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Sustainable State Housing Programmes: The Case of Pennyville

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DECLARATION

I declare that unless otherwise indicated in the text, this research report is my own unaided work, and has not been submitted before for any degree or examination to any other university.

……

(Signature of Candidate)

……. day of ……..., ……

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I would like to thank my parents. I appreciate all the love and support you have given to me over the years, I wouldn't have made it if it weren't for you. I thank you for your patience and allowing me the room to grow. I am also very grateful to my sister and my brother who supported me since the beginning and always believed in me.

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ABSTRACT

The Breaking New Ground Policy has played a major role in guiding the development of sustainable human settlements. It has also played a major role in guiding the formulation of housing policy amongst municipalities. For example in the City of Johannesburg it has influenced key policy documents such as the Growth and Development Strategy (GDS) 2040 and the Sustainable Human Settlement Urbanisation Plan. This report aimed to investigate how the notion of sustainable human settlements intersects with people's livelihoods. In other words, the research focused on how Pennyville is experienced as a sustainable human settlement by its residents. This intersection was guided by three key themes i.e. sustainable human settlements conceptualisation in theory and in South African housing policy, and sustainable livelihoods. The research aimed at understanding the intersection of the aforementioned things. Perhaps one of the main findings of the research was that the relationship between sustainable livelihoods and sustainable human settlements policy is fuzzy within the policy documents and in practice.

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ABREVIATIONS

SHS	Sustainable Human Settlements
BNG	Breaking New Ground
SHSUP	Sustainable Human Settlements Urbanisation Plan
GDS	Joburg 2040 Growth and Development Strategy
RDP	Reconstruction and Development Programme
CBD	Central Business District
DHS	National Department of Human Settlement, South Africa
DFID	Department for International Development
GCIS	Government Communication and Information System

Chapter 1: Introduction

1.1 Background

In the years leading up to 2004 the South African government realised that its effort to address the apartheid injustices such as peripheralisation[1] were failing, instead the housing projects were criticised for advancing apartheid legacies. As a result, a comprehensive plan for housing delivery i.e. the Breaking New Ground Policy was introduced in 2004, with adjustments such as using housing as a driver for the development of sustainable human settlements in support of spatial transformation and contributing to poverty alleviation. The state has been implementing this new approach for the past ten years. Moreover, it is argued that the state housing programme has since improved from providing just housing to providing sustainable human settlements with areas such as Pennyville and Cosmo City in Johannesburg used as examples (Burger, 2013).

1.2 Rationale

Pennyville is a state project responding to the need for spatial change of apartheid city, and in Johannesburg it has been hailed successful in various ways. This assessment is based on the idea that the project aims to provide affordable, and sustainable housing and tenure options (CoJ, 2014), and it is also in line with the Breaking New Ground principles in terms of mixed and integrated development (Royston, 2009; GCIS, 2012). Moreover, Pennyville comprises of various components that the state deems sustainable based on the experience gained during the first decade of housing programme (GCIS, 2012). The project is guided by certain principles (i.e. providing infill development, offering places of opportunity to poorer people, providing well-located settlements, creating self-sustaining settlements through rental integration), all of which are components of a sustainable human settlement (DHS, 2009). Mainly it is these projects implemented under the BNG that have been regarded successful due to various reasons, including but not limited to the fact that these projects have managed to include various tenure options for people and these projects are located closer to city centres. Thus they have been regarded as successful by the nation itself (DHS, 2009; CoJ, 2014).

[1]Peripheralisation in this report the term refers to the process whereby the government located low-income houses at the periphery of the city far away from economic opportunities (Goebel, 2007)

At this stage, it has been 10 years of implementing projects similar to Pennyville but little is known about their success. Instead the successes of projects like Pennyville have been predominately based on assumptions, and the actual impact of the projects on residents has been little explored. Research themes evident on documents to date mainly focus on understanding the availability of components such as social facilities or physical infrastructure, whilst less focus is paid to the effect of these components on residents.

This research aims to uncover alternative thinking or provide depth to the current approach of providing sustainable settlements, by exploring the daily lives of residents in Pennyville and relating these to the notion of sustainable human settlements. In addition, the focus is to identify limitations, weaknesses and strengths of the new concept of sustainable human settlements. This information is necessary to update state housing projects, identify gaps, and assumptions made by planners and government for sustainable human settlements (i.e. assumptions about them being well located, self-sustaining, and having rental integration). Therefore, the research uses residents' experiences and housing policy to look at how the perceived advantages and strengths of this flagship intervention (as perceived by state, planners, housing professionals) intersect with the realities of Pennyville residents' daily lives. This intersection is very important to understand, in order to understand better what are sustainable human settlements and what are not in terms of the end user.

The intention of the research is to investigate how sustainable human settlements are received and experienced by people. The research focuses on various aspects of the notion of sustainable human settlements, for example the idea of well-located land and convenient transportation. Moreover, sustainable livelihoods literature is used as a starting point to analyse people's experiences. This is based on the fact that for a clear understanding on how people experience sustainable human settlements using their daily experiences one needs to understand the notion of sustainable livelihoods. Therefore, the argument is that with more projects being implemented under the name sustainable human settlements, it is important to understand how these projects relate the idea of sustainable livelihood and how they have contributed to people's daily experiences.

1.3 Problem statement

It has been 10 years since the introduction of the BNG and research on the sustainability of the implemented state projects remains limited. In addition, numerous assumptions are made (by planners and government) about the components that areas like Pennyville possess in terms of sustainability. However, the reality of these components remains untested and little is known about how these components translate into people's lives. Therefore, there is little information about how the existing sustainable human settlements have been received and used by people, thus little is known about the extent to which components such as well location, rental integration transform or impact on people's lives.

1.4 Research question

How is the new generation state housing project of Pennyville experienced as a sustainable human settlement?

Sub-question

1. What does the state define as a sustainable human settlement?
2. How is Pennyville understood as a sustainable human settlement for residents?
3. In what ways do sustainable components of Pennyville intersects or translates into the lives of the users/residents?
4. What are people's/residents perceptions about key sustainable human settlement components that are deemed sustainable by the state or planner in the area?
5. What do people value most about the area?

1.5 Methodology

The following section introduces the methodology used in the project. The section is divided into six themes, all which focus on outlining how the research was completed. It provides a series of steps undertaken to achieve the main goal of the research and to answer the research question. It explains how the data was obtained and the basis on which the results were analysed. It is important to note that every aspects of this research is understood in three categories firstly, RDP owners, secondly those occupying social housing and lastly residents experiences are related to the overall state's perspective in terms of policy.

1.5.1 Type of research

The research utilized qualitative methods as the guide for data collection. Interviews were used as the primary means of collecting data, and information gathered on book reviews, journal articles and newspaper articles as guidance as discussed below (May, 2001). A qualitative method entails the use of small-scale intensive pieces of research to explore everyday life experiences of people and communities at different times and in different places (May, 2001). As a result, a qualitative method allowed the complexities and differences of the case study to be easily explored. The research is qualitative because it used semi and unstructured interviews as the means of exploring people's lives and their explanations for aspects of their lives (May, 2001). Thus at the core of the research methodology are beneficiaries of the state housing programme (residents) and housing policy. The initial conceptualization of the research included interviewing state officials as another core of the research but due to practical difficulties and a finer scope the research relied on the South African housing policy and only one state official was interviewed through email. Therefore, the research depended on the interaction with residents in terms of exploring their meanings of certain aspects of their lives thus enabling the interpretation of certain components including but not limited to its physical setting. The research also depended on review of housing policy documents. The research was based on data collection from field site where participants experience is based i.e. Pennyville. A theoretical lens was developed and used to interpret and engage with various stakeholders (interviewees).

1.5.2 What kind of information is needed?

The main component of the research relies on engaging with people from the area about their experiences of living in Pennyville. However, it is important to note that the first kind of data is collected from books and journals in order to understand notions of sustainable human settlement and sustainable livelihoods. Moreover, national and regional (Gauteng and City of Johannesburg) policy were used to understand the state's stand on sustainable human settlements. The notions of sustainable livelihood and sustainable human settlement were essential to define as they were later used to interpret the linkage between sustainable human settlements and sustainable livelihoods, by enabling the identification of the intersection between the two concepts. In addition, the intersection between these two main theoretical components of the research mentioned above (sustainable human settlements and sustainable livelihoods) was informed by data collected through interviews. The focus on livelihoods and sustainability of the settlements guided the main aim of the research in terms of investigating how people's lives have intersected with the place since moving into the area. This entailed finding out how certain components of the settlement enabled them to live better lives.

1.5.3 What data is needed?

The research separates the data into two, distinguishing between primary data and secondary data. The secondary data included literature analysis (focusing on sustainable human settlements, sustainable livelihoods and state policy) and primary data included interpretative research (interviews). Three key themes were identified to guide acquiring of information from the sources mentioned above, in order to come to a better understanding of how sustainable human settlements translates into people's lives, if they do translate.

The first key theme of the research is based on understanding the notion of sustainable human settlements in South Africa. This revolved around understanding the background and facts about sustainable human settlements in South Africa. This implied understanding the underlying intention behind the sustainable human settlement in a national context and also regional context i.e. ideas of spatial transformation and infill developments. Essentially, this included understanding and interpreting the different components of the settlements such

as the rental component, RDP houses[2], transport, physical infrastructure, and social facilities, thus form the basis of the research. At this point it is important to note that the scope of this research does not include an investigation on environmental sustainability, but takes a narrow view investigating only location, physical infrastructure, access to basic and social facilities, and mixed income as aspects of sustainable human settlements.

Moreover, the theme was also centred on contextualising the idea of sustainable human settlement, fundamentally looking at the policy behind sustainable human settlements in South Africa. This involved looking at the policies that regulate sustainable human settlements. In essence, policy document were used to investigate the core intentions of the state. In addition, the policy was used to understand the assumed implications of the components of sustainable human settlements. In other words this theme was focused on getting the states' perspective on sustainable human settlements. Consequently, the policy documents (nationally and regionally) were used as a means of engaging with state officials, understanding in depth the rationale for creating Pennyville as a sustainable area.

The second key theme of the research is based on understanding the idea sustainable livelihoods. The research understands the latter in terms of theory and translates the idea practically to understanding the lives of people living in Pennyville. Consequently, it was essential to first get a deeper understanding of the concept of livelihoods in theory so as to engage with people with a clear understanding of what constitutes livelihoods. In addition, it was necessary to get examples from other scholars on the sufficient ways to engage with communities through the livelihood lens. Understanding this concept in theory contributed to the formulation of interview questions on the basis of individual understanding and tested theoretical work.

The last theme but not least is primarily the core of the research i.e. practical, it involved understanding how people use and value the settlement, and understanding the City of Johannesburg's views on Pennyville as a sustainable human settlement. It was based on interacting with people living in Pennyville

[2]Reconstruction and Development Programme (RDP) is a South African policy framework focusing on social and economic aspects, implemented by the government in 1994 (Tomlinson, 2006). The term has been used as a nickname to for the subsidized houses provided by the government since 1994.

and exploring their explanations of their aspects of their lives. These explanations are essentially in figuring out the relationship between people and some of the components in the area that are deemed sustainable by the state or scholars. In addition, the research was also based on interacting with City officials or parastatal institutions to get their views on Pennyville. However, only one state official was interviewed through email. Residents experiences of living in Pennyville and the state perspective was essential to understand the intersection between people's lives and the SHS components.

1.5.4 How to collect the data

A number of methods and tools were used to collect both primary and secondary data. For secondary data, I engaged with relevant resources i.e. books, journals, and state policy in a selective manner in order to avoid focusing on themes that are less relevant: for the research for example there numerous housing policies in South Africa but the research only focuses on the ones that pay attention to sustainable human settlements. Beginning with the policy, I only focused on aspects that relate to users of sustainable human settlements. With respect to theory that looks at sustainable human settlements, the data was collected from a number of South African literatures ranging from policy reviews to descriptive literature on the notion of SHS in South Africa post-2004. Nevertheless, the research also uses international literature although the majority of the literature is drawn from South African literature.

For primary data, a qualitative method (i.e. interviews) was used to interact with residents so as to formulate a better interpretation of the sustainable human settlements components identified in Pennyville and how they intersect with people's livelihoods. This involved the usage of semi-structured' and 'open-ended' interviews (May, 2001). Semi-structure interviews were used to interact with the official whereas open-ended interviews were used to engage with residents. Interviews with residents were open-ended due to the fact that as a researcher I cannot draw a definite line on people's experiences, thus to understands livelihoods in the area I needed a wide view on residents' experiences on livelihood strategies.

The main sources of the primary data are interviews with residents of Pennyville. Pennyville consists of three accommodation typologies ranging from flats to

single units (CalgroM3, 2014). The settlement comprises 3200 housing opportunities: subsidised RDP houses, Johannesburg Social Housing Company (JOHSCO) [3] affordable rental units with shared facilities, Joshco social housing units and middle and high-income rental by others i.e. mainly managed by banks (CalgroM3, 2014). The area is highly celebrated due to the fact that it also consists of RDP units in addition to the other forms of housing. This all forms part of the new initiative of the government, improving from previous critiques of creating neighbourhoods with poor people by mixing income groups (Landman, 2012).

As a result, the interviews were sampled based on the aforementioned typologies. However, due to time constraints the research was narrowed to two different typologies namely people from RDP houses and people from the JOSHO affordable units. The reason behind this purposeful section of participant was important in order to get hold of interviewees with different characteristics i.e. different incomes and different background in terms of their previous accommodation. Seven residents were interviewed from each typology. Data analysis of the findings was linked with the literature relating to the sustainable livelihood framework explored in the literature review. Similar research has employed different methodologies to collect primary data. For example, Landman's (2010) research uses a quantitative method, this research expands from Landman's research and thus employs a qualitative method to get a deeper understand on people livelihood strategies.

Collected information on resident's experiences was analysed based on the two most important sections of the literature, the sustainable livelihood framework and components of sustainable human settlement. In other words, the analysis tried to analyse people's survival strategies by seeing how people's livelihood strategies intersect with the components deemed sustainable in Pennyville. The purpose was to try and get a sense of what components are playing a role in people lives and how and why they are playing an important role in people's lives. Another reason was to try and understand why, if any of the components

[3]Joshco 'was created by the City of Johannesburg in March 2004 to provide quality, affordable and sustainable social housing products' (About Joshco, 2014). One of its aims is to manage all council owned rental stock and it is deemed the provider of choice in terms of rental housing (About Joshco, 2014).

that are deemed sustainable in settlements like Pennyville seem to be failing. In addition, observation skills were used to complement interviews and for a general understanding of how people use the settlement.

State official's interviews were initially planned with the focus on state on understanding the state's perspective in terms of how it views Pennyville as a sustainable human settlement. However, due to constraints with regard to getting hold of state officials the research relied on policy documents and newspaper articles as the only state perspective. The purpose of this section was to get an understanding of how the state officials expected some of the components to emancipate people living in the area supplementing the document writings of Pennyville. In other words, understanding deeply how Pennyville is aligned with policies like BNG and the intentions under each SHS component provided by Pennyville. This is essential to discern before linking people people's livelihood strategies with aspects or component of SHS in the area.

1.5.5 Sampling

Choosing a study sample is important for any research method. There are three broad approaches to selecting a sample for a qualitative study i.e. convenience, theoretical and judgemental sampling (Marshall, 1996). However, this research utilizes judgement sampling also known as purposeful sample. This entails the actively selection of the most productive sample to answer the research questions. The selection was based on my practical knowledge of Pennyville, and the available literature.

In addition, the framework for sampling is largely based on the typologies i.e. social housing units and RDP housing units identified in Pennyville as described above. For social housing units, respondents were randomly selected whilst for RDP housing units, sampling was strengthened by selecting respondents from units that show variety, although they are the same typology. Variety in this case is seen as additions that can be spotted on the units, such as back rooms or *spaza* shops. Variety in housing circumstance is necessary to get different understanding from various situations, thus enabling the researcher to dig deeper into various survival strategies available in Pennyville. In terms of time, respondents were selected and interviewed during the week and also during the

weekend. This was an attempt to interview households with working and non-working bread winners. A limitation was that low-income households might work both during the week and weekend and therefore not be found at home at either time.

1.5.6 Ethical considerations

As a researcher I have to make sure that participants know that their participation is voluntary and that they have freedom to withdraw from the study any time without any unfavourable consequences and also that the results will not harm them in anyway (Bhattacherjee, 2006). In addition, to avoid harm participants were made aware that if they wished anonymity and confidentiality can be ensured (Bhattacherjee, 2006). In addition, all the necessary information about the study was disclosed to the potential subjects, this was essential to avoid confusion or expectations by participants (Bhattacherjee, 2006). Lastly, as a researcher I had the ethical obligations to make sure that unexpected or negative findings were fully disclosed, even if they cast doubt on the research design or the findings.

1.6 Conclusion

In contrast to a quantitative research, this research made use of a qualitative method. Therefore results from this research cannot be used to generalize back to the community as a whole i.e. Pennyville. The use of a qualitative research as the key tool was based on the aim of the study which was to get a deeper understanding of the area. Now that the tools of the research have been established the next chapter looks at the key literature of the research as one of the research tools.

Chapter 2: Defining Sustainable Human Settlements

Arguments in this section are structured around three main themes. To build up the research I first look at how one defines sustainable human settlements. This section looks at a number of components that are mainly used to define a sustainable human settlement. This is essentially to point out some of the components that may be classified as sustainable in Pennyville. The second theme focuses on how these components are included or defined in the South African housing policy, and also zooms in to regional policy and focus on the City of Johannesburg's understanding of sustainable human settlement. The last theme looks at the key elements of the notion of sustainable livelihood. However, the aim is to explore the role played by some of the components that are classified as contributing to the idea of sustainable human settlements in Pennyville. Thus the intention is to understand what works for households and not necessarily what works for the City authorities. Thus the literature aims on laying a foundation on the intersection between sustainable human settlements and sustainable livelihoods in the research.

2.1 What constitutes a sustainable human settlement?

The following section looks at the main components of a sustainable human settlement. It also aims to indicate some of the assumptions that come with certain aspects of sustainable human settlement. According to Girardet (2004: 419) a sustainable city is '…a city that works so that all its citizens are able to meet their own needs without endangering the well-being of the natural world or the living conditions of other people, now or in the future'. Moreover, urban planners try to create sustainable human settlements that encompass all the amenities, services and facilities. However, the problem lies in that the settlements created are not as comprehensive as indicated in the plans (Burger, 2013). According to Burger (2013) one of the key challenges in planning for urban areas from the perspective of residents is to enable job creation which is an important part of sustainable livelihoods and well-performing human settlements (DHS, 2013). This should be at the heart of what municipalities do and how they function (Burger, 2013). This section identifies six main components that are deemed essential based on sustainable human settlement policy and literature. The themes have been extracted from various housing

literature based on a South African perspective i.e. policy reviews and sustainable human settlements. The findings of the research try to identify the relation between the features of a sustainable human settlement and sustainable livelihoods.

2.1.1 Location

The location of human settlements is seen as a key component that has dominated the idea of creating sustainable human settlements, especially in the South African context. In South Africa, the idea of location dominated the shift to sustainable human settlements in 2004, introduced through Breaking New Ground (Rusk, 2006). It was used as a main critique, criticizing the first phase (1994-2004) of the democratic state housing provision. Location of houses, especially in urban areas was seen as poor and fostering the apartheid legacy (Goebel, 2007). The first phase of housing provision in the City of Johannesburg located people in places like Orange Farm, far from the Central Business District and thus making it difficult and costly for people to travel back and forth to places of work (Lambooy and Levashova, 2012). Thus the location of houses was seen as worsening urban poverty instead of combating urban poverty. Therefore as argued in Department of Housing (2004) it was essential to move towards well-located human settlements, whereby people will have access to cheap transport integrated with the opportunities provided by cities such as jobs and other economic services and activities. The idea of location is coupled with the provision of public transport such as Bus Rapid Transport systems (Rea Vaya) introduced in the City of Johannesburg in 30th of August 2009, and it was assumed that it is within this public transport mode that people will have better access to the city in terms of job opportunities, cheaply and efficiently (Maliene and Malys, 2009).

