlement and the residents' rights to the land where formalisation is feasible and the provision of basic services (water and electricity). The study considers the programme of formalisation of informal settlements as a legal process through which settlements are created and residents obtain security of tenure as opposed to full physical upgrading, which includes the development of a top structure.

According to the Department of Housing (2004: 17) formalisation and regularisation of the informal settlement programme is premised on the promotion of *in situ* rollover upgrading and relocation. The provision of adequate housing is the responsibility of the National Department of Human Settlement in South Africa (Republic of South Africa, 1996). It was found that the key sustainable solution for providing adequate housing in South Africa is housing subsidy. The National Department of Human Settlements has a National Housing Subsidy Scheme, its function is to ensure that housing beneficiaries receive a housing subsidy and freehold security of tenure. As the foundation plan, the study had focused on this plan (BNG Housing Plan 2004) because has been perceived as a milestone in managing housing since 1994. The BNG provided funding instruments that facilitated a phased *in-situ* upgrading approach to informal settlements. The BNG recommended an *in situ* upgrading of informal settlements located in land suitable for human settlement (see section 1.1).

Isandla Institute (2007: 28) states that *in situ* upgrading is a preferred suitable sustainable

solution intervention towards the informal settlement challenges. Unlike relocation, *in situ* upgrading does not interrupt informal settlement residents' livelihoods. Informal settlements are upgraded where they are situated (see section 1.4). Njoh (2008: 109) indicates that relocation is undertaken where the settlement is situated in hazardous land not suitable for residential purposes. Njoh (2008: 109) also points out that relocation is undertaken only when it is impossible to rehabilitate the land where informal settlement dwellers are residing. Isandla Institute (2007: 29) argues that new relocation sites should not be far from the current sites of informal settlements. Isandla Institute (2007: 29) suggests that new relocation sites should be provided with basic services (water and sanitation) and closer to public facilities such as clinics and schools.

COJMM area has an estimated total number of 180 informal settlements with an approximate population of some 200 000 households. The study has shown that the COJMM Mayoral Committee has established the Informal Settlement and Upgrading Steering Committee that will oversee the implementation of the eradication and the upgrading of informal settlement programmes. The abovementioned committee was created also to monitor whether all stakeholders participate in the informal settlement upgrading processes.

As a part of creating a sustainable solution intervention, it was found that COJMM had disaggregated 180 informal settlements in six categories in order to fast-track the eradication and upgrading of informal settlements. Although there were many sustainable solution interventions to eradicate and upgrade informal settlements, in this study, *in situ* upgrading and relocation were considered to be the main focus (see section 1.1). This study advises COJMM that once it is aware of housing beneficiaries' categories, it should be able to intervene accordingly in providing adequate housing. Ms Novula Mokonyane's (the former MEC of Housing in the Gauteng Provincial Government, now the new premier of the same province) budget speech dated 24 June 2008 announced a shift from the provision of RDP housing to People's Housing Process (hereafter referred to as PHP) (www.joburgnews.co.za) downloaded on the 10/08/2010. This method is in

line with the formalisation and servicing of sites in the informal settlements and relocation sites, through project-linked capital subsidy. The PHP is a model of housing delivery where people are encouraged to erect their own houses or organise the building of their own houses with the help of their families and friends.

While undertaking this study, it was discovered that between 2004 and 2006 COJMM had acquired land where Lehae Housing Project Phase one has been established and several households from the Eikenhof informal settlement have been relocated. It was observed that the Lehae Housing Project Phase one has accommodated a limited number of qualifying beneficiaries for RDP houses. In this regard, the relocation as a sustainable solution proved to be an ineffective in the Eikenhof informal settlement. Relocation has failed to eradicate or upgrade he Eikenhof informal settlement. The informal settlement still exists and no permanent basic service (water and sanitation) and infrastructure as yet.

While undertaking this study, it was also found that COJMM had two departments managing informal settlement challenges (Development Planning & Urban Management has a section called Informal Settlement Unit, whereas Housing Department has a section called Projects Implementation and Monitoring. Managing informal settlements is part of the function of the two mentioned departments. Both departments are comprised of functionaries such as a land surveyor, a conveyancer, a town planner, a civil engineer and project manager with other skilled people to assist in the process of formalisation of informal settlements(www.joburgnews.co.za)10/10/2010. Formalising informal settlements involves registering the properties, naming streets, and proving basic services In order to bypass the lengthy and complex planning processes COJMM has resorted to formalisation and regularisation of some of the informal settlements in terms of the *Less Formal Township Act* 113 of 1991. The approach of formalising informal settlements grants recognition to residents of informal settlements as the legal occupiers of that land.

It was found that COJMM Housing Department had a strategy in place to deal with housing problems. In 2005, COJMM Housing Department had developed its own

Housing Master Plan with a target of eliminating informal settlement by 2009. The researcher assumes that the Housing Master Plan emanated from BNG 2004. The Housing Master Plan is a five years plan that is reviewed at the end of the initial five-year period (www.joburgnews.co.za) downloaded on the 10/10/2010. This plan is also one of COJMM sustainable solution intervention aimed at the eradication of informal settlements. The purpose of the Housing Master Plan is to map out a coordinated and realistic course of action for each financial year in COJMM. The aim of the Housing Master Plan is also to create sustainable solution intervention such as affordable and safe housing opportunities for COJMM indigent and homeless people.

