

**EVALUATION OF THE CHALLENGES TO PROJECT
DELIVERY CONFRONTING PROJECT LEADERS
IN THE DYNAMIC HUMAN SETTLEMENT
ENVIRONMENT**



**Minor Thesis Presented for the Degree in
MSc Project Management**

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CMPFAB001

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PLAGIARISM DECLARATION

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ABSTRACT

Governments around the world are battling and continually trying to address the housing backlog, which stems from previous discriminatory regimes and increasing urbanization. The housing backlog in South Africa has increased significantly and most especially in Cape Town. Housing is seen as a measure to transform and unify the aforementioned segregated population. Project Leaders (PLs) are saddled with the responsibility of housing delivery and managing diverse stakeholders. Although project management is the driving force behind the provision of housing delivery, the project process is not free from dynamics. These housing projects constantly attract social and political attention, resulting in the PL repetitively contending with the inherited social and political dynamics of the Human Settlement Environment (HSE). This dynamism creates a complexity that poses numerous challenges that hinder the PL's ability to lead, manage and transform housing projects. This research examines the challenges faced by PLs in the HSE, and whether PLs exercise a capacity to creatively transform, maintain, and lead the project organization.

A qualitative research approach with inductive-philosophical reasoning was chosen for the study. The research employed interviews for data collection. A sample of 19 PLs working in the public sector of human settlements in Cape Town was purposefully selected to participate in the study. The collected data was analysed using thematic analysis to identify appropriate themes.

The research defined dynamic HSE as a new variable through the literature conducted and contributing to the body of knowledge. The results further identified six themes emerging from the challenges faced by PLs. They are: 1) Social challenges; 2) Political challenges; 3) Organizational challenges; 4) Legislative challenges; 5) Multi-stakeholder challenges; and 6) Skills challenges. Following on from these themes, two key issues showed that social and political influence were the dominant factors affecting the implementation of housing projects. The research found that PLs do not have the authority in housing delivery. This limits the PL's ability to creatively transform, maintain and lead the project organization.

Keywords:

Cape Town, Housing, Human Settlement Environment, Project Delivery, Project Leader, Transformation

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LIST OF ACRONYMS

APM	Association for Project Management
BEPP	Built Environment Performance Plan
BER-BCI	Bureau of Economic Research Cost Index
BNG	Breaking New Ground
CoCT	City of Cape Town
CRR	Capital Replacement Reserve
CSIR	Council for Scientific and Industrial Research
DOH	Department of Housing
DoRA	Division of Revenue Action
EFF	External Financing Fund
FFC	Financial and Fiscal Commission
FLISP	Financial Linked Individual Subsidy Programme
GDP	Gross Domestic Product
HDA	Housing Development Agency
HS	Human Settlements
HSDG	Human Settlements Development Grants
HSE	Human Settlement Environment
ICDG	Integrated City Development Grant
ICESCR	International Covenant on Economic, Social and Cultural Rights
IDP	Integrated Development Plan
INEP	Integrated Network Electrification Programme
IPMA	International Project Management Association

IQ	Intelligence Quotient
MayCo	Mayoral Committee
MEC	Member of the Executive Council
MFMA	Municipal Finance Management Act
MSDF	Municipal Spatial Development Framework
NDHS	National Department of Human Settlements
NDP	National Development Plan
NDPG	Neighborhood Development Partnership Grant
NHF	National Housing Forum
OECD	Organization for Economic Co-operation and Development
PFMA	Public Finance Management Act 1999
PIE	Prevention of Illegal Eviction
PL	Project Leader
PM	Project Manager
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PMP	Project Management Professional
PPPFA	Preferential Procurement Policy Framework Act
PTNG/ PTIG	Public Transport Network Grant / Public Transport Infrastructure Grant
SA	South Africa
SACAP	South African Council for the Architectural Profession
SACN	South African Cities Network

SACPCMP	South African Council for Project and Construction Management Profession
SACPLAN	South African Council for Planners
SACQSP	South African Council for the Quantity Surveying Profession
SERI	Social Economic Rights Institute
SOE	State-owned Entities
TOD	Transit-Oriented Development
UNICEF	United Nations Children's Fund
USDG	Urban Settlement Development Grant
WCNDHS	Western Cape Department of Human Settlement

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CHAPTER 1 INTRODUCTION

1.1 Introduction

This chapter presents the importance of the research, starting off with the background of the human settlement environment, and discussing the key elements that lead to the problem statement. Furthermore, this section develops the main research question leading to the aim and objectives of the study. This section provides overall justification for the undertaking of this study, clearly highlighting the limitations, scope, and methodology of the research approach, concluding with the structure of this research report. This chapter aims to describe the context of the human settlement environment and its dynamics, in which a Project Leader must work, and the challenges that they may encounter during the housing delivery process.