2.1.2 Physical infrastructure

Physical infrastructure is also seen as a key for sustainable human settlements. It entails both the infrastructure used to build the house and also the quality of soft infrastructure accompanying the house (Department of Housing, 2004). The term soft infrastructure comprises of many definitions, for the purposes of this research it should be defined as unified physical elements that present framework supporting an entire human settlement such as sewerage (Cross, 2008). It is argued that better quality infrastructure contributes as a component

of sustainability (Cross, 2008). For example houses provided by the government in the first phase were criticized for their poor quality in terms of, location, structure (i.e. size) and other accompanying infrastructure such as roads. Thus it is argued that they worsened living conditions of the poor (Trusler, 2009). In South Africa, the shift from quantity to quality houses, points out exactly the importance of infrastructure in sustainable human settlements (Tomlinson, 2006). The shift was mainly based on the idea that the focus on quantity was in fact exacerbating the living conditions of the poor, and that a house had to be of a certain quality to be counted as sustainable (Tomlinson, 2006). In addition other key physical infrastructure to sustainable human settlements include engineering infrastructure such as electricity and water which are considered important for improvement of people's livelihoods (Tomlinson, 2006).

2.1.3 Environmental friendliness

Most South African housing and policy documents include natural resource efficiency and environmental sustainability in their policy objectives. In practice, however, beyond the requirement that environmental impact assessments form part of the development planning process, few implementers include environmental sustainability or the sustainable use of resources in their development objectives (Smeddle-Thompson, 2012). Arguably, 'sustainable resource use and the systems required to implement and measure sustainable resource use strategies are more readily adopted by developed countries that have stable political-economic structures and technical capacity' (Smeddle-Thompson, 2012: 10). Environmental sustainability is comprised of an important dimension besides only taking care of the environment. Environmental sustainability can also be looked at in terms of the social dimension i.e. residents. However, this research does not take this approach as it does not seem to be a key defining factor of the settlement. Therefore, the research focuses on how sustainable human settlements components have contributed to people's lives and pays no attention to how the components have played a role in creating a sustainable ecological environment. For this and other reasons the research will not dwell in arguments related to the environment.

It is recognised that the environmental dimension of sustainable human settlements is potentially a key issue for municipalities and beneficiaries. Therefore, this is an important area for future research although it was not

included in this current study. Because of the focus on beneficiaries and the time given to complete this research, the research will not focus on the environmental aspect of sustainable human settlements instead it will focus on other components which play a major role in improving people livelihoods.

2.1.4 Access to basic and social facilities

Social and basic facilities can be defined as the benefits (i.e. grants) or facilities such as education, health care, and it also includes subsidized housing provided by a government or available in a settlement (DFID, 1999). Landman (2010) reveals that residents view the access to basic and social facilities as important for a sustainable human settlement. In Landman's (2010) findings, people pointed out the kind of facilities that they feel are necessary for a better livelihood (for example improved quality of education and health) such as clinics and schools. Therefore access to these facilities is seen as key for sustainable human settlements. The underlying idea on this concept is that well-located areas are able to get easy access to facilities such as schools and clinics, either by residents walking there or through cheap public transport (Department of Housing, 2004). Access in this case is based on dimensions such as cost, opening hours and also qualifying criteria or terms and conditions associated with the facilities (Landman, 2012). The lack of information on beneficiaries' views on sustainable human settlements may have hindered the realisation of access to facilities. This is owing to the fact that some of the assumptions made in terms of for example cost or distance may not be aligned with people's view. Landman (2010) points out that in areas such as Cosmo City and Pennyville people still lack access to facilities such as day-cares and pre-schools thus pointing out that the current design or available services do not cater for people as the state assumed it would. Principally the state is supposed to play a major role as an institution to enable the realization some aspects of sustainable human settlements i.e. moving beyond the focus on location to how exactly people access certain facilities. As a result, the research will investigate which facilities are accessible and which are important to people.

2.1.5 Mixed income

The concept of mixed income has largely influenced the design of SHS in the last ten years. The idea of mixed income housing development seems to have been strengthened by the state working with private developers i.e. public-private

partnerships (Onatu, 2010). In this model, the state funds a certain percentage of RDP units and other credit-linked or rental units (e.g. provided by Joshco), and the private companies fund rental units. Landman (2010) argues that location has played a big role in attracting private investors. She further sees 'location or proximity as critical for the success of medium-density mixed housing in the country. This enables both the local authority and developers to save costs while providing medium to lower income residents with higher quality living environments in proximity to socioeconomic opportunities' (Landman, 2010: 14). The notion of mixed incomes makes the implementation of Breaking New Ground principles such as densification easier, whilst also bringing profits to private companies.

Arguments for mixed income developments include avoiding the creation of homogenous settlements. This is informed by the idea that the new government should move away from providing similar settlements that were provided by the apartheid government with specific reference to hostels (Maliene and Malys, 2009). The main underlying assumption is that diversity of income i.e. a move away from creating homogenous settlements will enable economic sustainability in the area resulting in self-sustaining settlements, self-sustaining in a sense that the environment provides economic opportunities or networks for the poor to improve their lives (Onatu, 2010). For example, Landman's (2010) research reveals that people see the need to open home-based businesses as essential. Therefore, it can be argued that such findings should be accompanied by State involvement in creating an environment that opens economic opportunities. Surprisingly the State policy pays less attention to this as indicated on the policy review that follows.

2.1.6 Infill development

The last component of sustainable human settlement is infill development. The City of Johannesburg has initiated a number of infill developments with Pennyville recognized as one of them (Department of Housing, 2014). Infill development refers to the recent approach by the City of Johannesburg to embark on rehabilitation mining land for development based on the assumption that mining land is well located. One of the assumptions include the idea that this land has the potential to bring poorer people closer to the city and thus

essentially redressing the apartheid legacy because they are better located (Department of Housing, 2014). Infill developments are accompanied by various expectations, for example Pennyville is 'expected to yield affordable and sustainable housing and tenure options' (Department of Housing, 2014). Fleurhof's location and packaging assumes access and proximity to economic opportunities (Department of Housing, 2014).

2.1.7 Conclusion

Sustainable human settlements cannot be defined only through academic writings. For the purposes of this research one cannot look at the sustainable human settlements' components without understanding how they relate to the South African housing policy. Therefore, the next section looks at the sustainable livelihoods literature.

2.2 Sustainable livelihood approach: looking at user practices

Moser (1998) argues that it is essential to start recognizing what the poor have rather than what they do not have. Therefore, in an effort to assess sustainable human settlements as an intervention to poverty reduction this research draws on sustainable livelihood literature which focuses on people's daily life experiences. In the first decade of South African housing policy, the policy's impact on spatial, economic and social integration emerged as a major concern (Baumann, 2003). However, looking at the current housing policy route that is sustainable human settlements, the relationship between the new housing policies to poverty eradication remains relatively unexplored. This complex relationship between housing policy and poverty has been best understood through the sustainable livelihood framework sometimes known as the asset vulnerability framework (Baumann, 2003). The latter has been used to assess the South African housing policy but it seems only to have been applied to criticize the post-1994 housing policy (Baumann, 2003), for example, between 1994 and 2004 it has been used to understand household's behaviour for example notions like why people sell or abandon their houses (Baumann, 2003; Moser, 1998). However, the same concept is yet to be applied on recent projects that are guided by the new housing policy. Using the sustainable livelihood literature, this research will consider beneficiaries perception of the housing policy and poverty relationship. For example to what extent has locating people closer to the city improved people's lives? As a result this section defines the concept of the sustainable livelihood framework and outlines its main components.

Firstly, it is essential to define the concept of sustainable livelihoods framework. The concept focuses on livelihood strategies employed by the poor households, in this case livelihoods mean the 'capabilities, assets and activities required for a means of living' (Baumann, 2003: 95). A human settlement is considered sustainable 'if it is able to cope with and recover from stresses and shocks, mainly it is considered sustainable if its components intersect with people livelihoods and helps households maintain or enhance their capabilities and assets both now and in the future' (Carney, 1998:2). The concept of sustainable livelihood goes beyond income and focuses on non-marketable or intangible resources (Baumann, 2003). However, it is important to note that most of the

literature on sustainable livelihoods focuses on rural areas (Niehof, 2004). It is only recently that the same concept has been applied in urban areas (Owusu, 2007; Mayson, 2014). One should note that there are basic similarities and differences in terms of the principles underlying the livelihood approach in rural and urban areas (Walker et al, 2001).

2.2.1 Characteristics of sustainable livelihoods

It is important to first define the meaning of livelihoods. Rakodi (1999) stated that a livelihood comprises the capabilities, assets and activities required for a means of living. Moreover, assets refer to both tangible and intangible resources that can be tailored by households in their daily lives (Rakodi, 1999). The livelihood approach is important because it understands that although governments and economists often focus on wage employment, there are other day-to-day activities that the poor depend largely on (Rakodi, 2002). However, policy makers cannot simply rely on people's strategies for betterment but should enable greater access to a sustainable livelihood by ensuring that assistance is provided in the form of promoting opportunities. In other words they should focus on strengthening the assets that poor already have and are utilizing for their benefit (DFID, 1999; Mayson, 2014; Chambers, 2003). Walker et al (2001) extend this by arguing that how poverty is understood determines the way policy makers and planners respond to it.

Thus the livelihoods approach descends from a different perspective in terms of understand poverty and associated interventions. Thus it restores agency to poor people, instead of seeing them merely as 'passive units' (Rakodi, 2002:10). Moreover, it goes beyond assumptions made by experts or theorists (Chambers 1995) i.e. acknowledges the 'diverse ways in which people make a living under conditions where structural constraints seem overwhelming' (Beall & Kanji, 1999:7), understanding that poverty is a 'condition of insecurity rather than only a lack of wealth' (Walker et al, 2001:1). People make use of livelihood assets by engaging in livelihood strategies to take gain of livelihood opportunities and attain valuable livelihood outcomes (De Haan and Zoomers, 2005). Moreover, people's strategies are diverse but they remain largely affected by external environments (DFID, 1999).

Vulnerability seems to be the core concept in the sustainable livelihood approach. Thus it is important to note that there is a strong relationship between vulnerability context, policies, institutions and processes, and infrastructure and services (Mayson, 2014). Vulnerability in this context implies change in processes as people move in and out of poverty. Moser (1998:3) defines vulnerability as 'insecurity and sensitivity in the well-being of individuals, households and communities in the face of a changing environment, and implicit in this, their responsiveness and resilience.'

Central to an understanding of the concept of sustainable livelihood approach is an appreciation that poverty is neither a stable, permanent nor static condition (Walker et al, 2001). Consequently, understanding that the poor move in and out of relative poverty as they respond to the opportunities, shocks and stresses (i.e. social, economic and environmental) which they experience is important (Moser, 1996, Chambers, 1995). In that regard, several theorists converge on the understanding that the poor employ a variety of strategies as a way to diversify and minimize the risk for failure (Chambers, 1995; Rakodi, 1997). Moreover, such livelihood strategies are multifaceted as men and women draw on their assets (Moser, 1996; DFID, 1998).

The sustainable livelihood approach understands that people are engaged in multiple activities and do not rely on more limited range (such as one household member with full time paid employment) of livelihoods strategies to ensure their well-being (Walker et al, 2001). While such systems may incorporate paid employment, there are other important strategies for the poor (Chambers, 1995). The poor employ multiple and diverse strategies to reduce vulnerability to poverty. However, the content of livelihood strategies differ according to context from location to (Rakodi, 1997).

De Haan and Zoomers (2005:28) extend on Moser's ideas on defining the concept by stating that 'this new actor-oriented perspective was mostly interested in the world of lived experience, the micro-world of family, network and community and it drew attention to related issues such as poverty, vulnerability and marginalization'. Moreover, the key goal of the livelihoods approach is 'to search for more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as

opposed to ready-made, interventionist instruments' (De Haan and Zoomers, 2005: 30), in other words strengthening people's strategies rather than institutionalizing broad new strategies.

Similarly, Wallmann (1984) cited in De Haan and Zoomers (2005: 32) stresses that 'livelihood is never just a matter of finding or making shelter, transacting money, getting food to put on the family table or to exchange on the market place'. Conversely, Wallmann (2005: 32) argues that the capitals that were previously highly rated (e.g. income) in terms of livelihoods are equal to 'a matter of ownership and circulation of information, the management of skills and relationships and the affirmation of personal significance . . . and group identity'. In other words, strategies such as 'meeting obligations, of security, identity and status, and organizing time' are equally important as shelter and food. Therefore, they should also be understood as possessions that ease continued existence, adaptation and poverty alleviation. Similarly, De Haan and Zoomers (2005) states that these strategies are also 'the basis of agents' power to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources. Ordinarily, the process results in ensuring that people are not victims but rather they play important roles in their day-to-day lives to enable survival by exploiting whatever opportunity at hand (De Haan and Zoomers, 2005).

In summary, the focus on assets is an attempt to go beyond the conventional definitions and approaches to poverty eradication, and understand that poverty has more aspects (Krantz, 2001). The aim of this research is to unpack aspects of the livelihoods in relation to the main components of SHS discussed above. Thus investigating how people's assets intersect with components deemed sustainable in the current SA housing policy. Essentially understanding the role that SHS components have played in enabling the ability of households to reduce or avoid vulnerability. The research uses the concept of sustainable livelihood as a framework to point out potential gaps or inadequacies of SHS, or its benefits. It attempts to look for people's experience in order to inform certain arguments and assumption made for SHS components by focusing on both tangible and intangible assets.

2.2.2 Key Sustainable Livelihood Capitals

The arguments levelled for sustainable livelihoods are primarily grounded upon five capitals or assets both tangible and intangible, and they are seen as important in poverty reduction (Moser, 1998; Rakodi, 1999). Understanding these assets is essential to better understand how beneficiaries are benefiting from the components of SHS, whether the components are aiding in improving their lives for the purposes of the research (Moser, 1998; Moser and McIlwane, 1997). Importantly, it is not only the amount of assets that individuals, households or communities have, but also how well they can be mobilised and managed. Moser (1998:5) describes the poor as being 'managers of complex asset portfolios', which people adjust to achieve the livelihood outcomes most suited to them (Mayson, 2014). As a result, the purpose of the research is to explore how these have been fostered or encouraged by SHS. The latter is guided by exploring the relationship between this section and the first section. The main components of sustainable livelihood framework are as follows.

Human capital is defined 'as the skills, knowledge, capacity to work, and good health that together enable people to pursue different livelihood strategies and achieve their livelihood outcomes' (DFID, 1999: 19). For households human capitals varies based on factors such as health and households size, but it entails the amount and quality of labour available (DFID, 1999). Moreover, human capital appears in the common framework as a livelihood asset, hence it is commonly seen as the key to achieving livelihood outcomes (DFID, 1999). As well as being of intrinsic value, human capital (knowledge and labour or the ability to command labour) is required in order to make use of any of the four other types of assets (DFID, 1999). It is therefore necessary though not on its own sufficient, for the achievement of positive livelihood outcomes (DFID, 1999).

Rakodi (2002) notes that people can attempt to invest in securing more of an asset (for instance, education in order to gain human capital), or dispose of an asset (for instance of financial assets to pay for the education). Sometimes people can also sacrifice the ability to access and utilise an asset in future, because of short-term shocks or stresses (Rakodi, 2002). These understandings emphasise that occupants are already employing their own mechanisms to cope and succeed, given the vulnerabilities they face, thus it is the task of the

researcher to investigate and understand these mechanisms (Mayson, 2014). In a sustainable human settlement approach this includes the assumption that if a SHS project manages to create skills or create the environment for skill development, knowledge, ability to labour and good health it will then enable people to pursue different livelihood strategies(job opportunities) and achieve their livelihood objectives (Krantz, 2001; Cross, 2008; Mitlin, 2002). However, the relationship between human capital and components of new housing policy in South Africa is fuzzy or opaque because it has been based on a number of assumptions without really exploring how it turns out in reality i.e. how SHS projects have played a role in enhancing human capitals.

Another important capital is social capital. Firstly, it is important to acknowledge the debate that surround the understanding of what is meant by social capital. The DFID (1999: 21) argues that in the context of sustainable livelihoods it should be taken as to mean 'the social resources upon which people draw in pursuit of their livelihood objectives'. Social resources are sought to include 'networks and connectedness, either vertical (patron/client) or horizontal (between individuals with shared interests) that increase people's trust and ability to work together and expand their access to wider institutions, such as political or civic bodies', this also includes mutually-agreed or commonly accepted rules, norms and sanctions; and relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor' (DFID, 1999: 21).

As a result, social capital refers to the available networks and connectedness that people draw on for better livelihoods outcomes (Krantz, 2001; Baumann, 2003). Social capital arguments are based on the premise that if people are connected to each other and places in terms of networks and location they will be able to improve their livelihood standard and be less vulnerable to poverty in all its manifestations (Moser, 1998).

Financial capital relates to resources that people use to achieve their livelihood objectives and it comprises the important availability of cash or equivalent, which enables people to adopt different livelihood strategies thus for the purposes of a sustainable livelihood literature the definition is not economically robust (Krantz, 2001; DFID, 1999). However, it has been adopted to try to

capture an important livelihood building block, namely the availability of cash or equivalent resources that can be used to enable people to adopt different livelihood strategies (DFID, 1999).

Financial capital is probably the most flexible of the five categories of assets (DFID, 1999). Thus it can be converted with varying degrees of ease, depending upon the availability of transforming structures and processes that can shift it into other types of capital (DFID, 1999; Beall and Kanji, 1999). It can be used for direct achievement of livelihood outcomes, for example when food is purchased to reduce food insecurity (Walker et al, 2001; DFID, 1999). Although it is considered the most important by institutions it remains interrelated to other capitals also it is an asset than remains difficult to access especially for those considered poor (DFID, 1999). Additionally, alone it cannot solve all the problems of poverty. For example people may not be able to put their financial resources to good use if they lack knowledge or there is lack of existence of appropriate transformation structures such as developed markets or policy relation to enterprises (DFID, 1999). Mainly in the housing field the assumption often made is that if people have financial assets they will be able to improve their lives. This is linked to the assumption that with secure tenure people will be able to get access to loan finance but that has failed due to a number of reasons (Goebel, 2007). However, that has been hindered by the lack of clarity between title deeds and strict regulations on ownership of RDP houses (Baumann, 2000).

Natural capital refers to resource stocks from which resource flows and services (such as land, water, forests, air quality, erosion protection, biodiversity degree and rate of change, etc.) useful for livelihoods are derived (DFID, 1999). Resources that make up natural capitals are intangible public goods such as the atmosphere and biodiversity, to tangible assets used directly for production trees and land (DFID, 1999). However, this research avoids discussing in full depth environmental issues because of the reasons stated on the first section. The research focuses on the end user, how the SHS components (excluding natural or environmental assets) improve people's livelihoods. However, it is important to note that the research will be receptive to information on natural capital that might arise in the course of the research. Nonetheless, natural capital remains important to people's livelihoods especially for those who derive all or part of

their livelihoods from resource-based activities (farming, fishing, gathering in forests and mineral extraction).

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods (Rakodi, 2002). Infrastructure includes changes to the physical environment that works towards enabling people to meet their basic needs and goods that people use as tools or equipment to partake in everyday life (DFID, 1999). In reality these include resources such as affordable transport, secure shelter and buildings, adequate water supply and sanitation, clean, affordable energy and access to information (Moser, 1998; DFID, 1999). The assumption in the City of Johannesburg is that with accessible and affordable transport such as the BRT people will be able to better their lives. Nevertheless, issues such as what determines affordable are normally left out and affordability ends up being defined by state standards not the user themselves.

