

DECLARATION

I declare that this research is my own work which is being submitted to the University of the Witwatersrand, Johannesburg, to fulfil the requirements for the Master of Science degree in Housing. I also declare that this research report has not been submitted for the same or a different degree in any University.

.....

SIBONELO P. NGCOBO

.....

DATE

ACKNOWLEDGEMENTS

My greatest appreciation goes to my supervisor, Professor Aly Karam of the School of Architecture and Planning who has provided direction and constructive criticism from the beginning to the end of my research work. My sincere gratitude also goes to the programme co-ordinator and my lecturer, Professor Marie Huchzermeyer for her academic support throughout this challenging work.

I cannot forget to thank my dear sister and a former colleague at Ekurhuleni Municipality, Johannesburg, Ms. Samkelisiwe Ngcobo, and my current Town Planning Intern, Ms Z. Sodladla, for their tremendous emotional support. Lastly, I dedicate the entire report to my mother, Velephi Ngcobo, for her everlasting love, support and guidance.

ABSTRACT

In post-apartheid South Africa, the delivery of low-income housing has been occurring at unprecedented rates since 1994. This means that more and more poor households are gaining access to secure tenure on progressive basis. Unfortunately the new low-income housing townships are often established on cheap peripheral land, adjacent or far beyond the existing apartheid townships. The widespread growth of informal settlements in urban areas has also been occurring at higher rates following the repeal of apartheid laws which restricted rural-urban migration. The growth of informal settlements is nothing but a precise indication of poverty and the desire of the poor to gain access to employment opportunities. However, the link between employment opportunities and home is often provided by transport. Travelling demands money which most of the urban poor rarely have. For the poor, proximity to areas of employment opportunities is key to surviving in urban areas. The consequence of this arrangement is the establishment of informal settlements near places of employment as a way of escaping the cost of transport.

Yet the upgrading of well-located informal settlements has not been a preferred and popular strategy for the post-apartheid government as a mechanism for promoting access to opportunities. Instead the focus has largely been on providing access to individual tenure through the delivery of the free-standing housing units on the periphery where land is relatively cheap to accommodate large scale housing delivery. Is this the only factor which had motivated the rural poor to migrate to urban areas in the first place? Which matters most for the urban poor? Is it access to subsidised housing in the urban area only or is the latter. Perhaps it is a combination of both factors.

To provide answers to the foregoing questions, the researcher resolved to pose two guiding questions to focus the investigation: *What are the effects of relocation to the periphery on household livelihoods and how do relocated households make a living on the periphery....what sort of coping mechanisms are adopted to survive in remote, isolated, low density and sprawling low-income Reconstruction and Development Programme (RDP) townships of the post-apartheid South Africa?* The research uses Diepsloot as a case study area because it presents all the necessary traits of a typical

post-apartheid South African low-income township which had been used as a northern Johannesburg relocation site. The findings of the research suggest that the only major positive impact which result from relocation, is access to secure tenure while the major negative impact, is the poor location of Diepsloot in relation to major employment opportunities. This finding correlates with the existing literature and the hypothesis of the study.

CHAPTER ONE

1. INTRODUCTION

What effects does relocation have on household livelihoods or how does relocation affect household access to livelihood opportunities, and what of coping strategies are adopted by relocated poor men and women on the periphery of the cities? The repeal of apartheid laws in South Africa contributed to a dramatic increase in rate of urbanisation. The poor from rural areas penetrated urban spaces for one but very serious purpose. This purpose is the desire to gain access to employment opportunities. The inherent human desire to gain access to social facilities which improves safety and well-being is considered secondary to the desire to access employment opportunities. Unfortunately, access to employment is preceded by access to shelter. In other words, in order to access urban employment opportunities, one must have shelter above his head in the urban area and where possible, in close proximity to the place of work. The second precondition is proximity to these employment areas. Consequently the urban poor who often fail to access private sector housing due to affordability constraints resort to invading unoccupied pieces of land to establish shack settlements.

This research report is the outcome of an intensive case study investigation. Diepsloot has been chosen as a case study area because it portrays all the characteristics of a post-apartheid South African low-cost housing township. In 1996, the City of Johannesburg Metropolitan Municipality relocated about one thousand five hundred households from Alexandra Far East Bank informal settlement to Diepsloot, north of Johannesburg. The relocation of households was based on the findings of the hydrological study that identified the area as a floodplain. (Alexandra Urban Renewal Programme, 2010). The Alexandra Far East Bank informal settlement is located at about 12 kilometers from the Johannesburg Central Business District (CBD). The proximity of Alexandra to the Johannesburg CBD and other employment centres such as Edenvale, Bedfordview and Sandton, make it a well-located settlement and therefore supports access to livelihood opportunities which occur in these areas. Unlike most South African post-apartheid Black Townships, Alexandra is adjacent to high income residential areas such as Johannesburg high and middle income residential areas which offer domestic

employment. This is not the case with Diepsloot which is located at about 32 kilometers on the northern periphery of the City of Johannesburg.

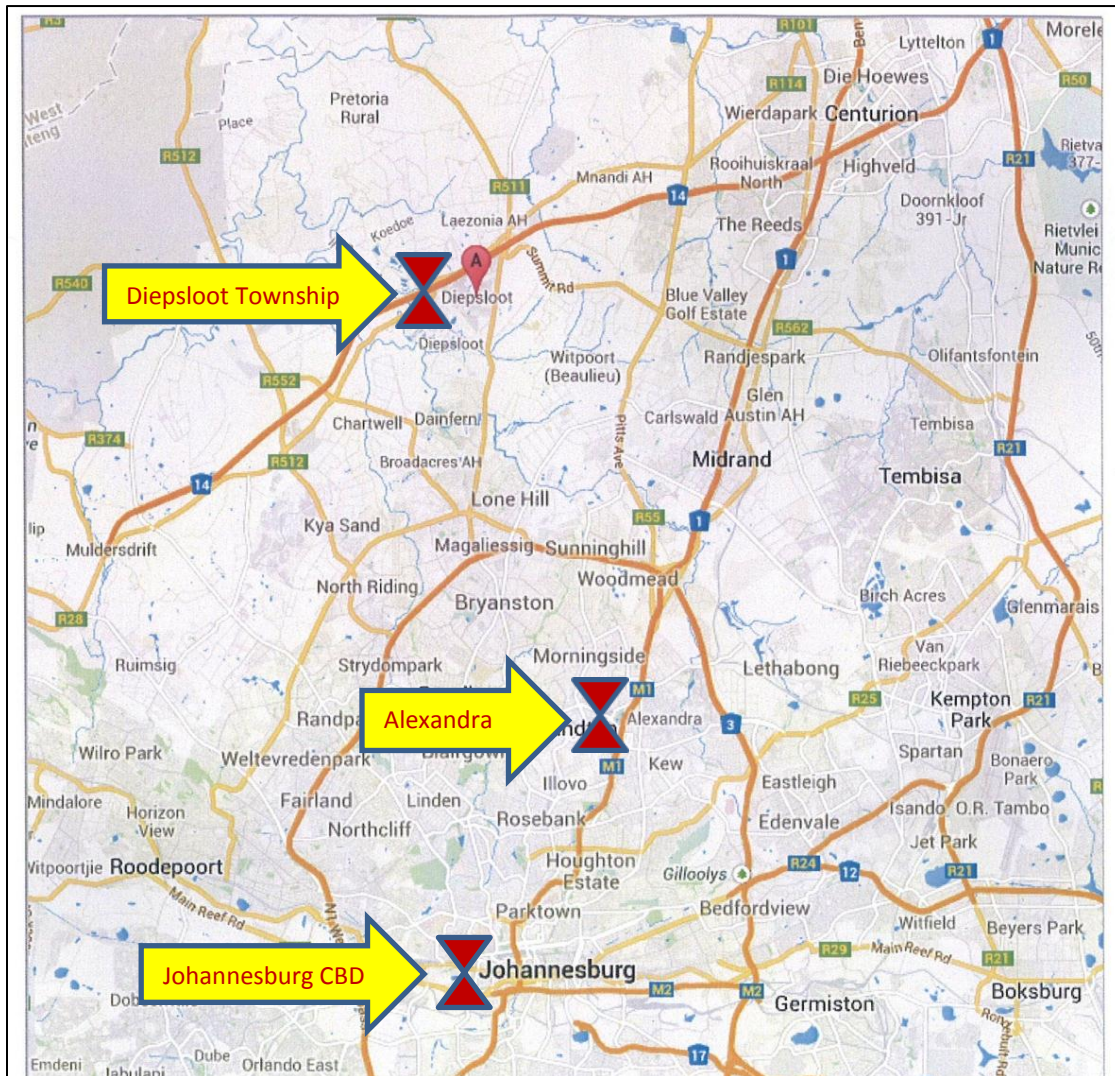


Figure 1: Diepsloot, Alexandra and Johannesburg CBD Locality Map

Source: www.brabysmaps.com, 2013

This report is made up of five distinct chapters. This is the **introductory Chapter**, which outlines the purpose, problem statement and rationale, research question, hypothesis and the analytical framework. **Chapter 2** provides a detailed review of the existing literature and includes sections dedicated to the history of housing location in South Africa, overview of the post-apartheid housing legislative framework, implementation of the housing policy and its effects on household livelihoods. Furthermore, Chapter 2

discuss causes of informal settlements, factors which usually trigger relocation of informal settlements, poverty and livelihoods, role of tenure and impacts of official regulatory frameworks on home-based livelihoods opportunities.

Chapter 3 looks at the role of transport in household livelihoods by focusing on low-income household expenditure on transport, access to different modes of transport, common destinations and travel durations. **Chapter 4** of the report discusses the findings of the case study evidence gathered during face-to-face interviews with the respondents, carefully formulated to achieve research objectives. The study findings are presented under five livelihood assets, i.e. financial, human, physical, social and natural capital. **Chapter 5** concentrates on the analysis of the study findings while **Chapter 6** is the final Chapter of the report which discusses policy recommendations and general conclusions.

1.1 Purpose of the study

The research focused on a group of 1 500 households that were relocated from Far East Bank informal settlement in Alexandra to Diepsloot in 1996, The underlying purpose of the study was to:

- a) examine effects of relocation on livelihoods (examine the extent to which households' livelihood opportunities have been disrupted by relocation to Diepsloot Township)
- b) measure level of access to livelihood assets before and after relocation
- c) identify and explore households' coping strategies before and after relocation.

1.2 Rationale and problem statement

In the year 1996 the Johannesburg Metropolitan Municipality relocated residents of the Alexandra Far East Bank informal settlement to Diepsloot Extension 4 because their settlement was on a floodplain. Poor households usually depend on localised sources of income; relocation to remote areas often lack socio-economic resources and tend to increase their vulnerability to shocks and stresses. The consulted literature indicates that there is a strong relationship between housing location, transportation and centres of employment. In general, townships that are located on the periphery of urban areas usually impose significant transport costs on households.

Behrens and Wilkinson (2003) point out that the government's tendency to locate RDP townships on the periphery imposes direct additional travel time and expenditure on transport. In most cases, peripheral townships lack essential community facilities. Huchzermeyer (2003) indicates that the majority of post-apartheid low-income housing projects are in peripheral locations which often lack social and economic infrastructure. Furthermore, Huchzermeyer point out that relocation of communities to the periphery also affects household social capital (*ibid*). Patel (1999), cited in Barter (2002), emphasises that relocation of households to the periphery usually breaks down existing social support and community-based mutual aid networks. It is therefore these and other issues which will be discussed in detail later in the report that motivated the researcher to conduct a case study on the relocation of households to the periphery.

1.3 Research questions

The research posed the following three sets of interrelated questions as a point of departure in addressing the problem:

a) Main question:

What are the effects of relocation on household livelihoods?

b) Sub-questions:

- How was the level of access to livelihood opportunities before? Has relocation reduced or increased the vulnerability of households to shocks and stresses?
- What coping strategies were adopted by relocated households before and after relocation?

1.4 Hypothesis

Diepsloot is far from Johannesburg CBD and other employment centres compared to Alexandra. Due to its remote location in relation to major employment centres, a person who travels from Alexandra to Johannesburg CBD and other surrounding employment areas spends less money and time travelling than a person from Diepsloot. In general, distance determines the amount of time one spends travelling and the cost of transport.

Behrens and Wilkinson (2003) indicate that the most obvious effect of peripheral location is undoubtedly on travel distance. The further households are located from employment opportunities, the further they have to travel to gain access to livelihood opportunities (*Ibid*). The spatial location of Diepsloot, as illustrated in Figure 1 above, in relation to major employment centres imposes additional travel time and higher transport expenditure. This is not the case with Alexandra, since it is closer to the CBD and other employment centres such as Edenvale, Sandton, Bedfordview and Germiston. This means that households had easy access to employment centres before they were relocated to Diepsloot.

1.5 Review of related literature

This section will be covered in detail in Chapter 2. It will discuss the available literature in the form of books, research papers, reports, articles, journals and internet materials covering the subject of relocation, informal settlements, livelihoods, tenure, official regulatory frameworks and transportation. Reviewing related literature provided valuable insights to the contemporary debates and issues around the subject of relocation to the periphery.

1.6 Livelihoods Analytical Framework

Figure 2 illustrates the structure and the elements of the Sustainable Livelihoods Framework which is going to guide the focus of the report. The framework provides the lens through which poverty can be understood from poor people's perspective rather than from those of researchers (Rakodi, 2002).

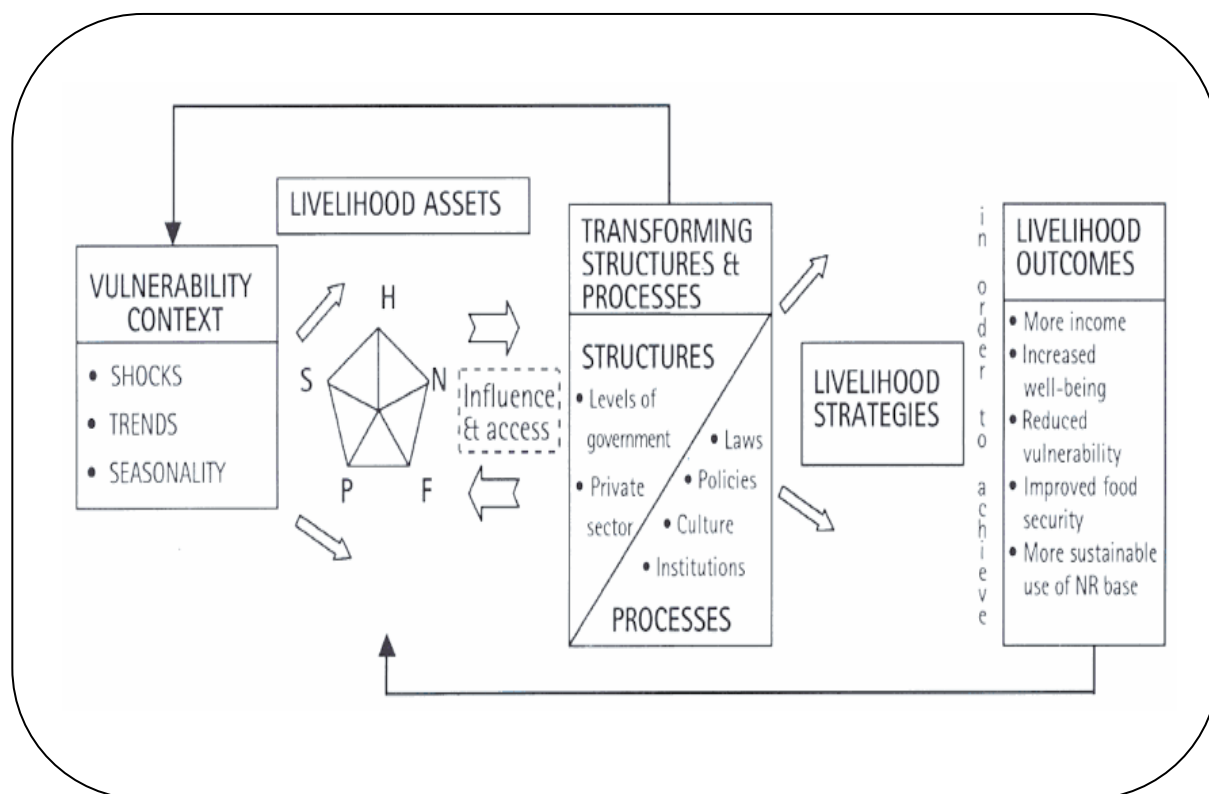


Figure 2: Sustainable Livelihoods Approach Framework

Source: Adapted from Rakodi, 2002:9

Carney (1998) describes the framework as a tool that provides the basis for poverty analysis. Arrows in the diagram indicate complex relationships between assets, context, vulnerability, livelihood strategies and the associated outcomes. Thus, the study is going to use this framework as a tool for analysing the findings in Chapter 4 of the report. Households with many livelihood assets tend to cope and recover more quickly because they have enough savings to buy more assets in order to accumulate wealth than those with fewer assets. For example, insufficient land, inadequate physical and financial capital, and lack of skills are indications of limited access to assets. Moser (1998) defines resilience as the ability of poor households to withstand shocks and stresses and vulnerability as the unpredictable events that can undermine livelihoods and cause households to fall into poverty. Poor resilience may be linked to lack of education and skills.

The Food and Agricultural Organisation of the United Nations (2005:17) refers to five livelihood assets as a resource base of household or the community. In the centre of the framework is a pentagon which denotes different types of assets available to households, namely human, natural financial, physical and social capital. (DFID, 1999). Access to livelihoods is affected by location, policies, regulations, public and private institutions (Meikle, 2002). Rakodi (2002) outlines the five livelihoods assets as follows:

- i. **Financial capital:** financial capital constitutes income derived from the sale of household labour, pensions, loans and remittances from outside the household. Access to affordable credit is crucial as it provides households with the opportunity of starting small business enterprises, for example spaza shops and salons.
- ii. **Human capital:** human capital occurs in five different forms: labour, health, education, knowledge and skills. In order to sell labour, households need to be healthy and have the necessary level of education, knowledge and skills. These factors act as a pre-condition for securing employment in formal labour markets.
- iii. **Social capital:** social capital is about social resources available to households in the form of networks, membership of savings groups and wider political groups, relationships of trust and reciprocity as well as participation in government institutions.

- iv. **Physical capital:** physical or produced capital is the basic infrastructure in the form of transport, housing, water, communication networks and production equipment which allow households to pursue their livelihoods.
- v. **Natural capital:** natural capital is concerned with households' access to natural resources such as water, land and urban agriculture. Natural capital is less significant in urban areas, but other households do practise it on a marginal scale as a means of improving food security. Practising urban agriculture can help households save some of their incomes because a portion of food consumed is produced by the household itself.

Households adopt a complex variety of coping mechanisms to survive harsh realities which are together called livelihood coping strategies. Carloni and Crowley (2005:5) define livelihood strategies as the range and combination of activities and choices that households make in order to achieve their livelihood goals. These include short-term strategies, for example ways of earning income to buy food for the household. Long-term strategies may include sending children to school as a way of improving the future human and financial capital (*Ibid*).

1.7 Research method

In order to address the research questions, an qualitative exploratory case study method was used to investigate the phenomenon. The primary reason for choosing this approach is that case studies are suitable for qualitative investigations (Yin, 2003). The case study has the ability to investigate the phenomenon in its natural setting. In other words, a case study allows the researcher to collect data from the area in which the research participants experience the effects of the phenomenon under study (peripheral location). Case studies allow the researcher to investigate the phenomenon using multiple sources of data such as interviews and direct observation (*Ibid*). One cannot understand the impacts of relocation and life on the periphery without observing the subject in its natural setting. One of the greatest advantages of using qualitative method in studies of relocation is that the researcher goes into the site and be part of the environment.