1.2 Background to the study

Human Settlements (HS) is a global phenomenon and a challenge, because the need for habitation cannot be ignored. Housing is one of man's basic needs. In 1948, the right to housing was realized in Article 25 (1) of the Universal Declaration of Human Rights and was preceded in 1976 by one of the most well-known documents around the world, namely the Vancouver Declaration on Human Settlements (Marais and Wessels, 2005:17-18). These declarations address the housing issue globally and at country level making each country responsible for HS. Even with the right to housing being recognized internationally, only a few countries give recognition to this right. The South African Government only reacted in 1994 after the relinquishment of apartheid, by the publication of its Constitution, referring to Chapter 2, Section 26, Subsections 1 and 2 that:

“...everyone has the right to have access to adequate housing”.

This responsibility for housing as per the Constitution, lies with the public sector, specifically the Department of Human Settlement (Republic of South Africa, 1996). According to Mbanga (2018), HS has the most dynamic human elements on the earth's surface, with the most visible signs of human culture that are imposed on the natural world, and directly propels the rate of

urbanization. These human elements of settlement relate to material, social, businesses, religious and cultural aspects (Sarkar, 2010:2). The South African housing policy describes or portrays housing as a holistic environment that includes infrastructure, social services and the community as a whole. The public sector through the National Department of Human Settlements (NDHS) fulfills its role and responsibility to the public by building homes for the impoverished inhabitants of the provinces. Municipalities are mandated to consult with all relevant stakeholders in the housing delivery process, as that consultation is part of the project, and one of the public legislative requirements. The fundamental means to achieving a successful housing delivery project is by establishing a project management system. Project management systems and expertise consequently become a means to deliver projects to the Human Settlements Environment (HSE) as they involve planning, organizing, coordinating, leading, and controlling resources to accomplish project objectives (Gido and Clement, 2012:27).

Leadership, on the other hand, is linked to change in the environment and its behaviour; thus the definition of a leader keeps on evolving, including the fact that leadership abilities and qualities vary with circumstances and change over time. It is the responsibility of the Project Leader (PL) to make sure that the project objective is achieved. The PL, through the utilization of a project management approach in the public sector, is a key role player in the delivery of houses for the HSE. Hao and Yazdanifard (2015), express their opinion by stating that effective leadership is about managing change, and change itself is what stimulates the business environment. In this research, the terms “Project Manager” and “Project Leader” are used interchangeably because of the broadness of the role of a project manager, which is a working condition in the Human Settlement environment. (See further discussion in Chapter 2, Sections 2.10 -2.14).

Shelter is a basic human need, identified in Maslow's theory of human needs (1943) as a physiological need. The three basic needs a person must have are food, shelter and water. As shown in (Figure 1.1) below, there are certain fundamental lower level needs that must first be satisfied before people's higher needs can be satisfied. The lowest need is the physiological need, which consists of air, water, food, shelter, sleep, clothing, and reproduction; next stage comprises of safety and security forming the basic needs, then love/ belonging and esteem that are psychological needs that are geared toward prestige and a feeling of accomplishment;

and finally, self-actualization of achieving one's full potential, including creative activities for self-realization.