However, many assessments have discovered that a particular lack of access to any type of infrastructure can be considered as a core dimension resulting in poverty (Owusu, 2007). For example, 'without adequate access to services such as water and energy, human health deteriorates and long periods are spent in non-productive activities such as the collection of water and fuel wood (DFID, 1999: 25). Moreover, the 'opportunity costs associated with poor infrastructure can preclude education, access to health services and income generation' (DFID, 1999: 25). The apartheid legacy presents a better example in this regard. As a result, participatory approaches have been noted as essential to establish users' priorities and need.

2.2.3 Conclusion

Therefore, the research uses the identified key concept of sustainable livelihoods identified on this section to explore resident's experiences in Pennyville. These themes are used as the basis to explore people strategies in Pennyville. Moreover, the research bares some limits i.e. it does not explore the whole idea of sustainable livelihoods in detail rather it only looks at residents' experience as part and parcel of the idea of sustainable livelihoods. Moreover, the understanding of the notion of sustainable livelihoods played a key role on the identification of different questions that can be used as guidance to explore Pennyville through the sustainable livelihood perspective. Therefore, this

research argues that in order to understand how sustainable human settlements are received and experienced by people it is essential for the state or planners to have a clear understanding of their livelihoods i.e. their daily experiences or strategies.

2.3 State Policy

Policy for sustainable human settlements plays out in a number of government policies. This section looks at how state policies include or outline components of SHS and the underlying aim of each component. The first part looks at sustainable human settlement policy at a national scale and the last part looks at housing policy at a regional scale. At national scale the research focuses on BNG and at regional scale it focuses on Joburg 2040 (Growth and Development Strategy) and the Sustainable Human Settlement Urbanisation Plan. In general I look at the components of sustainable human settlements as understood by the South African government. The aim of this section is to define and outline sustainable human settlement components as understood by the state thus making it easy to understand Pennyville as it is understood by the state.

2.3.1 The Evolution of the Post-Apartheid Housing Policy

Firstly, it is important to note that 'one cannot reflect on the current state of human settlements without a basic understanding of the past and its impact on the urban future' (Du Plessis and Landman, 2002:2). In South Africa human settlements cannot be considered in isolation without looking at the earlier historical apartheid injustices (Du Plessis and Landman, 2002). That is at the heart of it all is the apartheid regime which basically separated development and control and this occurred for more than forty years (Cross, 2006). This resulted in the exclusion of large sections of the population from the economic, social and environmental benefits of vibrant, integrated, sustainable urban development (Khan and Thurman, 2001; Beall and Kanji, 1999). This resulted, in a settlement pattern that generated enormous movement patterns across vast areas, which is both time-consuming and costly, and represented unequal access to socio-economic resources (Landman and Du Plessis, 2002).

In addition, Khan and Thurman (2001) state the implementation process of the 1994 Housing White Paper paid less attention to exploring other forms of tenure and it was largely based on the untested assumption that 'most people wanted to become homeowners as opposed to renters thus the majority of subsidized

housing have been in the form of single story home ownership' (Khan and Thurman, 2001:15). As a result, it is safe to indicate that the role played by rental accommodation was not explicitly recognized in the 1994 Housing White Paper and has not been addressed in subsequent policy revisions and amendments. This was contrary to the large number of people in Gauteng living under rental tenure (Tomlinson, 2006). Moreover, research leading to the introduction of the BNG has proved that there is a strong need for rental housing in former black areas (Cross, 2008). During the first decade of the post-apartheid period most housing experts converged on the idea that the public housing rental option would be expensive and administrative costs would be very high (Cross, 2006).

Moreover, between 1994 and 2004 the government failed to address the struggle for access to well-located land and integrated housing development, which resulted in poorly located land for housing (Khan and Thurman, 2001; Bond and Tait, 1997; Huchzermeyer, 2001). Thus gaining access to well-located land challenged the housing programme (Beall and Kanji, 1999) and Goebel (2007) argues that access to well-located land remains a challenge. As a result, the government failed to address the apartheid legacy instead perpetuated the trend of locating people on cheap land and in peripheral locations which 'by definition are the less desirable parts of town' (Khan and Thurman, 2001:18). This meant little progress in transforming apartheid towns and cities through housing projects rather consolidation of the apartheid systems (Goebel, 2006). This resulted in larger distance from urban/industrial centres and lack of access to other facilities, thus affecting income generation opportunities (Cross, 2008; Adebayo, 2011). Moreover, the high cost of transportation to town or city affected household income. Numerous problems associated with well-located land can be linked to the land scenario in South Africa. This is due to the fact that the state is slow in acquiring well-located land partly due to the policy around land reform such as 'willing buyer' and 'willing seller' (Goebel, 2007). Firstly, the key problem was that the cost of the land and services must be covered by the capital subsidy which during that time was R30 000 per unit (Goebel, 2007; Adebayo, 2011). Thus developers opted for cheaper and poor land in order to maximize the available amount for top structure and produce large quantities of fully subsidized units (Charlton and Kihato, 2006).

In addition, the land scenario is highly related to lack of integrated development (Goebel, 2007). This implies that to a large extent, housing projects were carried out in isolation during the first phase of the housing programme without being integrated to necessary facilities such as social facilities and amenities (Hopkins, 2006). There are a range of explanations for the lack of provision of social, educational, commercial and recreational facilities (Khan and Thurman, 2001), these include a lack of interdepartmental co-ordination and budgeting at all levels of government (Khan and Thurman, 2001; Rust, 2006; Tomlinson, 2006). In summary, projects were largely developer driven rather that community driven, the latter based on the understanding of sustainable livelihoods concept, is essential.

2.3.2 The Breaking New Ground

As a result, the Breaking New Ground is a reflection on housing White Paper 1994 that it is argued to have failed to confront apartheid legacies resulting in issues discussed on the previous paragraph. While one might argue that there was a great shift in the introduction of the BNG, it is also important to note that the Housing White Paper of 1994, also focused on stabilizing the environment and transforming the apartheid legacy while simultaneously establishing new strategies to address the housing backlog (Khan and Thurman, 2001; Ajayi, 2012; Bond and Tait, 1997). As great as the 1994 White Paper was, a need remained to move away from delivering what was just housing to delivering sustainable human settlements.

A comprehensive review of the outcomes of Government's housing programmes from 1994 to 2004, led to the introduction of the Comprehensive Plan referred to as the Breaking New Ground (BNG) in 2004 (DHS, 2004). The Breaking New Ground policy is an essential document in South Africa because it marks the shift to sustainable human settlements (DHS, 2004). The year 2004 was marked by the state finally responding to critiques that were directed to the first post-apartheid phase of housing. The experiences from the 1994 White Paper inspired the shift from providing just housing to providing sustainable human settlement (DHS, 2004; Crankshaw et al, 2006). Eventually this was accompanied by the government changing the name of the department of housing to the Department of Human Settlements, understanding that there was a greater need to integrate the existing policy framework and concomitant programmes with the significant

policy shift from the provision of housing only to the establishment of sustainable human settlements (DHS, 2004).

As a response to a painful past, the BNG introduced programmes that were necessary for the establishment of integrated, sustainable human settlements. These include upgrading of informal settlements and enhancing the range of housing typologies (DHS, 2004; Ajayi, 2012). In governmental terms this included integrating the previously excluded groups into all the city life and opportunities or benefits (Adebayo, 2011). Moreover, the BNG focused on densifying where necessary, which was also linked with inclusionary housing and fiscal incentives to promote densification and discourage urban sprawl. BNG programmes also focused on improving spatial planning, plans related to this strategy focused on improving coordination and alignment, as it is essential to do between the different planning instruments and economic policies (DHS, 2009; Cross, 2008). Guided by the idea that 'there is a need to develop a single planning authority and/or instrument' to better guide the development of sustainable human settlements this was later symbolized by the moving of certain powers from different departments to the Department of Human Settlements (DHS, 2009: 24). In addition, there was also a necessity to improve the location of new housing projects (DHS, 2009; Venter and Marais, 2010). This was introduced as a way to 'achieve spatial restructuring', with the BNG aiming on accessing well-located state-owned and parastatal land for the development of sustainable human settlements.

The BNG included in it the new housing vision 'to promote the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing' (DHS, 2004: 7). The BNG understand poverty to involve three 'critical dimensions: income, human capital (services and opportunity) and assets'. Thus the shift to sustainable human settlements is primarily directed towards the alleviation of asset poverty (DHS, 2004; DHS, 2009). Asset poverty refers to poverty that is considered to be more prevalent than the income approach (Trusler, 2009). With a concern with the limits of poverty measured in income terms only, asset poverty encompasses both economic and social conditions that are essential and sufficient for household livelihoods, similar to the notion of sustainable livelihood. As a way of tackling asset poverty using housing, the BNG aims at, among other things at

successfully implementing the failed, well intended measures identified by the housing department after 1994 elections, these include 'pursuing a more compact urban form, facilitating higher densities, mixed land use development, and integrating land use and public transport planning, so as to ensure more diverse and responsive environments whilst reducing travelling distances (DHS, 2004: 11)

2.3.3 Breaking New Ground elements and objectives

The BNG was introduced as a way to extend the 1994 White Paper especially in terms of quality and location through variety of housing programmes and projects (Ajayi, 2012; Venter and Marais, 2010). This new approach was meant to shift from the earlier supply-centred approach to demand-centred approach (Charlton and Kihato, 2006). In order to do so, the BNG is guided by four main themes. The first key theme is Sustainable human settlements, it entails creating well managed settlements that are going to result in sustainable development, wealth, poverty alleviation and equity (Charlton and Kihato, 2006). Secondly, integration which is based on the shift from providing just housing to providing sustainable human settlements i.e. Spatial restructuring and "… utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring" (Rust, 2006: 10). Moreover, due to experience gained from the first decade of the housing programme, integration is also looked at as an institutional challenges, thus the BNG acknowledges that there is a need for both vertical and horizontal integration with the state in terms of both plans and investment (Rust, 2006; Royston, 2009). The third theme is housing assets, this is based on the idea that there is a necessity to support the property market and to reduce duality by enabling access by all to enable empowerment and wealth creation (Rust, 2006). Lastly, it entails upgrading informal settlements, brought about the realization that you cannot easily get rid of informal settlements. The BNG proposes integration of informal settlements to the urban fabric through upgrading and in that process simultaneously overcoming spatial, economic, and social exclusion (Rust, 2006; Trusler, 2009)

BNG incorporates new principles such as: integrating subsidised, rental and bonded housing, providing engineering services at a higher level, providing basic facilities such as schools, clinics and commercial opportunities and lastly

combining different housing densities and types (Smeddle-Thompson, 2012; Trusler, 2009). The different types and density of housing range from single-stand units to double-storey units and row houses as seen in settlements similar to Pennyville (Landman, 2012). These key elements are guided by the state's efforts to refrain from providing low-income housing on the periphery, so as to reduce inequalities and inefficiencies of the apartheid space economy (Tomlinson, 2006). Therefore, the BNG has laid a strong foundation for the development of sustainable human settlements in South African and this is most visible in the City of Johannesburg (Landman, 2010).

In conclusion the South African post-apartheid housing policy comprises two important phases (Adebayo, 2011). The first constitutes the implementation over a decade, of the Housing White Paper (HWP) and the Housing Act of 1997, the first national housing policy of a democratic order, adopted in 1994 (Adebayo, 2011). A key determiner of the first phase is that secure tenure was seen as a precondition for household investment in housing (DHS, 2009). The subsequent move to introduce the BNG was the realization by the government that "the 1.6 million houses that have been built have not become 'valuable assets' in the hands of the poor" (DHS, 2004: 4) cited in (Adebayo, 2011:4)

2.3.4 Other important national policy

It is very important to note that the BNG is not the only policy that is working towards sustainable human settlements. There are also other policy and Acts that work together with the BNG to develop sustainable human settlements. Thus this section gives a brief overview of these policies and analyses how they speak to sustainable human settlements and how certain components are included and prioritized within these policies.

2.3.5 Outcome 8 Delivery Agreements: Sustainable human settlements and improved quality of household life

On the road to achieve the delivery of housing units, the South Africa has identified 12 outcomes to guide development up until 2014 (DHS, 2012). In that regard the government seems to have placed more emphasis on Outcome 8: sustainable human settlements and improved quality of household life. Outcome 8 is guided by further by four desirable outputs, and 'each output is linked to a set of activities that will help achieve the targets and contribute to

the outcome' that the state aims to achieve i.e. sustainable human settlements (DHS, 2012: 14).

Similar to the BNG, Outcome 8 is a response to the apartheid legacy in terms of spatially and economically disparities. The first output is to achieve accelerated delivery of housing opportunities (DHS, 2012). This involves upgrading well-located settlements, and looking more into rental as an option for delivery of housing. Moreover, output one together with output two 'explicitly includes improving livelihoods through the provision of different forms of tenure, and provides for alternative methods of housing delivery' and basic infrastructure (DHS, 2012: 14).

The second output focused on improved access to basic service. Targets for this output includes increasing water access from 92 % to 100 %, sanitation from 69 % to 100 %, refuse collection from 64 % to 72 %, electricity from 81 % to 100 % (DHS, 2012). The third output was based on the idea of redressing spatial injustices created the apartheid government thus it focused on the mobilization of well-located public land for low income housing and affordable housing (DHS, 2012). The last output focused on the need to improve the property market. The ultimate aim was to facilitate the private sector to enable finance for the gap market i.e. people earning between R3 500 and R12 800 in other words increasing the delivery of rental housing for those that are excluded from the fully subsidized housing programmes (DHS, 2012).

To this end, a series of legislation and policies in housing have been put in place since the advent of democratic dispensation in 1994 (Ajayi, 2012). Aspirational legislation and policies exist on housing in general, but the execution leaves undesired results (Ajayi, 2012). These policies and legislation include the Social Housing Act, No. 16, 2008 established in alignment with the 1999 rental housing Act (DHS, 2009). The Social Housing Act, No. 16, 2008 is understood as the main piece of legislation for social housing sector also aligned with rental housing act and the 1997 housing Act (DHS, 2009). All of these acts are formed on the premise that they should encourage the establishment and promote sustainable state funded housing (Ajayi, 2012). Moreover, they work towards integration by establishing the roles of the different spheres of government in social housing to enable intra and inter-governmental integration (DHS, 2012).

2.4 Regional policy: Understanding the City's perspective toward sustainable human settlements

The following section looks at the current housing policy working toward sustainable human settlements. It starts by looking at the GDS 2040 and then moves on to focus on the current Johannesburg highly rated plan i.e. The Sustainable Human Settlement Urbanisation Plan (SHSUP). These policies are important as they set the tone in terms of understanding what does sustainable human settlement mean for Gauteng especially for the City of Johannesburg. They define the current status of the city in terms of housing and also give a clear indication of the future of sustainable human settlement in terms of the City's perspective.

2.4.1 Joburg 2040 Growth and Development Strategy (GDS)

Defined by the City of Johannesburg (2011: 5) the Joburg 2040 GDS of 2011 'is an aspirational strategy that defines the type of society the City aspires to achieve by 2040'. The GDS continues to focus on the City's struggle in dealing with past injustices created during the apartheid. Thus it works towards transformation that will lead to a non-racial, non-sexist and just city (CoJ, 2011). Referring to the City's previous strategy the 2011 GDS acknowledges that the 'The 2006 GDS provided not only a vision for a sustainable future Johannesburg, but also defined the City's values in clear terms, through the GDS principles' (CoJ, 2011: 10). The 2040 GDS therefore aims to build on this legacy of:

- Eradicating poverty;
- Building a diversified and inclusive economy;
- Building liveable communities;
- Ensuring resource security and environmental sustainability;
- Achieving social inclusion; Building social cohesion; and
- Promoting good governance.

  (CoJ, 2011: 10)

Clearly the City puts resilience, sustainability and liveability as its main targets. To achieve this, the City focuses on 'infrastructure as a building block for resilience and sustainability' and mass public transport as a true 'silver bullet' (CoJ, 2011: 26). In that regard, the GDS comprises of principles to guide the City towards 2040. It is important that not all of the principles speak directly to

housing thus not all of them are relevant for this section. The policies selected in this section are those that are related to housing or sustainable human settlement. These include eradicating poverty through a pro-active approach. This entails 'helping new households, internal and circular migrants, those in hostels, informal settlements and historical ghettoes, the unemployed youth, refugees and others who are vulnerable to access urban services' (CoJ, 2011: 33).

Moreover this implies 'enabling the poor to access basic livelihoods, inter-alia by helping them to secure social grants, facilitating skills development and basic employment opportunities, and supporting 'self-help' projects, start-up micro-enterprises and community-based co-operatives' (CoJ, 2011: 33) and it also involves 'ensuring the affordability of municipal services, public transport and social facilities, through progressive tariff structures, creative cross-subsidization and targeted social packages' (CoJ, 2011: 33). In addition, the City strives on accommodating the poor, by working to ensure that they can find and retain decent lowest-cost rental housing opportunities 'without needing to resort to a life lived in informal settlements and Inner City slums' (CoJ, 2011: 33). Thus a key priority in terms of housing, is the assimilation of the poor, ensuring that the poor are not located on peripheries of the city but are well accommodated in mixed-income residential spaces (CoJ, 2011)

However, the most important principle in terms of the GDS for this research is principle 3 which aims to build sustainable human settlements (CoJ, 2011). The City understands that 'this commitment cannot, however, be addressed without honestly considering how sustainable human settlements can best be established in a city still divided across race and class lines' (CoJ, 2011:35). In building sustainable human environments, the City aims to address a triple challenge: breaking through the Apartheid City; creating more liveable environments; and confronting the post-Apartheid reality of urban exclusion (CoJ, 2011:35).

Another related principle is achieving social inclusion through support and enablement (CoJ, 2011). Here the City 'will ensure the promotion of social inclusion at all levels of society, through addressing key obstacles, including those that relate to access to service infrastructure and social safety nets' (CoJ,

2011: 35). Based on the City's vision and the aforementioned principles the following outcomes are envisaged:

1. Improved quality of life and development-driven resilience for all
2. Provide a resilient, liveable, sustainable urban environment – underpinned by infrastructure supportive of a low-carbon economy
3. An inclusive, job-intensive, resilient and competitive economy
4. A leading metropolitan government that pro-actively contributes to and builds a sustainable, socially inclusive, locally integrated and globally competitive Gauteng City Region
   (CoJ, 2011:91).

Outcome 2 relates more to the creation of sustainable human settlement nonetheless all the outcomes are essential for a sustainable livelihood. This entails that the City will manage to establishment sustainable human settlements, sustainable and eco-efficient infrastructure solutions '(e.g. housing, eco-mobility, energy, water, waste, sanitation and information and communications technology)' (CoJ, 2011: 94). This outcome is underlined by one important vision i.e. the sustainable human settlement vision. The vision generally aims to establish a sustainable city by offering good quality of life and directing informal settlements toward sustainability. This revolves around easing accessibility to social amenities (e.g. transport, clinics, public facilities) resulting in a changed spatial landscape (CoJ, 2011), that can be seen as a sustainable human settlement.

The GDS 2040 provides numerous principles that can be considered specific to the needs of the City of Johannesburg. For examples it focuses on aspects such as transport, integration, physical infrastructure, employment, changing spatial landscapes and sustainability. All of which are necessary for households to attain sustainable livelihoods. Therefore, the GDS 2040 provides important principles to guide the implementation of sustainable human settlements in Johannesburg.