The study aimed to identify and investigate intangible factors such as social norms, socio-economic status and gender issues. Such issues can only be thoroughly and comprehensively investigated through in-depth open-ended questions which allow the researcher to elaborate research questions. Qualitative methods allow for detailed investigation of issues by asking questions such as; who is affected, why is affected and what factors are involved. This is not the case with the rigid and highly structured quantitative methods. Quantitative methods can leave out rich information due to the use of coding and standardisation (Nicholls, 2011). Qualitative method was chosen because the study sought to explore the effects of relocation on people's lives.

Nevertheless, qualitative methods have their own shortcomings which must be clearly and proactively recognised before deciding on the research approach. Firstly, findings of the qualitative methods cannot be extended or generalised beyond the boundaries of the study area (Yin, 2003). Secondly, qualitative methods usually involve relatively smaller samples and this can mean that its findings are less likely to be taken serious by other academic researchers. The method requires the researcher to become immersed with the phenomenon by becoming part of the community under investigation. This can contribute to subjectivity of the study findings to due emotional feelings experienced during information gathering.

The greatest pitfall in using the qualitative method is the difficulty associated with phrasing the questions because it requires the researcher to have a list of well-framed and long open-ended questions which demand good questioning skills. Ambiguity is inherent in human language, therefore the appropriate and relevant responses largely depends on the ability of the researcher to ask the right questions in that particular language. Therefore, researchers need to have a good vocabulary of the respondent's language otherwise the study is bound to arrive to distorted findings due to barriers associated with the lack of proficiency to understand the language of the target population.

Yin (2003) states that it is important for novice researchers to define the boundaries of the case study prudently to avoid losing focus on the research problem. Hence the study focused on only 1 500 households that were relocated from Alexandra Far East Bank to

Diepsloot Extension 4, in September 1996. Prior to being moved to Diepsloot Extension 4, the households were temporarily settled in the transit camp in Diepsloot Extension 1 for a period of four years. One of the case study guiding principles is that a sample must be representative of the entire population in terms of characteristics (*ibid*). The sample of the target population was drawn from a total of 10 households which consisted of employed and unemployed adult females and males with a direct experience of relocation.

The study used the snow-balling sampling approach to identify other households to form a complete sample with the assistance of the first respondent who knew the area very well. Interviews were conducted during the weekend of 24 and 25 November 2012 from 9:00am-4:00 pm. Each interview started by the explanation of the research purpose and lasted for about 30 minutes. The survey questionnaire consisted of closed and open-ended multiple-choice questions and is attached as **Appendix 1**. It covers the following data themes:

- I. Background information in respect of the type of shelter respondents' occupied before and after relocation.
- II. Personal information on age, gender, level of education and marital status.
- III. Residential comparisons which covered shelter ownership status, personal perceptions regarding safety, security, beneficial social relationships between individuals and membership of community-based organisations, level of physical infrastructure and durability of shelter before and after relocation.
- IV. Employment status, income source/s and their location before and after relocation.
- V. Household expenditure on transport for trips to work, school and shops before and after relocation.
- VI. Access to modes of transport and travel durations before and after relocation.

1.8 Limitations of the study

The study made use of a snow-balling sampling approach. Even though this technique is generally effective for qualitative studies, I believe it added some biasness to the study. My poor understanding of Sipeedi and Venda languages possibly resulted in misinterpretations of responses of certain questions. Reliance on English also contributed to respondents' misunderstanding of questions because the first respondent who assisted with translations, spoke English with difficulty.

1.9 Conclusion

This chapter has demonstrated that the purpose of the study was to examine the effects of relocation on household livelihoods. The chapter has adequately outlined the problem and the rationale for undertaking the research as a means of gaining a better understanding of the effects of relocation on relocated households. The main question being posed by the study is: What are the effects of relocation on household livelihood opportunities? Based on the fact that Diepsloot is located far from areas of employment, the study has hypothesised that relocation resulted in the disruption and reduced access to livelihood opportunities. The analyses of study are guided by the Sustainable Livelihoods Approach. Lastly, this chapter has outlined the methodology and the corresponding research strategy used to study the effects of relocation on household livelihood opportunities.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter provides a detailed review of related literature. Relocation is a very broad subject as it encompasses a number of sub-topics through which a better understanding of its effects on livelihoods can be explored. The chapter begins by outlining the history of housing location and the post-apartheid housing legislative framework. It then delves into the factors responsible for relocation of informal settlement communities to the periphery, poverty and livelihoods, role of tenure, and impacts of regulatory frameworks in household livelihoods. Information was gathered from books, journals, articles, reports, internet, etc. The covered literature largely concentrates on the effects of relocation by comparing the level of access to livelihoods assets before and after relocation.

2.1 History of housing location in South Africa

Prior to 1994, settlements in South Africa were separated from one another in terms of race and colour of the people. This was achieved through a series of apartheid legislation which was based on separation and control rather than integration and social cohesion. Ballens (1998:742, in Karam and Sihlongonyane, 2003:160) notes that the traditional town planning model in South Africa focused on 'separation and control, administered in centralized and hierarchical fashion'. Housing for the non-white communities in South Africa, especially black townships, was characterised by low-density dormitory suburbs located on the periphery, several kilometres from the urban core (*Ibid*). Smith (2003) writes that spatial inequality was expressed in the planning strategy which placed black, Asian and Coloured communities on the periphery. These areas were characterised by a weak economic base and lack of social facilities. According to Berrisford and Kihato (1998), blacks were on the extreme periphery and occupied only 13% of land in South Africa in terms of the 1913 Land Act. He adds that lack communities were forced to travel to white areas for employment opportunities (*Ibid*).

According to Sihlongonyane and Karam (2003), large open spaces of land were set aside to act as physical barriers between different racial groups. They further state that under apartheid, housing for non-white communities was allowed only on the edges of the city while white communities lived in central locations characterised by good economic and social infrastructure. Smith (2003) points out that the periphery was characterised by sub-standard housing and lack of economic opportunities. **Figure 3** below shows the apartheid city model as graphically illustrated by Davis in 1981. As it can be seen, Black/Bantustan settlements are located on the outer periphery and are separated from the neighbouring Indian and Coloured groups by either freeways or large tracts of open spaces.

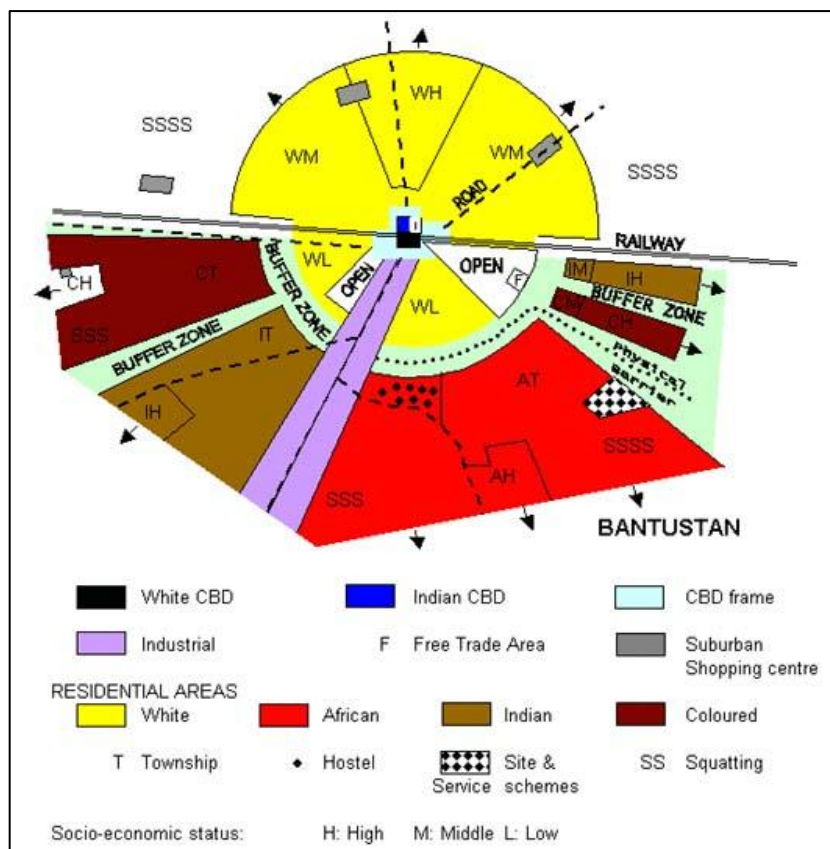


Figure 3: Apartheid city model

Source: Simon, 1989:195

2.2 Overview of the South African post-apartheid housing legislative framework

This section provides a broad overview of the housing legislative framework. Several pieces of legislation have been introduced to facilitate housing delivery in South Africa since 1994. These pieces of legislation, amongst others, aim to improve previously disadvantaged communities' access to socio-economic opportunities. When the African National Congress (ANC) took over in 1994, it introduced the Reconstruction and Development Programme (RDP) as its main policy document that was going to guide the development of future policies. As a result, the policy acted as a road map for addressing the legacy of apartheid. In terms of the RDP policy, everyone has the right to have access to adequate housing. The policy defines right to housing as having a secure place in which to live in peace and dignity and the democratic government is ultimately responsible for ensuring that housing is provided to all who cannot afford it (ANC, 1993). The policy acted as a long-term strategy document in which the ANC government articulated its vision, goal and objectives for a new democratic state.

Contained in the RDP policy document is a goal of delivering not less than one million houses for the first five years of the democratic government, establishing viable communities in areas close to economic opportunities, as well as to health, educational and social amenities, supported by good transport infrastructure and the provision of secure tenure in various forms, including upgrading of existing well-located informal settlements in order to promote access to economic opportunities.

As a result, the policy informed and influenced almost all pieces of legislation that followed after it (*ibid*). The National Housing White Paper was published in 1994 as a first piece of legislation intended to stabilise the housing policy environment and to put in practice the goals of the RDP. One of the principles of the 1994 Housing White Paper stipulates that residential areas must be established in locations that allow access to employment opportunities (Republic of South Africa, 1994).

A year later, in 1995, the Development Facilitation Act was introduced to facilitate a speedy delivery of housing and provision of engineering bulk infrastructure (Department of Land Affairs, 1995). Chapter 1 of this Act provides a set of land development principles which all housing developments are required to comply with. These principles include the integration of social, economic, and institutional aspects of land development, availability of residential and employment opportunities in close proximity to or integrated with each other, a diverse combination of land uses at the level of individual erven or subdivision of land to discourage urban sprawl (*Ibid*).

In 1996, the Constitution of the Republic of South Africa was introduced. Section 26 of the Constitution state that everyone has the right to have access to adequate housing (Republic of South Africa, 1996). To achieve this socio-economic right, the state must take reasonable legislative and other measures within its available resources on progressive basis (*Ibid*). In terms of the International Declaration of Human Rights Report published by the United Nations, adequate housing means privacy, space, security, lighting, ventilation, basic infrastructure, all at an affordable cost within a reasonable distance from job opportunities and social services (COHRE, 2005:25). In 1997, the National Housing Act was introduced. This Act defines housing development as access to a permanent residential structure with secure tenure, ensuring internal and external privacy and providing adequate protection against elements (National Department of Housing, 1997).

The post-1994 housing policy has been heavily criticised for placing the poor on the periphery of South African urban areas which often lack economic and social amenities. The National Department of Housing responded to this and other policy challenges by releasing the Breaking New Ground (BNG) strategy in 2004. Some of the objectives of the BNG is the creation of sustainable human settlements, the upgrading of well-located informal settlements and renewed cooperation between the state and the private sector in delivering affordable rental housing in inner city areas (Department of Housing, 2004). The question of informal settlement is well articulated in view of alleviating poverty by providing access to livelihood opportunities.

2.3 Implementation of the housing policy and effects on livelihoods

Housing policy can be defined as a set of measures designed to modify the quality, price and ownership and control of housing (Malpass and Murie, 1999:7). Housing policy generally implies action in relation to a particular problem which it is intended to solve or ameliorate in pursuit of some objectives (*ibid*). A strict interpretation of this point is that government housing programmes and strategies are supposed to serve the common good but in reality they *systematically* operate to reinforce the same legacy they were introduced to address by placing the poor on the periphery. Hays (1995) defines a housing welfare programme as a programme which uses public resources in the form of direct financial aid, in-kind assistance or publicly financed expertise to alleviate housing problems. This implies that those who are defined as poor qualify for state subsidised housing, in South Africa this is achieved on progressive basis as stipulated in Section 26 of the Constitution.

Lalloo (1999) identifies some major shortcomings of the current South African housing policy from a citizenship perspective. He defines citizenship as the duties, responsibilities, rights and privileges that flow from meaningful membership in society. He notes that components of citizenship comprise three closely interwoven strands, namely political, civil and social. He outlines the two areas where the current housing policy has failed to promote citizenship. The first is *access to place*, which he defines as lack of convenient access to economic opportunities, health and social amenities (*Ibid*). The second area is the *individual and the community* which he describes as the contribution of the housing policy to the creation of isolated and fragmented communities with poor social capital (*Ibid*).

The current South African housing policy emerged from protracted negotiations between the National Housing Forum, the business community and the African National Congress-led government in the early 1990s (Huchzermeyer, 2003). According to Huchzermeyer, both the National Housing Forum and the Business sector supported minimal state intervention in housing delivery programmes by following neo-liberal approach while the ANC pushed for a welfarist and redistributive approach. Housing in

South Africa is a welfare programme for the poor who cannot afford to build or buy in the private market.

This suggests that any housing policy must be formulated to address a specific problem. In the case of South Africa, the housing policy is designed to amongst others, (i) to promote the establishment of socially and economically viable communities, and (ii) to promote the establishment of residential areas in places allowing convenient access to employment opportunities (Khan and Thurman, 2001).

It is clear that the housing policy in South Africa was formulated to promote, amongst others, access to economic opportunities. It is also clear that the policy aims to promote access to economic opportunities by encouraging the establishment of low-income housing in areas allowing access to opportunities. Khan and Thurman (2001) show that most of the subsidised housing developments in South Africa have typically been situated on cheap land which is often far from livelihood opportunities. It is government's goal to deliver as many houses as possible to all the poor South Africans. This desire, coupled with insufficient budget allocations to acquire well located land, means that most of the new low-income housing projects will be developed on cheap peripheral land near or far beyond the existing apartheid townships.

From the above discussion, it is apparent that the manner in which the housing subsidy is implemented in South Africa does not focus on upgrading of well-located informal settlements as the majority of them are situated on private land. This is evidenced by the focus of the subsidy in establishing housing developments on greenfield sites away from employment opportunities. Khan and Thurman (2001) indicate that the delivery of medium-density housing is not adequately pursued in South Africa. They note that the reason for this seems to be the unwillingness of the state to buy the well-located land from the private market. Khan and Thurman (2001) write that instead, it is private sector developments that locate in areas that are adjacent to economic opportunities. Poor people in South Africa usually gain access to subsidised housing through the project-linked subsidy scheme. Behrens and Wilkinson (2003) note that project-linked subsidy accounts for 83% of all approved housing subsidies applications. The subsidy provides 40m² houses to qualifying households earning between R0-R3500 per month and is

based on a once-off capital subsidy (Department of Local Government and Housing, 2009:10). Due to the fact that the programme is based on a mass delivery mode, its implementation demands the availability of large tracts of land. As a result, most of the low- cost housing projects are established on greenfield sites near the existing apartheid black townships which are far from socio-economic opportunities. In practice, the implementation of the housing subsidy is effectively reinforcing unequal access to amenities articulated in the 1994 Housing White Paper, i.e. access to employment opportunities and social facilities.

Urban poor households living in low-income housing townships remain marginalised, mainly due to being on the periphery of the city. Sihlongonyane and Karam (2003) argue that the location of the low-income housing has failed to make positive impacts on the lives of the poor, by placing them on the outskirts of urban areas. They estimate that most of the low-cost housing projects are located more than 20km from the city centre (*ibid*). Based on the findings by Sihlongonyane and Karam in Johannesburg (2003), it is clear that the location of housing tends to contribute to social and economic marginalisation of the poor.

Dewar (2003) points out that, as a result of additional distance between residential and employment nodes, households tend to spend more time travelling. Increased travelling times resulting from relocation to the periphery means that one must leave home very early in the morning in order to arrive at work on time. The unfortunate experience is that those who cannot afford transport sometimes are forced to walk long distances to get to areas of employment. Sihlongonyane and Karam (2003) argue that 'spatial planning policies seem to fail to restructure apartheid city form'. They add that most of the low-cost housing townships are established on land previously identified for sites-and-service schemes during apartheid.

'The new planning approach seems to have lost the authoritative urge of efficacy and influence that was possessed by the previous regime'. They conclude that the test of the democratic government will be the extent to which it manages to reverse the apartheid legacy by establishing low-cost housing in areas adjacent to job opportunities (*ibid*). However, up to now, it is the private market forces that seem to dictate the location of

low-income housing in South Africa rather than government. The failure of the housing subsidy to provide access to social and economic amenities is also manifested in its focus on the once-off individual capital subsidy scheme which is characterised by the delivery of the semi-detached 40m² house on the periphery, neglecting other forms of tenure which must be promoted in the inner city in order to ensure that people live close to places of work.

2.4 Causes of informal settlements

Causes of the informal settlements are often linked to socio-economic and political inequalities in most parts of the world. In South Africa, almost all causes of informal settlements are linked to apartheid. Several pieces of legislations were passed to restrict blacks from entering the urban space. In the 1990s, the Group Areas Act and other legislations which controlled the influx of rural migrants into urban areas were repealed. This resulted in a huge housing deficit in major cities.

The second cause which is linked to the previous point is the desire of the poor to gain access to job-based socio-economic opportunities located in the city. Huchzermeyer *et al.* (2004) argue that informal settlements are a symptom of inequalities and contemporary processes of social, economic and political exclusion. This implies that the causes of informal settlements are not always linked to the demand for housing but sometimes it is the desire to have access to urban socio-economic opportunities. The third factor is linked to South Africa's post-apartheid housing delivery mode. The project-based approach has reinforced the creation of informal settlements by focusing on the production of houses rather than addressing the diverse socio-economic marginalisation of the housing beneficiaries. Beneficiaries tend to desert the subsidised housing units due to poor location.

Furthermore, the project-linked subsidy programme is designed for households earning between R0 and R3500 per month. Other types of subsidy programmes have not been prioritised in order to address housing backlogs in other income groups such as gap housing which accommodates individuals who do not qualify for fully subsidised

households earning between R7500 and R15000 per month. At the same time, this group does not earn enough to qualify for bonded housing. Secondly, the shortage of government-funded rental housing in areas adjacent to places of work also contributes to the proliferation of informal settlements due to the cost of private rental accommodation. A large number of people who do not qualify for full housing subsidy as prescribed by the National Housing Code usually gain access to shelter through erecting shacks on vacant urban land.

2.5 Factors responsible for the relocation of informal settlement communities

" The reason the poor choose steep hillsides, riverbanks, or the sides of roads and railways, is mainly because these are near employment opportunities, but are available because of the dangers they pose, which means that nobody else wants them"
(Payne, 2001:10).