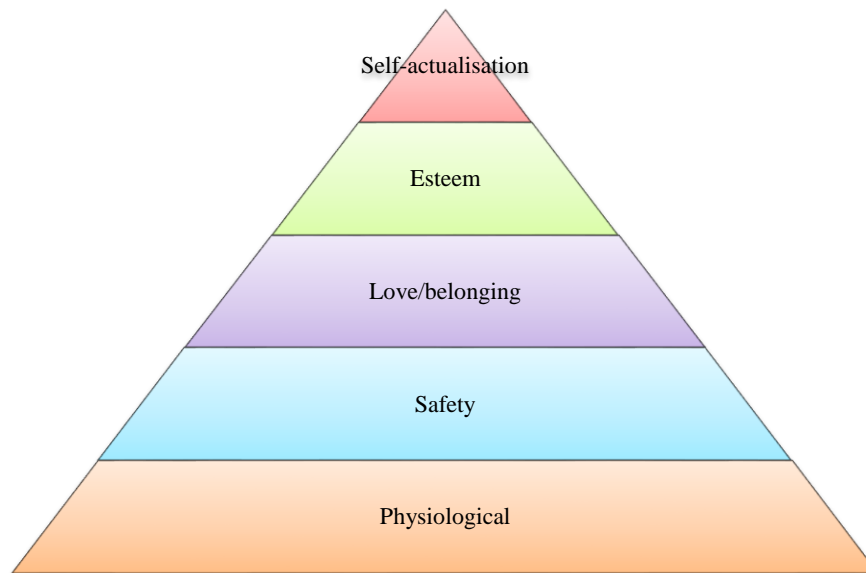


Figure 1.1: Maslow's Hierarchy of Needs (Maslow, 1943)

Shelter is therefore not only a basic human need, but also a motivation to which people respond when it has been denied for too long (Maslow, 1984). Once an individual's basic needs are met, their motivation predictably moves to the satisfaction of psychological needs and eventually end up in self-fulfillment needs. A house thus provides shelter including safety and security for an individual, since it is linked to an infrastructure that covers the remaining physiological needs and is a means of meeting these needs.

Approximately 2% of the world's total land is covered by cities, with 54% of the population already living within cities, and the percentage is expected to increase to 60% by 2030. Progressive urbanization has a negative impact on cities, and the CoCT is no exception, with limited infrastructure as identified in their Municipal Spatial Development Framework (MSDF) (City of Cape Town, 2018). The available land within the urban core is not controlled by local governments, as it belongs to other public institutions and the private sector. In line with the MSDF CoCT (2018: 220) the Cape Metropole, the CoCT acknowledges that it has limited control over large areas of undeveloped land within the city of Cape Town, as these are owned by other State-owned Entities (SOE) and the private sector. Currently, infrastructure deficits in the system are transferred to new developments as conditional

mandates for approvals, making it more difficult for developers to absorb these problems. As indicated in the CoCT MSDF (2018: 235), the recent rate of infrastructure investment does not appear to have sufficient long-term housing to meet the demand in Cape Town.

The beneficiaries of NDHS housing projects are the poor, who are fully subsidised, and the middle class, who are partially subsidised. The NDHS defines the poor as people with an income between R 0 - R 3 500, the middle class with an income of R 3 501 - R 15 000) and the upper class as having a high income of R 15 001- upwards. These three classifications refer to the different public sector housing programmes and do not represent a common definition, but are unique to South Africa (SA). This set of criteria describes the beneficiaries of a housing project, so living in an informal settlement is not a guarantee for a house. In 2015, findings from the WCDHS indicated that the urban poor who live in informal settlements live in appalling conditions without rent security, without basic services and without environmental security (Western Cape Department of Human Settlements, 2015). Abbott, Martinez, and Huchzermeyer (2001:2), aver that urbanization is the beginning of any dialogue relating to informal settlements. This is true in the case of the Western Cape, where the population growth is the result of urbanization and 31.5% of the population is living in urban areas, as stated in the Annual Performance Plan of Western Cape Department of Human Settlements (WCDHS) 2018/19. This segment of the population in an urban area demands basic services identified in the Built Environment Performance Plan 2012/13, such as housing, land and resources from the local municipality (City of Cape Town, 2012). The pace of urbanization is concerning, as the availability of land becomes a problem for urban development, as development intentions for certain pieces of land are disrupted by informal settlements. It is therefore closely linked to the continuing urban constraints associated with the growth of such settlements and the provision of basic services to them (such as water and sanitation). Informal settlements in SA have been part of the urban environment for a very long time, dating back to colonial times (Parnell and Hart, 1999). They are the most important component of urban development because informal settlements provide an unlimited source of labour resources that drives the economy. That is why Huchzermeyer (2006) argues that informal settlements are part of the urban fabric and have a particular history, form, and function.