2.4.2 The Sustainable Human Settlement Urbanisation Plan (SHSUP)

The Sustainable Human Settlements Urbanisation Plan is a housing plan created by the City of Johannesburg in 2013. Its purpose is to 'is to craft a future development paradigm in relation to accommodation provision within the City from 2012 – 2030' (CoJ, 2013:6). It is important to note that the SHSUP also

looks at current housing delivery. It focuses on looking at the key issues facing the delivery of sustainable human settlements and identifies where the City went wrong. Moreover the SHSUP starts by giving a general description of the state of housing in the city and associated key issues. However, these all relate to those described above which led to the introduction of the BNG nationally. These include, poor quality of housing, disintegration resulting in spatial and land use issues, and intense focus to one housing tenure or typology with less focus to renting (CoJ, 2013). With the aforementioned issues confronting the city, the SHSUP outlines key development principles necessary to guide the City towards sustainable human settlements. The City state that the SHSUP is aligned to GDS 2040, and it is aimed to contributes to Outcome 2 of the GDS 2040 (CoJ, 2013).

The SHSUP defines the City's approach to sustainable human settlements i.e. the City's approach is to 'respond to urban development and management need by considering integrated and new responses to evolving challenges in the implementation of sustainable development' (CoJ, 2013: 11). However, the City expands the former by stating that the City's vision is also guided by other policies and plans such as 'Sustainable Housing Strategy (2001); Joburg Metropolitan Open Space System (2002); Sanitation Policy (2002); Integrated Infrastructure Plan (2003), Refinement of the Urban Development Boundary Strategy and its Implications for Growth (2003); Expanded Public Works Programme Policy and Implementation Framework (2004); City Safety Strategy (2005); Human Development Strategy (2005); Sustainable Human Settlements and Sustainable Housing Typology Research Project (2006); Growth Management Strategy (2008); Framework for Non-Motorized Transport (2009); Informal Trading Policy (2009); Regional Spatial Development Frameworks (2010); Spatial Development Framework (SDF, 2010); Integrated Development Plan (2012), Integrated Transport Plan; Built Environment Performance Plan (BEPP, 2011)' (CoJ, 2013: 13). This history is important for establishing ideas related to sustainable human settlements before the 2013 SHSUP document as Pennyville preludes the SHSUP. Moreover this history of housing, plans and frameworks shows the level of the City's commitment in ensuring efficient development of sustainable human settlement by enabling integration of policies that range from transport, infrastructure, mixed income and job creation related.

Therefore the SHSUP highlights the City's level of commitment towards creating sustainable human settlements.

The SHSUP is also informed by the City's own indices for sustainable human settlements (CoJ, 2013). These play an important role in ensuring that the implementation achieves the desirable sustainable human settlements (CoJ, 2013). In addition, indices ensure that there is a great level of integration for example the inclusion of transport or trading policy when designing human settlement works toward strengthening the poor's survival strategies. As a matter of fact**,** it is clear that the City of Johannesburg is moving toward the right path in ensuring that settlements are designed in a way that suits its residents resulting in sustainable livelihoods (CoJ, 2013). Interestingly, the SHSUP principles are clearly based on the BNG ideas, of creating more than just a house. Below is a summary of the selected few principles that I believe are aimed toward sustainable human settlement.

SHSUP aims to make optimal use of existing infrastructure or areas where infrastructure can be sensibly upgraded, as well as resources like well-located vacant land (CoJ, 2013). This principle stems from the necessity to create settlement that are well linked to the surrounding townships, different from creating settlements that are far away from existing systems such as transport system (CoJ, 2013). Another related policy is the SHSUP focus on areas where social infrastructure and services already exist or where capacity has become available easing the creation of sustainable human settlements (CoJ, 2013). In addition, the SHSUP also aims to provide and extend access to public transport and let public transport capacity guide the search for possible housing. Again this stems from the idea that the need for housing should be accompanied by already existing systems. These principles are accompanied by the City emphasis on creating areas that are well-located, well-served and comprise of aspects such as mixed-use and high density suited to accommodate complex socio-economic profiles (CoJ, 2013). As a result, the SHSUP aims to achieve significant delivery targets in terms of density, typology on small land parcels (CoJ, 2013). The idea of providing mixed typologies is guided by the City's principle that aims at facilitating the creation of quality, high density small and large scale accommodation catering for the full spectrum of income groups and curbs the costly urban sprawl (CoJ, 2013).

Moreover, the SHSUP introduces a new theme that has been largely ignored by housing policy which is to build on existing social networks / local support systems / safety nets and create communities with the strongest coping mechanisms. This principle is followed by the City's focus on facilitating a broad spectrum of financing options to assist movement up the housing ladder (CoJ, 2013). This signifies that the City's commitment of using housing as a way to alleviate poverty. This is based on the City's understanding that there is a need to create an enabling environment for sustainable livelihoods (CoJ, 2013). This forms part of the City fight to promote job creation and local economic development in all parts of the City by building on occurring local economies (e.g. Alexandra). The SHSUP also sees the necessity to acknowledge and manage informality within human settlements through responsive planning (CoJ, 2013).

2.4.3 Conclusion

Unlike the state policy, the City of Johannesburg seems to have taken a step further in terms of ensuring that there is a great link between people's livelihoods and settlements. This is based on the fact that the way in which the SHSUP is formulated. The plan is a clear example of a shift from providing just housing to providing human settlement because it focuses on a variety of aspects that are essential for the success of settlement. However, the main aim of this research is to identify if the link assumed by the City in the policies mentioned above works towards enriching beneficiaries of SHS, or if there is still a gap between the settlements designed by the City and people's survival strategies. Therefore, the following section provides a summary and develops a conceptual framework at which the findings in this research will be analysed based on the three themes identified in this chapter i.e. sustainable human settlements, sustainable livelihoods and state policy.

2.5 Conceptual framework

The conceptual framework is drawn from the overlapping aspects, themes concepts and variables of the sustainable livelihood and sustainable human settlement notions. Moreover, it tries to set out the way in which findings of this research will be analyzed. In addition, it also points out the presumed relationships between them. The aim of this conceptual framework is to point out what the research sets out to achieve. In summary, the research departs

from three key themes, namely the themes of sustainable human settlements, sustainable livelihoods and state policy. The research explores the relationship between sustainable human settlements as perceived by the state, and people's livelihood strategies.

There is a strong relationship between the notion of sustainable livelihoods and sustainable human settlements. It is important to note the overlapping aspects within these two notions whilst also acknowledging the distinction between them. The ways in which they overlap are important for analysing findings in chapter 5. The first key aspect for sustainable human settlement is the idea of location. This is important, especially given the history of providing housing in South Africa and the City of Johannesburg in general. The aspect of location focuses on where settlements are located. This aspect overlaps with the idea of social capital in the notion of sustainable livelihoods, whereby location has an impact on people's social networks and their ability to influence better livelihoods.

The second key aspect with overlapping features is the concept of physical infrastructure. In terms of sustainable human settlements it focuses on the infrastructure used to build houses and the components of the settlement as a whole, and in South Africa it has been reflected in the shift from quantity to quality houses.

Physical capital is extended in the notion of sustainable livelihood to focus on how or what basic infrastructure or goods are needed to support livelihoods. Moreover, the focus is on how the infrastructure will enable people to meet their basic needs in order to partake in everyday life.

Lastly, the notion of sustainable livelihoods comprises of financial capital as an important aspect. This is viewed as a capital that can be used for direct achievement of livelihood outcomes through purchasing or exchange but it remains difficult for the poor to access. However, this aspect also emerges in the notion of sustainable human settlement in different ways. For example it is core in the idea of well-located land which also comprises of various sub-aspects such as transportation and income generation all of which are guided by the idea of access to financial capital. Moreover, it also forms core of the idea of mixed

income whereby the assumption is that the concept of mixed income aids income generation by creating employment opportunities.

All of these overlapping aspects are used to describe findings and analyse findings in chapter 4 and 5 respectively. However, it is important to understand the definitions of the sustainable livelihood and sustainable human settlement notions. 'Sustainable livelihoods' focuses on people's daily lives whilst the sustainable human settlement notion focuses on how settlements can be ordered for a better future. However, the two notions possess similar aspects all of which are deemed essential for the conceptual framework as discussed above. The fact that these two notions overlap implies for me that sustainable human settlements are only sustainable if they cater for people's daily lives. As a result, for people to benefit from sustainable human settlements, the state has to arrange sustainable human settlements in a way that they are aligned with people's daily needs. The key to sustainable human settlements depends on sustainable livelihoods to be more specific people's daily strategies. In addition, people's actual strategies can give insight into the extent to which the settlement is aligned to needs.

To understand the aforementioned relationship I look in this research at state policy (and interview a state official) to get a clear understanding of sustainable human settlements from the state perspective. I then look at sustainable human settlements using South African literature to understand the main components that are part of defining sustainable human settlements. Using sustainable livelihood literature I interact with residents from Pennyville and explore how their lives are impacted by certain aspects of SHS. The goal of the research is to use the aforementioned concepts to understand how Pennyville as a new generation state housing programme is experienced as a sustainable human settlement. Furthermore, the intention is to understand how the conceptualisation of the area as a sustainable human settlement has contributed towards poverty alleviation through enabling sustainable livelihoods.

2.6 Position of the research in relation to the existing work

As stated above there is limited research on the relationship between the new housing policy and poverty alleviation. It still remains to be proven, if the new housing policy is in line with user's livelihood strategies. However, I cannot disregard the fact that this research is comparatively similar to Karina Landman's research published in 2010, titled *A home close to opportunities in South Africa: Top down vision or bottom up demand?*

Landman's (2010) research focus specifically on two components of sustainable human settlements, namely medium-density mixed housing and the location of these houses to opportunities. Her main intention is to 'investigate whether the promotion of greater proximity is a mere idealistic policy-driven vision based on international trends and political intentions or a response to the needs of residents and other key stakeholders' (Landman, 2010: 9). In other words, she tries to identify if ideas of medium-density mixed housing and greater proximity are balanced with the needs and preferences of people who live in these settlement (Landman, 2010). Thus her focus is on views of residents and other key stakeholders regarding the importance of the proximity of medium-density mixed housing developments to greater social and economic opportunities. In doing so she determines the relevance in terms of appropriateness and applicability of medium-density mixed housing developments in the country by determining factors that are considered necessary by residents.

Comparable to this research, her point of departure is that there have been limited studies on the social perceptions of people on medium-density mixed housing in South Africa. She further argues that there is a need for an in-depth understanding of their experiences and preferences regarding ideas surrounding medium density mixed housing. My point of departure also stems from user experiences and preferences however my focus is on their experiences in terms of how components making up settlement like Pennyville help improve their lives. I investigate the relationship between livelihood strategies and the settlement as identified as a SHS. The latter entails asking people how their everyday survival strategies have been maintained or enhanced by the settlement. Landman's (2010) research focuses on people's perspectives regarding ideas relating to SHS with specific focus on proximity of medium-

density mixed housing, with perhaps less attention to how those settlements have improved people's lives.

Nevertheless, this research uses Landman's findings as a point of departure and advance the focus by looking at the effect of SHS on people's lives. As a result, it is essential to outline some of the major findings of her research as they will later inform my research. Landman's (2010) research was divided into four parts: Importance of location and proximity, towards more inclusive cities and greater access, close proximity to socioeconomic opportunities, inclusion of communal facilities and services and she also looked at perspectives from other stakeholders i.e. developers and state officials.

Landman's concluding finding from the investigation on the idea of locating medium-density housing in closer proximity to opportunities is that it is '…not a mere idealistic planning vision promoted by national government and a select group of built environment professionals' (Landman, 2010:15) but that BNG's focus on the development of social and economic infrastructure is in line with the user needs and preferences of the residents in South Africa. As a result, I use the findings and go beyond to identify how Pennyville (one of Landman's case studies) as a sustainable human settlement has intersected with households or individual survival strategies thus playing a role on poverty alleviation.

In addition, different from the Landman's (2010) research, I depart somewhat from the conventional concept of sustainable human settlements in South Africa. Accordingly, I look at Pennyville as a sustainable human settlement in various dimensions and not narrowing it to a medium-density housing project as it is often by categorised. I focus on all the key aspects of sustainable human settlements though pay less attention to environmental concerns because of the scope and time given to do this research and also due to the reasons mentioned on the above sections. In addition, I examine the new housing policy (BNG) and how the chosen study area conforms to the principles in these documents. In addition, I use the concept of sustainable livelihoods to identify how the project has improved or hindered people's lives. This is achieved by understanding residents experience in terms of how they see/use and benefit from the study area.

In summary the main purpose of the research is to explore how people in Pennyville use these livelihoods capitals and assets, and how these intersect with the notion of SHS. The research explores how their practices of these capitals have been informed by the components deemed sustainable by the SA housing policy. Consequently this will involve identifying some gaps or benefits of the new housing policy and impacts it has on poverty alleviation.

Chapter 3: Introducing Pennyville

The following section looks closely into the chosen case study. It aims to situate Pennyville within the broader urban context of the City of Johannesburg and also locate it within its immediate surrounding regions/townships. In addition, the section aims to look in detail at all the descriptions that are associated with the settlement. These range from its location, the development process and the resultant product, assumed benefits or advantages, the facilities available, and Pennyville in relation to other mixed housing development (Cosmo City and Fleurhof) and policies that guided its development.

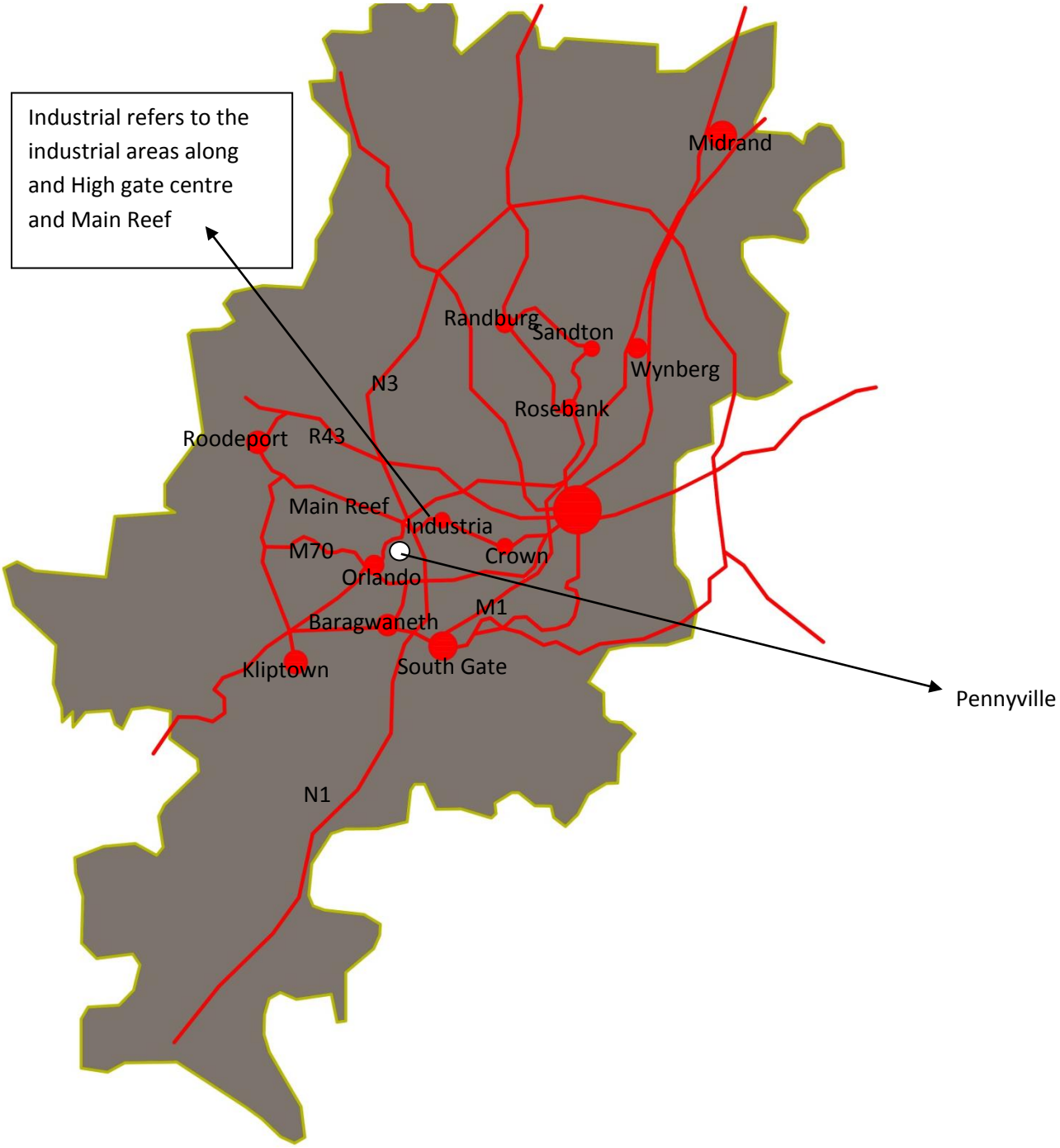
Pennyville is one of the few mixed housing developments that were inspired by the release of the BNG in 2004 (CalgroM3, 2014). To date only 26 mixed developments can be identified in Gauteng and these are seen to act as a way forward in addressing challenges of the historically divided society (DLGH, 2012). It is important to note that this shows the City's seriousness on the route to mixed development with a number of developments under planning and others under implementation. These developments are part of the Gauteng Provincial Government project for affordable rental units through social housing institutions, small-scale backyard rental programme and the construction of community residential Units (DLGH, 2012).

Most would argue that the route to mixed housing developments was influenced by the country's painful past and failure of the post 1994 government (Landman, 2012). However, it is important to note that the notion of mixed housing is a 21st century international concept with a number of countries having engaged on the same route that the City is following (Dube, 2013). As a result, South Africa has also followed the same planning trend as outlined in the BNG but in the name of redressing the apartheid injustices. Sometimes termed New Urbanism, mixed development favours the creation of more diverse places and represents a move towards sustainable neighbourhoods and cities (Landman, 2012).

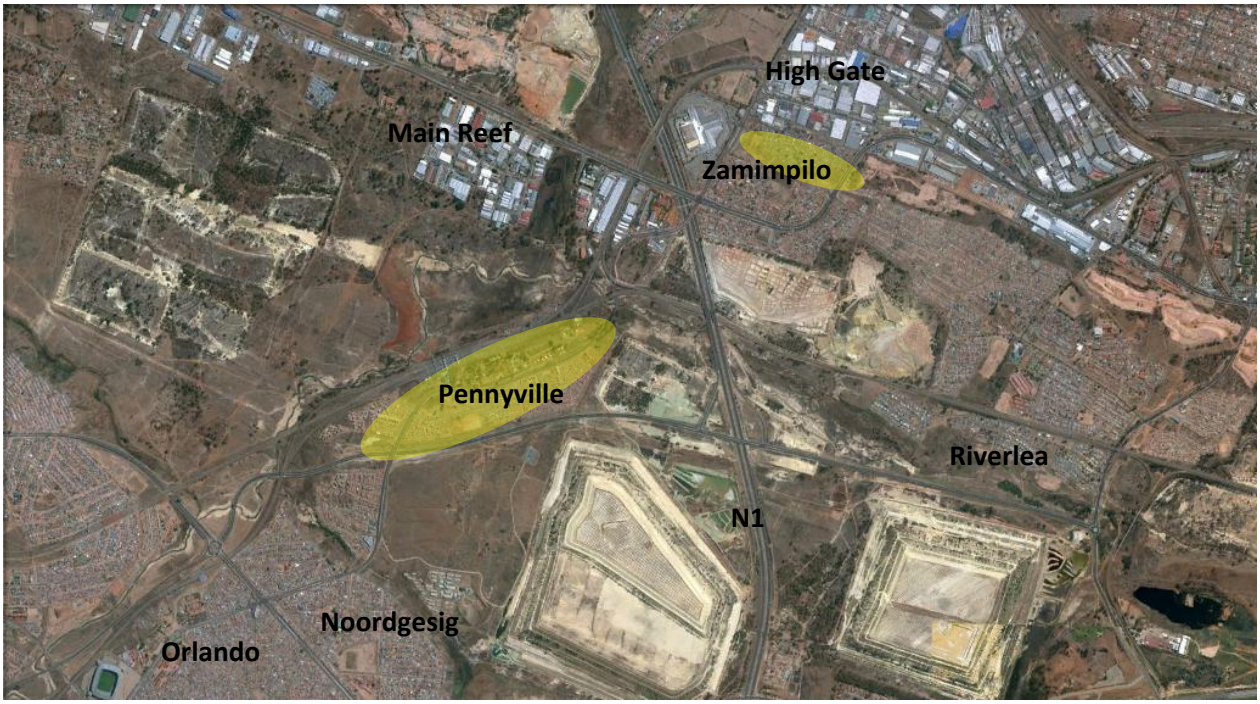
Pennyville is considered to be a sustainable human settlement and is sometimes referred to as a mixed housing development. The term 'mixed development' can be associated with various descriptions, a settlement can be considered to be a mixed development based on the type of mix ranging from 'housing or tenure

types, a mix of income groups, a mix of social groups and land uses…' (Landman, 2012: 52). Some developments comprise of a larger socio-spatial mix with all of the aforementioned types of mix. Pennyville serves as a great example of a mixed development. However it should be noted that Pennyville does not comprise of all the different types of mixes but it is classified as a mixed development mainly because it consist of the following types of mix: a mix of tenure types, a mix in income groups and a mix of social groups (Landman, 2012). Therefore, it does not comprise of mixed land use in a planned sense but to a lesser extent it has developed to comprise of unplanned mixed land uses. Moreover, accessibility is at the core of mixed housing developments and through its location Pennyville is assumed to have met and addressed the issue of accessibility (CalgroM3, 2014). However, it is important to note that the project was initially conceived to be only free-standing, fully subsidized units (BNG-type), but the changes in housing policy and discourse influenced the change to an integrated development and it was informed by the realization of the benefits associated with social rental units (PDG, 2011). The City was moving toward the route that social rental housing is more viable (PDG, 2011).