Relocation is a frequent concept in the literature dealing with informal settlements. Even though the study makes use of the concept of 'relocation', it is worthwhile to provide a definition of other concepts that are closely related to the concept of 'relocation', namely resettlement and displacement. The World Bank Handbook of Reconstructing Natural Assets after Natural Disasters (2012:3) defines relocation as a 'process whereby the community's housing assets and public infrastructure are rebuilt in another location'. The interpretation of this concept suggests that all the community assets, including social and economic infrastructure, are re-established in a different locality. It can also be deduced that relocation does not entail disruption of livelihoods. Relocation is sometimes used interchangeably with resettlement in the informal settlement literature. Sherbinin (2010:1) defines resettlement as a movement of households which is directly planned by government or private developers, where an area is chosen in order to settle households. The choice can be made after a series of consultations with affected households, but can also be imposed upon them (*ibid*).

On the contrary, Patil (2012:4) defines resettlement as an act of leaving one's house, land and moving to an unknown area, taking occupation of new houses, adopting new

survival strategies, entering into new relations and adjusting to a new culture and environment. Unlike the former definition provided by Sherbinin (2010), the latter concentrates on the need for households to adapt to the new environment as a way of coping with local conditions. Literature shows that most relocation projects result in community displacement and reduced access to livelihoods (Kanji, 1998, Meikle, 2002, and Huchzermeyer, 2012). According to Sherbinin (2010:1), displacement refers to the movement of households from their place of usual residence to another area. This movement is often forced in the sense that, in most cases, households are not given the opportunity to choose the new settlement. Furthermore, Sherbinin (2010:3) discusses two types of displacements that are usually responsible for the relocation of informal settlement communities, namely those that are induced by major infrastructural projects and those that are induced by environmental risks. Infrastructural projects that usually result in the relocation of large numbers of urban poor households include construction of dams, major freeways, hydro-electrical power stations, etc. Environmental risks such as tsunamis, flood-prone areas, hilly slopes, subsiding soils, river banks are also responsible for sudden large scale relocations.

Factors responsible for the relocation of informal settlement communities include property market forces, large-scale development projects, environmental risks, and lack of secure tenure. Private property market forces also seem to contribute substantially to the relocation of informal settlements. Malpass (1995) indicates that in a capitalist state, in addition to striving for progressive housing policies, government also strives to attract and maintain private sector confidence. In South Africa it is common for informal settlements to occur near private sector developments. As a result of perceptions held by wealthy groups, government is often under pressure to relocate communities of the informal settlements to the periphery. For example, the emergence and formalisation of informal settlements have been opposed by affluent groups on the basis that informal settlements cause a decline in property values.

Local government land use management policies also contribute to the relocation and displacement of informal settlement communities. Sihlongonyane and Karam (2003), in their study of land use and property markets in Johannesburg, found that land use management system was intended to support private property markets by giving a

degree of investor certainty. They add that land use management and the political will hardly change what the property markets dictate. In other words, markets operate above any local government land use management policy.

Linked to the above point, is the issue of 'urban competitiveness' which refers to the ability of the city to compete with other cities by attracting private sector investment (Begg, 1999: 796, in Huchzermeyer 2011:48). Hubbard and Hall (1998:2, in Huchzermeyer 2011) point out that cities tend to be run like business entities as they persistently pursue their competitive advantage. For example, Maponya Shopping Mall in Johannesburg is a private development developed on the land that was previously occupied by the informal settlement. The community was relocated to the southern periphery of the city to make land available for development of the shopping mall. Du Plessis (2006) indicates that every year, a large number of urban poor households around the world are evicted from their homes to avail the land for profitable commercial developments. He further adds that major infrastructure development projects such as dams, freeways, international sporting events, for example the 2008 Beijing Olympic Games and other major urban redevelopment initiatives are responsible for the displacement of low-income households. Du Plessis (2006:181) points out that "in Beijing, an estimated 300 000 people have lost their homes as a result of preparations for the 2008 Olympic Games".

The World Bank Handbook of Reconstructing Natural Assets After Natural Disasters (2010) states that poor urban dwellers often settle informally on state land often not suitable for residential development. As a result, the area is declared as unsafe, and relocation of households follows immediately. Environmental risks which may cause the relocation of households, includes, wetlands, flood zones, river banks, very steep slopes and subsiding soils (*Ibid*). Lastly, lack of access to secure land tenure which usually results in relocation is another factor responsible for the relocation of informal settlement communities. Land tenure is defined by the Food and Agricultural Organisation of the United Nations (2002:7) as a relationship, whether legally or constitutionally defined, among people as individuals or groups with respect to land and includes rules of behaviour which define how property rights to land are allocated. For example, during the year 2000, the City of Johannesburg introduced a plan which focused on improving

access to tenure by moving informal settlement residents to greenfield sites where their tenure and access to services could be formalised and secured, given the lack of affordable and large pieces of land near the CBD (COHRE, 2005).

2.6 Poverty and sustainable livelihoods

Rakodi (2001:33) defines poverty as a condition where people's basic needs for food, clothing and shelter are not met. This means that households are considered poor if they fail to satisfy their nutritional, clothing and housing needs. Meikle (2001) indicates that poverty occurs in two different poverty forms, namely absolute poverty and relative poverty. Absolute poverty occurs when households cannot obtain adequate resources measured in calories or nutrition to support a minimum level of physical health. Relative poverty occurs when households cannot enjoy a certain level of living standards as determined by government (*ibid*). It therefore implies that both absolute and relative poverty represent extreme economic and social marginalisation of households; however, absolute poverty is more serious than relative poverty because it includes lack of food, clothing and housing.

In the context of livelihoods, poverty is not only defined in terms of lack or low incomes but broader concepts of deprivation and insecurity are used. Rakodi (2002) notes that deprivation occurs when people are unable to reach a certain level of functioning or capability. For instance, ill-health or poor well-being of households indicates a form of deprivation. Likewise, Carney (1998) sees deprivation as a form of physical weakness, isolation, vulnerability and powerlessness. Of note is the concept of 'vulnerability' which is defined by Meikle (2002:39) as referring to the susceptibility of households to sudden shocks or longer-term stresses imposed by changing economic, environmental and political contexts. For example, loss of employment is an economic context which cuts access to income. Households rely on their livelihood assets to survive harsh conditions. Carney (1998:4) defines livelihood as comprising the capabilities, assets (including both material and intangible resources) and activities carried out to generate incomes. As noted in the above paragraph, capabilities relate to the well-being and the ability of households to work in order to create assets, including income. Rakodi (2001:34) argues

that livelihood is considered sustainable only when it can cope with and recover from stresses and shocks and enhance its capabilities both now and in future. For example, if households have been able to recover from the negative effects of relocation it is an indication that their livelihoods are sustainable.

The livelihoods of households are affected by context. For example, a location and its local conditions constitute context. Livelihoods of the poor are determined by the context in which they live and the constraints and opportunities the location presents. As far as location is concerned, peripheral location can act as a constraint to gaining access to employment opportunities given the high cost of transport. It must be pointed out that any location will have its opportunities and constraints and the main sources of vulnerability will differ from place to place. However, according to Meikle (2002), context can also mean policies, laws, regulations and institution. In most cases, policies, laws and regulations are made by government institutions and bind all citizens including the poor and this is the reason why their livelihoods are affected by context. Livelihood opportunities are also affected by level of access to 'entitlements'. Rakodi defines entitlements as a bundle of commodities over which households can establish commands and may include access to common social infrastructure like roads and community facilities. Meikle (2002) outlines the five household livelihood assets as follows:

(i) Financial capital refers to income derived from the sale of labour, pensions and loans and remittances from outside of the household supply cash flows. Access to affordable credit is important for enterprise development, for example access to fast and little loans can support households in starting small businesses like tuck shops and taverns. Moser (1996), in the study of Cisne Dos, found that informal credit arrangements were common amongst poor households, borrowing on a short-term basis from neighbours and nearby relatives for daily consumption.

(ii) Human capital refers to labour, health, skills and education. In terms of human labour, the capacity to work is the main capital for the urban poor. In respect of human health, the sale of labour for urban poor households is very important in determining the quality of labour. As far as skills and training is concerned, gaining access to education

facilities is necessary in order to improve household human capital. Fouracre *et al* (2006) points out that the element of poverty which is associated with the quality of life refers to the person's capability, skills, knowledge and ability to labour. The quality, quantity, safety and security of transport in low-income housing settlements on the periphery are usually poor, and as a result can cause stress, injury and even road fatalities (*Ibid*). Fouracre *et al*. (2006) points out that low-income housing townships situated on the periphery are usually characterised by lack of health facilities. In areas where primary healthcare facilities are provided, they tend to operate beyond their designed capacity. As a result it can be difficult for old and sick people to access these facilities. In turn, this situation can result in weak human capital in terms of the well-being of household members. Due to the cost of transport, people can choose walking to get to work, which can be very strenuous

(iii) Natural capital refers to natural resources such as water, rivers, land, but it is less significant in urban areas; most families practise it on a marginal scale. Use of land for urban agriculture tends to be more common in rural areas rather than in urban areas. Urban poor households do practise home gardening, though at a very small scale, particularly because they lack access to big tracts of land and tend to limit their agricultural activities within the yard.

(iv) Physical capital refers to physical assets used to produce other assets including income. Housing is often one of the most important assets for the urban poor as it is used for both productive (renting of rooms, using the space as a workshop area) and reproductive purposes in addition to shelter. Housing is a crucial productive asset through which the poor can protect themselves against calamity. Hence housing insecurity increases the vulnerability of the urban poor. But when the poor have secure ownership of their shelter they usually use it as a space for generating income. Payne (2001) notes that homeowners use their housing as a base for enterprise or rent it out to raise some income.

(v) Social capital refers to the network of support and reciprocity that may exist within and between households and within communities. Forms of social capital include reciprocal relationships between households, membership of community-based

organisations and access to information about available opportunities via community networks. In Cisne Dos, Moser (1996) found that community-based organisations consolidated and popularised themselves through frequent service delivery riots aimed at compelling government to provide housing and access to basic services such as electricity, piped water, roads, sanitation, etc.

Relocated households usually take time to integrate with communities they find in new settlements. The type of a relationship that prevails during the first few years is characterised by lack of trust and tensions. Solon (2003) found that the relocation of households to the outskirts of the city tends to disrupt a sense of belonging and social relationships, resulting in a lack of participation in community development efforts, creation of tensions and ultimately destruction of unity and fellowship amongst households. Moser (1999) in her study of Cisne Dos in Ecuador found that 15-25 of households in slums depended upon neighbours for caring for children during the day. Loss of social networks, insecurity for what may happen in future, medical hardships and loss of faith in government, feelings of powerlessness and increased social isolation are some of the negative effects on social capital that can be observed during the first few years in relocation sites (*Ibid*).

Solon (2003), in the study of relocations in Cambodia, found that many people cited the inability to communicate with friends in order to gain information on where work was available. What is important to note here is that as a result of difficulties to visit or to communicate with the distant relatives and friends, people end up not having information in job opportunities. It is clear that that relocation of families to existing communities sometimes results to poor social networks. The study conducted by Bryceson et al. (2003) found that mobile phones sometimes play a big role in sustaining social networks between distant relatives in Africa. This means that as a trade-off between transport mobility and locational access, mobile phones have a huge potential to reduce the impacts of transport costs on households as contact can be maintained through cell phones. The biggest advantage is that cell-phones are affordable even to the poor households. This makes it possible for distant families to maintain contact without having to physically visit one another.

2.7 Household coping strategies

The Food and Agricultural Organisation of the United Nations (2005:5) defines livelihood strategies as the range and combination of activities and choices that households make in order to achieve their livelihood goals. Urban poor households cope with unexpected shocks and stresses in a variety of ways. They do this by drawing upon available individual, community and public resources. Meikle *et al* (2001) state that households build up different patterns of activities which together make up livelihood strategies. Households tend to diversify their livelihood strategies by using available opportunities to multiply their income sources. Rakodi (2002) notes that most households have a portfolio of activities such as formal waged employment, informal trading and service activities. However, Chambers (1997) takes note of the fact that livelihood strategies of those who are employed on a full-time basis tend to be less diverse than those who are not. This clearly means that those who are casually employed tend to have little income and as a result, are forced to diversify in order to survive calamities.

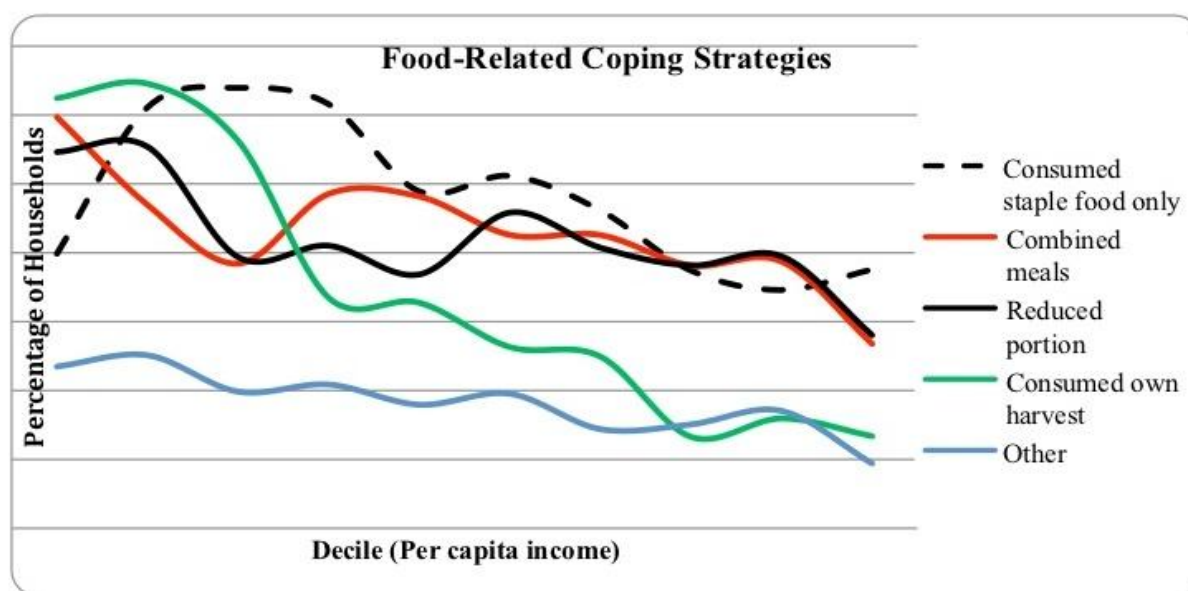


Figure 4: Example of the food consumption-related coping strategies

Source: Meikle, 2001:18

The UNICEF Report (1999:13) outlines different categories of household coping strategies as follows:

- coping strategies that are related to augmenting income: for example through sale of assets, running home-based enterprises, borrowing, drawing upon savings or even stealing from others;
- coping strategies related to changing food consumption: for example through consuming one's own harvest and reducing daily consumption levels;
- coping strategies related to reducing expenditure on education: for example transferring children from an expensive private school to a non-fee public school, spending less on books and even withdrawing children from school;
- coping strategies related to reducing expenditure on health services: for example shifting from private healthcare to public health care, switching to traditional herbs, delaying medical visits due to lack of money to pay for transport, etc.
- coping strategies related to the production of new household members: delaying having babies, sending babies to rural households or relatives, etc.

It is evident that not all coping strategies adopted by the poor are sustainable for example; the UNICEF Report shows that borrowing money and sale of assets are the most common coping strategies used by the urban poor to survive. With respect to borrowing, the UNICEF study found that households borrow from friends, relatives, neighbours and cooperatives. Even though borrowing is common and seem to be the quickest way of responding to unexpected negative incidences, excessive use of this strategy is detrimental to households because may lead to a spiral debts. Meikle *et al.* (2001) provide examples of other activities which are usually undertaken by the urban poor to cope with adversities. These include stinting on education, basic foodstuffs, medical costs which undermine human capital in the long term. Likewise, such strategies may provide relief in the short term, but can potentially reduce the ability of households to sell their labour in the long term due to lack of appropriate education and skills.

For example, child labour is one of the strategies that are commonly adopted by the urban poor households; however, this strategy is not appropriate because it sometimes prevents children from attending school. Furthermore, the strategy exposes children to being vulnerable to different forms of abuse. Household members can sometimes engage in criminal activities such as theft or stealing in order to satisfy basic needs, but these have negative effects on other households. Other coping strategies can cause illnesses in the household, these include waste-picking in unsanitary conditions and illegal dumping which can lead to unhealthy neighbourhoods.

In addition to the above strategies, Rakodi (1999) notes that domestic service, urban agriculture, renting out of rooms, scavenging, walking instead of travelling, family splitting and remittances from households working away, also form part of a bundle of coping strategies that are commonly adopted by urban poor households as survival strategies. For example, a household may rent out an extra room of the family house or outbuilding for the purpose of generating extra income. Other households may practise urban agriculture on marginal land to improve food security whilst others tend to focus on hawking and vending. Security against harsh and unexpected realities is of utmost importance for urban households.

Rakodi (2002) notes that households use a variety of options to manage assets. The first option is investing in securing more of an asset as a way of ensuring long-term security and stability. This is considered to be a shield against uncertainty and as a means of strengthening asset base. The second option is the substitution of one asset for another and the third option is the disposal of assets to compensate for the consumption shortfall (*Ibid*). This suggests that households tend to dispose sell less needed assets to get much needed ones in order to get by. For example, a household may decide to sell a car and use the money from this to pay for children's education.

2.8 Household livelihood outcomes

Livelihood outcomes are what household members achieve through their livelihood strategies, such as levels of food security, income security, good health, well-being and asset accumulation. As indicated above, households adopt a wide range of livelihood strategies to cope with negative socio-economic conditions. However, urban poor households have fewer coping strategies than their affluent counterparts. This is mainly because their coping strategies often undermined by the prevailing labour market forces and regulatory frameworks and most of them tend to own fewer assets.

Livelihood outcomes of individuals or households are the results of people's successes or failures in transforming, through a variety of strategies, assets available to them into income, basic goods or services needed to survive (Moser, 1998). Livelihood coping strategies can yield either positive or negative outcomes. This largely depends on the ability of households to generate more assets from existing ones. This suggests that some households can succeed while others fail to achieve positive livelihood outcomes. Therefore, analysing the nature of vulnerability involves analysing not only coping strategies but also the outcomes of those strategies pursued to survive harsh realities.

Livelihood outcomes are also influenced by the extent to which different household members have access to income (Meikle et al., 2001). For example, if the man is the only one who brings income in the family, he is likely to decide how money is spent in the households; as a result women's participation in household finances is undermined. Meikle (2002:46) indicates that the following are some of the mechanisms which can yield positive livelihood outcomes for poor households:

- i. Gaining access to assets and livelihood opportunities, for example to affordable credit from banks and living adjacent to major employment centres.
- ii. Living in healthy environments with appropriate infrastructure and service: for example transforming informal settlements into formal settlement with access to a waterborne sewage system, piped water, electricity and appropriate dumping of waste.
- iii. Gaining access to supporting social services: for example to police services, clinics and schools.

A significant number of the poor urban households tend to derive their incomes from the informal sector of the economy. In most parts of the world, informal economic sector activities occur mostly in the CBD and absorb a large number of poor individuals because skill is not a precondition as in the formal employment sector. However, the ability of the informal sector to reduce vulnerability of the urban poor is limited by a number of factors which include low incomes, strong competition and regulatory frameworks. These factors make the sector less profitable, especially where diversification is low. Urban poor households often lack the education and skills required to find employment in the formal job market. Lack of education and skills increases their vulnerability against stresses and shocks and means that the most survive through casual labour. The implication is that their livelihood strategies are sensitive to change and therefore are unlikely to cope and recover from stresses and shocks because they are poor in resilience.