It was also discovered that COJMM will use two key tools in the form of legislation to give recognition to residents and status of informal settlements, namely, COJMM Town Planing Scheme and of the *Development Facilitation Act* of 67 of 1995 (www.joburgnews.co.za) downloaded on the 10/10/2010. The informal settlements will be rezoned in terms of the COJMM's Town Planning Scheme and give informal settlement residents a legal recognition through the issuing occupation permits. The *Development Facilitation Act* of 67 of 1995 (hereafter referred to as DFA) would be applied in the upgrading of informal settlements. The idea of implementing DFA is to enable COJMM to consolidate existing rights of land, allow for full ownership of property at a later stage within the same process and bring previously excluded informal settlements in COJMM's regulatory frameworks. In this regard residents are given certain rights to land and the opportunities to access basic services.

Residents occupying publicly owned land would receive security of tenure of the land they are residing on. When the rezoning approach is applied, informal settlements resident would be issued with occupation certificates. These occupation certificates would give limited rights to people to occupy their site and pass it on to heirs, but at the same time the occupation certificate will not allow the occupants the right to sell these sites. In terms of the DFA option, residents who have occupied land for at least five years, may be given beneficial occupation rights to the land or receive a form of

ownership known as initial ownership, before obtaining freehold ownership after the settlement is formally proclaimed.

From the ongoing discussion, it is clear that informal settlements remain a challenge across major cities of South Africa. It was proven from the Eikenhof informal settlement experience that COJMM has failed to ensure that the rapid growth of the settlement be supplemented with investments in basic services. In order to upgrade informal settlements in COJMM, it is advisable that some of the building requirements should be bypassed. Once the informal settlement dwellers are allowed to bypass building requirements, they may be able to erect decent housing for themselves. It was also clear that availability of suitable land and security of tenure is vital in achieving a sustainable solution intervention in the informal settlements. It is the assumption of this study that since human activities are attached to land, the South African government should release sufficient land for housing development, provide tenure options (ownership, rental and lease) and for infrastructure development. The informal settlements can only be eliminated once there is a provision of both sufficient land and security of tenure.

4.10. CONCLUSION

The outcome of data collection and its analysis has been presented and discussed in this chapter. COJMM has a mandate to eradicate informal settlements and to provide adequate housing opportunities to poor households and low-income families. The Eikenhof informal settlement dwellers live in poor living conditions. This informal settlement lack basic services (running water and sanitation) and infrastructure (electricity and drainage systems) and residents lack the security of tenure. In the Eikenhof informal settlement there is a high rate of unemployment. Those who are employed accrued poor monthly income ranging between R1 500 to R3 000. The income bracket of the Eikenhof informal settlement dwellers is an indication of high levels of poverty in the area. The majority of the Eikenhof informal settlement dwellers depend largely on the government grants and temporary jobs, while some are involved in the

recycling, hawking and tuck shop businesses. The income bracket levels of the Eikenhof informal settlement dwellers constrain their chance to improve their living conditions.

The informal settlement dwellers in the Eikenhof informal settlement have a limited access to formal economic activities, schools and livelihoods due to transport challenges. The majority of housing units in the Eikenhof informal settlement were constructed with poor building materials such as mud bricks, asbestos sheets and plastic sheets. In this respect, informal settlement dwellers are faced with challenges of shacks collapsing, fire related damages, storms and heavy rain damages. COJMM lacks communication strategy that can be used to disseminate policy information. This chapter has discussed the findings and interpretation of the study. Chapter five draws conclusions and gives recommendations.

CHAPTER 5

CONCLUSION, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

5.1. INTRODUCTION

Chapter 4 discussed the research findings and interpretation of the results of the study. The purpose of this study was to investigate the effectiveness of the sustainable solution intervention applied by COJMM in addressing the informal settlement challenges (see section 1.3). This chapter provides a discussion on the realisation of the study objectives. The discussion is intended to indicate whether the study has addressed its main research problem in accordance with its stated objectives raised in Chapter 1 (see section 1.4). This chapter further presents a reflection on the research problem and research questions. An attempt has been made in the previous chapter to examine the extent to which the identified sustainable solution interventions can respond to and address the informal settlement challenges in the Eikenhof informal settlement. Hence, a reflection on each chapter's success in addressing its purpose has been discussed. The conclusion and recommendations have been drawn from the ongoing discussion. In addition, this chapter provides limitations of the study and areas of further research. The limitations of this study do not suggest that the study is incomplete, but indicate how external factors contributed to limiting the study. Limitations should be taken into account in understanding the holistic context of the study.