Locating Pennyville within the City of Johannesburg Figure 1



Locating Pennyville Figure 1.1



3.1 Locating Pennyville

As illustrated by figure 1 and 1.1, Pennyville is located south of Roodepoort in south-western Johannesburg (CalgroM3, 2014). It lies along New Canada Road just south of the major railway line that connects the Johannesburg CBD with Soweto (CalgroM3, 2014). The 100ha site is 7km south west of the Johannesburg CBD. It also lies on the main BRT route linking the City of Johannesburg with Soweto (Dube, 2013). Moreover, it is also adjacent to the New Canada train station. Similar to Fleurhof Township it is situated centrally in terms of the transport networks, major highway routes are the N1, N17, Main Reef road, and Soweto highway, hence it has been praised for being a highly accessible location (CalgroM3, 2014).

The land was bought by a private developer in 2006, but development was hindered by rules against the use of subsidies on privately-owned land (CalgroM3, 2014). However, an agreement of land exchange was reached by the City and the developer, the site was exchanged for one in near Riverlea previously owned by the City (PDG, 2011). At the end the land was transferred to the City, with the developer having rights to develop and transfer the property to subsidy beneficiaries (PDG, 2011). Moreover, the relationship

between the two parties resulted in market rental units being sold to the developer at an assessed market value (PDG, 2011).

Construction on the site started in September 2006, with bulk and internal services being constructed at the same time (Gauteng Human Settlements, 2014). The top-structure construction started immediately after the conclusion of the land sale in January 2007 (Dube, 2013). The first units were completed and handed over to beneficiaries in December 2007. In addition, the last phase of the construction process was completed in May 2011 with rumours of the next phase to begin soon on the surrounding open space (PDG, 2011).

The aim of the development was to eradicate the Zamimpilo informal settlement (shown in figure 1.1) with 1 600 RDP units allocated for people from the settlement (Joshco, 2011). Moreover, Pennyville also provided housing opportunities for backyard dwellers from Orlando East, other beneficiaries include backyard dwellers from Riverlea, Noordgesig and Wesbury (Shown in figure 1.1) (Calgro M3, 2014) this was achieved through the City's partnership with private companies (Dube, 2013). As a public private partnership the project comprised of a partnership between the City of Johannesburg and the Pennyville Zamimpilo Relocation Pty Ltd, a company which is part of Calgro M3 and the ABSA group (CalgroM3, 2011). In addition, the Johannesburg Social Housing Company (Joshco) also forms part of the partnership and managed to acquire rental units.

3.2 Typologies in Pennyville

Figure 2 below shows the overall spread of typologies and relationship with different institutions in terms of funding and development (CoJ, 2010).

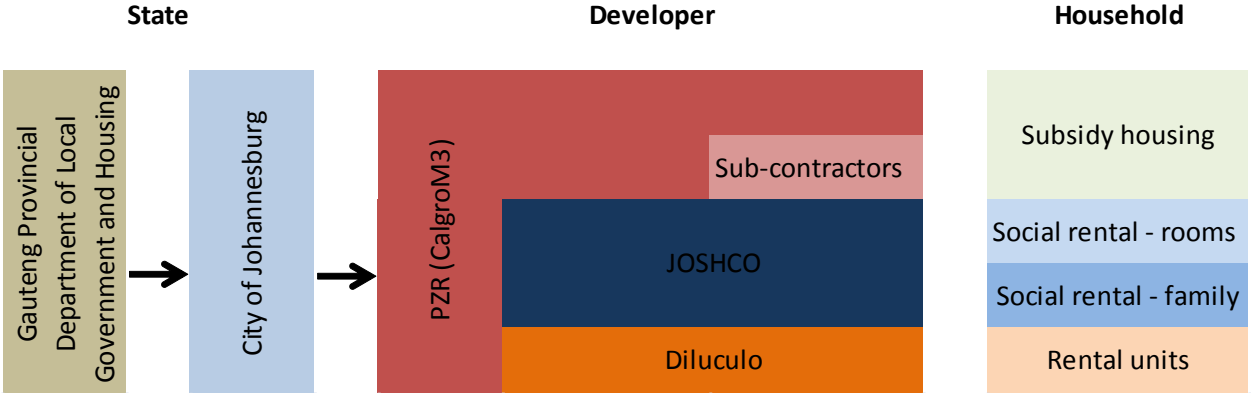


Figure 2 Typologies and Institutions (CalgroM3, 2014)

First are the fully subsidized units. These units are provided at no cost and are funded by the City of Johannesburg (Landman, 2012). These are the RDP units which house people with minimal salaries included in the range of R0-R3500 p/m (CalgroM3, 2014) and have been mainly allocated for people who were staying at the targeted informal settlements. Secondly are the partially subsidized units (Landman, 2012). These units include Finance Linked Individual Subsidy Programme (FLISP), Social and Rental Units. The FLISP units in particular are either privately funded and/or through financial development organizations such as the 'Social Housing Regulatory Authority (SHRA)', 'Johannesburg Property Fund (JPF)' or the 'National Housing Finance Corporation (NHFC) (CalgroM3, 2014). Lastly are the fully bonded units, these are provided through private finance institutions and where the buyer applies for a bond in his/her own private capacity (Gauteng Human Settlements, 2014)

The Pennyville project delivered 3 200 housing units, of which 1 600 are RDP houses (subsidized by the government), 800 are credit-linked units owned by Diluculo Properties a division of ABSA commercial Property, 600 apartments for rental accommodation are owned by the Johannesburg Social Housing Company , 200 rental units are owned by Joshco (PDG, 2011). This illustrate the mix of tenure accommodated in Pennyville, including private ownership for very low-income households (through subsidized RDP houses), private ownership for low to middle-income households (through affordable credit-linked housing) and rental social housing units. The comprehensiveness of the project can be spotted from various attempts by the City to make it inclusionary as much as possible, with 200 Joshco rental rooms built to accommodate families from Zamimpilo that did not qualify for a housing subsidy, earning between R3 500 and R7 000 per month (CoJ, 2010). The 800 middle and high income rental units were aimed to benefit households with incomes between R3 500 and R15 000 a month (Calgro M3, 2011).

The fully subsidized units have a 'fairly high specification including tiled roofs, which added approximately R5 000 per unit to the basic cost of the minimum BNG house' (PDG, 2011: 5). This decision was guided by the need to increase the attractiveness of the rental units (PDG, 2011). The cost of the walk-up stories was lessened by savings made on infrastructure and this resulted in walk-up stories' total package costing lower than single-standing units (PDG,

2011). The single rental rooms were essentially the same unit layout as the 36m² two bedrooms fully subsidized walk-up units, but with the lounge area converted into a third rental room, with a shared kitchen and bathroom for the three rooms (Gauteng Human Settlements, 2014; PDG, 2011).

Joshco secured the three roomed units for R80 000 per unit. Initially, rooms were rented out at R250 per month but due to demand the rent escalated to R284 per month (PDG, 2011). So within three years this rental has escalated to R284 per month (PDG, 2011). The three roomed units were developed to cater for those who were renting shacks in Zamimpilo informal settlements and meet the requirements for Joshco social (PDG, 2011). It was later discovered that that the Joshco single rooms in Pennyville provided full services at a cheaper price compared to a shack in Zamimpilo (PDG, 2011).

The 43m² family social housing rentals included landscaping and security measures and they were built at a cost of R205 000 and rented out at R1 500 (PDG, 2011). The result was that they were of a higher specification, but R600 per month cheaper than the market rental units (PDG, 2011). This was due to Joshco's requirement which limited the target market (PDG, 2011). Applications were received from individuals and households earning up to R14 000 per month (PDG, 2011). Landlords, 'understandably, accepted the applications from the highest income earners, who represented a much more secure income stream' (PDG, 2011: 5).

Pennyville development was intended to eradicate the Zamimpilo informal settlement (PDG, 2011). However, the informal settlement still remains to date although it is at a smaller size (PDG, 2011). This is largely due to the fact that Pennyville accommodated those who qualified for RDP houses and those who did not qualify remained. The project was funded by the provincial housing subsidies with the City of Johannesburg also contributing to bridge and subsidise on the completion of the project (PDG, 2011.)

3.3 Available components in Pennyville

As a sustainable human settlement Pennyville comprises of different component that are essential to describe. In addition, the project is close to a major shopping centre (the High-Gate Centre) and industrial areas (Department of Housing, 2014) as illustrated in figure 1 and 1.1. On-site facilities and amenities include sports facilities, schools and a crèche (DLGH, 2012). This enhances greater access to a range of socioeconomic opportunities. 'There is also a commitment from the provincial departments of health and education to build a school and a clinic. The construction will begin this year, 2008, and be completed in late 2009' (Masondo, 2007). The quote above stems from the state of the City address on the 11th September 2008 by the executive mayor of Johannesburg thus symbolising the City's commitment to the creation of sustainable settlements.

Pennyville also has of a police station, upgraded during the development of the area (CalgroM3, 2011). In addition, it comprises of a crèche developed and donated by Pennyville Zamimpilo Relocation (a subsidiary of Calgro M3 and Absa Group), in support of the City's Early Child Development Programme at a cost of R3, 9 million (CalgroM3, 2011; Dube, 2013; CoJ, 2014). The crèche has four classrooms, an office, kitchen, activity room, sick room and two sets of bathrooms for the children (PDG, 2011). The City also provided a satellite library service that aims to provide the local community with much-needed books (CoJ, 2014).

Transport has been noted as an important element in all urban models. Transportation networks can be seen as the intricate stitch of the urban fabric of all cities. It is imperative that these networks allow easy accessibility to places of work and interest (CalgroM3, 2014). With that being said, beside the availability of the taxis, buses and railway station Pennyville has been blessed with the completion of 'Phase 1B of the Rea Vaya runs from Soweto and passes Noordgesig, New Canada, Pennyville, Bosmont, Coronationville, Newclare, Westbury, Westdene, Melville, Auckland Park and Parktown to link up with the Johannesburg Central Business District' (Gibbs, 2013: 1). The Gauteng Premier Nomvula Mokonyane said 'transport was contributing to the development of a non-racial society's (Gibbs, 2013:1).

Moreover, the place has included the usage of design principles in its design, and urban design has played a major role in the positioning and situation of amenities as illustrated by figure 3. Nodal areas like schools, crèches and parks were situated in close proximity to residents (Dube, 2013). All these amenities are thought to be within walking distance to all residents.

As a key aspect to the survival of people, infrastructure development is imperative in township developments. With the past being used as a key reference, the quality of infrastructure has improve in new housing developments (CoJ, 2010). For Pennyville as a Greenfield development, some bulk infrastructure was required to service the site, this included a bulk water connection, an outfall sewer, the main bus route through Pennyville, a pedestrian bridge (located in figure 3) and some preliminary earthworks (PDG, 2011). These were budgeted for and paid for by the City through their MIG budget (PDG, 2011). To minimize health issues (with dust the main concern) as Pennyville is situated next to a mine dump the City worked with DRD Gold SA, Crown and Harmony mines to green and rehabilitate the tailings of the mine dumps (Landman, 2012).

3.4 Perceived advantages of the area

There are a number of benefits that have been ascribed to the way in which settlements like Pennyville are designed. These include the following: it is thought that the different typologies offered by the settlement enable people to move up tiers by creating additional employment opportunities through higher disposal income in the area or high tax base (CalgroM3, 2014). Moreover, the higher the tax base the simpler it is to attract other business activities or to a certain extent force improved service delivery (CalgroM3, 2014). In other words, it acts as a ladder enabling people to move from the 'second economy' to the 'first economy' and once this happens people will be able to gain better place once they earn higher salary (CoJ, 2010). Moreover, these removes the stigma that has long been associated with RDP housing units since they are all integrated. Places like Pennyville have been praised by the City for the level of integration in terms of social, racial, and financial aspects. The way these settlements are laid out has played a major role in making sure that no stereotypes are attached to certain extensions (CalgroM3, 2014).

In addition, it is assumed that due to the way in which these settlements are designed, there is no room for security issues since the design allows for constant eyes on the street (Landman, 2012). The courtyards availed by the designs are also assumed to allow people to conglomerate within the courtyards (CalgroM3, 2014). By mixing the typologies, people are not easily led to any criminal activities or gangsterism and it also acts as a move away from the way in which hostels or RPD housing units were developed in the past (CalgroM3, 2014). Each unit adheres to the South African National Standard Regulation 10400 which allows units to be energy efficient as well as insulated from the elements (CalgroM3, 2014).

The way in which Pennyville was developed illustrates the importance of integration between the City and private developers. Pennyville also serves as an example of how a sustainable human settlement can be developed by the City in partnership with the private sector. The provision of different aspects such as social facilities (such as a park, crèche and a police station), variety of transport modes and different typologies fits the description of a sustainable human settlement. One can assume that this contribute positively on people's daily lives in Pennyville.

Moreover, it is also important to mention the policies or strategies that are supposedly to have guided the development of Pennyville. These include Gauteng Growth and Development Strategy, City of Johannesburg 2030, housing sector plan all of which were formulated on the basis on BNG in terms of housing in South Africa. However, the key objective is 'the creation of a vibrant human settlement that conforms to the BNG principles as contained in the National Department of Corporate Governance' (CalgroM3, 2014: 27). Moreover, new developments such as Fleurhof[4] comprise of certain aspects or decision making slightly informed by lessons learnt from the development of Pennyville (CalgroM3, 2011). With the most highlighted lesson for the development being that the integrated spread of income groups in Pennyville was wrong, as there were more subsidy beneficiaries than rate payers. From a private developer's position the spread of Pennyville '… Took prime land and gave it to those who were getting it free' (CalrgoM3, 2011: 8). Thus, although Pennyville is similar to

[4]The Fleurhof Mixed-Income Housing Development Project is a transit-oriented mixed-income development project nestled along the Main Reef Road, 13 km west of the Johannesburg Central Business District (Department of Housing, 2014)

settlements like Cosmo City and Fleurhof, there are distinct elements that can be extracted that make it different and somehow special. These include the multi-storey RDP units in Pennyville which have proved to the City that they are easily manageable compared to other typologies (Landman, 2012). This is based on the fact that Pennyville is dominated by RDP houses, which is not ideal for developers as indicated by the above quote. As a result, it is necessary to find the right balance when designing a mixed development that consists of RDP houses. These new unit typologies are thought by both the City and developers to be a great step toward housing delivery in the city (CalgroM3, 2011).

Chapter 4: Exploring Experiences of People's lives in Pennyville

The following chapter presents the findings of the fieldwork i.e. it outlines the experiences of Pennyville residents. People's experiences were explored with respect to various components that are attributed to the concept of sustainable human settlements in South Africa. These include location, transportation, access to basic and social facilities, physical infrastructure, proximity to mixed incomes, income generation, and safety and security. As explained in the methodology section, every aspects of this research is understood in three categories firstly, RDP owners, secondly those occupying social housing and lastly residents experiences are related to the overall state's perspective in terms of policy. This is discussed in the following chapter. This chapter outlines findings from RDP house owners and social housing tenants.

4.1 Location

In South Africa sustainable human settlements are evaluated mainly based on their location due to the painful past endured by the country coupled with the perceived failure of the post-1994 housing policy. The term location was used as a main critique in criticizing the first phase (1994-2004) of the democratic state housing provision. More recent state projects have been praised for their change in location, making it very important for this research to understand what location means for users. The research was interested in what the envisaged locational advantages in the area are and exploring how they have translated into people's lives. Moreover, it was important to understand how people living in Pennyville describe their change in location, since many of them come from different locations. It was also essential to understand the reasons behind people occupying social housing in the area.

RDP owners staying in Pennyville come from three different locations, Zamimpilo informal settlement, backyard dwellers from Orlando and Riverlea as shown on chapter 3 figure 1.1. Therefore, it was interesting to investigate what they see as the value of their current location and how the change in location has contributed into their lives. The important thing to understand in this case is that unlike those renting social housing, RDP owners especially those that are poor have no choice besides staying in their current location.

For those interviewed who were relocated to Pennyville by the government as discussed in chapter 3, only a few have raised the importance of the location in their lives when invited to comment as follows.

Is Pennyville closer to social and economic opportunities?

'... We have a park and kids play there and it is also a place to relax….. There is a crèche where my daughter goes and it is close to the park making it easy for kids to play…. For job opportunities I think the place is close to industries [Main Reef] but there are many people here that are unemployed so it is hard to say but at least here we have our own houses'. (Michael 2014, interview 27 June)

The above quote highlights the fact that occasionally it is not only about the location but only just a stable place where people can be able to generate their own income without being at the wrong side of the law.

Moreover, one RDP owner indicated that the change in location has disrupted the social networks and the possibility of income generation (Nyanda 2014, interview 11 July). Although the change in location cannot be regarded as the only reason why the resident has lost the job it nonetheless highlights the importance of the ties people create that were disrupted when they move to new location. The research identified that a number of RDP owners had developed strong ties with their previous location but nonetheless RDP owners were desperate for a proper place to stay. For example residents chose to move from Zamimpilo informal settlement which would be considered to be closer to the city to Pennyville which is further when compared to Zamimpilo. In addition, since moving to Pennyville one of the residents (Nyanda 2014, interview 11 July) indicated that her social networks that were disrupted and these were essential for her survival. However, one household (Kyles 2014, interview 12 July) indicated that Pennyville remains a large part of their social networks mentioning that what changed is that their social networks are connected through modes of transport imposing travelling fees for strengthening social networks.

Moreover, the overall response from the different RDP owners interviewed (i.e. those who were previously staying in Zamimpilo informal settlement, backyard shacks in Orlando and Riverlea) indicates that a strong relation with the

surrounding existed in their previous locations (for example working and trading) (Ricky 2014, interview 11 July). (For those who were previously staying in Riverlea) the change in location has not only led to a new house but also a new racial distribution which due to our country's past is associated with many political concerns. Hence one interviewee specifically stated that the relocation has discontinued their social networks and the availability of part-time jobs (Kyles 2014, Interview 12 July).