2.9 Role of tenure in livelihood strategies

Lack of access to tenure is often associated with people living in the informal settlements. Assayed (1993: 15) defines informal settlements as 'high density widespread residential communities established and consolidated often outside of the formal legal and economic structures and identifies three different types of informal settlements: gradual, communal and mobilised informal settlements. Gradual informal settlement results from spontaneous actions by individuals looking for shelter by gradual accumulation on public or private land. Communal informal settlement generally results from a collective action by settlers who have carefully organised a specific squatting plan of invading a specific piece of land; hence it has a greater chance of being ignored by government, whereas mobilised informal settlement is usually instigated by political leaders who want to threaten the ruling party (*Ibid*).

Housing policy in South Africa concentrates on the provision of shelter and seems to ignore the root causes of poverty. Huchzermeyer (2004:18) argues that implementation of the housing policy must focus on the upgrading of well-located informal settlements as a way of supporting access to livelihood opportunities. She writes that the new

discourse on informal settlement support must be centred on poverty alleviation, reduction of vulnerability, and social inclusion (*ibid*). Access to formal wage employment is undoubtedly critical for the survival of urban households but the reality is that most of them do not have access to formal labour markets because they lack appropriate skills. Instead, many of them make a living by hawking, vending, working as domestic servants and operating home-based enterprises. This suggests that proximity to areas where informal sector activities are concentrated and to high-income residential suburbs is critical for the poor. Likewise, access to secure tenure provides the urban poor with the opportunity to use their homes to raise income.

In South Africa, the question of security of tenure has been linked with individual home ownership. In one hand, this form of tenure concentrates on the production of low density housing townships far from areas supporting household livelihood opportunities. On the other hand, official town planning regulations usually restrict the use of the dwelling for commercial purposes. Huchzermeyer (2004:18) points out that 'security of tenure in the context of reducing vulnerability, must enable choice in developing appropriate tenure options through community participation and recognising the link between livelihoods and land tenure'. In terms of reducing vulnerability, security of tenure implies recognition of the right to the city (*ibid*). In most cases, housing beneficiaries are not consulted on the choice of tenure, instead government decides for them. Access to secure tenure can assist the urban poor in improving their socio-economic status in several ways. Royston (2009) discusses three routes in which access to secure tenure can improve the economic well-being of the urban poor.

The first route relates to 'property ownership' and the production of capital gains. This route is achieved through the sale of property. Money from the sale of property can be used to purchase larger properties in affluent places where property values are higher than in low-income areas. This opportunity is not taken advantage of in South Africa because the National housing policy prohibits the sale of the RDP house during the first eight years of occupation.

According to Royston (2009), the second route through which access to secure tenure can improve livelihoods of the poor, is the use of the dwelling for productive/commercial

purposes. He points out that the opportunity accrues from on site or property-based livelihood opportunities such as renting out rooms, running a spaza shop and practising urban agriculture as a way of raising income. Gaining access to title deeds must not be a precondition undertake these livelihood activities; however, in South Africa, town planning regulations usually prohibit the use of residential properties for economic uses because land use management system is based on the historical planning framework which separates commercial activities from residential activities. The third route through which access to secure tenure can support the livelihoods of the poor is 'settlement location'. According to Royston (2009), this route is indirectly linked to the property. Well-located residential settlements provide easy access to livelihood opportunities in the city. In other words, settlements that are adjacent to major economic nodes, especially those where informal sector occurs at a larger scale, supports livelihoods of the poor. Cities accommodate a complex variety of informal sector activities which provide employment to most of the urban poor households.

2.10 Forms of housing tenure

Housing tenure occurs in different forms but not all of them are recognised by the legal system. Most of those which the legal system fails to recognise usually lack evidence, and as a result they are not defensible in the court of law. Royston (2009) outlines six forms of housing tenure that occur in South African urban areas. The first is 'registered ownership', which he describes as a form of tenure where residents live in an area that has been surveyed, registered and descriptions of land were lodged in the deeds registry. In this scenario, residents are in possession of the primary transfer title deeds to the erf that they are living on (*ibid*). This means that evidence of claiming the rights is based on the title deed document.

'Immediate ownership' is a second form of tenure which, according to Royston (2009), is to an extent similar to registered ownership discussed above but differs slightly because evidence of claims is by means of being in possession of a 'happy letter' confirming that housing beneficiaries are legal occupants of the government- subsidised

RDP houses. The 'happy letter' is issued upon the completion of the RDP house as a confirmation that the beneficiary is happy with the condition of the house. Beneficiaries of RDP houses usually wait a long for a long time before they receive title deeds for the houses they occupy.

The third form of tenure is 'expectation of registered ownership'. Royston describes 'expectation of registered ownership' as a tenure where people are in possession of a document that confirms that at some time in the future people will be able to gain possession of title deeds. This usually happens by being in possession of a 'C Form' which is issued as proof that the individual is on the RDP housing waiting list (*Ibid*). In practice, this means that government has made a commitment to build houses for the people. But this does not go to an extent of specifying the date the house will be built.

The fourth form of housing tenure is 'occupancy'. In this situation, people occupy the land informally or without following legal processes (Royston, 2009). Evidence of claim is by means of physical presence on the land. Most informal settlements occur through this form. The fifth form of housing tenure is the 'officially recognised rental'. This form of tenure allows residents to rent dwellings from landlords who are legal owners of the properties (*Ibid*). Its security is based on the ability of tenants to pay rent when it is due to avoid summary eviction. The sixth form of the housing tenure is 'unofficial rental' which Royston (2009) describes as an arrangement where residents rent from landlords who themselves do not have any original documentation to prove their claim. This is usually the case in the informal settlements where those who came before rent out plots or shacks to new members.

Leap (2005) in (Royston, 2009:7) discusses two key indicators of secure tenure. The first indicator is when people's rights over the land are becoming clearer. This means that people understand the extent of their rights and therefore can defend them with confidence. The second indicator is when land use regulations become clearer and people know the implications of conducting unauthorised activities on their properties.

2.11 Impacts of regulatory framework on livelihoods

Official regulations affect household access to livelihood assets by determining which activities are legal or illegal. Most of these regulations tend to undermine the ability of the urban poor households to conduct home-based enterprises because they often prohibit the use of the property for commercial activities. Regulations and planning approaches which are based on the separation of commercial, manufacturing and residential areas tend to undermine the ability of the urban poor to utilise their properties for economic activities (Payne, 2001). In South Africa, property owners are required to obtain approval from government agencies before they can use their homes for income generating activities either by submitting building plans or submitting a rezoning application. Both these requirements are costly and most of the poor cannot afford them. For the poor, shelter means not only protection against natural elements but also a space where income can be derived. In South Africa and other former British colonies, planning approaches are too rigid to support home-based income generating activities.

Payne (2001) notes that 'on-going research has shown that a substantial proportion of administrative procedures continue to apply development planning approaches which are often based on out-dated British and other colonial regulatory frameworks'. In many parts of the world urban poor households struggle to gain access to livelihood opportunities because of complicated regulatory and administrative procedures which they need to comply with before exploiting the economic potential of their properties. For example, De Soto (1989, in Payne, 2001:7) found that 'in order to fully comply with the relevant legislation and administrative procedures in Peru, new property owners must complete 159 bureaucratic steps in order to legalise their properties and receive title deeds'.

In South Africa, apartheid planning was designed to separate commercial land uses from residential land uses. This separation increased the vulnerability of the poor urban because regulations prohibit the use of residential space for business activities. However, urban poor households often choose to ignore official regulations and instead, they find their own ways and strategies to improve access to livelihood opportunities.

Payne (2001:8) provides three reasons why land use regulations failure usually fails to receive attention from low-income groups. The first reason is that 'planning standards, regulations and administrative procedures raise the cost of conformity to levels that a majority of the urban poor simply cannot afford to meet'.

The second reason is that 'many people in the informal settlements and other low-income areas are not even aware of the official requirements because they have little contact with government agencies' (*ibid*). The last reason is that official requirements are usually written in English, the language which the majority of the poor cannot understand (*Ibid*). For example, in South Africa, official land use regulations are often published in English. Official regulations and administrative procedures tend to increase the vulnerability of the urban poor households instead of reducing it by creating an enabling environment that will promote the generation income from home. Payne (2001:14) identifies three ways in which regulatory framework undermines the ability of the urban poor to improve their livelihoods by undertaking home-based income generating activities. The first is 'reduction of incomes of the poor who spend their earnings on conforming to the regulations'. The second is that the application of official regulations 'exposes non-conforming households to the threat of legal action for contravening the regulations'. The third one is that official regulations discourage the emergence of small home-based enterprises (*Ibid*) in low-income communities.

2.12 Conclusion

This chapter began by outlining the pre- and post-1994 South African low-income housing location. This has been done to reflect any similarities between the apartheid and post-apartheid approach to locating low-income housing townships. The existing literature indicates that the tendency to locate the urban poor on the periphery seems to reinforce apartheid spatial legacy. The chapter has discussed the major causes of informal settlements and different forms of tenure. The literature shows that informal settlements are a symptom of poverty and develop as a result of the poor trying to gain access to urban economic opportunities. The section on poverty and livelihoods provides an intensive discussion of the five livelihood assets as depicted in the conceptual diagram in Chapter 1 of the report. The literature indicates that access to all the four livelihood assets is of utmost importance in urban areas, natural capital seems to less relevant in the urban context.

The types of coping strategies that are usually adopted by the poor to deal with adversities includes those that are considered unsustainable, for example withdrawing children from school due to the cost of education has a negative impact on household human capital. The chapter has also reviewed literature on different forms of tenure. The review of literature indicates that informal settlement residents have no legal tenure for the land they occupy. Lastly, regulatory frameworks tend to undermine the ability of households to use their homes for productive functions due to rigid controls and the cost of complying with them.

CHAPTER THREE

THE ROLE OF TRANSPORTATION IN HOUSEHOLD LIVELIHOODS

3.0 Introduction

Urban poor households rely on public transport to gain access to important destinations such as schools, hospitals, employment centres etc. Booth et al. (2000:1) define transport as the movement of people and goods by any conceivable means for any conceivable purposes. There are particularly strong linkages between housing location, transport and household livelihoods. Both transport infrastructure and services enable urban poor households to build up assets needed by households to diversify their livelihood strategies. Transport provides a critical connection between poor households and livelihoods. For example, Venter (2007) shows that the role of transport in livelihoods includes access to employment, education, health and social networks. Transport has two distinct elements, namely transport infrastructure and transport services (*Ibid*). Thus, access to improved transport infrastructure and transport service is essential for the urban poor and acts as a pre-condition for gaining access to employment opportunities.

Inadequate access to transport contributes to the vulnerability of low-income housing beneficiaries. Venter (2007) indicates that lack of adequate access to transport has been identified by most researchers as a component of social and economic exclusion. However, housing and transportation policies often fail to recognise the relationship between transport and housing location. The most important aspect of transportation in the context of household livelihoods is 'transport accessibility'. Bryceson et al. (2003:3) defines transport accessibility as a perceived proximity to desired location in relation to destinations and is affected by the potential provided by transport and land use system for different types of people to engage in various activities. Maunder (2007) indicates that transport accessibility is a factor which depends on infrastructure and the available modes of transport for the movement of people and goods. This means that, in addition

to gaining access to good transport infrastructure, proximity and available modes of transport are other critical factors which affect access to important destinations.

3.1 Low-income households' transport expenditure

Behrens (2003) indicates that the tendency to establish low-cost housing townships on the periphery imposes higher travelling expenses on housing beneficiaries. In South Africa, it is a common practice for the new RDP townships to occur on the periphery of urban areas, far from employment centres. Booth et al. (2000) writes that the dispersed spatial pattern of cities results in higher transport costs which in turn lead to poor reduced access to employment opportunities. Tiwari (2002) found that in Delhi, sprawling low-income housing developments force bus operators to charge higher fares due to extended travelling distances resulting from locating new low-income townships far from the CBD.

Urban poor households around the world spend a significantly larger portion of their income on transport than on other household needs. Tiwari (2002) states that according to international standards, low-income households should not spend more 15% of their monthly incomes on transport. The reality is, however, that most of the urban poor spend more than 15% of their income on transport. For example, Biermann (2006) found that low-income South Africans living on the periphery spend between 15 and 16% of their monthly incomes on transport. In a different study, Reyneveld (2008) found that low-income households in peripheral areas of South Africa spent approximately 10% for the train, 14% for the bus and 17% for the minibus taxi. The figures are high considering the fact that most of the urban poor are engaged in the informal sector which is characteristically known for providing very little income. Figure 5 below shows household expenditure on different modes of transport in South Africa during the year 2008.

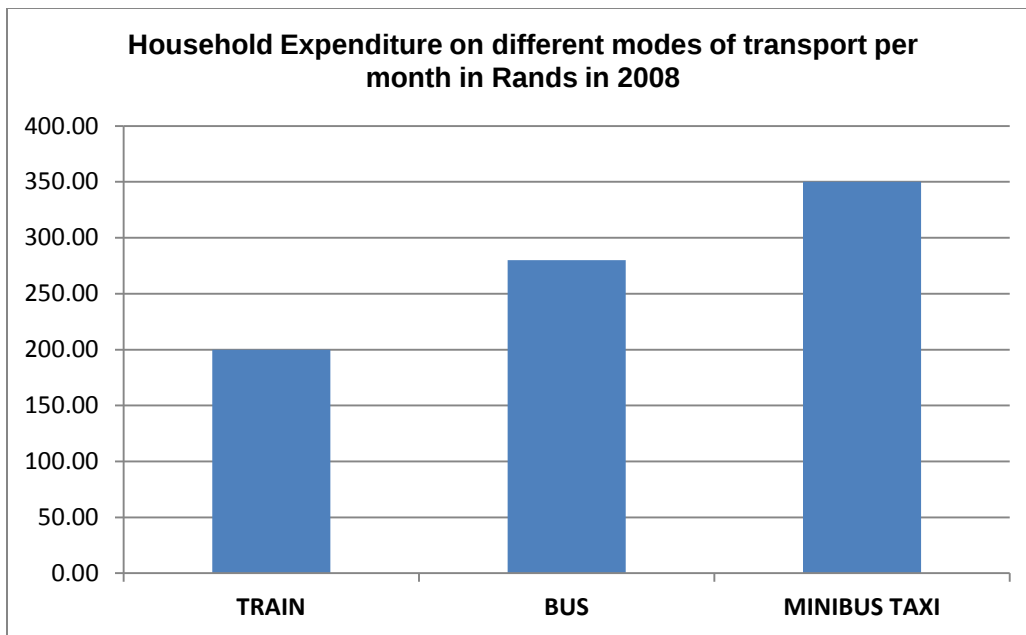


Figure 5: Monthly household expenditure on transport

Source: Buurman, 2006

In the study comparing Alexandra (centrally located) and Diepsloot (peripherally located) in 2003, Biermann (2006) found that households from Alexandra spent only R250 per month on public transport while those from Diepsloot spent R350 per month on the same mode of transport for trips to the CBD. Figure 6 below shows the difference in monthly transport expenditure between Alexandra and Diepsloot.

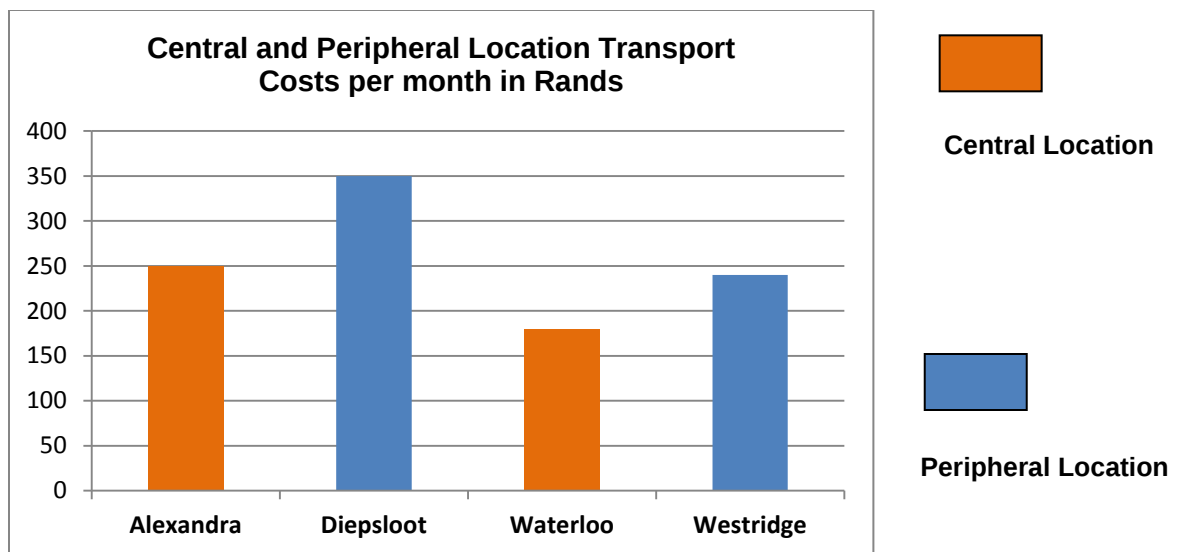


Figure 6: Monthly transport costs by location: Johannesburg and Durban

Source: Buurman, 2006

The same study found that households from the centrally located low-cost housing township of Westridge in Durban spent only R180 on public transport while households in a peripheral low-cost housing township of Waterloo in the north of Durban, spent R240 on public transport for trips to the CBD. Moving abroad, Booth *et al.* (2000) found that urban poor households living in the periphery of Latin American urban areas spent 15% of their monthly income on public transport whereas households living in central locations spent 7% of their income on public transport on trips to the CBD. Barter (1998) found that in India, households living in peripheral locations spent more than 20% of their incomes on public transport while those in central locations spent less than 10% for trips to the CBD. Figure 7 below shows the percentage of public transport expenditure in Latin America and India in 1995.

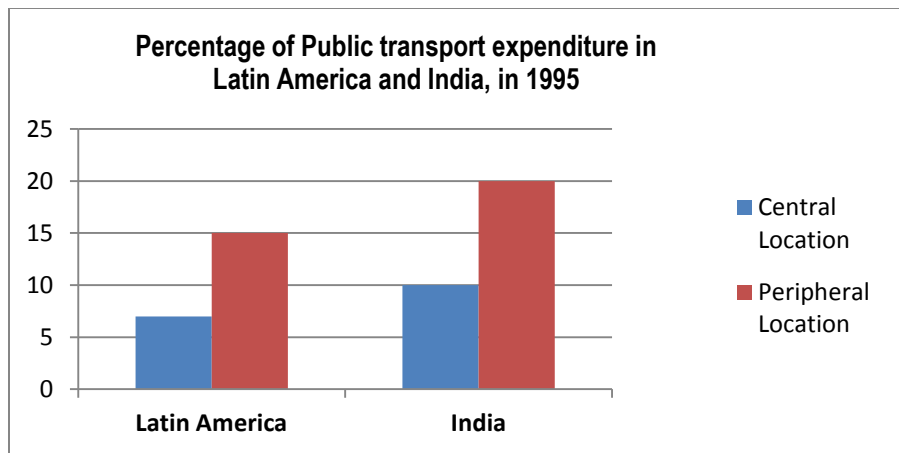


Figure 7: Monthly transport costs by location, Latin America and India

Source: Barter, 1998

Barter (1995) also found that 71% of urban poor households living in peripheral areas of Lusaka cannot afford public transport at all. In the same study, he also found that in general, low-income households spent up to 42% of their monthly incomes on transport while high income households spent only 10% of their monthly income on transport.