5.2. A REFLECTION ON THE RESEARCH PROBLEM

The study briefly described and examined the effectiveness of the sustainable solution intervention in Chapter 1 (see section 1.1) as well as in Chapter 4 (see section 4.9). Formalisation and regularisation of informal settlement programmes with a premise on

the promotion of *in situ* upgrading and relocation were discussed in several sections of the previous chapters. In the formalisation process, relocation and *in situ* upgrades were regarded as the main solutions in the eradication and upgrading of informal settlements (see section 1.1). The discussion was advanced to further explore the challenges faced by COJMM in attempting to eradicate and upgrade informal settlements including the Eikenhof informal settlement. The sustainable solution intervention applied by COJMM in the Eikenhof informal settlement had failed to achieve its intended objectives. It was also impossible to implement the *in situ* upgrading programmes in the Eikenhof informal settlement due to the prevalence of dolomite conditions and the lack of security of tenure (see section 1.4).

The relocation process was used to remove some of the Eikenhof informal settlement dwellers to the Lehae Housing Project phase one. This relocation had yielded less than expected results due to the limited availability of land suitable for the development of low-cost housing in the new relocation sites. The relocation process did not succeed in moving all households in the Eikenhof informal settlement. The formalisation process of informal settlements was expected to result in identifying more suitable land for low-cost housing developments. Due to these development challenges such as shortage of suitable land and the availability of dolomite in the Eikenhof informal settlement, no land was identified for low-income housing development (see section 1.4). COJMM was faced with the challenges of identifying and providing suitable land with the security of tenure to informal settlement dwellers. In summarising the discussion on the provision of sustainable solution intervention used in the informal settlement upgrading process, it is also important for the study objectives of this study to receive necessary attention and discussed in the following section.

5.3. A REFLECTION ON THE STUDY OBJECTIVES

In order to determine whether the objectives of the study have been achieved, this section provides a brief discussion. In response to the articulated objectives, the study has

responded in the following manner:-

Objective one: to investigate what kind of development challenges are faced by the Eikenhof informal settlement dwellers. Chapter 1 provided introductory background of the human settlement challenges faced by informal settlements dwellers in the South African urban areas. The following are development challenges faced by the Eikenhof informal settlement dwellers: insecurity of tenure, lack of infrastructure and dolomite land. Chapter one also provided the reason for this study to be undertaken (section 1.3).

Objective two: to examine the extent to which a sustainable solution intervention (relocation and *in situ* upgrading) responds to and addresses informal challenges in the Eikenhof informal settlement. In Chapter 1 the BNG Housing Plan 2004 was outlined as a means to sustainable solutions to informal settlements. The BNG Housing Plan 2004 intended to provide direction towards informal settlements upgrading process. This plan also intended to provide funding instruments that facilitate a phased *in situ* approach to informal settlements. Thereafter, the National Department of Human Settlement also unveiled Housing Strategic Plan 2009- 2014, which is not the focus of this study.

Chapter one also outlined the methodological approach of the study, research problem, research questions, terms and concepts used in this study (see section 1.1). The main focus of the study was the formalisation of informal settlements (*in situ* upgrading and relocation) that was identified as sustainable solution intervention to address the informal settlements challenges such as the lack of security of tenure, lack of basic services (water and sanitation) and poor infrastructure (roads and drainage systems), prevalence of the dolamatic condition (see section 1.1).

Chapter 2 dealt with literature review that provided the basis for the context and further discussion of this study. In this study evidence of similar studies undertaken by other researchers in an attempt to obtain sustainable solution interventions towards the challenges of informal settlements was taken into consideration. The discussion in

Chapter two encourages both COJMM and the Eikenhof informal settlement dwellers to have meaningful engagement in order to obtain permanent sustainable solutions to the informal settlement challenges.

Objective three: to examine the effectiveness of sustainable solution interventions (*in situ* upgrading and relocation) of the study was describe and analysed (see section 1.3). Formalisation of informal settlements was promoted by the BNG Housing Plan 2004 and considered to be one of a mechanism towards sustainable solution intervention. In this regard, the formalisation of informal settlement programme recommended two approaches namely: relocation and *in situ* upgrading of informal settlements as the most sustainable solution to be applied in the eradication and the informal settlements upgrading process. The *in situ* upgrading and relocation were supported by the National Department of Human Settlements Strategy unveiled in September 2004 as a viable sustainable solution intervention.

Although the study has manage to examine the extent to which a sustainable solution intervention (relocation and *in situ* upgrading) responds to and addresses informal challenges, intervention applied in the Eikenhof informal settlement proved to ineffective (section 4.9). As it is in the Eikenhof informal settlement, there are no permanent basic services (water and sanitation) and infrastructure (electricity and drainage systems) or infrastructure in the Eikenhof informal settlement (see section 1.3). Chapter 3 provided guidelines about the suitable research tools and the suitable research methods employed in this study. Chapter three also provided clarity on the reliability and validity of the tools and methods used to collect data. This chapter also made the data collection of this study possible.

Objective four: To collect and analyse data in order to interpret the findings. Data analysis and interpretation were done primarily to determine whether COJMM interventions were effective and to what extent did these sustainable solutions initiated responded to informal settlement challenges. In the case of the Eikenhof informal

settlement, it was found that COJMM was providing make-shift services (tanker tap water and refuse removal) only. The sustainable solution interventions (provision of tanker tap water, chemical toilets and refuse removal) provided by the COJMM was found to be a short -term solution.