Over the past six decades, developing countries have witnessed massive urbanization and the ways to solve problems associated with informal settlements are not straight forward or easy for cities. It has become an undeniable fact that the city needs to cater to these individuals regardless of their informal status and location, which falls within the public sector domain. The Cape Metropolitan MSDF of 2018 has projected a housing demand of 500 000 housing units over a period of 20 years (2012-2032) and also city investment to follow the Transit-Oriented Development (TOD) development strategy. The aim of this strategy is to increase the number of units in the densely populated areas around the city, which is in line with the idea of a compact city. However, the resources available to meet the demand for housing are not sufficient. Based on the resources currently available to the city and the traditional housing approach, it will take more than 70 years to eliminate Cape Town's current housing backlog (CoCT, 2018:231).

The provision of housing in the public sector has been declining since 2007, while the demand has been rising steadily, and in Cape Town the proliferation of informal settlements with increasing pent-up demand has increased the demand for housing. After the abolition of apartheid in 1994, for the first ten years the newly elected South African government was mainly concerned with building houses for marginalized people, as evidenced by the housing policy of Breaking New Ground (BNG) (National Department of Human Settlements, 2004:6). The first housing delivery programme was scoped in the White Paper on housing in 1994 (Republic of South Africa, 1994). According to this paper, a target of one million housing units was set out to be achieved within five years (Republic of South Africa, 1994). However, this goal was only achieved after seven years (Charlton and Kihato, 2006). Even though the goal was met two years late, the dynamics had not changed and the housing development process has not speeded up since then. The focus on housing did not meet the challenges, and service delivery has not increased, thus the backlog continues to build up, as described below.

Cities are seen as drivers of development and poverty reduction, but population sprawl and environmental deprivation (with unstable patterns of production and consumption) feed urban poverty and growth (Yoon, 2014). The definition of an “urban area” is defined according to each country and it is difficult to compare. However, United Nations Children’s Fund (UNICEF) (2012) describes that an urban area can be defined either by administrative criteria

or political boundaries, a threshold for population size, population density, economic function or the presence of urban features. Nevertheless, an urban area is a human settlement comprising of a population that has an infrastructure that is constantly evolving as a result of population growth. Human Settlement Sustainability is challenged by rapid and unplanned population growth, which constantly increases the demand for appropriate infrastructure and sustainable development in cities.

Since 1994 (after apartheid), and at the beginning of democracy in South Africa, the NDHS has implemented various housing projects, with 4.3 million houses and housing facilities, with a positive effect on more than 20 million people, according to the Human Settlement Yearbook 2015/2016 (National Department of Human Settlements, 2015:261). Even with this significant progress, the shortfall is estimated at more than two million housing units (NDHS, 2015). Although the NDHS target is to produce 300 000 social houses per annum, it has failed to reach the target due to challenges and complexities (The Fuller Centre for Housing Western Cape, 2014). Housing delivery challenges are not unique to SA alone as the problem of slow housing delivery also relates to other African countries (Ayedun and Oluwatobi, 2011:7). The provision of subsidized housing, as defined in the South African policy, follows a top-down approach led by the NDHS, who design the relevant framework conditions and set implementation targets for the implementing municipalities. The lack of understanding of the complexity and challenges faced by the municipalities is unique to their environment and is then revealed by the project implementation (during the working phase), which the NDHS does not take into account when setting these objectives. The provincial government has been given a mandate to enable the municipalities to provide housing, but sometimes to act as developers. The local government is expected to deliver housing within its boundaries.

The decline in housing delivery can be directly linked with the HSE dynamics and the public sector bureaucratic procedures and legislation, and the major shift from a model of conventional housing provision, into sustainable HS. The aspiration of better living conditions and wanting a good quality of life are the primary reason for the influx of people into urban areas. These areas provide access to job opportunities, education, social services, city life, shelter, infrastructure, and the integration of various cultural activities. Unfortunately, the dream of better living standards and good quality of life that drives these human beings to the cities, is broken down by the harsh reality that access to these elements is not that easy or free.

The public sector, on the other hand, has its own operational process for each sphere and with the rules and regulations set to deliver a service to these communities, delivery becomes a challenge. What emerges is that the needs of the people and the organization's process and requirements do not match. The HSE is dynamic and the challenges for a PL within the public sector becomes complex. The role, authority, accountability, and responsibility of a PL are not agile (not on a fast cycle). To adapt to the HSE, the PL needs to lead effectively.