3.2 Modes of transport

Venter (2007) notes that walking accounts for 71% of daily trips in low-income households in South Africa. Behrens and Wilkinson (2003) indicate that walking is a major mode of transport after minibus taxis and accounts for 61% of trips made in Cape Town in the year 1999. Similarly, Biermann (2006) found that in South Africa, minibus taxis account for 73% of work trips. Reyneveld (2008) reports that in all metropolitan areas of South Africa, the use of private modes accounts for 24.5%, minibus taxis account for 29.3% whereas buses account for only 6.3%, with the train travel having the smallest share, 5.9%. Figure 8 shows the percentage of transport modes usage for different purposes in Cape in 2008.

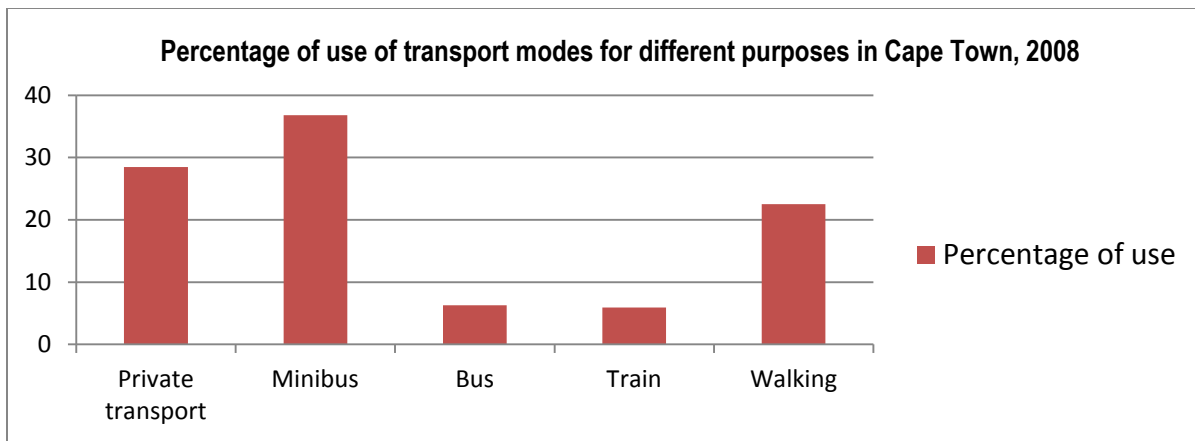


Figure 8: Use of transport modes, Cape Town 2008

Source: Venter, 2007

These findings show that in South Africa, minibus taxi and walking are two common modes of transport available in low-income communities. Most of the new low-cost housing townships have limited bus service and train service is not available in the RDP townships. Thus, the poor in low-cost housing townships rely on minibus taxis to get to different destinations. Those who live within a walking distance from employment centres and other important destinations, usually walk to avoid unnecessary expenditure. As indicated above, minibus taxis cost more than buses, which implies that households in peripheral low-cost housing townships have poor mobility compared to households in central locations.

Internationally, Anand and Tiwari (2006) discovered that in India, walking accounted for 33% while buses accounted for 42% and bicycles 21%. Barter (1998) writes that in most developing countries, the majority of trips are on foot because it is the most affordable mode of transport for poor households. He adds that in Jakarta in 1985, walking accounted for almost 60% of all trips taken by the lower-income groups. In Jakarta, walking accounted for 60% of all trips made by low-income groups in the year 2005. In Santiago, Chile, 75% of work trips were made by bus and 15% by walking. In Uganda and Zimbabwe, walking accounted for 61% of trips made in the year 2005 (*Ibid*). The findings suggest that walking, as in South Africa is still the most common

mode of transport for low-income households. The poor seem to prefer walking due to the fact that it does not involve spending money; however, other destinations are too remote and as a result people are sometimes forced to use motorised transport to reach distant destinations.

3.3 Travel durations

According to Buurman (2006), there is very little empirical evidence to support the hypothesis that households living in peripheral locations spend more time travelling than households living in central locations as this largely depends on the mode of transport. This means that households using faster modes of transport may spend less time travelling than households using slower modes of transport irrespective of the length of distance covered. As a result, her study revealed that households in Johannesburg spend less time travelling than households in Durban due to the fact that a larger proportion of people use private cars in Johannesburg than in Durban. This simply means that as most people in Durban do not earn enough money to buy private cars, they use public transport which tends to be slower than private transport.

The study conducted by Behrens and Wilkinson (2006) in Cape Town revealed that low-income households in peripheral locations spent approximately 50% more time travelling to work than households in central locations. A case study undertaken by Venter (2007) in Pakistan, Sri Lanka and Tanzania revealed that households from low-income settlements located on the periphery spent up to an hour travelling between work and home. However, households from central locations spent less than 20 minutes travelling between work and home. Biermann (2006) found that there is no substantial relationship between distance from the CBD and travel time other than travel mode. Biermann argues that this is mainly due to the fact that households travel to different destinations other than to the CBD. This is also as a result of the multi-nodal structure of cities as there are areas of economic activities other than CBDs (*Ibid*). For example, most households from Diepsloot could find work in Randburg and Sandton.

3.4 Conclusion

This chapter has illustrated the role of transport in livelihoods as well as costs, travel durations and access to various modes of transport. The literature shows that most of the poor urban households spend a larger portion of their incomes on transport. Lastly, the literature shows that households in peripheral locations tend to spend more on transport than households in central locations.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.0 Introduction

This chapter presents the findings of my case study. It begins by providing a brief history and the physical description of the study area, Diepsloot Extension 4. The main purpose of the study was to examine the extent to which relocation has disrupted households' access to livelihoods. In other words, the study aims to identify and discuss the effects of relocation on household livelihoods. The data gathering process was guided by the Sustainable Livelihoods Approach analytical framework; as a result, findings of the study are presented under the five livelihoods assets, namely financial capital, human capital, physical capital, social capital and natural capital.

The face-to-face interviews were conducted with research participants from their homes. This method was considered to be the best as it provides a 100% response rate and that it is a most appropriate form of data gathering for complicated open-ended survey questions. This approach allowed the researcher to interact with and observe the behaviour of the respondents during interviews in detail. However, this approach also added bias to the process as respondents generally behave in a certain manner in the presence of a researcher investigating the subject of this nature (housing). This could also have influenced the types of responses given to certain question.

The findings report levels of access to the five livelihood assets before and after relocation in order to measure the effects of relocation on household livelihoods. Data on sources of income, employment status and expenditure on transport for different types of trips is presented under financial capital. Information about the level of education, knowledge, skills and training, health and well-being is presented under human capital. Access to shelter, form of tenure, electricity, water, sanitation, social facilities, roads and transport is reported under physical capital whereas information about social relations at household, community and institutional level is reported under social capital. Natural

capital is not significant in urban areas but is still relevant because a small number of urban poor households practise agriculture. Coping strategies, livelihood diversification and outcomes are discussed in each of the five livelihood assets indicated above. Pictures, bar charts and tables are used to illustrate the findings of the study.

4.1 Diepsloot community profile

Diepsloot is a low-income Black Township established in the early 1990s by the then Transvaal Provincial Government. Established as a reception area, Diepsloot soon became a transit camp for thousands of families relocated from various informal settlements in the West and North Rand of the Gauteng province (City of Johannesburg SDF, 2010). It was established as a site-and-service housing scheme by the then Transvaal Provincial Government in the 1990s. Most of the informal settlement residents in Johannesburg originally came from various provinces of South Africa as labour migrants. Diepsloot brings together various ethnic groups from different areas (Benit, 1999). The majority of these labour migrants found employment in the Johannesburg CBD and other surrounding employment nodes. Some found employment in the mining industry, while some joined the informal sector as hawkers and vendors. Most female labour migrants worked as domestic servants in the white suburbs (Alexandra Urban Renewal Programme, 2010).

According to the research participants, the first group of people to settle in Diepsloot were 273 homeless people brought by the Rhema Church from Honeydew, followed by families from Zevenfontein informal settlements, and later in 1993/4, about 3000 people from Alexandra were relocated to this area. Diepsloot is situated in Region 'A' of the Johannesburg Metropolitan Municipality (City of Johannesburg Spatial Development Framework, 2010). This low-income Black Township is located at approximately 32 kilometres from the Johannesburg CBD and approximately 18 kilometres from the Sandton CBD. N14 Highway on the north and William Nicole Drive on the east are both connecting Diepsloot to the Johannesburg CBD. Diepsloot covers a total land area of 12.00 km² (City of Johannesburg SDF, 2010). This area began developing into a

township in 1993, primarily through migrants erecting shacks on vacant land. The population of the area increased rapidly as a result of arrival of new residents from Alexandra and elsewhere in Johannesburg (Centre for Social Development in Africa, 2008). In 2011, Diepsloot has a total population of 150 000 people (Statistics South Africa, 2011).

Access into Diepsloot is provided by King Dinizulu Street which forms a major intersection with William Nicol Drive in the eastern boundary of the Township. All roads in the study area are tarred. Streets are characterised by a variety of informal businesses. These include fruit and vegetable trading stalls, tuck- shops, carwash services, public phones, processed foods, furniture, second-hand clothing, barber shops, beauty salons, etc. Community social facilities include a community park, fire station, satellite police station, metro police, community library, primary school and the clinic.

The establishment of Diepsloot Township was motivated by the need to accommodate thousands of rural migrants who came to Johannesburg to search for jobs. In 1996 the City of Johannesburg relocated people from several informal settlements to peripheral areas of Johannesburg to make way for the Alexandra Urban Renewal Programme. A total of 1500 residents of the Far East Bank informal settlement in Alexandra were relocated to RDP houses in Diepsloot Extension 4 in 1996. The land they occupied was environmentally unsafe and was later included in the Alexandra Urban Renewal Programme (City of Johannesburg, 2010). In 2011, Diepsloot had a total population of 150 000 inhabitants and 25 000 households with an average of 3.4 members per household (Statistics South Africa, 2011). A total of 5000 households came from Alexandra. In 2011, this group represent 3, 3% of the Diepsloot total population. About 54% of the economically active members of the population are unemployed (Urban Land Mark, 2010). The population of Diepsloot is made up of Black Africans (98%), Coulered (0, 2%), Indian/Asian (0, 1%) and White (0, 2%) (Statistics South Africa, 2011).

In 2011, Statistics South Africa carried out a household survey of education levels on male and female members of the population above the age of 20 years. (Statistics South

Africa, 2011). The survey found that in Diepsloot, 1, 6% of males and 1, 2% of females had no education. 3, 1% of males and 2, 0% of females had some primary education. In terms of secondary education, the survey found that 17, 8% of males and 14, 0% of females in this age category had some secondary education. In respect of Matric, the survey found that 11, 2% of males and 9, 1% of females had Grade 12 (Matric). Furthermore, the survey also revealed that only 1, 0% of males and 0, 9% of females had Post-Matric qualifications. In respect of household incomes, the same survey found that 59, 0% households had no income, 10, 5% households earned between R1-R4800, 13, 7% households earned between R4801-R9600 and 35, 5% households earned between R9601-R19600 per month. The Diepsloot population is made up of Black Africans (98, 0%), Coulered (0, 2%), Indian/Asian (0, 1%), White (0, 2% and other groups represented (1, 5%) (Statistics South Africa, 2011). The most spoken language in Diepsloot is Northern Sotho accounting for 22, 8% followed by isiZulu, Tsonga and Ndebele, each accounting for 10, 5% (*Ibid*). Census 2011 showed that out of a sample of 62 882 people, 33 489 (53, 2%) were renting, 2 5021(3, 9%) were still paying bond while 10 726 (17%) owned their homes (*Ibid*). The high percentage of people who were renting (53, 2%) suggest that most people in the sample did not have access to secure tenure. The area consists of three different housing typologies, namely 40m² RDP houses, bonded houses and shacks. Extensions 1,12 and 13 are occupied by shacks only, Extensions 2, 4, 5, 6, 7, 8, 9,10 and 11 are predominantly occupied by RDP houses, whereas Extension 3 is largely bonded houses.

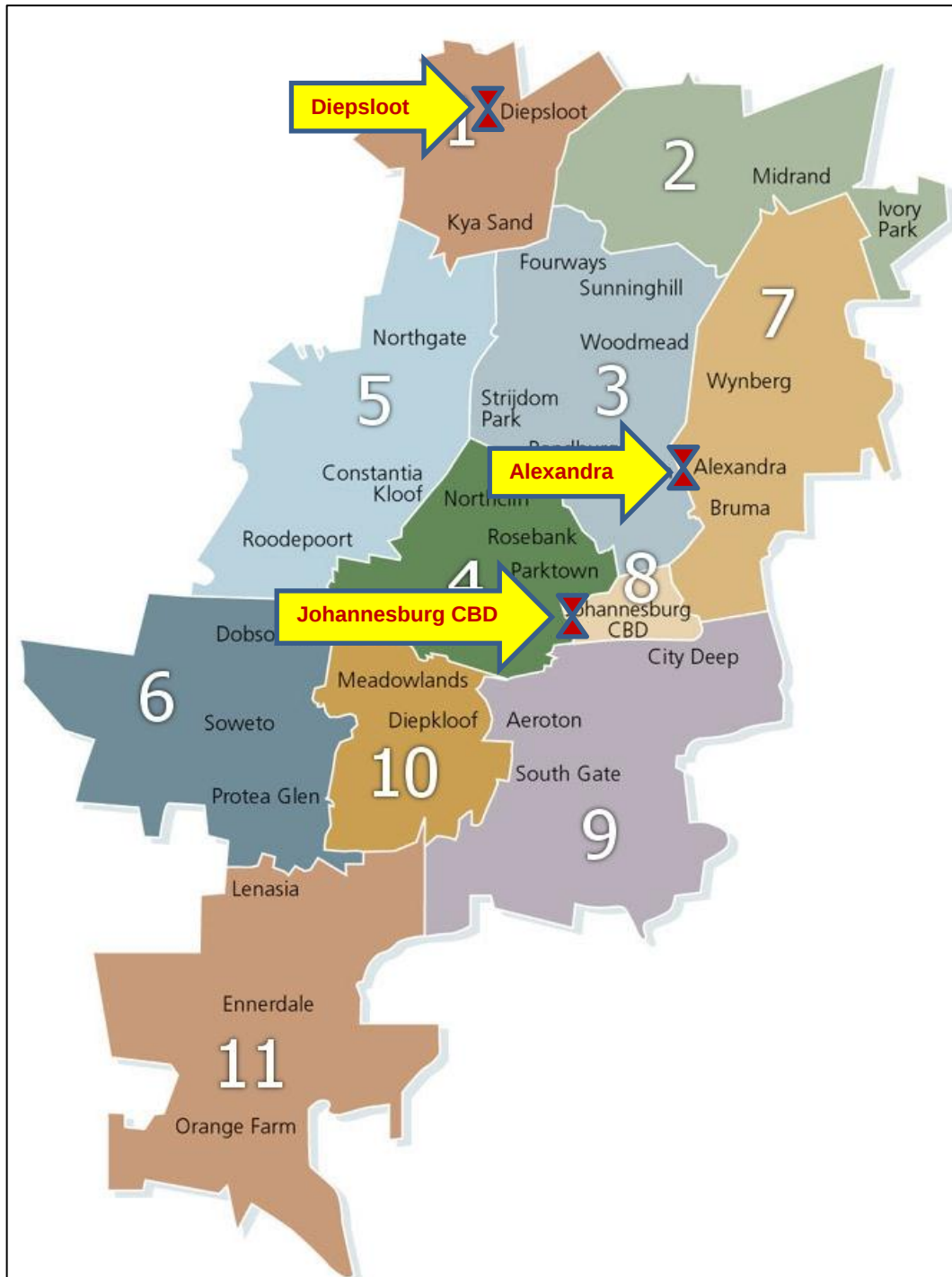


Figure 9: Map indicating Johannesburg CBD, Alexandra and Diepsloot Townships

Source: Johannesburg SDF, 2010:86

4.2 Alexandra community profile

Alexandra was established by the apartheid government in 1912 as the only settlement where black people could live in Johannesburg (City of Johannesburg, 2010). It is located at about 12km from the Johannesburg CBD and is surrounded by mainly white suburbs and forms part of Region 'E' (*ibid*). Its proximity to the Johannesburg CBD and other economic nodes such as Edenvale, Sandton and Bedfordview made it an ideal location for most black migrants who wanted to gain easy access to job opportunities. The population in Alexandra and other black townships grew out of proportion after the lifting of apartheid laws which restricted the influx of rural migrants to urban areas (*ibid*). Most migrants found accommodation in the existing black townships by renting backyard shacks while some were accommodated by relatives in the hostels. However, many did not find such accommodation and resorted to erecting shacks just outside the existing formal black townships (Alexandra Urban Renewal Programme, 2010).

In 2011, Alexandra had a population of 179 624 inhabitants with a total area of $\pm 6,91$ km². The community of Alexandra is characterised by high population density, elevated levels of unemployment, low levels of education, and monthly incomes (Centre for Social Development in Africa, 2008). Census 2011 survey of education levels on male and female members of the population above the age of 20 years revealed that 1.5% of males and 1.3% of females had no education in Alexandra (Statistics South Africa, 2011). 3.3% of males and 2.7% of females had some primary education (*ibid*). In terms of secondary education, the survey found that 14.3% of males and 12.1% of females in this age group had some secondary education. In respect of Matric, the survey found that 13.5% of males and 12.8% of females had Grade 12 (Matric). Furthermore, the survey also revealed that only 2.0% of males and 2.3% of females had Post-Matric qualifications. In respect of household incomes, the survey found that 49.9% of households had no income, 7.2% of households earned between R1-R4800, 9.2% of households earned between R4801-R9600 and 22.8% households earned between R9601-R19600 per month. These findings clearly show that population of Alexandra is characterised by low levels of education and low household incomes.

The population of Alexandra is made up of Black Africans (99. 0%), Coloured (0. 4%), Indian/Asian (0. 1%) and other groups represented (0. 4%) (Statistics South Africa, 2011). The most spoken language Alexandra is isiZulu accounting for 26. 3% followed by Northern Sotho, accounting for 23. 1%, Tsonga (11. 3%), Xhosa (9. 8%) and others accounting for 29. 6% (*Ibid*). Census 2011 revealed that out of a sample of 63 737 people, 15 015 (23. 5%) were renting, 4 981(7. 8%) were still paying bond while 23 397 (36. 7%) owned their homes (*Ibid*). People who were renting represented the second highest percentage (23. 5%) and this is the group which lacked secure tenure, thus more vulnerable to shocks than other groups in the sample. The 1 500 relocated households tend to have similar characteristics in terms of low education levels and low monthly household incomes.

4.3 Access to livelihood assets

Poverty has several dimensions of deprivation which manifest themselves as lack of security, poor human capabilities in the form of health, knowledge, education, training and skills, and lack of income and assets. These are different dimensions of poverty which are looked at when analysing the vulnerability of the poor households. Poverty is not just lack of wealth and consumption but includes vulnerability to shocks and stresses. Poor individuals and households living in the informal settlements usually lack access or have poor access to physical, social, human, financial and natural capital. Their assets have low resilience and poor adaptation capacity. This is the reason why they are sensitive to negative environmental changes.