Social housing tenants have raised different reasons as to why they chose to stay in Pennyville. The reasons range from personal family issues to those linked to the location of Pennyville. What was clear through observation is that social housing tenants seemed to be people starting new families with one or two children. It was interesting to find that there are various reasons that dominate the idea behind people choosing to rent in Pennyville. The first reason was that Pennyville was at the centre of their social networks and their place of work, making it easy for them to navigate between their social life and work (Zwone 2014, interview 11 July). The second reasons, is that some specifically indicated that they did not qualify for a house whilst at the same time there was a need for a bigger place as they were just starting families (Richard 2014, interview 28 June). The last reason is that people needed to be independent and away from their families to places where they will have their own privacy and be a 'man' (Zwone 2014, interview 11 July). It is important to note that a number of reasons do not relate to the idea of Pennyville with respect to the City's conceptualization.

> *'Before I moved to Pennyville, I was staying in Freedom Park close to Roodeport and I paid R3500 for one bedroom. So when I lost my job I looked at the rent here and it is was two bedrooms for R2500, way cheaper and also the baby was on the way' (Nzulu 2014, interview 11 July).*

The quote above indicates two reasons behind social housing occupant's choosing Pennyville because it was cheaper when compared to their previous locations especially after losing their jobs and it catered for their expanding household (Nyanda 2014, interview 11 July).

Why did you choose Pennyville?

'Because Pennyville is close to where I work, sometimes I run to work because it is not far. But the main reason is that I wanted to be alone. At first I moved to zone 3 meadowlands and rented' (Zwone 2014, interview 11 July).

Some social housing occupants saw Pennyville as being closer to their place of work as indicated by the above quote. Moreover, tenants indicated the proximity to their place of work meant that they could walk to work (Zwone 2014, interview 11 July).

4.2 Transport

The idea of location is also correlated with the concept of better access to public transportation. Thus the research also investigated how the access to public transport facilities has translated into people's lives. The main idea was to outline the different types of transport modes available in the area, understand how they are used by people resulting in understanding how the available of public transported translates into residents' lives. Through the research it was discovered that there are four types of public transport modes in the area all of which residents use for different reasons with private transport also another mode of transport used by residents. The main idea of the investigation was to understand the main reason why certain people would use a certain type of public transport and not the other. This entails understanding the type of transport used by both typologies i.e. those owning RDP units and those staying at the social housing.

Of the four different types of public transport, residents indicated Putco buses as the least used. This is due to the fact that workers or residents in Pennyville have discounted this mode of transport, citing issues such as that *'the bus always gets to Pennyville full during peak hours'* (Nancy 2014, interview 12 July).

> *'…. only Putco can take you to Randburg straight. The problem is that when it gets here it is already full' (Eric 2014, interview 28 June).*

The above quote indicates that residents classify Putco buses as the only mode that would provide residents with an option to travel directly to places of work

such as Sandton and Rosebank without travelling via Johannesburg CBD. From the interviews conducted not many residents have cited this issue of full Putco buses, stating that it is the reason behind their high cost of travelling to work.

The second least used of the four modes of transport is the Rea Vaya buses. From the City's point of view one would expect Rea Vaya buses to be amongst the most used transport mode in the area but residents cited a number of issues leading to the limited usage of the Rea Vaya buses. Of the seven interviews of residents staying in RDP units, they highlighted that they have never used it and only a few from social housing have used it. However, those from social housing who have used the buses later moved to using taxis. Moreover, residents from both RDP and social housing all cited similar reasons as to why they prefer other modes of transport. These reasons include the disconnection with the taxi ranks when the Rea Vaya gets to the Central Business District in Johannesburg. The following is a quote from one of the interviews for reasons behind not using the Rea Vaya

> *'Because Rea Vaya stations are far from taxi ranks and there is no Rea Vaya that goes to Alexandra so I will have to walk to MTN to catch a taxi' (Nancy 2014, interview 28 June)*

From the above quote it is important to note that this might change when the Rea Vaya start to go down Louis Botha Avenue. Nonetheless the current setup of the Rea Vaya remains a problem as indicated by the quote above.

Other reason given by those who are unemployed is that Rea Vaya is only busy during peak hours and at other hours one would have to wait an hour to catch a bus (Ricky 2014, interview 11 July). Moreover, residents indicated that the Rea Vaya was expensive and that they would not afford both the taxi and Rea Vaya as it would harm their financial situation (Nyanda 2014, interview 11 July). However, it is important to acknowledge that the availability of diverse transport in the area has managed to boost the options available for residents. Availability of options enables residents to manoeuvre around different modes of transports for various reasons. Therefore, with income as the main issue, the interviewees staying in the RDP houses have pointed out that they use the train because they feel they have no choice and it is the only transport mode that enables them to have extra money to use for other needs (Nyanda 2014, interview 11 July).

For those renting, none of the interviewees indicated that they have used the train, indicating factors such as that both the train and train station gets scary-full during peak hours, referring to the fact that New Canada is a change station (Lesedi 2014, interview 27 June). However, this might be seen as an advantage for those using the train as once they board the train there they are less likely to change to another train along the way. However, the train remains a very important strategy for those looking to save money, but safety issues have led to parents from both typologies to organize a different mode for children as the train is not safe for children especially during peak hours (Nancy 2014, interview 28 June).

According to the interviews taxis are the most used transport mode in the area. Residents from both RDP and flats have indicated the taxi as their preferred mode of transport. The interesting part is that planners would naturally assume that the taxis are used by social housing occupants only based on their financial situation, but from the interviews conducted one can deduce that the taxis are the most dominant mode of transport in the area, and they are substantially used by both RDP owners and flats tenants, although residents have stated that it is expensive compared to the train.

> *'….and [you would think]your kids would have to use Rea Vaya or Train as they are the cheapest but you can't have your kid use the train, the train is not safe. And that means that you are forced to have money for a taxi' (Lesedi 2014, interview 27 June).*

The above quote indicates that taxis are seen as the only reliable and available solution to accessing services such as schools, clinics and police station. They are seen as a safer and a convenient mode of transport in the area especially for younger children that have to go to school. However affordability is a big issue as respondents indicated had to leave some of their children at home as they could not afford to live with them at Pennyville. They left them back at 'home' which in this case meant places as close as Soweto and as far as provinces such as Limpopo and Mpumalanga.

4.3 Access to basic and social facilities

Access to basic and social facilities has also been seen as a very important component of sustainable human settlements since the shift to BNG. As indicated in chapter 2 social and basic facilities can be defined as the benefits or facilities such as education, health care, police station and recreational areas provided by a government to or available in a settlement (DFID, 1999). Thus the research focused on understanding the types of facilities that people have access to, how they access these facilities and how these facilities translates into their lives. Generally the area lacks a number of important facilities as already noted by Landman (2010). Thus this research was also interested in understanding how people manage with the lack of various services and how these strategies differ within tenure options identified in the area. Residents pointed out the park and the police station as the only important social facilities available in the area, indicating that the area lacks public facilities such as schools and clinics. Landman (2010) confirms that settlements like Pennyville lack access to public facilities. Landman (2010) notes that access to these services or facilities is important as they appear to be related to a feeling of inclusion.

The lack of facilities has been cited as a major problem especially for those who are unemployed. Residents staying in the RDP houses have specifically stated that they have to use money or walk an estimated two kilometres or less to access facilities such as clinics, shops and schools. To get around the issue of lack of access to facilities such as schools, households RDP house owner have opted to leaving their older children at 'home' i.e. have them live elsewhere (Ricky 2014, interview 11 July). Others have managed to send their children to schools in neighbouring townships although indicating that that it puts a strain on their financial situation (Nancy 2014, interview 27 June). Moreover, children have been subjected to walking to the schools in the neighbouring townships and while other parents indicated that the issue of income has led to them subjecting their children to using the train that is considered not safe for a child. In addition, parents stated that allowing their children to use the train was related to their child's age as illustrated by the quote below.

> *'….the other one is 10 years old and I have to find money for her to catch a taxi, the older is 17 years old and uses a train. So it makes things easier sometimes (Nyanda 2014, interview 11 July)*

However, the issue of lack of social and basic facilities affects households differently, with a few social housing occupants opting to send their children to private schools indicating their financial muscles (Rolivhuwa 2014, interview 12 July). This indicates that the lack of facilities is not a concern for those with high income as they can afford for example medical aids or can use their cars to access shops or clinics (Rolivhuwa 2014, interview 12 July). People renting have also indicated that it simpler for them to send their children to schools that are not from the neighbouring townships as they are able to drop them off and pick them up after school using their private cars as they go and come back from work (Tami 2014, 12 July). Moreover, the lack of facilities such as community halls has forced people to hold events on lost spaces and roads. In addition, the park has become more of a public space to hold community meetings. It has also become a valuable space for both children and adult.

Although the area has a good park, the area lacks playing grounds such as soccer fields or netball courts, with residents pointing out that the area does not cater for youth activities which are essential for community development or combating crime. However, both residents from RDPs and flats have managed to create their own strategies which include going into the surrounding townships such as Orlando to access soccer fields but the cost of the strategy has minimized how residents engage in such activities (Zwone 2014, interview 11 July). However, the availability of different types of transport has managed to integrate the area with the surrounding services such as schools, clinics and police station. Lack of access to facilities is a problem for those unemployed as they have to walk to access these services. Moreover, there were different perceptions when it came to the highly praised park in Pennyville. Residents in Pennyville phase one saw the park as an important component of the area, stating that it provides their children with a place to play and others stating that they do not need to stress about paying fees to take their children to the crèche while they are still young as there is a place to play. Residents from Phase 2 stated that the park was designed in a way that requires their children to cross the dangerous four-way road as they think the pedestrian crossing was meant connect the train station with Phase 1. The phases of Pennyville are illustrated in chapter 3 figure 3.

4.4 Income generation

The reason for introducing the BNG was also marked by the need to enable the possibility of beneficiaries generating income. Thus the research questions were set out in a way that will discover how the generation of income relate to the area, and how the area has enable those without income to survive. In other words I was interested in exploring how people generate income, how the generation of income relates to Pennyville as a sustainable human settlement. It was interesting to identify the differences in income generation between the different households in the area i.e. RDP owners and flats tenants

For RDP owners, one key issue that was prevalent is that the need to travel to places of work was a major factor in determining amount of income households had at their disposal for survival at the end of the month. In addition, the need to seek out money to travel to access facilities such as clinics and schools was also a major factor. One RDP house owner (Michael 2014, interview 27 June) stated that his situation was worse than before as he had to spend a lot of money sending his daughter with eye problems to a special school based in Johannesburg CBD, and currently spend R750 compared to R450 from the previous location for transporting before including school fees costing R2000 per month. Moreover, the ineffectiveness of the train as a transport mode leaves the poor with no option besides spending as much as R50 per day to travel to work (Michael 2014, interview 27 June). Therefore, it is safe to state that income generation is at times debilitated by the need to travel as many people are working in places as far as Randburg and Cosmo City.

For the residents interviewed from RDP houses, a few indicated they had jobs, with those unemployed pointing out that they mostly depend on their social networks for survival which surprisingly extends to rural villages in other provinces as illustrated by the quote below.

> *'I depend on grant money…..and relatives from back home (Free State) to send me money' (Nyanda 2014, interview 11 July)*

Moreover, others pointed out that they depend on grants for survival with some pointing out that there are a high number of disabled people in the area staying in the RDP units. One of the interviewee assumed and attributed the high number of disabled people to the criteria used by the City to allocate RDP houses

(Kyles 2014, interview 12 July) In addition, it was interesting to identify that the strong relationship between the two different typologies in the area has managed to create opportunities for the unemployed. A great number of people staying in the RDP units are seen to be unemployed (Eric 2014, interview 28 June) and thus many of them have opted for constructing backyards rooms and spaza shops to generate income and this ultimately strengthened the relationship between RDP owners and flats tenants.

> ***What other opportunities would you say Pennyville offers for you as a resident?***
>
> *'[Unlike in Zamimpilo here] I don't have a problem with the police because I have the spaza, car wash and barber shop in my own yard'. (Ricky 2014, interview 11 July)*

The above quote indicates the impact that having your own house or yard can contribute towards Poverty alleviation. Ironically there are other informal businesses that can struggle to function in a more formal area such as Pennyville compared to informal area.

Moreover, the state's programmes such as Expanded Public Works Programmes (EPWPs) also enabled people to get part time jobs in Pennyville with one interview pointing out that it has provided him with one month employment. However the politics surrounding EPWPs in the area has made the issue of unemployment worse for others. Residents claimed that this is due to the fact that employment surrounding EPWPs is controlled by ANC officials (Eric 2014, interview 28 June).

For social housing households, income generation is not an issue because a bank statement was required to get a lease, indicating the stronger financial muscles of social housing occupants. Therefore, all people staying in the social housing flats that were interviewed have jobs. As a result, they are able to create opportunities for those that are unemployed in the area. It was also interesting to find out that there are tenants that are sharing the flats as a way to minimize the extent of the financial burden of the rent.

> ***Are you sharing the apartment?***

'Yes it is two bedroom apartment, and we share it and divided the rent and we each pay one point one' (Zwone 2014, interview 11 July).

Why did you decide to share?

'Because the rent is expensive R2200 and then for new people I think it is R2700 hard luck for them. For us people that have been staying here they just increased it to R2200 it used to be R2000' (Zwone 2014, interview 11 July).

The above quotes indicate that flats in Pennyville are not only occupied by families or high income earner, but also low income earners sharing apartments to make it affordable. Moreover, travel time for both RDP owners and flats tenants ranges from a 10 minutes' drive to 2 hours and the price of the transportation has been a factor in terms of net income earned, with travelling costs ranging from as little as R15 to R50 return.

4.5 Physical infrastructure (Energy, Water, Sewerage etc.)

Physical infrastructure is another important component of sustainable human settlement. Its conceptualization has changed in South African housing policy for example the size of the yard has evolved from what was once a 25m^2 to what is considerable a better size between 36m^2 and 40m^2 (Charlton and Kihato, 2006).Therefore it was essential to understand how the physical infrastructure provided in Pennyville translates into people's lives. The research in this regard focused on understanding the kinds of infrastructure people have access to, and how they use these infrastructures. However, it was important to note that RDP owners and social housing tenants have access to different types of physical infrastructure these include water, sewerage, physical house structure, electricity and solar geysers. The infrastructure discussed ranged from: size of the house, size of the yard, solar geysers, water and electricity.

The size of the house was indicated as a major factor behind parents leaving some of their children with their grandparents while they stayed with two or one children to avoid issues regarding space. Others also indicated that the size is not enough to put in furniture. Moreover, rooms like the kitchen are so small that owners can only use a two plate stoves. Therefore, issues raised with regard to the size of the yard were largely related to owners making changes to

the house. The recent findings from a study conducted in Soweto indicated that owners make changes to the houses and the main factors that influenced households to make changes include basic maintenance and needing more space (Eighty20, 2014).

Pennyville produced similar results as RDP housing owners indicated that their efforts to extend the house are hindered by the small yard. This made it difficult for owners to sometimes find parking space for their cars as the car cannot fit within the space considered their erf. The smaller yard has also made it difficult for owners to provide safety for their property and family as some don't have enough space to construct security walls or even washing lines leading to them engaging in strategies that include good communication between neighbours or flats tenants to share things like parking or washing lines.

Moreover, the state infrastructure provided in the area includes solar geysers. However, a few RDP owners have indicated that although the solar geysers are a great idea, the quality of the ones installed in Pennyville are poor and thus malfunction all the time (Lesedi 2014, interview 27 June). In addition, interviewees claimed that the City Power official hired to fix the geysers now requires incentives to fix them immediately or people have to strike in order for them to be recognized by the City Power electrician (Kyles 2014, interview 12 July). Interestingly, one interviewee with knowledge has managed to strategize to fix his geyser. As indicated below:

> *'I am lucky because they stopped installing the meters at my neighbour's house and since then they have not yet comeback to install in other houses….' (Nyanda 2014, interview 11 July)*

Water and electricity are supposed to be bought by RDP owners. However, a few from both typologies have engaged in activities such as illegal connections to avoid paying electricity. With regard to water, many RDP house owners are lucky that the state is yet to finish installing water meters, meaning that they do not buy water yet and they have included this as one of their strategies for survival. One interviewee specifically stated that he has taken advantage of the free water by opening a car wash (Ricky 2014, interview 11 July). It was not clear if this was a strategy from the City but the failure to install water meters has been an advantage for RDP owners. However, those that are buying water have

indicated that it is affordable especially based on the fact that they are able to live on the 6000 free litres.

For social housing tenants, they indicated that they do not buy water separately stating that it is included in their monthly rent (Eric 2014, interview 28 June). In addition, it was interesting to find out that electricity was expensive leading to some of the residents from both typologies to rely in illegal connections as a strategy to avoid buying electricity. In addition flats tenants indicated that they spend close to R300 for electricity with the amount exceptionally higher in winter whilst RDP owners spent half of the amount mainly due to the solar geyser. Those with heaters spend almost a similar amount to that of social housing tenants. In terms of size of the house, flats tenants indicated that it was the right size as they have just started new families i.e. a household composition of three or four family members consisting of children younger than 10 years (Rolivhuwa 2014, interview 12 July).

4.6 Mixed income

The idea of mixed income development is a concept that has been embraced by the most recent state programmes. Therefore this research focused on understanding how the concept has translated into people's lives. This entailed understanding how people coexist in the area. Through the interviews it was identified that there is a strong relationship between the different typologies in the area. This relationship is both economic and social beneficial to both typologies. The interviews pointed out that the relationship ranges from matters such as sharing washing lines, providing job opportunities, providing backyard rooms and services such as shops/spaza shops. As indicated by the following quotes:

> ***So because RDP house owners don't have the washing lines. Do you guys allow them to use these ones?***
>
> *'Yes they use them but some have managed to find space to build their own but we don't have a problem with them using our washing lines' (Nzulu 2014, interview 11 July)*
>
> ***Do you utilize from these spaza shops?***

'Yah but I'll only buy things like coldrink from the spaza shops' (Rolivhuwa 2014, interview 12 July)

Do you buy the candles at these spaza shops or?

'Yes it is convenient that there are spaza shops here. But I buy at this one here only because it is owned by a South African' (Zwone 2014, interview 11 July)

These quotes highlight the positive relationship that exists in Pennyville as a mixed income settlement. However, it should not be disregarded that some interviewees pointed out both the negatives and positives of the relationship as indicated by the quote below.

'….first we have to look at the fact that a lot of people here don't have jobs. All of those staying in the RDPs are coming from Zamimpilo informal settlements. Some of them survive by maybe approaching me to give them at least a job to wash or iron my clothes but some of them engage in illegal activities which is not good for the area' (Eric 2014, interview 28 June).

4.7 Safety and Security

Through the research residents communicated security strategies. Therefore it was a good idea to add security and safety as part of the theme of sustainable human settlements although it was initially left out at the conceptualization of the research. The main idea was to understand issues of safety and security, this entails strategies that people have available to utilize for safety concerns, or how the settlement relates to safety and security ultimately contributing to poverty alleviation. Interviewees communicated different views i.e. both RDP owners and flats tenants. One major key issue that both typologies raised is the ineffectiveness of the satellite police station in the area which has led to higher crime incidents especially cars being stolen. In addition, flats tenants pointed out that they have security guards patrolling around the flats that were hired by the property owners. Although they indicated that there are a number of crime incidents in the area, they also pointed out that the presence of the guards has made it easy for them since they don't have to look for other means of protection especially for those without cars.

In contrast, RDP owners pointed out that the crime rate in the area is high. In addition, the existing by-laws and the size of the yard limits a number of households from erecting walls as a way of protecting themselves against crime. Therefore, the fear to be on the wrong side of the law has left some households vulnerable to crime as they don't have fences or walls. They also pointed out that although one might assume that the security guards employed for the flats are at a convenience for RDP owners, it might be a misleading conception, as there have been a number of incidents where security guards indicated that they are only employed to protect the flats. Interestingly, the security guards also pointed out to the flats owners that they are only employed to protect the flats and not cars or anything else.