Although the world has entered the fourth industrial revolution, the availability of modern technology, larger housing budgets, and new programmes has not yielded the required outcomes to dent the housing backlog. Kadir, Lee, Jaafar, Sapuan, Ali and Abang. (2005) cited by Bakar, Karim, Yusuf, and Pin (2012) refers to ten challenges that are directly related to the construction phase of a housing project, but not the project in its entirety. The PM in the public sector domain concentrates on the entire project, from a holistic view, not only the construction/implementation phase. In the public sector, project management is faced with different challenges from those in the private sector, and these challenges tend to stretch far beyond project limitations. According to Grant, Hackney, and Edgar (2010:142), private organizations are driven by profits that provide a clear direction and measurement of their success. Although public and private sector PL goals are the same to deliver the project objectives, the organizational focus differs in the service they need to deliver, as the public sector is open to all and the private sector are limited. In contrast, the public sector's PL has to deal with projects within a social, political and multi-stakeholder challenging environment. According to City of Cape Town Standard Operating Procedure Guideline Document: Human Settlements (2016), noted that any PL, beyond all the project management and construction experience they may have, has to acquire a sound working knowledge of the Municipal Budget Process, and manage the need to get funding approvals for any outsourced work, as well as completing the processes to procure the services of service providers, i.e. consultants or contractors.

The housing policy has set out programmes and grants that are directly linked to housing which provide a highly prescriptive process, with limits within which the implementers have to operate. Hence, managing projects in the public sector puts the PL in the difficult position of attempting to keep everyone happy at the same time. The national government must formulate and make policies, develop norms and standards, as well as the rules and

regulations. When it comes to human settlements, a municipality takes on the role of being the regulator, enabler and provider. This means that PLs within the HSE are facing various challenges which contribute to the delivery on projects. This research study seeks to investigate the challenges faced by PLs (as referred to within the human settlement department) in a dynamic HSE, with the focus being limited to the Western Cape, particularly Cape Town.

1.3 Problem statement

Urban population growth has put more strain on the public sector in terms of keeping up with the housing demand. The housing demand backlog has substantially increased to date. Consequently, PLs are faced with several challenges that prevent them from achieving the sought-after project delivery targets. Therefore, this research examines the various challenges confronting PLs in the dynamic human settlement environment, towards reconfiguring the current role of PLs (in terms of authority and responsibility) on projects with a focus on service delivery.

1.4 Main research question

What are the challenges confronted by PLs during housing delivery in a dynamic HSE?

1.5 Aim of the study

To examine the different challenges faced by PLs in the dynamic HSE, and whether PLs exert an ability that can creatively lead and transform the project organization.

1.6 Research objectives

The objectives of the research are to:

- a) Determine the role, importance, and limitations of project leadership in the HSE.
- b) Establish how project delivery takes place in the HSE.
- c) Identify the different challenges confronted by PLs in the dynamic HSE.
- d) Find out whether PLs exert an ability that can creatively lead and transform the project organization.

1.7 Significance of the study

PLs face various challenges on human settlement projects that hinder project delivery and have an overall effect on the public sector. The public sector management, stakeholders, academics and practitioners need a better understanding of these challenges, if they aspire to adequately meet the housing need. The research will focus on identifying these challenges and provide recommendations. The research report will be beneficial to all stakeholders within the HSE.

1.8 Research methodology

A qualitative research approach was adopted in the research because it allows a combination of document reviews, and structured interviews. According to Creswell (2009), qualitative research is collecting data through reviewing documents, questioning participants, or studying people's behaviour.

1.9 Limitations of the investigation

The general qualitative research method disadvantages include:

- a) Interviews in terms of possible challenges with interviewing relevant officials, pertaining to the date and time schedules of individuals, during working hours;
- b) Lack of scientific control;
- c) Qualities of data gathered are subjective, pertaining to the views held by the respondents.

1.10 Structure of the research report

The structure of the research is as follows:

Chapter One – Introduction: This opening chapter offers the foundation of the study with a background framework on the topic, leading to the identification of the problem, and establishing the purpose of the study.

Chapter Two – Literature review: This chapter outlines the concept of the human settlement environment, its dynamics, emerging challenges and all its intricacies surroundings

urbanization, government mandate, the housing development process, project delivery, and multiple stakeholders. Thereafter, this chapter highlights the approach of the project leader with special consideration of the role of orchestrated action within the human settlement environment to archive project delivery.