Access to financial capital

Financial capital does not only include actual savings, access to credit or hard cash but also access to non-financial assets which can facilitate access to income. For the poor, shelter is usually used for both productive and reproductive functions. This means that in addition to providing protection against elements, shelter is used for income-generating

activities. Three out of ten reported that they owned shacks which they rented out to generate income. Seven respondents were tenants and occupied shacks for residential purposes only. Shack owners did not allow business activities in their shacks as the space was usually too small to accommodate productive functions. Others reported that they wished to operate home-based enterprises in their shacks but were discouraged by the fact that they did not own the land.



Figure 11: Preparation of traditional beer in the informal settlement

Source: Author, 2013

Some were running home-based enterprises such as *spaza* shops and shebeens which were selling bottled beer and *mqombothi* (traditional beer) with liquor licences. Sometimes these enterprises were selling drugs such as dagga and mandranx. Most of them indicated that they knew that they were breaking the law by selling these products.

Footnote: Spaza shop is an informal convenience shop business in South Africa usually run from home to supplement household income.

Shebeen is an unlicensed drinking establishment or a private home selling alcohol without license.

Relocation enabled households to generate income from home, including those who could not before relocation, on a larger scale because RDP plots provided more space. Seven out of ten households indicated that they generate income through home-based enterprises such as renting out backyard shacks, spaza or tuck shops, taverns, shebeens, beauty salons and food-processing enterprises. Eight out of ten households indicated that they had been informed by the Municipality through written notices that backyard shacks are illegal structures but decided to ignore the notices because backyard shacks help them to generate some income from their plots. Employment provides incomes to most households and there is formal and informal employment.

Employed female respondents indicated that they work as sleep-in domestic helpers in Sandton, Edenvale and Bedfordview. Most of them kept their jobs after relocation. Additional costs of travelling did not affect them very significantly because they visit their homes during the weekends. With the exception of domestic workers, relocation to Diepsloot imposed additional travelling expenses on men and women working outside of Diepsloot. . Some of the Unemployed male respondents reported that before relocation, they gained access to income through selling scrap material to recycling industries located in Germiston, Edenvale and Kempton Park. This group continued relying on recycling as a source of income but complained about the cost of transporting materials after relocation due to Diepsloot being far from recycling industries. Three households reported that they were receiving government social grants and pension. Households with children under the age of eighteen years received grants because their parents were unable to maintain them. Pension was paid to adult members of the households of sixty years and older who were unable to support themselves financially. As a result, grants and pensions were reported as the main source of income in these households.

There are formal and informal sources of credit for households. Formal credit is credit which is provided by registered financial service providers in the formal sector whilst informal credit is provided by unregistered service providers. Poor households usually lack access to formal credit because most are unemployed, therefore do not qualify for it. The majority of those who are employed are engaged in the informal sector activities which usually do not pay them enough income to afford loan repayments. Most households reported that they often turn to friends, relatives, colleagues, community

saving schemes (*stockvel*) and sometimes to local business operators for credit. Relocation from informal settlement to Diepsloot did not have any effects on households' access to formal to formal and informal credit. The RDP house which is supposed to improve access to credit cannot be used as collateral in terms of the National Housing policy. Households can receive title deeds only after eight years from the date they sign 'happy letters'. At the time of data collection, only two respondents were repaying bank loans.

Access to human capital

Household access to human capital is determined by its level of productive knowledge, education, skills, vocational training and well-being. Households with poor human capital generally have poor access to decent employment. In turn, their ability to create assets is limited and makes them more vulnerable to shocks and stresses. This implies that their coping strategies have low resilience and they are therefore sensitive to unexpected negative changes in the environment that demand them to adapt to new challenges.

Lack of education and skills reduces the opportunity of gaining access to adequate income. This is the reason why most of the uneducated and unskilled individuals end up living in substandard residential environments. However, the future of households' human capital is promising because almost all interviewed households indicated that they had children attending school. However, three households had children who had obtained Matric but did not proceed to tertiary education because parents could not afford tertiary education fees. In Far East Bank, schools and the clinics were provided in the formal Alexandra Township far from where the respondents lived. In Diepsloot the clinic, library, lower and higher primary schools are available within a walking distance from homes. With the exception of the secondary school which is located in Diepsloot Extension 5, quite far from the respondents' homes. Sharing of community resources raised some tensions between the relocatees and the old members of the community. In terms of social relationships, it was reported that there was tension between them and the original community (those who had lived in the area before respondents) over the

use of the local clinic and the library. Most of the social facilities were introduced several years after the establishment of Diepsloot as a settlement. According to the respondents, those families who had lived in Diepsloot several years before the introduction of households from Alexandra felt that they are the ones who pressurised government to provide essential social facilities and housing.

Access to social capital

Social capital refers to networks of support and reciprocity that occur at household, community and institutional levels. Social capital is a crucial resource in poor households because they usually draw upon it during times of shocks and stresses. This means that it is a platform on which households form relationships that facilitates access to assets. It is made up of tangible and intangible assets. Tangible assets include people and credit. Intangible assets include productive relationships between people and institutions. Adult members are usually the ones who are responsible for maintaining households. Younger members are usually responsible for helping with domestic functions like washing, cleaning, cooking child care, yard and house maintenance.

Four out of six working households reported that they relied on their children for the above-mentioned functions. Unemployed female respondents reported that they perform domestic duties themselves, especially during day-time when their children are at school. Three out of six male respondents indicated that they usually assist in building repair work and renovations at home. Seven out of ten households reported that, before relocation, they had managed to purchase small grocery items like candles, bread and, milk from local tuck-shop operators on credit based on trust. According to three respondents, this stopped after relocation because they started to deal with new retailers who did not trust them. Five out of ten households reported that they were members of a community saving scheme (*stockvel*) which was based in the formal part of Alexandra Township. Because cash contributions to the scheme must be made manually, after relocation these respondents had to travel to Alexandra to make their monthly contributions. Five households who were members of the scheme reported that they

decided to withdraw their membership after relocation to avoid travelling to Alexandra every month.

Access to physical capital

Physical capital includes production equipment, tools, housing, and common public infrastructure such as roads. Housing and road infrastructure are the most relevant assets in the study. In respect of tenure status, all respondents lacked access to secure tenure before relocation because they occupied land illegally. Lack of secure tenure was a major form of vulnerability in Alexandra Far East Bank. The informality of the settlement presented other forms of vulnerability to households in Alexandra such as sudden evictions and displacement. Seven out of ten households reported that they were renting and only three out of ten owned shacks. However, even shacklords themselves had no secure tenure because they did not own the land. Furthermore, before relocation households lived along flood-prone banks of the Jukskei River, which exposed them to flooding. Low structural durability of shacks also exposed households to storms or hurricanes.

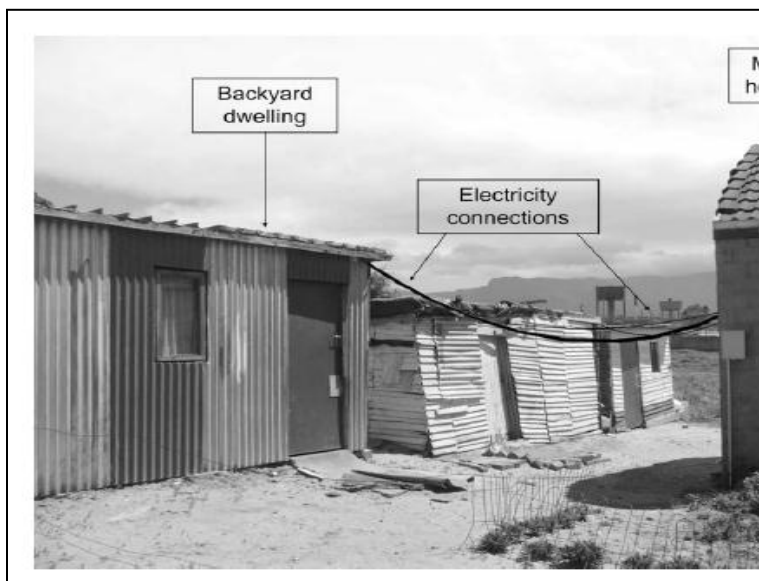


Figure 12: Illegal electricity connection in Diepsloot

Source: Alexandra Urban Renewal Programme, 2010

All households reported that they had access to electricity through illegal connections in Alexandra. Unauthorised access to electricity carries some risks, which potentially increase the vulnerability of households; for example, if offenders are caught, they face a risk of being fined heavily or imprisoned. Furthermore, illegal electricity connections put the lives of households at risk because they are usually carried out by individuals who lack technical knowledge of connecting electricity.

Those who had no access to electricity at all, relied on candles for lighting and on paraffin for cooking and heating. Candles together with paraffin can cause shack fires if they are not used with care. The risk of candle fires is quite significant in informal settlements since shacks are built too close to one another and are built from materials that burn easily.



Figure 13: An illustration of informal settlement density

Source: Author, 2013

Lack of proper road infrastructure and overcrowding was another form of vulnerability before relocation from Alexandra. Access to individual shacks was by means of informal footpaths and as result the settlement was not accessible to vehicles including public

transport which facilitates access to livelihood opportunities. This means that emergency response teams such as fire-fighters and ambulances have difficulty accessing the area. Delayed response can result in deaths that would have been avoided if proper road infrastructure was available. Lack of proper road infrastructure also made it difficult for police services to be rendered effectively to the community.

Government social facilities such as schools, clinics and police stations were located in the formal part of Alexandra Township, far from Far East Bank. Schools and clinics play a crucial role in the creation of human capital. Lack of adequate access to schools results in low standards of education while lack of adequate access to clinics results in poor health and well-being. Consequently, individuals will be unable to sell their most important asset which is labour. Relocation to Diepsloot Formal Township has to a great extent reduced the vulnerability of households to risks. In terms of tenure, households gained access to secure tenure for the first time. They became titled owners of both the land and the house for the first time in the urban area. Gaining access to tenure means that they are no longer facing a risk of eviction and displacement because their tenure rights are legally protected. RDP houses are built on geotechnical suitable land and have high structural durability which provides adequate protection from natural elements.



Figure 14: An RDP house with backyard shacks erected for renting

Author, 2012

In Diepsloot, households gained access to electricity through legal connection which encouraged them to improve their livelihoods such as running home-based enterprises (baking, sewing, food processing and refrigeration). This also means that their lives are

no longer exposed to risks associated with illegal connections and shack fires as result of using candles for lighting. There is a formal road infrastructure in the relocation site which provides easy access to households in case of emergency situations.



Figure 15: RDP houses with access to services and tarred roads

Source: Author, 2012

Transport infrastructure facilitates household access to public transport which they need to gain access to livelihood opportunities. In Diepsloot, government social facilities are available within walking distance from the respondents' houses. These include the police station, clinic, library and a primary school. Provision of these facilities within the reach of poor households has made a positive contribution to the creation of human capital. The issue of crime in Alexandra was raised quite sharply during interviews; however, this is not the case with Diepsloot. Perhaps the presence of the police station within the neighbourhood also contributes to the fight against crime.

Access to natural capital

Natural capital involves access to naturally available resources which enhance household livelihood coping strategies, for example adequate access to arable land can allow households to grow fruits and vegetables for subsistence or commercial purposes. Even though the Jukskei River provides water and possibly fertile land along the banks for urban agriculture, none of the respondents had food gardens in Alexandra. Instead, most of the fertile land adjacent to the river was covered by shacks. Two respondents reported that they had vegetable gardens on their backyards in Diepsloot.

4.4 Modes and cost of transport before and after relocation

Table 1 below illustrates the cost of public transport to major employment centres before relocation. The study found that most off-site income earning activities were located in the Johannesburg CBD, Edenvale CBD, Sandton CBD and Bedfordview CBD. Employed individuals were working in the CBDs and in the surrounding wealthy suburbs of these areas. Those who raised income in the CBDs were usually security guards, cashiers, car guards, beauticians, hawkers and vendors. Those who worked in the residential suburbs were employed as domestic workers rendering cooking, washing, cleaning, ironing, yard maintenance and child care services.

Table 1: Public transport expenditure before and after relocation

COST OF PUBLIC TRANSPORT FROM ALEXANDRA					
Modes of transport	JHB CBD	Edenvale CBD	Sandton CBD	Bedfordview CBD	Randburg CBD
Mini-bus taxi	R12	R6	R12	R10	—
Bus	R8	R4	R8	R4	—
Train	R8	—	R5	—	—
COST OF PUBLIC TRANSPORT FROM DIEPSLOOT					
Mini-bus taxi	R20	R20+R6	R12	R20+R6	R10

Source: Author, 2013

The study found that that individuals working in the areas spent R12 for a trip to Johannesburg CBD, R6 for a trip to Edenvale CBD, R12 for a trip to Sandton CBD and R10 for a trip to Bedfordview CBD. In respect of bus trips, households spent R8 to Johannesburg CBD, R4 to Edenvale CBD, R8 to Sandton and R4 to Bedfordview CBD per trip. Train trips to the Johannesburg CBD cost R8 and R5 to Sandton. Edenvale and Bedfordview do not have train services.

Cost of travelling to the same destinations increased dramatically after relocation to Diepsloot. Minibus taxis are the only mode of transport in Diepsloot. After relocation, cost of travelling to Johannesburg CBD by minibus taxi increased from R12 to R20, to Edenvale from R6 to R26. Costs of travelling to Sandton remained R12 because the distances between Alexandra and Sandton and Diepsloot and Sandton are approximately the same. Randburg is the closest to Diepsloot and provided employment to some people after relocation. Increased transportation cost to employment centres compromised the ability of the unemployed members of the community to gain access to job opportunities.

4.6 Travel durations before and after relocation

The study found that, after relocation, minibus taxi trip duration from Diepsloot to Johannesburg CBD increased from 15 to 40 minutes, to Edenvale and Bedfordview CBDs from 10 to 50 minutes. Table 2 below shows public transport durations before and after relocation.

Table 2: Travel durations by different modes of transport

PUBLIC TRANSPORT TRAVEL DURATION FROM ALEXANDRA					
Modes of transport	JHB CBD	Edenvale CBD	Sandton CBD	Bedfordview CBD	Randburg CBD
Mini-bus taxi	15 Mins	10 Mins	25 Mins	10 Mins	—
Bus	30 Mins	15 Mins	40 Mins	15 Mins	—
Train	40 Mins	—	45 Mins	—	—
PUBLIC TRANSPORT TRAVEL DURATIONS IN DIEPSLOOT					
Mini-bus taxi	40 Mins	40+10 Mins	20 Mins	40+10 Mins	10 Mins

Source: Author, 2013

Trips from Alexandra and Diepsloot to Sandton show a small time difference of 5 minutes because both settlements are at approximately equal distances from Sandton. Minibus taxi trips to Randburg show a duration of only 10 minutes because Diepsloot is close to Randburg.

Table 3: Duration of trips to shops

Place	Minor shopping trips	Major Shopping trips
Alexandra	Walked short distance	Travelled approximately 12kms
Diepsloot	Walked short distance	Walked or travelled approximately 3 kms

Source: Author, 2013

4: Duration of trips to schools

Place	Lower primary (Grades 0-3)	Higher primary (Grades 4-7)	Secondary (Grades 8-12)
Alexandra	Walked or travelled 2kms	Walked or travelled 2kms	Walked or travelled 2kms
Diepsloot	Walked 200 metres	Walked 200metres	Walked or travelled 2kms

Source: Author, 2012

4.7 Livelihood strategies

The study found that respondents used the following coping strategies before and after relocation:

- **Strategies involving increasing resources through multiplication and diversification of income sources:**

Urban households tend to focus on income-generating coping strategies more than rural households. This is because life in urban areas demands access to money. Most of their daily needs are satisfied through having constant access to cash: for example they need money to buy pre-paid electricity and water for cooking, lighting and heating. This is not the case in rural areas where households use wood for fire for cooking and heating.

Labour is the most important asset, through which the poor gain access to other essential assets needed to reduce vulnerability to shocks and stresses, including exploiting new opportunities. Of those households that were employed before and after relocation, most were self-employed in the informal sector in the Johannesburg CBD. This group reported that they had more than one source of income while those who were formally employed had mostly had one source of income. The decision to undertake diverse livelihood activities may be motivated by the fact that wages in the informal sector are usually too low to sustain households.

Those who had diverse sources of income reported that living in the informal settlement made it possible to diversify their income sources. This is because some of the households survived by undertaking illegal and unauthorised enterprises. For example, there are those who earned a living by selling drugs such as dagga and alcohol. Those who were selling dagga reported that they knew that they were breaking the law because it is illegal to do so. Those who were selling alcohol without approval from the municipality and liquor board also knew that they were breaking the law by doing so. Due to the inaccessibility, overcrowding and poor or no lighting at night in the informal settlements, most households operated these unauthorised uses without much fear of detection.

Most of the unemployed respondents reported that they coped with poverty by undertaking two or more home-based enterprises such as tuck shops selling grocery items on a small scale, renting a whole or part of the shack, selling dagga, traditional (*mqombothi*) or bottled beer, running a small fruit and vegetable business from a table top, providing tailoring services and selling processed foods (cakes, vetkoek, chips, sheep- and cow-heads commonly known as *skop* or *inhloko* and chicken meat pieces. Those who were self-employed in the informal sector reported that they coped with poverty by duplicating their enterprises in different parts of the CBD. Most focused on selling processed foods, fruit and vegetables vending, selling loose cigarettes, selling groceries, carrying packets for shoppers, selling pirated music/video CDs, operating a barbershop/beauty salon, , offering car guard and parking assistance services to motorists, pushing grocery trolleys for shoppers at

major supermarkets. Some coped with poverty by collecting scrap material for selling to recycling industries while others coped by stealing from others. Intense application of official regulations by the municipality to formal settlements reduced the ability of households to diversify their livelihoods. Most of respondents who earned an income by operating home-based enterprises complained about the complicated application process and costs attached to legalising home-based enterprises. Some of those who have erected backyard shacks on their RDP plots reported that they have received building control contravention notices from the municipality. As a result, some of the coping strategies that were popular in the informal settlement disappeared gradually after relocation.

Some of those who kept their informal sector jobs in the CBD continued undertaking them even after relocation. They reported that competition in the street- trading sector is very high in Diepsloot so they decided to remain in the CBD despite additional travelling expenses. These respondents also complained that they spend longer time travelling to their businesses, they often sell fewer goods and services than they used to before relocation due to delays in reaching the CBD that caused increased travelling distance and the limited availability of minibus taxis in the early morning. Those who reported that they failed to operate small enterprises in the CBD before relocation indicated that relocation opened up new livelihood opportunities for them. Car-washes, spaza shops, taverns, vending, hawking, beauty salons, barbershops, meat-braaiing (*shisanyama*) were amongst those activities which households switched to after relocation to respond to local opportunities.

- **Strategies involving changing the quantity of human capital**

Two female respondents reported that they postponed having children when they lived in the informal settlement because they were concerned about raising children in a shack. Most said lack of adequate living space and unhealthy living conditions as well as lack of secure tenure discouraged them from starting a family. In order to create multiple sources of income, other respondents reported that they brought their brothers, sisters and sometimes children from rural households to the informal

settlement so that they could be close to employment opportunities. Increasing the quantity of human capital was also non-productive gains such as two female respondents who had babies reported that they relied on their sisters from rural households for child care before relocation.

- **Strategies involving drawing on stocks of social capital**

Before relocation social capital provided a platform where households gained access to other important resources such as labour and access to credit. Income-earning household members was responsible for household maintenance. In other households, young females were assisting in child care. Some of the school-going children helped in family businesses after school hours. Of note after relocation to Diepsloot is the sudden reduction in household size because some of the children who stayed with their parents received their own RDP houses in Diepsloot. Households, especially those who had steady/permanent jobs managed to buy groceries from local retailers on credit when they ran out of food before relocation. These households made sure that they repaid retailers when they received their wages. This arrangement ceased after relocation because most retailers either remained in the informal settlements or relocated to other areas. Most households reported that they also got access to credit by borrowing from friends, relatives and colleagues.