This study has realised its purpose of investigating whether the sustainable solution intervention (relocation) is effective in addressing informal settlements development challenges as applied by COJMM in the Eikenhof informal settlement. However, it was found that COJMM sustainable solution intervention applied was ineffective in responding to and address the informal settlement development challenges (provision of security of tenure, provision of infrastructure (road, drainage systems, electricity) and basic services (water and sanitation) in the Eikenhof informal settlement. COJMM did not able to provide basic services and infrastructure because insecurity of tenure on the land and the prevalence of dolomatic conditions in the Eikenhof informal settlement (see section 4.3).

Objective five: In order to consolidate the objectives above, Chapter 5 provides conclusions and recommendations of the study on the basis of collected data and general discussions through the chapters. A reflective approach was adopted in this study to provide the understanding whether the study has been successful in addressing pertinent research problems.

5.4. CONCLUDING REMARKS

It was discovered that the Eikenhof informal settlement cannot be upgraded through the *in-situ* upgrading programmes because of its development challenges (lack security of tenure and prevalence of dolomite). Such situations make it difficult or even eventually impossible to implement *in situ* upgrading programmes (see section 1.4). In such cases, relocation is usually recommended. The lack of security of tenure and the prevalence of dolomatic conditions limited COJMM in providing relevant sustainable solution

interventions (provision of permanent infrastructure (roads, electricity and drainage systems) and provision of basic services (water and sanitation)). It is also critical that COJMM has to accept that informal settlements are part of the housing scene and will not be eradicated altogether.

COJMM should not perceive informal settlements as geographical space of deteriorating of standards. Rather, informal settlements such as the Eikenhof informal settlement should be seen as geographical space whereby poor people are allowed to move from informal dwellings to conventional houses over a period of time. However, the challenge in this regard was to curb the expansion of informal settlements by introducing tight regulations such as bylaws and ordinances. These regulations should support and be linked to the interventions of both *in situ* and relocation solutions. For examples, in cases where a family was able to receive a government support housing or able to qualify for a bank loan for a mortgage, government regulations providing a sustainable solution could be effected. In this case, such sustainable solution should ensure that land should not be invaded. This would ensure that overtime, as the housing conditions of informal settlement dwellers improve, or as informal settlements dwellers move to government subsidised housing, a sustainable solutions to informal settlement management gets effected automatically. The process would then address any further land invasion or land subdivisions to increase shacks within informal settlements including the Eikenhof informal settlement.

Having discussed the concluding remarks of the study, it is equally important to discuss the recommendations that can be employed to eliminate the informal settlement challenges. The following section discusses recommendations of this study.

5.5. RECOMMENDATIONS

This section discusses the recommendations of the study. In striving to achieve the government housing policy objectives of improving people's lives, priority must be given

to the needs of the most disadvantaged people, especially informal settlement dwellers. The government housing policies should facilitate the rapid and continuous improvement of quality of people's life (by providing decent housing, security of tenure, clean water, electricity and sanitation). The recommendations of the study were considered based on the following considerations: living conditions in the informal settlement, dissemination of policy information by COJMM, interventions and perceptions of participants. The abovementioned considerations were discussed with recommendations in the next sections.

5.5.1. Living conditions in the Eikenhof Informal Settlement

- In order to improve the living conditions of the Eikenhof informal settlement, COJMM should firstly identify land and acquire land ownership. After the ownership has been acquired, COJMM can then relocate or formalise the Eikenhof informal settlement. Once the informal settlement is formalised, COJMM can provide basic services (water and sanitation) and infrastructure (electricity and drainage systems). The Eikenhof informal settlement dwellers can then develop their settlement into a habitable area. COJMM may then install services, allow informal settlement dwellers to improve quality of their life by erecting decent housing. It is further recommended that COJMM should create housing strategies that incorporate a phased in programmes (such as *in situ* upgrade) to upgrade the Eikenhof informal settlement.
- In dealing with dolomatic conditions in Eikenhof informal settlement, COJMM need to consider conducting more feasibility studies, focusing on obtaining remedial measures to manage the prevalence of the dolomatic conditions. Once feasibility studies have been done, COJMM would be able to take informed decisions and determine whether the land can be rehabilitated for future use.

- COJMM should also adopt meaningful effective sustainable solution interventions and spatial planning strategies realistically adapted to local conditions. COJMM should create possibilities for effective participation by all people in planning, building and managing the Eikenhof informal settlement. Therefore, the informal settlement sustainable solution in the Eikenhof informal settlement must be conceived as an integral part of human settlements development process in COJMM.
- Since it was found that high numbers of people are unemployed in the Eikenhof informal settlement, COJMM should develop innovative approaches in formulating and implementing informal settlement programmes aimed at promoting employment. These programmes should enable COJMM to have partnership with private sector entities that will lead to job creation and transfer skills to the Eikenhof informal settlement dwellers. These innovative approaches to develop programmes can be done through appropriate involvement of the national government, COJMM, private sector and the Eikenhof informal settlement dwellers. Once the skills have been transferred and job opportunities created to informal settlement dwellers, it is possible that some of the informal settlement dwellers will manage to secure better employment, and then move out of the Eikenhof informal settlement and acquire decent housing somewhere. The moving out of informal settlement dwellers in the Eikenhof informal settlement to other areas will contribute to eradication of this informal settlement.
- It is advisable for COJMM to take step through public- private partnership arrangements to facilitate more jobs that enable some occupants of the informal settlements to move into social (rental) housing. Once people have accessed better employment opportunity, they might be willing to accept alternative housing and pay monthly rental in social housing units or buy their own affordable housing. The Government Expanded Public Works Programmes (hereafter referred to as