Chapter Three – Research Methodology: This chapter describes and justifies the qualitative research approach chosen for the study, the research design, method of data collection and analysis, and ethical considerations.

Chapter Four – Data Presentation, Analysis, and Discussion: The chapter presents and discusses the data collected and analysed, according to the research methodology set out.

Chapter Five – Conclusion and Recommendations: The study conclusion and recommendations are outlined, as to how PLs, as well as other officials may assist with the project delivery process for human settlements.

1.11 Chapter summary

This introductory chapter has presented the outline and structure of the minor thesis, including its aim, objectives, significance and research methodology. It also acknowledges the limitations of the research. A brief introduction to the remaining four chapters is given to orient the reader to the work in an overview. In the next chapter, a literature review provides an exploration of the topic as represented to date, in the literature.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter outlines the concept of the environment of the human settlement, its dynamics, emerging challenges and all the intricacies surrounding urbanization, government mandate, housing development process, project delivery, and multi-stakeholders. It also highlights the approach and the challenges faced by the project leader in a human settlement environment. It also reviews the process of project delivery within developing human settlements.

2.2 The Human Settlements Environment

The HSE has intrinsic complexities. Housing developments are usually initiated by the private and public sectors, with the public sector mostly concentrating on the poor. Within the public sector, the NDHS is responsible to provide everyone with a sense of belonging through housing, as mandated by the Constitution (Gibberd, 2010). Communities depend on the government for service delivery as the political leader who canvassed for their votes and promise them service delivery; housing is at the top of the list of services. For NDHS to respond to the housing need and demand, they must provide land and money. The methodical approach in which it is done, is through processes, frameworks, programmes, and policies. Adding to the complexity of the bureaucratic nature of the NDHS is that it forms part of the public sector with a predetermined organizational structure with its own responsibilities, authority and accountability (Du Toit and Van der Waldt, 1999). Public sector spheres and departments need to be in sync as per their mandate; however, each department and its related spheres has a specific mandate that does not always align with NDHS housing delivery, as indicated in the Stakeholder and Intergovernmental Relations Strategy and Engagement Plan, by the +Housing Development Agency (HAD) (Housing Development Agency, 2017:19)

Furthermore, the public sector is split into national, provincial and local spheres. It is the responsibility of provincial and local organizations to provide service delivery according to the Constitution of the Republic of South Africa. With these human settlements spheres exploiting public land and money to fulfill their mandate, their entire operations and processes

are bound by the transparency of the institution's mandate as a whole, as well as the individual sphere's rules and policies identified in the Provincial Finance Management Act of 1999 and Municipal Finance Management Act 2003 (Government, 1999 and Government, 2003). Human settlement projects reside mainly within the public sector domain, with the authority that relies on politicians. For NDHS to fulfill its mandate, they rely on a project management approach and housing development process, to navigate through the public administration which they borrow from the private development sector. This machine comes with its own set of principles, rules, and legislation. With this being said, the lack of internal public sector resources capability to fulfill the housing mandate alone places a further burden on the NDHS, as they need to procure resources (Mabelebele, 2006).

PLs are thus relied upon when it comes to housing developments, to coordinate and synchronize the various project factors whilst managing various multi-stakeholders to achieve service delivery. The expedition of service delivery is directly linked to the quality of life aspiration, as people are not looking for a house or place to exist alone, but to be part of the socio-economic environment of which they can form part (Windapo and Goulding, 2013). This calls for sustainable human settlement development that caters to all within the environment. HS and informal settlements are multifaceted to define, describe or understand as its dynamics and complexities are not easily understood, due to being rooted in human existence. Maslow's motivation theory of the hierarchy of needs demonstrates food, shelter and water as basic needs (amongst others), detailing further that these basic needs first need to be satisfied before any other needs can be addressed (Maslow, 1948). Thus the quality of life for an individual starts by fulfilling the basic needs and once that is achieved, the individual can move forward to attain his or her other needs. This places further burdens on the project leader to achieve the project objective as the housing project itself needs to create job opportunities for these individuals, through the development process of infrastructure and housing (HAD, 2017:67). This and other public sector responsibilities thus get passed onto a housing project, which were not the objective of the project.