- **Strategies involving reducing consumption and expenditure**

To make sure that food lasts longer, households reported that before and after relocation they always had only breakfast and supper. Some indicated that they only had breakfast during weekends because they leave home very early in the morning and preferred to carry lunchboxes which lasted them the whole day at work. The study revealed that, in general, poor households tended to buy used rather than new clothing as a way of saving money. Schoolchildren have breakfast and dinner at school through government school feeding schemes. Findings also show that poor respondents, especially older individuals, usually prefer to buy used clothes as new

clothing is expensive. Those who work at the Diepsloot Mall reported that they usually walk to work to avoid spending money on transport while others reported that they spent money to buy food and electricity rather than spending it on house repairs.

4.8 Conclusion

Lack of secure tenure discouraged many households from utilising their shacks to generate income. The findings show that more households undertook income-generating activities from home after relocation. This implies that relocation presented more home-based income generating activities and this contributed to the diversification of livelihoods in Diepsloot. However, additional expenditure on transport resulting from longer travelling distances implies that there is an additional financial burden on household financial capacity. The study also shows that relocation has resulted in longer travel durations.

In respect of poor human capital, the positive effect of relocation on household levels of education cannot be realised over a short period of time because improving level of education and skills would take a very long time to make noticeable positive effects on household human capital. However, it must be pointed out that in the informal settlement, schools and clinics were located far from the respondents' homes. The findings indicate that relocation has disrupted social capital to a certain degree because some of the respondents who were members of the community savings scheme withdrew from the scheme as a result of increased transport they incur when they attend meetings in Alexandra. Another interesting finding regarding social capital is that both before and after relocation, households have always relied on informal rather than formal sources for credit. One of the remarkable benefits of relocation is recognised under physical capital. After relocation, more households managed to use their homes to generate incomes due to access to secure tenure and services. In respect of natural capital, the study finding correlates with the existing literature indicating that urban households, unlike their rural counterparts, rarely engage in agricultural activities. Instead their livelihoods are concentrated in the service sector.

CHAPTER FIVE

ANALYSIS

5.0 Introduction

The underlying purpose of the study was to examine the effects of relocation on household livelihoods. The study has hypothesised that the spatial location of Diepsloot, in relation to major employment centres imposes additional travel time and additional expenditure on transport. This is not the case with Alexandra, since it is closer to the CBD and other employment centres such as Edenvale, Sandton, Bedfordview and Germiston. This means that households' access to livelihood opportunities was better before compared to after relocation. The case study evidence has been presented in the previous chapter.

This chapter provides the analysis of the findings using the Sustainable Livelihoods approach as an analytical framework. Therefore the main objective of this chapter is to demonstrate the positive and negative effects of relocation on household livelihoods. In other words, this section will measure access to livelihood assets before and after relocation. The primary question posed by the research is: *What are the effects of relocation on household livelihoods?* To address this question, the analysis will focus on the five livelihood assets, namely, financial capital, human capital, physical capital, social capital and natural capital as well as travel durations and modes of transport.

5.1 Financial capital

The findings show that the cost of transport increased significantly after relocation to Diepsloot. In general, higher transport cost put household budget under severe strain. This situation often results in household reducing expenditure on other basic household needs such as food, clothing and education. Furthermore, increased expenditure on transport can result in household failing to save money for unforeseen circumstances like a death of a family member. The lack of bus and train service in Diepsloot means that households do not have alternative modes of transport other than the expensive

mini-bus taxis. The literature has shown that there is a strong link between transport, home and places of employment; hence lack of access to affordable modes of transport (bus and train) to facilitate access to places of employment opportunities has a negative effect on household livelihoods. The study has hypothesised that people who live in peripheral areas tend to spend more money on transport than people who live in central areas. This hypothesis correlates with the finding because the study has revealed that household expenditure on transport increased as a result of relocation to Diepsloot. Increased transportation cost to employment centres compromised the ability of the unemployed members of the community to gain access to job opportunities.

A notable positive effect of relocation on household financial capital is access to secure tenure. The findings have shown that only three out of ten respondents owned shacks which they rented out to generate income in Alexandra. The seven respondents indicated that lack of secure tenure in Alexandra discouraged them from erecting shacks. As a result, the number of respondents generating income by renting out shacks increased from three people to six people and this was motivated mainly by having access secure tenure.

Both before and after relocation, households did not receive any remittances. In terms of social security grants and pensions, relocation did not have any direct impacts on these forms of income. However, it is worth pointing out that before relocation this group of respondents travelled as far as to the Johannesburg CBD to collect grants and pensions. After relocation they only travelled to the Diepsloot Mall, which is within a walking distance, to collect their grants and pensions. The study shows that both before and after relocation, income and wages were generated from the same types of economic activities. These include conducting home-based enterprises (renting, tuck shops), vending and hawking, in and outside the Townships. What is worth noting about the spatiality of livelihoods is that Johannesburg CBD continued to be the primary employment node while Edenvale, Bedfordview and Sandton continued to act as secondary employment nodes for domestic services despite additional distance and transport costs. This suggests that, despite a change in location, people maintained their sources of income and wages especially those who were employed in the formal sector.

The findings also reveal that those who earned a living by operating small-scale informal enterprises either from home or within the area continued to do so despite the change in location. Likewise, this suggests that relocation did not result in people changing the way they live or earn income. In Diepsloot all respondents first had to obtain the necessary permit from the municipality before they can operate home-based enterprises. This was not the case in Alexandra as the municipality paid little or no attention to the use of land in the informal settlement. The literature shows that urban poor households are required to comply with complicated and costly official regulations before they can exploit the economic potential of their homes.

The study has revealed that four respondents who have decided to erect additional dwellings on their RDP plots without submitting building plans have been served contravention notices by the municipality. Likewise, those who have decided to run tuck-shops from their houses have received notices for contravening zoning regulations in terms of the relevant town planning schemes. Hence, to a certain extent, relocation to Diepsloot has reduced the ability of households to generate income from home as a result of official regulations. However, it must be pointed out that households were always going to be subjected to official regulations at some stage after the formalisation of their informal settlement.

5.2 Human capital

The literature indicates that access to education and health facilities provides households with the opportunity to improve their livelihoods (Meikle *et al.*, 2002). It also indicates that human capital is of critical importance in urban areas. This suggests that poor access to human capital has the ability to undermine the ability of households to sell their labour effectively. Thus, there is a strong relationship between poor human capital and the vulnerability of households. Households with poor level of education and skills are unlikely to get jobs in the formal sector; as a result they are often absorbed by the informal sector. This sector usually provides low wages which results in poor households failing to satisfy their basic needs such as food, transport, clothing and education. The literature has shown that failure to satisfy these needs is an indication of

being poor. The fact that seven out of ten households do not have individuals with Matric is an indication of poor human capital. According to the literature, households with poor human capital are vulnerable to shocks and stresses than those with strong human capital. Thus, people who lack education and skills benefit from staying in areas that are adjacent to employment centres, especially the CBD where a variety of informal sector jobs are available. The study has revealed that the majority of respondents make a living through engaging in the informal sector as hawkers and vendors. Therefore, based on the findings and the analysis, it can be concluded that the relocation of these households to the periphery has disrupted their access to job opportunities. This correlates with the hypothesis of the study and the existing literature.

5.3 Physical capital

Literature shows that housing is often one of the most important assets for the urban poor as it is used for both productive and reproductive purposes. Access to secure tenure allows or encourages the urban poor to generate income from home in a number of ways (Moser, 1998). Even though some of the respondents generated income from home by either renting a shack or operating other types of home based businesses such as tuck shops and shebeens, lack of access to secure tenure was always a biggest threat to these coping strategies. Gaining access to secure residential space and basic services such as piped water and electricity improves and stimulates households to take advantage of the new livelihood opportunities. In most cases, the availability of good physical infrastructure such as roads, transportation, electricity, piped water, waterborne sewerage, schools, clinics, hospitals, police services, and telecommunication networks is often justification for the migration of people from rural to urban areas. The services are however not adequately provided in the informal settlements, instead they are often provided only in the formal settlements. It is therefore not surprising that these services were not provided in the informal settlement but rather in Diepsloot. Therefore, as far as access to physical capital is concerned, relocation has provided access to secure tenure and basic services which support and improve access to livelihoods.

5.4 Social capital

Literature indicates that social capital comprises social relations at household, community and societal levels (Moser, 1998). As a relational concept, it is measured in terms of perceptions of trust, association or membership of external organisations. It appeared quite clearly that three female respondents were members of the savings/stockvel scheme in the informal settlement. The majority of the scheme membership was based in Alexandra Formal Township but members were able to go there to attend monthly meetings. The cost of travelling as a result of new distance forced these respondents to withdraw from the savings scheme. One of them has managed to join a local savings scheme in Diepsloot but complained about higher contributions. It also was clear that before relocation, respondents were members of the Abahlali base Mjondolo (Informal Settlement Residents) Alexandra branch which is the community-based organisation promoting the in-situ upgrading of informal settlements in South Africa.

Relationships of trust and reciprocity play a critical role in providing access to credit. The study found that in Alexandra households were able to buy groceries from local supermarkets on credit. Respondents lost access to this type of credit when they left Alexandra. This arrangement develops from a long and well established relationship of trust. It will take respondents several years to build this relationship with local shop owners. The findings of the study only show that friends, relatives and colleagues act as major source of credit both before and after relocation. Relocation resulted in family splits and reduction of household size. This happened as a result of new families that were constituted when individuals received their own RDP houses in Diepsloot. Respondents lived very close to one another in Alexandra. After relocation, the respondents' homes were separated from one another by people they did not know. The allocation of plots was done in such a way that people could not continue living close to each other. It is important to point out that even though relocatees were separated by strangers, the distance between houses was fairly short, therefore walkable. It can therefore be stated that, relocation has disrupted most forms of social capital that existed in the original settlement.

5.5 Natural capital

The literature shows that natural capital is less significant in urban areas. Unlike their rural counterparts, livelihood strategies of the urban poor households are not concentrated in the agricultural activities. The study has found that none of the respondents practised urban agriculture. This is despite the proximity of households to a natural source of water (Jukskei River). Respondents acknowledged the importance of practising urban agriculture as way of improving household food security but identified lack of space as a major obstacle. The fertile land along the banks of the Jukskei River was occupied by shacks. After relocation access to land for urban agriculture improved as a result of the free space around the RDP house. Unlike in the informal settlement, dwelling units in Diepsloot are positioned in the rear end of the plot, leaving some space in front of the house. However, in most instances, this space is not utilised for food gardens in urban areas; instead it is used for erecting additional rooms for renting or for other types of home-based enterprises such as spaza shops or taverns. It is not surprising that the study found that only two respondents reported that they were practising urban agriculture in Diepsloot. This finding correlates with the existing literature because urban agriculture has been found to be less significant in both settlements. Therefore there is no direct relationship between the insignificance of urban agriculture and relocation. Instead, the insignificance of urban agriculture is linked to the settlements being in the urban area where most people do not practise farming as a livelihood.

5.6 Travel durations and modes of transport

According to Buurman (2006), there is very little empirical evidence to support the hypothesis that households living in peripheral locations spend more time travelling than households living in central locations as this largely depends on the mode of transport. According to Buurman (2006), this largely depends on how fast the mode of transport being used is. Buurman's study compared all modes including private transport while my study dealt only with private transport because none of the respondents had private cars. Therefore, comparisons of travel durations focused only on public transport. The

study has revealed that, before relocation respondents' trips to major destination i.e., Johannesburg CBD, Edenvale and Bedfordview took less time than after relocation. For instance, Table2 shows that the minibus trip to the Johannesburg CBD took 15 minutes before relocation and 40 minutes after relocation. This correlates with the finding made by the study conducted by Behrens (2003) in which he found that, people living in central settlements spent less time travelling than people in peripheral locations. This suggests that when one compares the same modes for both settlements, Diepsloot trips will always last longer than Alexandra trips. However, an interesting finding is that both before and after relocation, trips to Sandton took almost the same duration because both Alexandra and Diepsloot are at approximately equal distances from Sandton. This is the reason why the cost of public transport to Sandton did not change much for both settlements.

5.7 Conclusion

The analyses show that households generate income by running home-based enterprises, hawking and vending. This applies to both before and after relocation but home-based income-generating activities are on a bigger scale in Diepsloot. This is motivated by access to secure tenure and basic services. Access to formal credit was poor before and after relocation. People rely on friends, relatives, local businessman and colleagues for credit. In respect to human capital, the analysis reveals that households have low levels of education. As a result, most of them are employed in low-skill jobs in the informal sector. Regarding physical capital, the analysis shows that access to housing, engineering services and community facilities has improved households' physical capital. In respect of social capital, the analysis show that certain households withdrew from being members of the community savings scheme which is based in Alexandra mainly due to increased cost of transport after relocation. Natural capital seems to be a less relevant coping strategy for urban households. This is mainly due to the fact that most coping strategies of the urban populations are concentrated in the service sector rather in the agricultural sector. It also was shown that the main obstacle to practising urban agriculture is a lack of access to suitable land. Lastly, the analysis

shows that travel durations have increased with the exception of trips to Sandton because this area is close to both Diepsloot and Alexandra. One of the obvious negative effects of relocation on households is the lack of bus and train services in Diepsloot.

CHAPTER SIX

POLICY RECOMMENDATIONS AND GENERAL CONCLUSIONS

6.0 Introduction

The findings suggest that there are more positive impacts of relocation to Diepsloot than negative effects. It is clear from the findings that access to shelter and basic services such as electricity, waterborne sanitation, piped water, tarred roads, health and educational facilities decreases the vulnerability of households in several ways. Access to secure tenure has opened opportunities for conducting home-based enterprises in secure residential space while access to the electricity and water supply encouraged many households to adopt long-term survival strategies without fear of summary evictions.

The study shows that the most significant negative impact of relocation is in increased expenditure on public transport as people continued to travel to the original major destination, mainly for work purposes. The study indicates that household expenditure on transport after relocation is made worse by lack of other two affordable modes of transport which used to be available in Alexandra, the bus and the train. It is not surprising that the issue of Diepsloot location in relation to major employment nodes was raised as a biggest concern. Due to peripheral location of Diepsloot, the cost of transport to important destinations has escalated. Therefore, the lack of both bus and train services as well as the cost of minibus taxis directly contributes to the vulnerability of households in Diepsloot. Findings of the study are the responses to the research question, therefore policy implications or recommendations are derived from available literature and what the study has discovered to be the negative effects of relocation.

6.1 Policy recommendations

Firstly, in order for the delivery of housing to alleviate poverty, a more flexible and permissive land use management system is urgently needed in urban areas. Literature has shown that the rigid and out-dated regulatory framework undermines the ability of the urban poor households to conduct home-based enterprises on their properties. Policies that support the productive use of residential space can reduce the vulnerability of the poor. Government currently prohibits the sale of the RDP house as a way of ensuring that beneficiaries do not lose their houses as a result of desperation for money as this may take them back to informal settlements.

But gaining access to secure tenure must improve the economic status of beneficiaries and renting backyard shacks, running spaza shops and other home-based livelihood activities that do not have any serious negative environmental impacts must be granted free entry rights in the residential properties. This will mean that households are able to utilise their properties for productive functions and obtaining official approval will not be a precondition for households to engage in the activities. Secondly, it is important to widen the tenure options to improve access to economic opportunities. The poor location of Diepsloot in relation to major economic nodes limits the ability of households to gain access to employment opportunities. Rental housing is a channel through which a large number of the urban poor can gain access to economic opportunities via secure rental arrangements. Rental accommodation seems to be better located in relation to job opportunities than ownership housing which is often located on the periphery. Thirdly, the existing literature shows that access to affordable transport is a precondition for reducing the vulnerability of households.

Lack of bus and train service in Diepsloot decreases access and mobility of the poor to opportunities; this has a negative effect on their livelihood strategies. To address this challenge, government and the private sector should work together in facilitating access to cheaper modes of transport as a way of improving the mobility of the poor. This will also help in reducing the expenditure on transport. Fourthly, upgrading well-located informal settlements can improve access to employment opportunities. The available literature shows that the urban poor usually choose vacant pieces of land near

employment opportunities because they want to live close to where they work. This suggests that most of the informal settlements score better than new peripheral low-cost townships in terms of promoting access to employment opportunities. However, government must first conduct feasibility studies of land occupied by the informal settlement determined the viability of the upgrading. Where relocation is the only option available to improve access, this should be informed by the livelihood assessment outcome as a way of identifying the relationship between the residents and the local environment. Lastly, housing should occur in a coordinated manner. Inadequate or poor coordination between land use planning and transportation should be avoided. Government departments must ensure that essential social facilities, including recreational spaces are incorporated in the planning of new low-income housing townships to create well-functioning sustainable human settlements. Most of the new low-income housing townships lack basic social facilities. The study has revealed that the secondary school was very far from the Diepsloot Extension 4. The study has also revealed that the whole of Diepsloot does not have a bus service, so minibus taxis are the only mode of transport other than walking and it is expensive as result, most respondents identified the cost of travelling as one of the negative impacts of relocation. Lack of coordination between land use planning and transportation results in the establishment of townships with poor access to public transport.

6.2 GENERAL CONCLUSIONS

The study has examined the effects of relocation on household livelihoods. The level of access to livelihoods has been compared for both locations, Alexandra and Diepsloot. The study has also identified and discussed different coping mechanisms used by the urban poor to deal with shocks and stresses. The Sustainable Livelihoods approach has been chosen as the tool for focusing and guiding the research. By nature, poverty is a complex multi-dimensional phenomenon which can only be understood better by those who are poor. According to the available literature, the Sustainable Livelihoods approaches seem to provide a comprehensive way of studying poverty.

Both the available literature and study findings indicate that the most significant positive impact of relocation to RDP settlements situated on the periphery is access to secure tenure. The study has found that access to secure tenure unlocks various economic opportunities for housing beneficiaries. In other words, access to tenure encourages households to generate income from home without fear of eviction. It must be pointed out from the findings, it is clear that households appreciate their houses and the new formal environment which has access to good road infrastructure, water, waste collection services, electricity, clinics, schools, etc. The study has revealed that the poor location of Diepsloot in relation to major employment nodes is the most significant negative impact of relocation on household livelihoods. In conclusion, the hypothesis of the study is accepted because the findings of the study reveal that poor location of Diepsloot in relation to employment centres reduces access to livelihood opportunities.

LIST OF REFERENCES

African National Congress (1993) The Reconstruction and Development Programme policy, South Africa.

Alsayyad, N. 1993. Squatting and Culture: A comparative Analysis of Informal Developments in Latin America and the Middle East, *Habitat International*, Vol. 17 (1) pages 33-44.

Anand, A. and Tiwari, G. 2006. A gender Perspective of the Shelter-Transport livelihood link: The case of Poor Women in Delhi, *Transport Reviews*, Vol. 26 (1) pages 63-80

Barter, P. 1998. Transport and Urban Poverty in Asia: A Brief Introduction to Key Issues: Conference Paper on Urban poverty in Asia, from 27- 29 October.

Barter, P. 2002. Transport and Housing Security in the Klang Valley, Malaysia, *Journal of Tropical Geography*, pages 268 -287.