4.8 Conclusion

From the findings residents in Pennyville employ different livelihood strategies for different reasons at different times. It is evident that poor have within them different coping mechanisms or livelihood strategies. For better lives, residents in Pennyville have employed strategies involving different livelihood capitals in the area. The findings from this research indicate that often the survival process is guided by people moving from one strategy to another. Their strategies encompass all the sustainable livelihood capitals i.e. human capital, social capital, financial capital, natural capital and physical capital. Moreover, it is clear that both typologies studied do not only rely on income as the only means for better livelihood. Baumann (2003) argues that the concept of sustainable livelihood goes beyond income and focuses on non-marketable or intangible resources and this is evident in Pennyville. Therefore, for sustainable human settlement policy to be successful, it is important for planners and policy makers to acknowledge diverse ways in which people live. This entails focusing on all the sustainable livelihood capitals and not necessarily income (Beall & Kanji, 1999) because people employ multiple strategies as a way to diversify and minimize the risk for failure (Chambers, 1995; Rakodi, 1997).

Pennyville provides a good example that people do not rely on more limited range (for example one household member with full time paid employment) of livelihoods strategies to ensure their well-being (Walker et al, 2001). The findings indicated that people depended on other relevant strategies for example their social networks. This emphasises Wallmann (2005: 32) argument that

capitals that were previously highly rated (e.g. income) in terms of livelihoods are equal to 'a matter of ownership and circulation of information, the management of skills and relationships and the affirmation of personal significance . . . and group identity'. In Pennyville not only are financial capitals used as livelihood strategies but also other capitals such as social capital, natural capital and physical capital were indicated to be essential for people's livelihood strategies and contributed to poverty alleviation.

In certain household dealing with poverty for parents involved leaving all their children or some to stay elsewhere (i.e. places in Gauteng and outside Gauteng). In certain cases households minimised the effects of poverty by having their children walk to school. It is evident that sometimes people can also sacrifice the ability to access and utilise certain assets, in this case parents sacrifice by not staying with their children, because of short-term shocks, stresses or structural constraints (Rakodi, 2002). Livelihood strategies are multifaceted and households draw and manage their assets differently to minimize vulnerability to poverty in all its manifestations (Moser, 1996; DFID, 1998) as evident in Pennyville.

However, policy makers cannot simply rely on people's strategies for betterment. Nonetheless they should focus on enabling greater access to a sustainable livelihood by promoting opportunities and ensuring assistance to livelihood capitals that are essential for resident's survival. For example Residents have indicated a number of opportunities that the area provides for example ability to start up a shop business or rental business but by-laws in place have hindered these opportunities. Therefore, it should be the policy maker's responsibility to ensure that these opportunities can be part of residents' survival strategies and are realized. This entails strengthening the assets that poor already have and are utilizing for their benefit (DFID, 1999; Chambers, 2003; Mitlin, 2002). The research has shown that the sustainable livelihood approach leads to more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as opposed to ready-made, interventionist instruments (De Haan and Zoomers, 2005: 30).

Chapter 5: People and Place: the intersection between Livelihoods and Sustainable Human Settlements

As stated in the beginning the main purpose of the research was to explore how people's survival strategies in Pennyville relates to the understanding of the area as a sustainable human settlement, in other words how their livelihoods intersect with the conceptualization of a sustainable human settlements by the state. Therefore, this sections looks at different sections of the policy as discussed in the literature reviews to find how the policy intersect with the findings (people's daily strategies) that were discussed in chapter 4. Consequently this involves identifying gaps or benefits and also adding depth to the understanding of the new housing policy. This entails identifying the link between poverty alleviation and sustainable human settlement i.e. understanding the impact of housing policy on poverty alleviation. In other words, this chapter outlines how the results modify or fit in with what we previously understood about the notion of sustainable human settlements. Throughout the research it became apparent that the most specific policies in the country are regional and local policies. However, it should not be disregarded that these policies are all aligned with what can be termed 'broad' national policy. Thus this chapter focuses on the intersection between people's livelihoods and regional policy and later relates the notion with national policy or plans. Therefore, the main focus in this chapter is on regional policy that is both Gauteng and City of Johannesburg policy, with national policy acting as guidance for regional policy. In summary, four key policy documents are used in this section and these are Joburg 2040 and the Sustainable Human Settlement Urbanisation Plan which are regional policies, the Breaking New Ground plan and Outcome 8 Delivery Agreements which national documents.

5.1 Well-located land and people's strategies

It is clear that these two above Johannesburg policies focus on eliminating poverty through housing as a development driver. In addition, Joburg 2040 states that the City aims on helping new households especially those who are vulnerable to access urban services. In terms of sustainable human settlements, this idea entails the identification of well-located land to better ease access to urban services or opportunities whereas when it is viewed in terms of the notion

of sustainable livelihoods it revolves around ensuring that people's survival strategies are well linked to settlements locations. The idea of well-located land requires confronting various key factors for example understanding what is well located land? Or where is well located land? Who wants access to well-located land? These are some of the questions that are indicated by the analysis of the findings in Pennyville. For example, the perception of well-located land differs from one income level to another. In Pennyville, the interviews highlight that what might be well located land for social housing tenants might not necessarily be well located land for RDP house owners.

Furthermore, the idea of well-located land in the City of Johannesburg is complicated by the fact that development of well-located land currently attracts social housing this is linked to the City's focus on the provision of RDP housing through relocations. In Pennyville, residents indicated that although the RDP housing owners value their new homes better than their previous ones. Their previous location was well located and it intersected significantly with their daily livelihood strategies. These included working at the surrounding environment for example through street trading and working as domestic workers in places accessible by walking.

However, it should not be disregarded that social housing occupants highlighted points that can be contrasted with those owning the RDP housing. Firstly, it should be acknowledged the social housing occupants chose to stay in Pennyville contrasted with RDP house owners that were relocated to Pennyville. Nevertheless, social housing tenants interviewed considered their flats as being well located, especially in terms of their place of work, social networks and schools for their children. This highlights the significance of the relationship between well-located land and people's social network. Moreover, the findings indicate that a better relationship between location and social networks influence better livelihoods i.e. enhances survival strategies.

In addition, this highlights the differences in preference when it comes to designing a settlement for a relocation process especially when it includes other typologies. It raises important questions, such as in whose terms does one define well-located land? For instance, well-located land for one of the RDP owners was when the location enhanced their survival strategies through

informal work opportunities or strong social networks while for social housing tenants well-located land was sought of in terms of proximity to work and social networks. The difference between the two typologies indicates that the idea of well-located land differs significantly especially in terms of income. What is well located land for the rich is not necessarily significantly well-located land for the poor. Moreover, when relocations is involved well-located land takes a much broader dimension as it is compared to previous locations for that that are relocated. Contrastingly, the SHSUP sees well-located land in terms of 'urban fundamentals' and these fundamentals are largely guided by the City's goal to curb urban sprawl.

Moreover, it is very clear that the officials at different levels of the government still look at the cities as the key places for job opportunities or any other related opportunities. In terms of Johannesburg, settlements locations are mainly defined in terms of the relationship or proximity in relation to the CBD. However, throughout the research it was clear that places of work have changed and people indicated that they worked in places as far as Sandton, Cosmo and Alexandra. One wonders if the place of work spread in Pennyville does still make Pennyville a well located area human settlement? Based on few responses from the interviewees people still travel long distances a trend that the City is trying to curb, people still spend a large amount of time and money to get to places of work. And one of the interviewees specifically stated that the City centre no longer offers work now- a debate that has been going on academically. To a larger extent this indicates that Pennyville location can be defined as well located by some residents and not well located by other residents. This indicates that officials have to rethink the idea of well-located land, with the conceptualization of well-located land inclusionary of dynamics that exist around the phenomena. Moreover, it represents how aspects such as well location or job opportunities relate to aspects of sustainable livelihoods such as financial capital which all form part of people survival strategies.

5.2 Spatial integration and people's strategies

In addition, the SHSUP seems to be a step forward by the City and moving toward the right path in terms of making sure that settlements are designed in a way that suits its residents resulting in sustainable livelihoods (CoJ, 2013). One of the principles from the current SHSUP is to 'Make optimal use of existing

infrastructure or areas where infrastructure can be sensibly upgraded, and 'Focus on areas where social infrastructure and services already exist or where capacity has become available' (CoJ, 2013). In this regard, it was highlighted by one of the City officials that the city has a way of measuring the suitability of components of sustainable human settlements such as well-located land, availability of infrastructure or services and this is done through the use sustainable human settlement indices. However, it was difficult to get access to a spread sheet for Pennyville SHS indices calculations. Nevertheless, the field work has identified that the area still lacks basic facilities such as schools, community hall and a clinic as it was previously discovered by Landman (2010). This resulted in different strategies from both RDP owners and social housing tenants as reported in chapter 4. This highlights Rakodi's (1994) argument that people with different income utilize different strategies for survival. However, the City is often cited stating that Pennyville is well located as it is surrounded by infrastructure from the neighbouring townships (Magni, interview 25 July). Related various quotes are accompanied by the fact that the settlements is served by different modes of transport. Moreover, this idea is guided by the SHSUP principle focusing on 'Providing and extending access to public transport and let public transport capacity guide the search for possible housing' (CoJ, 2013). It cannot be disregarded that physically, the availability of transport has integrated the area with other townships thus ensuring access to services for those who can afford. Therefore, aspects like access to transportation for sustainable human settlements are important for better livelihoods such as accessing social capitals (e.g. schools). This highlights the importance of the relationship between sustainable livelihoods and sustainable human settlements.

Therefore, it is clear that the design of Pennyville was based on the fact that the area will share services with the surrounding townships. However, the idea of Pennyville being integrated only through public transport is questionable. This is due to the fact that, certain individuals highlighted that the lack of access of basic facilities requires them to utilize strategies such as walking since they do not have enough money to use public transport. In addition, RDP owners have indicated that to access schools, clinics and shops they have to walk close to 1.5 kilometres or use public transport which is difficult since they are unemployed. According to the City of Johannesburg indices Walkable distance to two or more

local amenities and services (e.g. schools, police station, clinics, post office, libraries, sports fields, parks and retail stores etc.) should be less than 1 kilometre (CoJ, unpublished). Therefore, for a child to walk close to 1.5 kilometres is considered un-sustainable based on the City's sustainable human settlements indices. For children it has resulted in them walking distances along busy roads to access schools or parents being forced to find money. One interviewee specifically indicated that there was a major accident involving a pupil coming back from school, making it dangerous for children to walk long distance to school. Moreover, the difficulties in affording transport (including organized transport for school children) was pointed out by a number of RDP owners as being a major contributor to their monthly income, some indicating that they cannot afford to live with their children at Pennyville and thus they have left them back at 'home' which in this case meant places as close as Soweto and as far as provinces such as Limpopo and Mpumalanga.

Therefore, this highlights the financial strain put by integrating settlements with different income levels through public transport, it might be public transport but it does not mean that it is easily usable. Moreover, the value of access to public facilities from RDP owners contrasted with the views of those staying in the flats. Flats tenants indicated that they are able to afford to pay transport fees for their children to attend schools at the neighbouring townships with some indicating that they are able to drop their children at schools when they go to work. Therefore, this highlights that the idea of integration through public transport is only efficient for those with sufficient monthly income to afford public transport. It also puts a question mark on designing sustainable human settlements which rely heavily on their neighbouring townships for services.

5.3 Transportation and people's strategies

Nevertheless, responses from both typologies have indicated that the area is well served in terms of access to public transport. This includes the availability of four different modes of transport namely the Rea Vaya, Putco buses, Taxi and the train. Moreover, responses regarding how the availability of transport contributes into people's lives indicate that the transport system in the area might not be working as perfectly as the City of Johannesburg would imagine. Firstly, almost everyone, interviewed indicated that they work in places such as Rosebank, Cosmo City or Alexandra highlighting that the place of work is not

one that is mainly assumed by the City i.e. Johannesburg CBD or other central work locations.

In addition, the transport systems offers a range of choice mainly to those with sufficient income thus the settlement should be praised for the availability of different modes of transport serving from those that might be considered high earners to low earners in the area. However, responses have indicated that sometimes strategies that residents use are not always dictated by money as a factor. For example, many would love to use Putco buses as they are the only mode of transport that enables people to travel straight from Soweto to places such as Sandton without having to go through the Johannesburg CBD. However, the usage of Putco buses is limited by the fact that during peak hours they always get to Pennyville full. This highlights the fact that what might be included by the City as one of the transport modes in the area is not serving the settlement well. Consequently, residents in Pennyville are only left with the option of taking a taxi, train or Rea Vaya via CBD and again taking another taxi or train to their places of work. One can only imagine how that relates to people's net income. Some respondents indicated that they spend close to R50 per day on transport.

It is also important to highlight various issues associated with other public transport modes in the area. The first key one, is that although the train is the most dominating transport system in the area, people have highlighted that the train station (New Canada) is a change station, meaning that it is one of the busiest station in Soweto and this implies that Pennyville residents are affected by how the station get full during peak hours consequently making it dangerous for certain residents. Moreover, respondents indicated that the train sometimes stops for a long time which might results in them losing their jobs due to arriving late. Consequently, this has forced residents both from RDP housing and flats to find another alternative which is travelling through taxi or Rea Vaya. Consequently, this makes it more expensive for residents to travel to work as they are more expensive than the train. This highlights that as the City might define the train as another dependable mode of transport, it is confronted with issues that end in people spending a lot of money to go to work although they would have opted to spend less by using the train.

As a result, residents have indicated that the taxi industry dominates the transport system in the area. This is mainly due to the fact that it is seen as fast and affordable for those that are earning well, although for some RDP owners it is due to the fact that the cheaper option is dangerous or not dependable. Moreover, the highly praised transport system by the City of Johannesburg i.e. Rea Vaya is not working as perfectly as the City would imagine. This is due to the fact that it is also confronted by issues. One of the flat tenants indicated they would love to use the Rea Vaya but the problem is that it is not connected with the taxi ranks in the CBD which would consequently force the resident to walk to the taxi rank to catch a taxi to travel to place of work. The various issues identified in Pennyville highlight that the way in which the City imagine the transport systems works in sustainable human settlements is different in reality. Hence, Pennyville is a great example to indicate how the operational inefficiencies of transport systems can harm residents financially or physically as pointed by residents.

Outcome 8 has been quoted as being one of the influential and specific national policy documents in the country. And this can be seen as most of its principles can be traced in documents such as the SHSUP or Joburg 2040. Moreover, its output explicitly includes 'improving livelihoods through the provision of different forms of tenure, and provides for alternative methods of housing delivery' (DHS, 2012: 14). These principles are also included in the BNG such as broadening tenure options by integrating subsidized, rental and bonded housing (DHS, 2004; Ajayi, 2012). The notion of mixed income development is also guided by the need to improve the property market, with the ultimate aim to facilitate the private sector and encourage the private market to regard the gap market i.e. households earning between R3 500 and R12 800 in other words increasing the delivery of rental housing for those that are excluded from the fully subsidized housing programmes (DHS, 2012). In Pennyville, as discussed in chapter 4 the provision of rental housing has included a number of people who are excluded from subsidized housing and cannot afford bond houses.

Pennyville is also a high density settlement and this is related to the BNG's principles that focused on densifying where necessary, with emphasis on inclusionary housing and fiscal incentives to promote densification and discourage urban sprawl (DHS, 2004). In addition, this is emphasized by the

SHSUP principle which entails identifying well-located, well-served, mixed-use, higher-intensity inner-city areas as well for suited to accommodating complex socio-economic profiles (CoJ, 2013). Moreover, the SHSUP defines delivery targets in terms of density, typology and financing structures. These principles are based on BNG's focus of 'pursuing a more compact urban form, facilitating higher densities, mixed land use development, and integrating land use and public transport planning, so as to ensure more diverse and responsive environments whilst reducing travelling distances (Department of Housing, 2004: 11).

In Pennyville, residents indicated how their strategies intersected with the notion of a mixed income settlements. These strategies amongst residents of different income and socio-economic groups as indicated in chapter 4 ranged from providing jobs, sharing properties or materials, friendship and Services provided by RDP owners. One of the flats tenants stated that the availability of the RDP owners made it easy for him to find assistance in maintaining his house. Thus he provided employment opportunity to one of the RDP owners. In addition, some of RDP owners that were located closer to flats indicated that they utilized washing lines and parking lots without any conflict between the two different typologies. Moreover, social housing property owners hired people from the RDP houses to keep the exterior of the flats clean by executing services such as watering lawns and cleaning. Moreover, it was also interesting to hear from both typologies that some of the residents have since developed friendship with each other. One of the flat tenants indicated that the backyard rooms from the RDP houses provided him with extra space for his older son. However, it should be noted that a few interviews stated that the relationship was not great but pointed out that it was mainly related to the racial dynamics rather than income level or accommodation. This highlights how the concept of mixed income settlements overlaps with the notion of sustainable livelihoods especially when it comes to enhancing and influencing people's daily lives.

Nevertheless, the idea of mixed income has contributed to poverty alleviation in the area. The findings indicate that the idea has intersected with people's daily lives at very different levels and surprisingly sometimes at levels that the City would have not expected or levels not included in the conceptualization of policy as discussed above. For example the City might not have expected that

residents from social housing will share facilities such as washing lines with RDP housing dwellers. However, this indicates the strong relationships that exist between the different typologies. In addition, it shows that mixed income settlements present a greater opportunity for future housing projects. As a result, mixed income presents an opportunity for creation of high density small and large scale accommodation serving a broad range of income groups and possibility to curb urban sprawl. Moreover, it is in aligned with the SHSUP focus to 'use housing development as a catalyst for social transformation' (CoJ, 2013).

5.4 Building on existing survival strategies

The SHSUP drives the development of sustainable human settlements in the City of Johannesburg, its principles also includes 'Build on social networks / local support systems / safety nets (community one of the strongest coping mechanisms' (CoJ, 2013: 100). However, the research identified that people who were relocated to Pennyville have had their social networks disconnected. One ponders how in reality of development of sustainable human settlement in the City includes the aforementioned principle. The perception with respect social networks by the two typologies differs. At first hand, people that are renting in the area have indicated that they have chosen to stay in Pennyville because it is in the centre of both their social networks plus their place of work. While on the other hand, RDP owners have indicated that their social networks have been disrupted and they no longer live close to their trusted friends or relatives. One interviewee indicated that the relocation has meant that they always have to ask their friends to come over whenever they need help especially in terms of finances. This highlights, the fact that although the City has in one of its policies a principles to strengthen social networks when developing sustainable human settlements, it has continued to disconnect social networks. The fact that one of the City's goal is to eliminate informal settlements seems to always shadow people's priorities resulting in the City favouring relocations over informal settlement upgrading. Nevertheless, reasons behind relocations by the City should be researched further.

Another principle from the SHSUP is to 'Facilitate a broad spectrum of financing options to assist movement up the housing ladder' (CoJ, 2013: 100). In terms of the BNG this entails to 'Promote job creation and local economic development in all parts of the City' Build on existing/natural occurring local economies (e.g.

Alex)' (CoJ, 2013: 99). Furthermore, this entails to 'Acknowledge and manage informality within human settlements through responsive planning'. The SHSUP also aims to 'create an enabling environment together with the development of incentives to leverage private resources and to achieve better use of public funds for sustainable livelihoods' (CoJ, 2013: 100). However, one wonders how these principles were achieved in Pennyville. From the research, interviewees indicated that economic projects that were meant to benefit the settlement were being misused or benefiting only a few instead of covering different people in the area. A key programme that was discussed by two of the respondent is the Expanded Public Works Programmes (EPWPs) in the area. The interviewees noted that the projects only hired people for two weeks moreover the majority of people working in these projects are not from Pennyville which is supposed to be one of the principles of EPWPs. Expanded Public Works Programme is meant to uplift communities. In its conceptualization by the state, it is theorised to provide people with experience which they can then use to hunt for permanent jobs. However, in Pennyville, the process of employment is claimed to be dictated by party officials and only benefitting a few. One interviewee also added that Pennyville itself lacks part-time jobs compared to his previous residence which was Riverlea. However, the resident linked this issue to the fact that the area comprises of different races and politics surrounding employment are very rife. This highlights that South Africa is still far from being integrated the reason why it might be difficult for a coloured man to find work in a mixed income settlement.