EPWP) and the New Growth Path can be used as an example of job creation. The EPWP is the strategy that is highly recommended to create jobs in South African community projects today. As a programme, EPWP is the government tool to encourage the use of a labour-intensive approach to deliver services to the community. In principle, the government, through co-operative governance should encourage companies as well to agree to use people instead of machinery on public projects, providing unskilled labourers with employment in the booming construction industry. In order to provide relevant basic services, COJMM should device communication strategy to disseminate information to the community. The researcher believes that it is imperative to have communication strategy that would lead to information sharing sessions between COJMM and its citizens. The next section make discusses ways on how COJMM disseminate policy information to the Eikenhof informal settlement community.

5.5.2. Dissemination of information sessions

It is important for COJMM to share information with the community. This study recommends that COJMM should make some efforts to disseminate the informal settlement upgrading policy as far as possible. The study also recommends that COJMM should establish different forums where information sharing will take place. These forums should involve all stakeholders concerned, including the Eikenhof informal settlement dwellers. The information sharing sessions would assist COJMM to gather useful information that can be used in the planning stage of service provision. The community will make some contributions.

The contributions will assist COJMM to design an appropriate planning framework that can be used in upgrading the informal settlements. Community projects depend largely on the dissemination of information amongst all parties concerned. Once all stakeholders have shared the information, planning of land provision, infrastructure, transport, housing, community and service facilities could be provided based on sound financial

and technical principles. Dissemination of information sessions will lead all stakeholders to partake in community participation and the planning process. This is the stage where both the community and COJMM should take economic realities for any project into account. Consequently, COJMM could be able to initiate the relevant sustainable solution interventions to be implemented in the eradication of informal settlements. In this respect, it is important to discuss COJMM in the informal settlement upgrading process in the following section.

5.5.3. Interventions implemented by COJMM in the informal settlements upgrading process

In an attempt to eliminate the establishment of the new informal settlements, COJMM should develop and implement preventative measures that would curb the growth of informal settlements and new land invasions. COJMM should create mechanisms and institutions to develop and implement informal settlement policies which would prevent land invasion. In this regard, it is recommended that COJMM should proclaim some by-laws that should be used to regulate the establishment of informal settlements. These by-laws should also be used to prohibit land invasion, just as it has been done in the other municipal areas such as Ethekeweni Metropolitan Municipality and Mbombela Local Municipality.

In order for by-laws to be enforced, it is recommended that COJMM Housing Department should establish a Law Enforcement Unit that will deal with all challenges related to informal settlements. The Law Enforcement Unit needs to be capacitated by law enforcement officers. The responsibilities of these law enforcement officers will be to fine any person who illegally occupies vacant land. These law enforcement officers should work as field workers within the informal settlements. Their duties will be to count informal settlement households and to ring fence all available informal settlements to prevent informal settlements growth.

There are some alternatives in relation to upgrading methods that the study recommends that COJMM can use to upgrading the informal settlements. The following are some of the methods recommended: conventional and non-conventional *in situ* upgrading (conventional informal settlement include self-help scheme) commonly known as People Housing Process (PHP). Then, in this instance, COJMM could play a supporting role and establish support centre which should be capacitated by various professionals such as architects, town planners and project managers. The support centre could assist the beneficiaries by drawing house plans, managing saving on behalf of individual household and manage the procurement of building materials. In return, households have to use their own resources to erect houses. The households may organise the erection of their own houses by using own resources such as labour, savings, friends and families. COJMM may also implement medium term sustainable solution in the Eikenhof informal settlement by providing the following interim relief measures: communal ablution-blocks, emergency access roads, high mast lighting, numbering of shacks, water supply (standpipes), solid waste removal, communal sanitation, and provision of health care amongst the other things. The short-term solution can be implemented while COJMM is seeking for long-term solutions.

Relocation should be avoided by all cost, because in most case, new relocation sites are further away from urban area and some are poorly located than the existing location. Relocation displaces people and interrupt livelihood of the informal settlement dwellers. While avoiding relocation, COJMM may instead implement the non-conventional upgrade approaches meanwhile permanent sustainable solution intervention is sought. In the non- conventional upgrade, the approach is that COJMM should just put interim relief measures (communal water taps, street lights, communal toilets and roads) in the informal settlements. These interim relief measures should be considered as a medium to long-term sustainable solution intervention. The non-conventional approach has less impact to the informal settlement dwellers. It does not interrupt the livelihood of the informal settlement dwellers because it avoids demolition of household structures. The

residents of the informal settlements are not displaced to a far distant relocation sites and social and economic network of informal settlement dwellers that they know. After discussing sustainable solution intervention implemented by COJMM it is also imperative to note perceptions of the informal settlement dwellers.