Behrens, R., and Wilkinson, P. Housing and Urban Passenger Transport Policy and Planning. In South African Cities: A problematic relationship in Harrison, P., Huchzermeyer, M. and Mayekiso, M. (2003) *Confronting Fragmentation: Housing and Urban Development in a Democratizing Society*, University of Cape Town Press, Lansdowne.

Bell, J. and Kanji, N. 1999. Households livelihoods and urban poverty: Background paper for the Escor Commission Research on Urban Development, 12-15 March.

Benit, C. 1999. The Rise and Fall of the Community in Diepsloot, Johannesburg, urban Forum, Johannesburg, Pages 47-66.

Berrisford, S. and Kihato M. 2006. The Role of Planning Law in Evictions in Sub-Saharan Africa, *South African Review of Sociology*, Vol. 37 (1) Pages 20-34.

Booth, D. Hanmer, L. and Lovell, E. 2000. Poverty and transport: A Report prepared for the World Bank in collaboration with DFID, Overseas Development Institute.

Brown, A. and Lloyd-Jones, T. in Rakodi, C. and Lloyd-Jones, T. 2002. *Urban Livelihoods: A people-centred Approach to Reducing Poverty*, Earthscan, London

Bryceson, D. 2003. Livelihoods, daily mobility and poverty in *Sub-Sahara Africa*, *Transport Reviews* Vol. 23 (2) pages 177-196.

Buurman, S. 2006. A Sustainable Livelihood Cost-benefit model to enhance the understanding of the dynamics between low-income housing and location, *Town and Regional Planning Special Review*, Council for Scientific and Industrial Research, Pretoria, Pages 1-24.

Community Agency for Social Enquiry, 2006. A Quality of Life Survey in Low-Income areas of Johannesburg, pages 1-110.

Centre for Social Development in Africa, 2008. Johannesburg Poverty and Livelihoods Study, pages 1-33.

Centre on Housing Rights and Evictions. 2005. Any Room for the Poor? Forced Evictions in Johannesburg, South Africa, Centre on Housing Rights and Evictions, pages 1-102.

Chambers, R. 1995. Poverty and livelihoods: Whose reality counts? *Environment and Urbanisation*, Vol. (7) pages 173-204.

City of Johannesburg Metropolitan Municipality 2010/11. *Spatial Development Framework Plan*, Johannesburg.

City of Johannesburg Metropolitan Municipality 2002. *Alexander Renewal Project Housing Strategy Final Report*, Johannesburg.

Department of Housing. 2004. *The Breaking New Ground Strategy*, Department of Housing, Pretoria.

Du Plessis J. Forced Evictions, Development and the Need for Community-Based Locally Appropriate Alternatives: Lessons and Challenges from South Africa, Ghana and Thailand in Huchzermeyer, M. and Karam, A. 2006. *Informal Settlements: A Perpetual Challenge?* Cape Town, UCT Press.

Food and Agricultural Organisation of the United Nations. 2002. Land tenure and rural development, pages 1-49.

Food and Agricultural Organisation of the United Nations, Report No. 782. 2005. Overcoming Factors of unsustainable and overexploitation of fisheries, Rome, 1-352.

Fouracre, M., Sohail, M. and Cavill, S. 2006. A Participatory Approach to Urban Transport Planning in Developing Countries, *Transport Planning and Technology*, Routledge Vol. 29, Pages 313-330.

Hays, R. 1995. Power Ideology and Public Policy in the Federal Government and Urban Housing. Ideology and Change in Public Policy, New York, State University of New York Press.

Huchzermeyer, M. 2003. A Legacy of Control, The Capital Subsidy for Housing and Informal Settlement Intervention in South Africa, *International Journal of Urban and Regional Research*, Vol. 27.3, Pages 591-612.

Huchzermeyer, M. 2003. Addressing Segregation Through Housing Policy and Finance. In Harrison P., Huchzermeyer M. and Mayekiso M. *In Confronting Fragmentation: Housing and Urban Development in a Democratizing Society*, Cape Town, UCT Press.

Huchzermeyer, M. 2011. *From Cities with Slums to a Right to the City in Africa*. Cape Town, UCT Press.

Khan, F. 1994. Effective strategies for mobilizing women to self-reliance: International Conference on uprooted women, 12-15 November 1994, RSP Document Centre.

Khan, F. and Thurman, S. 2001. Setting the Stage: Current Housing Policy and Debate in South Africa, Isandla Institute.

Lalloo, K. 1999. Areas of Contested Citizenship: Housing Policy in South Africa, *Habitat International*, Great Britain, Vol. 1 Pages 35-47.

Malpass, P. and Murie, A. 1999. Housing Policy and Practice, United Kingdom, Palgrave.

Maunder, D., Bryceson, D., Mbari, T. and Onweng, T. 2007. Sustainable Livelihoods, Mobility and Access Needs in Urban and Peri-Urban Areas, Zimbabwe, Makere Institute of Social Research, Pages 1-13.

Meikle, S. in Rakodi, C. and Lloyd-Jones, T. 2002. Urban Livelihoods: A people-centered Approach to Reducing Poverty, Earthscan, London.

Meikle, S., Ramasut, T. and Walker J .2001. Sustainable urban livelihoods: Concepts and implications for policy, English Gardens, London.

Moser, C. 1996. Confronting Crisis: A Summary of Household Responses to Poverty and Vulnerability: The International Bank of Reconstruction and Development, Series No. 7, Washington D.C.

Nicholls, C. 2011. Advantages and disadvantages of using qualitative research methods, Alexandra Technique Collage, Colombia.

Patil, R. 2012. The Civic Facilities: A Study of Resettlement in Kagal Taluka of Kolhapur District, Golden Research Thoughts, Vol. 1 (IX) Pages 1-4.

Payne, G. 2001. The impact of regulation on the livelihoods of the poor: Regulatory guidelines for urban upgrading, pages 1-41.

Rakodi, C. 1999. A Capital Assets Framework for Analysing Household Livelihood Strategies, *Development Policy Review*, Vol. 17, pages 315-342.

Royston, L. 2012. Inequality and economic marginalisation: How tenure security can increase access to economic opportunities to poor people, Urban Landmark, pages 1-21.

Sherbin, A. Castro, M. and Gemenne, F. 2010. Preparing for population displacement and resettlement Associated with large climate change, adaptation and mitigation project: Background Paper for the Bellagio Workshop 2-6 November 2010, Harvard School of Public Health, pages 1-11.

Sihlongonyane, M. and Karam, A. 2003. The Impact of the National Housing Capital Subsidy on an Apartheid City: Paper read at the National Conference with theme "Colonialism", Bloemfontein, South Africa, 15-16 May.

Smith, D. 2003. Urban Fragmentation, Equality and Social Justice: Ethical Perspectives. In Harrison, P., Huchzermeyer, M. and Mayekiso, M. In *Confronting Fragmentation: Housing and Urban Development in a Democratizing Society*, Cape Town, UCT Press.

Sohail, M. 2005. Sustaining Livelihoods by Improving Urban Transport, *Engineering Sustainability*, Issue-ESI, pages 9-15.

Solon, K. 2003. Relocations and Livelihoods: A Case Study from Phnom Pehn, Cambodia, The London School of Economics, London, pages 1-23.

Statistics South Africa Census 2011, Pretoria.

Tiwari, G. 2002. Urban Transport Priorities: Meeting the Challenge of Socio-economic diversity in Cities, A case of Delhi, India, *Cities*, Vol. (19) No. 2 pages 95-103.

United Nations Annual Children's Fund Report. 1999. for period covering 01 January to 31 December 1998.

Venter, C. Vokolkova, V. and Michalek, J. 2007. Gender, Residential location and Household Travel: Empirical findings from Low-income urban settlements in Durban, South Africa, Routledge, Vol. 27 (6) pages 653-677.

World Bank 2010. Handbook for Reconstructing Natural Assets after Natural Disasters: Assessing the Damage and Defining the Reconstruction Policy, Washington D.C.

Www.brabysmaps.com, accessed 24 December 2013

Questionnaire: Exploratory Case Study

Research Title: “Forced relocation from informal settlements to the periphery and effects on livelihoods, A case of Diepsloot, Johannesburg

Initial of interviewer-----

Date-----

Gender of interviewee-----

Time-----

Good day,

My name is Sibonelo Ngcobo and I am a student at Wits University working on a research project that is exploring the effects of relocation on people’s lives. The information we collect will be used for academic purposes only but the final document will be available to the public. The questionnaire is completely anonymous and participation in this research is voluntary. If you are uncomfortable with any of the questions or do not wish to answer, then that is fine and we can stop at any time. Will it be possible for me to ask you some questions; it will take approximately 20 minutes of your time.

1. Background information

1.1. Which area were you living before relocation?-----

1.2. Where were you born?-----

1.3. Before relocation, were you living in a?

a. House (formal dwelling unit)

b. Flat

c. Shack

d. Other, specify-----

2. Personal information

2.1. How are you related to the people living in this house?

- a. Father
- b. Mother
- c. Daughter
- d. Son
- e. Other, specify-----

2.2. How do you define yourself as?

- a. Black
- b. White
- c. Coloured
- d. Indian
- e. Other, specify-----

2.3. What is your citizenship?

- a. South African
- b. Other, specify-----

2.4. How old are you?-----

2.5. What is your marital status?

- a. Single
- b. Married
- c. Separated

- d. Divorced
- e. Widowed
- f. Living with a partner
- g. Never married

2.6. How many people have been living in this house for the last 2-3 years?-----

2.7. How many children under the age of 18 live with you in this house?-----

3. Residential comparisons

3.1. Were you the owner of the previous residence?

- a. Yes
- b. No

3.2. How long did you live in the previous area?-----

3.3. Is there anything/s that you liked about the previous area?

- a. Yes
- b. No
- c. If yes specify-----

3.3. Is there anything/s that you didn't like about the previous area?

- a. Yes
- b. No

c. If yes, specify-----

3.4. Is there anything/s that you liked about your previous residence?

a. Yes

b. No

c. If yes, specify-----

3.5. Is there anything/s that you didn't like about your previous residence?

a. Yes

b. No

c. If yes, specify-----

3.6. Are you the owner of the house you live in?

a. Yes

b. No

c. Other, specify-----

3.7. How long have you been staying in the house you live in now?-----

3.8. Is there anything/s that you like about the house you live in now?

a. Yes

b. No

c. If yes specify-----

3.9. Is there anything/s that you don't like about the house you live in now?

a. Yes

b. No

c. If yes, specify-----

3.10. Is there anything/s that you like about the area you live in now?

a. Yes

b. No

c. If yes, specify-----

3.11. Is there anything that you don't like about the area you live in now?

a. Yes

b. No

c. Provide reason/s for your answer-----

3.12. How many years of schooling have you done?-----

4. Employment and income

4.1. Are you?

a. Self-employed

b. Employed

c. Not employed

d. Other, specify-----

4.2. What kind of work do you do?-----how long have you been doing it?-----

4.3. Were you employed before relocation?

a. Yes

b. No

c. Other, specify-----

4.4. In which area were you working before relocation?-----

4.5. In which area do you work now?-----if no longer working in the

same area, specify reason-----

--

4.6. What is your main source of income?

a. Work

b. Grant

c. Donation

d. Other, specify-----

4.8. How much was your monthly income before relocation?

- a. 0-R1500
- b. R1501-R3000
- c. R3001-R4500
- d. R4501-R6000
- e. R6001-R7000
- f. R7001 and above

4.7. How much is your monthly income now?

- b. 0-R1500
- c. R1501-R3000
- d. R3001-R4500
- e. R4501-R6000
- f. R6001-R7000
- g. R7001 and above

h. Provide reason if there is change-----

6. Additional income

6.1. Were you receiving a social grant before relocation?

- a. Yes
- b. No
- c. If yes, where did you collect it?-----

6.2. Are you receiving a social grant now?

- a. Yes
- b. No
- c. If yes, where do you collect it?-----

6.3. Do you generate any income from home?

- a. Yes
- b. No
- c. If yes, specify income-----

6.4. Do you have any other source/s of income?

- a. Yes,
- b. No
- c. If yes, specify-----

6.5. Did you rely on the same source/s of income before relocation?

- a. Yes
- b. No
- c. Please provide reason for change, if any-----

- c. If yes, specify income-----

6.6. Were you generating any source of income from the previous dwelling?

- a. Yes
- b. No

- c. If yes, specify economic activity-----

7. Household Expenditure

7.1 Did you spend any money on transport to go to work before relocation?

- a. Yes
b. No
c. If yes, how much did you spend per trip before relocation? R-----

7.2 Do you spend any money on transport to go to work now?

- a. Yes
b. No
c. If yes, how much do you spend per trip now? R-----

7.3 Did you spend any money on groceries before relocation?

- a. Yes
b. No
c. If yes, how much did you spend on groceries per month? R-----

7.4 Do you still spend any money on groceries?

- a. Yes
b. No
c. If yes, how much do you spend on groceries per month now? R-----

7.5 Did you spend any money on water and electricity before relocation?

- a. Yes

- b. No
- c. If yes, how much did you spend on water and electricity per month? R-----

7.6 Do you still spend any money on water and electricity per?

- a. Yes
- b. No
- c. If yes, how much do you spend on water and electricity per month? R-----

7.7 Did you live with children that were attending school before relocation?

- a. Yes
- b. No

7.8 If yes, did the children have to spend any money on transport to go to school?

- a. Yes
- b. No
- c. If yes, how much did the children spend on transport to go to school per trip? R----

7.9 Do you still have children that are attending school living with you in this house?

- a. Yes
- b. No

7.10 If yes, do children spend money to go to school?

- a. Yes
- b. No
- c. If yes, how much do the children spend on transport to go to school per trip? R----

8. Social capital

8.1 Are there any people that you lived within the same house before relocation?

a. Yes

b. No

c. If yes, how were you related to those people you lived within the same house before relocation?-----

8.2 For how long you lived together with those people in that house?-----

8.3 Did you receive any financial support from the people you lived with before relocation?

a. Yes

b. No

8.4 Did you receive any social support from the people you lived with in the same house before relocation?

a. Yes

b. No

8.5 Were both parents living together with children before relocation?

a. Yes

b. No

c. If no, specify reason-----

8.6 If yes, are both parents still living together with children in this house?

- a. Yes
- b. No
- c. If no, specify reason-----
- d. If no why don't visit them?-----

8.7 How often the parent who does not live in this house visit the household?

- a. Daily
- b. Twice a week
- c. Weekends
- d. Monthly
- e. Other, specify-----

8.8 Did you leave any friends and relatives in the previous community?

- a. Yes
- b. No

8.9 If no, how do you feel about the fact that you are no longer living with them?

- a. Bad
- b. Very bad
- c. Good
- d. Very good
- e. Provide reason for your answer-----

8.10 Do you visit them?

- a. Yes
- b. No
- c. If yes, how often do you visit them?-----
- d. If no, why you don't visit them?-----

8.11. Do you have friends in friends in this area?

a. Yes

b. No

c. If no, why you don't have friends in this area?-----

8.12 Do you a relative/s in this area?

a. Yes

b. No

8.13 Are you a member of a community-based organization?

a. Yes

b. No

c. If no, provide reason/s-----

8.14. Are there people living in this house who are members of a community-based organization?

a. Yes

b. No,

c. If no, provide reason/s-----

9. **Work travelling and mode of transport**

9.1 In which area do you work?-----

9.2 How much time did you spend to get to work before relocation?-----

9.3 How much time do you spend to get to work now?-----

9.4 Did you own a car before relocation?

- a. Yes
- b. No

9.5 If yes did you use it to travel to work?

- a. Yes
- b. No
- c. If no, why you did not use it to travel to work?-----

9.6 Do you still own a car now?

- a. Yes
- b. No

9.7 If yes do you use it to travel to work?

- a. Yes
- b. No

9.8 If no, why you don't use it to travel to work?-----

9.9 What mode of transport did you use to get to work before relocation?

- a. Walk
- b. Bicycle
- c. Motorcycle
- d. Private car
- e. Taxi
- f. Bus

- g. Train
- h. Other, please specify e.g worked from home,-----

9.10 Did you walk any distance to get to the transport stop before relocation?

- a. Yes
- b. No
- c. If yes, how much time did you spend walking to the transport stop?-----

9.11 What mode of transport do you use to get to work now?

- a. Walk
- b. Bicycle
- c. Motorcycle
- d. Car
- e. Taxi
- f. Bus
- g. Train
- h. Other, please specify e.g worked from home-----

9.12 Do you walk any distance to get to the transport stop?

- a. Yes
- b. No
- c. If yes, how long does it take to get to the transport stop?-----

9.13 Did you walk any distance to get to the transport stop before relocation?

- a. Yes
- b. No

c. If yes, how much time did you spend travelling to the transport stop?-----

9.14 Do you feel safe when walking to the bus stop?

a. Yes

b. No

c. If no, provide reason-----

10 School travelling and mode of transport

10.1. Do you have children that are still attending school living with you in this house?

a. Yes

b. No

10.2. In which area is the school/s situated?-----

10.3. Were there schooling children in the household before relocation?

a. Yes

b. No

10.4. If yes, was their schooling disturbed by relocation?

a. Yes, explain how?-----

b. If no, please explain your answer-----

10.5. How much time was spent to get to school before?-----

10.6. How much time is spent to get to school now?-----

10.7. What mode of transport was used to get to school before relocation?

- a. Walked
- b. Bicycle
- c. Motorcycle
- d. Car
- e. Taxi
- f. Bus
- g. Train
- h. Other, please specify e.g worked from home,-----

10.8 Did children have to walk from home to the transport stop?

- a. Yes
- b. No
- c. If yes, how much time they spend walking to the transport stop?-----

10.9 What mode of transport is used to get to school now?

- a. Walk
- b. Bicycle
- c. Motorcycle
- d. Taxi
- e. Bus
- f. Train
- g. Other, please specify e.g worked from home-----

10.10 Do children walk from home to the transport stop?

- a. Yes
- b. No
- c. If yes, how much time they spend walking to the transport stop?

10.11 Do you think they feel safe when walking to the transport stop?

- a. Yes
- b. No
- c. If no, provide

11. Shopping and mode of transport

11.1. In which area is the shopping place?-----

11.2. How often do you do major shopping for groceries?

- a. Weekly
- b. Monthly
- c. Other, please specify-----

11.3. What mode of transport did you have to use to travel to the shopping place before relocation?

- a. Walk
- b. Bicycle
- c. Motorcycle
- d. Car
- e. Taxi
- f. Bus
- g. Train

h. Other, please specify e.g worked from home,-----

11.4. What mode of transport do you use to travel to the shopping place now?

a. Walk

b. Bicycle

c. Motorcycle

d. Car

e. Taxi

f. Bus

g. Train

h. Other, please specify e.g worked from home,-----

11.5. How often do you do major shopping for clothing?

a. Weekly

b. Monthly

c. Other, please specify-----

11.6. How much time did you have to spend to get to the shopping place?-----

11.7. How much time do you spend to get to the shopping place now?-----

12. Relocation experience

12.1. Which of the following words would best describe the manner in which relocation was carried out?

a. Fair

b. Unfair

c. Communicative

d. Uncommunicative

12.2. Would you say the relocation process was friendly?

a. Yes

b. No

c. Provide reason for your answer-----

12.3. Were you provided an opportunity to identify alternative relocation site of your choice?

a. Yes

b. No

12.4. What challenges/problems you believe you are facing as a result of being relocated to this area?-----

12.5. What do you think must be done to address the problems mentioned above?-----

✓ We have come to the end of our interview, thank you for your cooperation which I greatly appreciate. Would you like to ask me some questions regarding to this interview?