5.5 Urban informality versus income generation

In addition, the City also places more attention in managing informality in urban areas. In Pennyville, economic development plays out in different ways and through observation it is safe to state that almost all economic development activities are not aligned with laws. One interviewee, indicated that in the past before Democratic Alliance ruled the ward, African National Congress officials were very strict and against activities such as spaza shops or extended rooms. However, the situation has changed and the interviewee stated that residents have taken advantage of the slack DA to construct spaza shops or extend their rooms. The unregulated economic activities have been confronted by various issues with some residents indicating that the spaza shops owned by black

people were forced out of business through competition by foreign owners. However, the opportunity to rent away a spaza shop is another way of generating income in the area. Nevertheless, judging by responses from various residents, xenophobic attacks maybe are looming in the area especially since there is high unemployment rate.

5.6 Informal strategies and access to basic services and social facilities

Moreover, mentioned in the Joburg 2040 is the idea of 'ensuring the affordability of municipal services…….through progressive tariff structures, creative cross-subsidization and targeted social packages' (CoJ, 2011: 33). The City has gone about this in a number of different ways. These ways have been included in the conceptualization of sustainable human settlements. In addition, the BNG also incorporate related principles such as providing engineering services at a higher level, providing basic facilities such as schools, clinics and commercial opportunities (Smeddle-Thompson, 2012). Outcome 8 approach also comprised of an output that focuses on improving access to basic service. Targets for this output include 'increasing water access from 92 % to 100 %, sanitation from 69 % to 100 %, refuse collection from 64 % to 72 %, electricity from 81 % to 100 % (DHS, 2012).

The municipality has ensured access to physical infrastructure in Pennyville in various ways. Firstly, in the initial phase of the project conceptualization the City managed to negotiated subsidized access to services for RDP owners (PDG, 2011). This highlights how the City's policy together with national policy intersects with people's lives as people indicated various ways on how they access services. Residents indicated how they access services such as water at a lower rate although electricity remains slightly expensive, for RDP housing dwellers it remains less expensive as they have access to solar geysers. Moreover, some struggle to access accessories such as heaters thus making their monthly power usage less. In addition, the discoveries that expensive electricity led to illegal connection from both typologies and that the City is yet to finish installing water meters which has been working as an advantage for some RDP owners was interesting. This generally indicates how certain action such as subsidized access to water or not installing water meters has intersected with people's lives resulting in poverty alleviation, sometimes inadvertently.

5.7 Physical infrastructure versus people's strategies

In terms of physical infrastructure, residents from the RDP housing have indicated various issues relating to the infrastructure pointing out ways in which it has not intersected with their daily lives or family structures. Firstly, although the state has shifted into providing better and larger RDP housing it is important that people have strategies that enable even better housing. For example residents indicated that small yards contradict with their needs and family size. This led people into utilizing strategies such as leaving some of their family members behind in another area. Moreover, the size of the yard has limited people from extending their houses or building security walls. This clearly indicates that there is a contradiction even within policy, as the policy assumes that people will be able to move up the ladder as they become less dependent while on the other hand the product restricts them from being able to engage in activities that might help them generate income for example backyard rooms. However, the size of the yard might have been a deliberate design intention to discourage informal defensive planning i.e. building walls.

It will be incorrect to discuss infrastructure in Pennyville without mentioning the highly praised park and police station. The park has been praised by the City as one of the important infrastructure components in the settlement. Therefore, through interviewees it was confirmed that the park and the police station are a convenience for residents in Pennyville. However, the fact that Pennyville comprises of two different phases (as indicated in chapter 3) led to different responses with regard to the park. Those staying in Pennyville phase two indicate that the park only serves those that are staying in Pennyville phase one, and certain residents state that they would not let their children cross the busy road to get to the park, however, it should be noted that there is a pedestrian bridge (shown in figure 3) which connects the two phases but seems like it was only meant to connect phase one with the train station. Therefore the park highlights that what to the City officials might be a great feature in a sustainable human settlement can have different effect in terms of the access people have to the feature.

In addition, another concept that was left out and considered as one of the least concerns of the research at the beginning but came out during the interviews, is the notion of environmental sustainability. The idea of environmental

sustainability is understood in different ways. In Pennyville, interviewees indicated that the solar geysers in the area are one aspect of environmental sustainability as conceptualized by the City that has worked in residents' favour. This is due to the fact that they no longer have to worry about buying electricity to operate geysers. Therefore, the focus on environmental sustainability when it comes to sustainable human settlements works well with low income households. However, it should be noted that residents pointed out a number of issues or costly strategies associated with these geysers as discussed in chapter 4. These issues indicate that although the move toward environmental sustainability is of paramount importance, the City should bear in mind the needs of the poor. For example, people indicated that the geysers rarely have hot water, they only have warm water which is never enough for their family size resulting in some buying electric kettles while others with knowledge when it comes to fixing them found ways to manoeuvre around these issues. In addition, the City failed to look at the sustainability of the geysers in terms of their quality although the City employed a technician to deal with issues relating to geysers, residents have pointed out the un-sustainability of the system because of the recurring breakages. Environmental sustainability in the eyes of the state is conceptualized differently when contrasted to residents in the area. The state might view the sustainability of geysers by indicating that it helps protects the natural environment and it is a cheaper option for low-income households whereas low-income households as users looks at it with a slightly different perspective. For example in comparison to their household composition requirements and the indirect implications it brings such as having to use electric kettles to get hot water.

5.8 Housing as an asset

Another important concept included in South African housing policy is housing assets. This is based on the idea that there is a necessity to support the property market and to reduce duality by enabling access by all to enable empowerment and wealth creation (Rust, 2006). People have indicated that they do sell their houses but this is done as a response to issues associated with the product not as a way to move up the property ladder. Only residents staying in the flats have indicated that they think of moving up the property ladder by buying houses and they would have loved to own the apartments

In addition the City has focused on 'enabling the poor to access basic livelihoods, inter-alia by helping them to secure social grants, facilitating skills development and basic employment opportunities, and supporting 'self-help' projects, start-up micro-enterprises and community-based co-operatives' (CoJ, 2011: 33)….The unemployment rate in Pennyville is high with most of the people staying in the RDP houses not working as highlighted by one of the respondent (Eric 2014, 28 June). It was interesting to find out how access to grants in all their different forms acts as a strategy for people's survival in the area. Moreover, social networks are important especially for the unemployed. One interview specifically indicated that she has highly dependent on her parents back in Limpopo to send her money for survival. This highlights the fact that there is a strong need for the City to strengthen these social networks, although the SHSUP contains information on strengthening social networks planners need to include specific and comprehensive strategies as many people are dependent on these strategies for survival.

A very important issue came out during the interviews. This was the issue of security. The two typologies interviewed indicated different experience or needs when it came to safety and security. Firstly, RDP owners stated that crime was a problem in the area. Tenants indicated that crime was 'not that bad' with one of the residents stating that there has been car theft in the flats. In addition, RDP owners indicated that the failure to erect security walls makes them more vulnerable to crime. Tenants indicated that they had security guards protecting the apartments. It was important to note the emphasis made by both typologies when stating that the guards were only protecting the flats and not in any way interested in issues surrounding the RDP houses or cars owned by those staying in the flats. As a response to crime, those with enough space have managed to erect security walls while other indicated that they were on the process of erecting walls too. It was interesting to find out how one typology is protected and the other remains vulnerable to crime. Perhaps this presents an opportunity for policy makers to think of a way that will manage to include all residents when it came to issues of safety.

5.9 Sustainable human settlements versus sustainable livelihoods

It is clear from these findings that key elements overlap between the notions of sustainable human settlements and sustainable livelihoods. The findings highlights that the way in which elements are viewed through the sustainable human settlements lens sometimes overlap with the way elements are viewed through the sustainable livelihoods lens i.e. people's strategies. Firstly the idea of well-located land in Pennyville has different meanings for different people, at times intersecting with people's strategies and at times not intersecting with people survival strategies. Similarly, the idea of spatial integration in Pennyville has worked in different ways, indicating once again that people have different survival strategies which are all important for a functional human settlement. In addition, transportation has different meanings when viewed through the two lenses, in Pennyville residents indicated the different meanings they have of transportation and how it related to their daily strategies. In addition, residents indicated that they view transportation differently based on their daily strategies, and contrastingly, based on the policy review, section the government has not taken these perspectives into consideration. Similarly, in terms of sustainable human settlements notion, the idea of urban informality is conceptualised differently by the state when compared to the reality of people's livelihoods. Moreover, physical infrastructure is valued differently within Pennyville especially between the two housing typologies. The type, size and quality of infrastructure intersects with people's strategies at various ways, different to the way it is conceptualised by the government when conceptualising sustainable human settlements.

Chapter 6: CONCLUSION

The research took the challenge to investigate the sustainability of state housing programmes. It focused on one specific case study i.e. Pennyville. What the research attempted to do was look at how the perceived advantages and strengths of the concept of sustainable human settlement as outline in the state policy documents and understood by planners, intersect with the realities of Pennyville residents' daily lives. In other words the research looked at Pennyville as a recent housing project implemented under the BNG. Overall this research produced some fascinating results and provided insight on how the notion of sustainable human settlement as conceptualized by the state intersects with beneficiaries. For example benefits of a mixed income settlements are often seen in monetary terms but Pennyville has shown that the relationship between various typologies extend to strategies such as sharing washing lines. In addition, the research was able to provide depth and additions to the existing conceptualization of sustainable human settlement.

6.1 Review and Reflections

The introductory chapter set out the context in which this research was based. It began by highlighting the problem of the research i.e. the fact that there is limited research on the sustainability of the new generation state housing programmes. Therefore it was thought to be necessary to look at how the concept of sustainable human settlement and its components have contributed to people's livelihoods. The introductory chapter also sets about identifying a research question and sub questions to frame the intention of the research. The key research and sub- questions were as follows:

Research question

How is the new generation state housing project of Pennyville experienced as a sustainable human settlement?

Sub-question

1. What does the state define as a sustainable human settlement?
2. How is Pennyville understood as a sustainable human settlement for residents?

3. In what ways do sustainable components of Pennyville intersects or translates into the lives of the users/residents?
4. What are people's/residents perceptions about key Sustainable Human Settlement components that are deemed sustainable by the state or planner in the area?
5. What do people value most about the area?

The first chapter also contained of a section that outlined the methodology at which the research was conducted. This research utilized a qualitative research method. Therefore, the findings from this research unlike a quantitative research cannot be used to generalize to describe the overall standing of Pennyville. The research is only based on 14 interviews conducted in the area and one state official. Seven interviewees from each of the typologies identified (i.e. RDP housing dwellers and social housing dweller) were interviewed using open-ended interview questions. The research focused on understanding resident's daily experiences in detail hence a qualitative method presented a better opportunity to conduct the research. In general the methodology involved primary data as interviews and secondary data by engaging with relevant resources i.e. books, journals, and state housing policy.

Difficulties were encountered in answering the research question 'How is the new generation state housing project of Pennyville experienced as a sustainable human settlement?' The key challenge was that answering the question required synthesizing and working with a somewhat confusing literature. As a result, the second chapter aimed to break the research question and framing the literature that was essentially for the research. The chapter represented the two bodies that formed part of the literature. Chapter two comprised of three sections the first one focusing on defining and understanding what constitutes a sustainable human settlement by using theoretical work, second section focusing on defining sustainable livelihoods and the last section defining sustainable human settlement using the South African policy documents on housing. Moreover, in an attempt form the basis to answer the research question chapter 3 introduced Pennyville. The chapter outlined the spatial location of the area and spatial layout. Moreover, the chapter also looked at the perceived advantages of the area.

The initial findings from the reviews of each of the three groups of literature studied (i.e. sustainable livelihood, sustainable human settlements and state policy) were that a there were few similar concepts from each group. In other words, key themes that define sustainable human settlements are somewhat similar to key themes that dominate the idea of sustainable livelihood. It is also important to note that the initial findings from looking at the literature review to a certain extent indicated that there is no clear relationship between the South African housing policy and the notion of sustainable livelihoods. In addition, the policy appeared broad even when it came to the realization of sustainable human settlements but the City of Johannesburg policy documents appeared to be moving towards the right direction in integration the idea of sustainable livelihoods with their understanding of sustainable human settlements. For example the SHSUP contains in one of its principles enhancing people's social network a theme that is part and parcel of sustainable livelihoods. Nonetheless, the South African housing policy has evolved to include these key themes as determinants for the creation of sustainable settlements.

The literature review was followed by a case study introduction. The chapter aimed at situating Pennyville within the broader urban context of the City of Johannesburg and locates it within its immediate surrounding regions/townships. In addition, the chapter looked at all the descriptions associated with the Pennyville as a sustainable human settlement. The main findings were that is well located with respect to the Johannesburg CBD and other surrounding business districts. Moreover, it comprises of well-designed social and basic facilities i.e. park, crèche and police station. In addition, its location has enabled it to be well served by a number of transport modes including the Rea Vaya and the train.

6.2 Main themes and Findings

The aim of the research was to look at how Pennyville is experienced as a sustainable human settlement through the exploration of people's daily lives. Therefore, finding were centred on the explored sustainable human settlement component i.e. people's experiences in Pennyville with regard to the available resources. Chapter 4 outlined the key findings under each themes and this was later analysed in relation of the state's housing policy in chapter 5. The key

themes included location, transportation, access to basic and social facilities, physical infrastructure, mixed income, income generation to safety and security.

It could be argued on the basis on this research, that the relationship between sustainable human settlements as conceptualized by the state and sustainable livelihoods is fuzzy and the need to enhance sustainable livelihoods should form the core of sustainable human settlements policy documents. In other words, all key components of sustainable human settlements such as well-located land, access to basic and social facilities, physical infrastructure, mixed income and other integral aspects within the state form part of the need to enhance sustainable livelihoods. Therefore, there is a need to look at these components having in mind that the realization of sustainable human settlements begins with the realization of what people needs or their daily live experiences. However, it is important to note that this research only represents views of 14 residents in Pennyville and the findings cannot be taken as guide for policy implementation. Nonetheless, it can be taken as guide for future extensive research regarding the relationship between sustainable human settlements as conceptualised by the City and people daily lives, which can be used to guide policy implementation. Moreover, Chapter 5 focused on the intersection between people's livelihoods and regional policy and national policy. It focused on concepts that were highlighted by residents that do not feature correctly in policy documents and also focused on features that dominate policy documents but are not part of people's daily lives in Pennyville. This was informed by the key findings outlined in the following paragraphs.

The research discovered interesting findings, firstly the idea of well-located land is a multifaceted concepts and the research has shown that it needs a well thought approach by the City. In terms of Johannesburg, the City approached developing well-located land through the notion of mixed development, with mixed income being the guiding theme. The City has look at the idea of well-located land with a focus on bringing people closer to their place of work. Contrastingly, well-located need not to be defined neither in state perspective nor in working class perspectives. However it should include all the factors such as those who are not working and also consider all the strategies that exist in communities. As stated in chapter 5 the idea of well-located land raises important questions, such as in whose terms does one define well-located land?

What is well-located land for the rich may not be significantly well located land for the poor. Therefore, the City should place more emphasis on defining well-located land and to a larger extent define it in terms of people's experiences. For example getting rid of the assumption that the work place spread is centred in Johannesburg city centre but instead understand that people work in places such as Sandton, Rosebank, and Cosmo City etc.

Mixed developments in Gauteng are also based on the need to integrate existing development with new developments. Therefore, the lack of some services in the Pennyville makes clear that its design was based on the idea that the area will share services with the surrounding townships. It was also based on the assumption that the availability of different modes of transport will enable and ease access to basic and social facilities. The findings indicated that the idea of designing areas with the City's intention of facilities being shared across neighbourhoods places a strain on those who cannot afford to access services such as public transport. Therefore, the City should understand that the availability of a variety of public transport modes does not significantly lead to all residents accessing facilities such as schools with ease, as availability of money is a major factor.

The idea of mixed income development in Pennyville seems to be playing a very important role. The fact that the area is a mixed income development has managed to create a range of opportunities which have contributed to poverty alleviation in the area. Therefore, it is very clear that the City is moving towards the right direction in the creation of sustainable human settlements as this concept of mixed income has intersected well with strategies of the different typologies in the area.

One of the SHSUP principles is to 'Build on social networks / local support systems / safety nets (community one of the strongest coping mechanisms' (CoJ, 2013: 100). This principle highlights the City's commitment towards creating sustainable human settlements that cater for people's needs. However, the findings indicated that there are difficulties in realizing this principle especially when the development involves relocation into RDP houses and social housing. As a result, there is a need for further research on how cities' can enhance people's social networks during relocations.

In its policies the City also places more attention on managing informality in urban areas. Economic development plays out in different ways and through observation it is safe to state that almost all economic development activities in Pennyville are not aligned with by-laws. Findings indicated that some residents are limited in their ability to extend their houses or to build spaza shops as part of their survival strategies. As a result, the need to manage informal activities is of paramount importance but to a larger extent it contradicts with some of the benefits aligned with the idea of mixed income developments. Therefore, the City should execute better ways in which the economic system of settlements can be enhanced without enforcing strict by-laws that are against benefits associated with concepts such as well-located land and mixed income development

An interesting finding by the research was that sometimes it is the ineffectiveness of the City that enhances people's survival strategies such as failing to complete the installation of water meters. This coincidentally intersected with the Joburg 2040 idea of 'ensuring the affordability of municipal services…….through progressive tariff structures, creative cross-subsidization and targeted social packages'. Although this might not be the best to go about ensuring access to basic services such as water it nonetheless represents a way in which the City can ensure efficient access to services.

Findings related to physical infrastructure such as the house itself, and the yards indicated that the City needs to places more emphasis on how physical infrastructure and built environment can facilitate peoples' strategies. For example the findings indicated that the City should consider factors such household composition and future individual extensions. The Soweto survey (2014: 15) revealed that 'just under 80% of households surveyed had either built a wall around their dwelling or are planning on building a wall in the future' and that 'Three-quarters of households surveyed said they are planning to make changes to their homes in the future' (Soweto Survey, 2014: 13). This highlights a trend that is likely to follow with Pennyville, perhaps despite the designers' or planners' intentions to the contrary. Therefore, the City should place emphasis when be aware of such factors when designing sustainable human settlements because they form part of people daily strategies.

It is important to note that the conceptual framework developed in chapter two formed the basis for findings. The conceptual framework identified key elements from the sustainable human settlements and sustainable livelihood notions. These elements were later analysed in chapter 5 with the focus on understanding how they overlap. As a result, it was discovered that these two notions comprise of related key elements that overlap in various ways. The findings indicated that sustainable human settlements cannot be viewed in isolation to the idea of sustainable livelihoods. In addition, it is the relationship that exists between the notions of sustainable human settlement and sustainable livelihoods that present an opportunity for a functional settlement that can present better experiences for its residents.

6.2 Limitations

The major limitation of this research is that the analysis remained predominantly at the policy level of planning and was limited to go a step further in getting views from City officials, developers on how settlements like Pennyville are suppose to function. Had these views been explored by this research perhaps a clear understanding on how sustainable human settlements link with the idea of sustainable livelihoods would have been established. Therefore a key issue that dominated the analysis is that the relationship between the notion of sustainable human settlement and sustainable livelihoods is not a clear cut on the South African housing policy.

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