5.5.4. Perceptions of the participants related to COJMM'S role in the upgrading of informal settlements

It is an advantage for COJMM to know the perceptions of the Eikenhof informal settlement dwellers in relation to housing provision in order to evaluate whether the needs of the community will be covered in the future projects to be planned and implemented. The researcher observed that the Eikenhof informal settlement dwellers are not making any efforts towards the provision of their own housing. Therefore, the researcher assumes that since COJMM has relocated some of the informal settlement dwellers to Lehae Housing Project, the remaining informal settlement dwellers may expect COJMM to provide housing for them as well. Therefore, this study recommends that COJMM should encourage informal settlement dwellers not to dependent on free RDP housing provision only. The provision of free RDP housing alone is not an adequate measure to resolve the informal settlement challenges facing informal settlement dwellers. The provision of housing should be a joint effort from both COJMM and informal settlement dwellers.

It is also recommended that COJMM should encourage informal settlement dwellers to be self- sufficient and be engaged in community driven housing delivery projects. In this instance, COJMM could provide stands situated on the serviced land (where there is water, sanitation and electricity) to informal settlements dwellers. Informal settlement dwellers should also be given security of tenure on the stands provided to them. Once the informal settlement dwellers are given security of tenure, then they can be permitted to erect their own houses over time. Community housing projects may have several advantages, including but not limited to, mobilisation and realisation of local social

capital, greater ownership of houses and the control of the housing process by local residents.

5.6. Limitation of the study

Nearly most studies undertaken have their own limitations. This study has limited itself to a quantitative research approach. However, the acceptance of the limitation does not, in any way, compromise the results of this study. The following are some of the known limitations in this study:

- ❑ Language: Questionnaires and interviews were drafted and conducted in English, where there was a need to interpret, the researcher clarified the questions in local language (Zulu, Xhosa and Tswana) and
- ❑ Time and budget: The intention of this study report was to interview a larger group of respondents rather than a small sample group, but it was not possible due to time, population size and budgetary constraints.

To overcome the limitations of the study, questionnaire was translated and interpreted into various African languages to suit each participant. The researcher has conducted this study within the available time and budget in satisfactory manner. The researcher selected samples that represent the population in there of the study in order to generalise the outcome of the study. It is assumed that limitations of the study imply that there are more to be researched on the subject field of study. The next section recommends further areas of the future study.

5.7. AREA OF FURTHER STUDY

This study stimulates further studies on the eradication and upgrading of informal settlements in order to obtain amicable solutions to the challenges of informal settlement dwellers. Upgrading of informal settlements also requires the recognition of four

conditions, such as security of tenure, the property rights, property values and the physical attributes of the underlying assets, and the impact on each other. The above aspects areas should serve as some of the key areas of further studies to enrich the body of knowledge on the informal settlements dynamics in South Africa.

5.8. CONCLUSION

An account of how the research objectives were addressed was provided in this chapter. The chapter had discussed both concluding remarks and recommendation remarks to be adopted by COJMM in an effort to come up with sustainable solution to eradicate and to upgrade informal settlements. This study encourages COJMM to implement tight regulations to curb informal settlement challenges faced by informal settlement dwellers. It is also recommended that the National Department of Human Settlement should use the recommendation of this study when attempting to upgrade informal settlements through informal settlements formalisation processes. The reflection of both research problem and research objectives has been discussed in this chapter. The interventions implemented by COJMM were also discussed in this study (see section 4.3).

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APENDIX

Appendix 1

SURVEY ON THE ERADICATION AND/ OR UPGRADING OF INFORMAL SETTLEMENT IN THE EIKENHOF (CITY OF JOHANNESBURG)

The purpose of this survey is to understand the perceptions and experiences of informal settlement dwellers regarding the eradication and / or upgrading of informal settlement in the City of Johannesburg Municipal area, the case study of Eikenhof informal settlement. All responses are anonymous and will be treated as strictly confidential

RESPONDENT CHARACTERISTICS

1. Gender

Male	1
Female	2

2. Marital status

Married	1
Single	2
Divorced	3
Widow	4

3. Level of education?

Primary level	Secondary level	Diploma level	Degree level	Post graduate level
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4. How old are you?

21yrs-30yrs	1
31yrs-40yrs	2
41yrs-50yrs	3
51yrs-60yrs	4
Other (please specify)	5

5. Are you employed?

Yes	No
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5.1. If yes, what is your household income?

R 0 – R 3 500	
R 3 501- R 5 000	
R 5 001 – R 7 500	
R 7 501_- R 10 500	
10 5001 – R 15 000	
More than R 15 000	

6. What is your province of origin?

Eastern Cape	1
Free State	2
Gauteng	3
Limpopo	4
Mpumalanga	5
Northern Cape	6
North West	7
Kwazulu Natal	8
Western Cape	9

INFORMAL SETTLEMENT RESIDENCE

7. Do you own a house elsewhere?

Yes	No
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RDP	1
Bonded house	2
Self build	3
Other (specify)	4

8. Since when have you been staying in the informal settlement?

Pre-1994	1
1995	2
2000	3
2005	4
2009	5
2010	6

9. What is your reason for staying in the informal settlement?

Affordable rental	1
Only accommodation available	2
Recommended by employer	3
Free accommodation	4
Next to my work	5
Other (please specify)	6
.....	

10. Do you have any basic services in your informal settlements?

Yes	No
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10.1. If yes, what kind of services do you have?

Running Water	1
Electricity	2
Roads	3
Refuse collection	4
Sewer and sanitation	5

11. In your opinion, do you think the Municipality is providing these basic services effectively?

	Yes	No
Electricity		
Roads		
Refuse collection		
Running water		
Sewer and sanitation		

11.1. If yes, rate the level of your satisfaction.

	Very satisfactory	Satisfactory	Not satisfactory	Very poor
Running water				
Electricity				
Roads				
Refuse				
Sewer and sanitation				

12. Are you aware of any developments plans from the City of Johannesburg Municipality with regard to eradication of informal settlements?

Yes	No
-----	----

12.1. If yes, how well (sufficiently) do you think these plans are responding in addressing informal settlement challenges?

Very well	1
Well	2
Do not know	3
Bad	4
Very bad	5

INFORMAL SETTLEMENT UPGRADING POLICY

13. Are you familiar with the policy on upgrading of informal settlement?

Yes	No
-----	----

13.1. If yes, how did you come about knowing it?

Public meetings	1
Resident meeting	2
Developmental forum	3
Civic Association	4

14. In your opinion, do you think the informal settlement upgrading policy is

contributing towards the eradication of informal settlement?

Yes	No
-----	----

15. What, in your opinion would be an ideal alternative to deal with the growth of informal apart from RDP?

Affordal rental	1
Site and service stand	2
Bonded house	3
Other (specify)	4

INFORMAL SETTLEMENT UPGRADING PROGRAMME

16. Do you know of any programme applicable to your informal settlements?

Yes	No
-----	----

16.1. If yes, which informal settlement upgrading programs do you know of that has been implemented by the City of Johannesburg?

<i>In-situ</i> upgrading project	1
Green field development	2

Site and service	3
RDP housing	4
People Housing Process (PHP)	5
Provide mixed income development	6
Other (specify)	7

17. Are you aware of the informal settlement upgrading projects in your settlement?

Yes	No
-----	----

17.1. If yes, which ones

<i>In-situ</i> upgrading	1
Green field development	2
Site and service	3
RDP housing	4
People Housing Process (PHP)	5
Provide mixed income development	6
Other (specify)	7

18. In your opinion, is there any progress in the eradication of the informal settlement?

Yes	No
-----	----

APPENDIX 2

REQUEST TO CONDUCT RESEARCH

TO: Ms Uhuru Nene

Executive Director City of Johannesburg Housing Department

CC: Mr Walter Melato

Director: Housing Dept Project Implementation and Monitoring

Mr Leslie Magoro

Regional Head: Housing Region F

From: Hasani Ngonyama

Operational Manager: Housing Region F

Date: 18 February 2008

REQUEST TO CONDUCT A STUDY RESEARCH

I, Hasani Ngonyama hereby request (ask permission) to conduct a research within the City of Johannesburg Metropolitan Municipality Area.

The research is part of requirement to complete my study (Master of Public Administration degree) as required by Unisa.

I hope my request will receive necessary attention and considered

Warm regards

Hasani Ngonyama

Ops Manager: Housing Region F

Tel(011) 681-8021 / 076 133 7268/ 083 981 0435

APPENDIX 3

PERMISSION TO CONDUCT RESEARCH IN THE CITY OF JOHANNESBURG METROPOLITAN MUNICIPAL AREA

MEMO

TO : The University of South Africa
Department of Public Administration
PRETORIA

FROM : Leslie Magoro
Regional Head
Housing Region F

DATE : 22 February 2008

SUBJECT : **PERMISSION TO RESEARCH**

The City of Johannesburg Metropolitan Municipality is currently funding Hasani Lawrence Nkonyama's Master of Public Administration programme, therefore permission is here also granted to him to conduct research within the City of Johannesburg.

Hope you find this in order

Regards

Leslie Magoro
Regional Head
CoJ: Housing Region "F"
Tel (011) 681-8114

**URBANISATION AND THE DEVELOPMENT OF INFORMAL SETTLEMENTS
IN THE CITY OF JOHANNESBURG**

by

HASANI LAWRENCE NGONYAMA

Submitted in accordance with the requirements

for the degree of:

MASTER OF PUBLIC ADMINISTRATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF KG PHAGO

CO- SUPERVISOR: DR BR HANYANE

FEBRUARY 2012

DECLARATION

I Hasani Lawrence Ngonyama, student no: 3697380, hereby declare that this **URBANISATION AND THE DEVELOPMENT OF INFORMAL SETTLEMENTS IN THE CITY OF JOHANNESBURG** is my own and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete reference. This report has never been submitted before for any qualifications.

Signed by : -----

Student No: 36297380

DEDICATION

**THE STUDY IS DEDICATED TO THE FOLLOWING PERSONS WHO ARE THE
PILLARS OF MY STRENGTH:**

- Grandmother, Mrs Tsatsawani Nelly Ngonyama
- Mother, Mrs Mthavini Nwa' -Daniel Ngonyama
- Father, Risimati Jack Ngonyama
- Tsakani Susan Ngonyama
- Nyiko, Vutisani & Neriseko Ngonyama

ACKNOWLEDGEMENTS

I would like to extend my gratitude to the following people who played major role to the completion of this study:

- My supervisor, Prof Kedibone Phago for his support, guidance and inspirations that kept me going when it was hard.
- Co-supervisors Mr Barry Hanyane for his critical thinking and understanding in ensuring the finalisation of this study.
- My grandma (Tsatsawani Ngonyama) who would check my primary school work even though she could not read or write, she made me realise the value of education. I am proud of you (*kokwani*).
- My friend, brother and colleague, Mr Samson Mashaba for the encouragement, efforts and prowess he gave whenever I needed help.
- An appreciation goes to all City of Johannesburg Metropolitan Municipality officials who contributed and provided the basic knowledge that helped in engaging arguments in the overall study, especially Mr Sello Mothotoana.
- An appreciation also goes to the Eikenhof informal settlement community who have participated tirelessly in answering all sorts of questions.
- My deepest and sincere appreciation goes to my wife, Tsakani Susan Ngonyama for her prowess support to all my study activities. “*Nkatanga u wansati exikari ka va wansati, ndzi hava rito ro nkhenza*”.
- My children (Nyiko, Vutisani & Neriseko), you are the reason and inspiration of my commitment that keep me going.

SUMMARY

South African urban areas are faced with a severe housing backlog. This situation could be attributed to many issues such as the lack of suitable land for housing and the existence of informal settlements. In some cases lack of suitable land for housing has also led to invasion of hazardous land. The informal settlement dwellers in the informal settlements are faced with development challenges such as poor infrastructure, lack of basic service provision and challenges regarding security of tenure. Consequently, government has responded to illegal occupation of land through evictions as the situation is understood to threaten the economy, the social and political stability and the management of the urban environment.

In order to address the scourge and growth of informal settlements, the National Department of Human Settlements has unveiled a housing strategy 2004 towards the informal settlement upgrading process. The informal settlement upgrading process is acknowledged as an effective means of eradicating informal settlements and improving the housing conditions of the poor in South Africa. The improvements of slums is now a Millennium Development Goal of the United Nations. The aim Millennium Development Goals is to substantially achieve target 11 by reducing the incidence of income poverty, hunger, gender disparity, child and maternal mortality, also by reducing the spread the spread of HIV/AIDs and incidence of malaria and reducing lack of access to water, sanitation and primary education. The aim of Millennium Development Goals is also to achieve significant improvement in the lives of at least 100 million slum dwellers in the world by 2020 as proposed in the “Cities Without Slums” initiatives (United Nations, 2000: 5). The upgrading of informal settlements is undertaken to assist in the realisation of the right to adequate housing and other human rights aspects such as access to water, sanitation and provision of security of tenure that prohibit forced eviction.

ABSTRACT

Urbanisation in South African cities is a worrying phenomenon. Cities such as the City of Johannesburg are faced with a severe housing backlog. This situation could be attributed to many issues such as lack of suitable land for housing, and the existence of informal settlements. This study has been undertaken to investigate whether the interventions implemented by City of Johannesburg Metropolitan Municipality to eradicate informal settlements are effective in addressing challenges faced by informal settlement dwellers. In South Africa, informal settlement upgrading process is acknowledged as an effective means of eradicating informal settlements. In this regard, interventions to eradicate informal settlements require extensive research in order to have proposals for future policy interventions. This study has been also undertaken to make some recommendations that might resolve the challenges of informal settlements in the City of Johannesburg.

KEYWORDS

- Informal settlements
- Informal settlement dwellers
- Interventions
- Challenges
- Upgrading of informal settlements
- Sustainable solution intervention
- Eradication of informal settlements
- Sustainable human settlements
- Land invasion
- Low-income housing
- Provision of land
- Security of tenure
- Provision of basic services
- City of Johannesburg Metropolitan Municipality.
- Sustainability
- Service delivery
- Urbanisation
- Local government
- Municipality
- Sustainable solution

6. List of acronyms and abbreviations

- BNG : Breaking New Ground
- CBD : Central Business District
- COJMM : City of Johannesburg Metropolitan Municipality
- CBO : Community-Based Organisation
- COHRRE : Centre on Housing Rights and Evictions
- DFA : Development Facilitation Act, 1995 (Act No. 67 of 1996)
- DoH : Department of Housing
- Dplg : Department of Provincial and Local Government
- IDP: Integrated Development Programme
- ISUP: Informal Settlement Upgrading Programme
- MDGs : Millennium Development Goals
- MEC : Member of Executive Committee
- NGOs : Non- Governmental Organisations
- NHSS: National Housing Subsidy Scheme
- PHP : People Housing Process

- RDP :Reconstruction and Development Programme
- RSA: Republic of South Africa
- SACN : South African Cities Network
- UNISDR : United Nations Development Programme
- UN : United Nations
- VIP : Ventilated Improved Pit (latrine)

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