2.2.1 Quality of life

Since 1994, in post-apartheid South Africa, the provision of adequate housing and reduction of poverty to provide a better quality of life has been a challenge for the South African

Government (Windapo and Goulding, 2013). Ruzevicius (2014) explained that quality of life for the whole region, countries, cities, communities, and individuals could be evaluated through nine main indicators, namely: material welfare; health; political stability and safety; family life; social life; climate, and geographical location; employment; political freedom and gender freedom. When it comes to stakeholder management in a housing project, what is fundamental is communication and people management. It is all about the ideals and aspirations of the person, measured by their level of satisfaction (Ruzevicius, 2014). This also plays a significant role when it comes to sustainable human settlement as the socio-economics involved to attain the desired quality of life are of paramount importance. The aspiration of better living conditions and a desire to have a good quality of life is the primary reason for individuals to move to cities. According to the UN-HABITAT (2007:1), the ones who are excluded from the city's opportunities physically, politically and economically, are the marginalized slum dwellers who are particularly vulnerable to crime and violence. Furthermore, it is difficult for these individuals to access education, employment and social amenities (South African Cities Network (SACN), 2016). Unfortunately, the dream of better living standards and good quality of life is not fulfilled by the harsh realities of the city, as the lack of security of tenure, poverty and unemployment which they encounter upon arrival, result in a continuous demand for growth.

2.2.2 Informal settlements are dynamic

Many people migrating to cities face challenges of living in informal settlements which comprise of crowded living conditions, lack of basic services, as well as exposure to crime and violence. It is evident that in a situation where people are subjected to the lowest margins of society, community safety is very low and residents are exposed to violence and crime on a daily basis. The formation of informal settlements in South African cities usually takes place in smaller pockets of urban land, adjacent to core formal areas (Abbot, 2004:193). That is why Huchzermeyer (2006) argues that informal settlements are part of the urban fabric and have a particular history, form, and function. Although the accommodation in informal settlements does not offer the comfort of living in a formal structure, it provides some protection from the elements and is an ideal home to people who cannot afford to pay for proper housing, and therefore provides a major advantage. These individuals are referred to as the urban poor, and live in appalling conditions with no security of tenure, basic services

or environmental safety, as noted in the WCDHS Municipal Human Settlement Demand Profile (Western Cape Department of Human Settlements, 2015). Bremner (1994) noted, as identified by Windapo and Goulding (2013), that communities within these informal settlements are multifaceted to outsiders due to the dynamics within the settlement. Dynamic in general refers to something energetic; capable of action and change; and forceful. They depend on social networks (interlinked to each other) to make their occupant's lives easier by using minimal resources at their exposure, making it a very complex social environment (Abbott et.al, 2001). The survival in informal settlements feeds on politics, social network structure and the socio-economics system. As a result, the National Development Plan (NDP) (2030) stated: “wherever possible, upgrades should happen in-situ, or at least with minimum disruption to existing communities”. Community participation is key to human settlement developments, because not getting the buy-in to the project is an early indicating factor for the project’s success. Misselhorn (2008:4) argues that the ignorance about the dynamics within informal settlements results in inappropriate interventions. These dynamics include the intricate social and survival systems, as well as the practical and communal challenges of housing and infrastructure development.

The effect of these on housing projects is that there is a constant influx of people, whereby they construct themselves in a high densified way that can cater to them all. However, once these settlements need to be developed, or an in-situ upgrade needs to happen, the land does not allow everyone to receive an opportunity. This causes disruption to the existing socio-economic structure that exists, and requires community participation to provide an amicable solution for all parties involved. Locally based smaller enterprises create economic activity by selling material that can be used for shelter. Local shops and services provide the essentials needed by these individuals to survive, which contribute to the sustainability of the socio-economic structure of the community.

2.2.3 Housing need

Increasing urbanization in cities caused an increase in South Africa’s housing backlog, with the number of residences (largely shacks) declared insufficient, increasing from 1,5 million in 1996 to 1,8 million in 2001 (Rust, 2006). Furthermore, the demand for housing is indicated by the number of people living in slums and informal conditions. The Western Cape accounts

for 4 524 335 people (which is about 11.2% of the national population) most of whom are located in Cape Town, according to the Census 2011 (Statistics South Africa, 2012). According to the CoCT State of Cape Town report from 2014, Cape Town recorded 376 informal settlements at that time, and the number is still growing (City of Cape Town, 2014). The growth of informal settlements emanates from the overcrowding of well-established townships in the form of shacks and backyard dwellings. The City of Cape Town Five-year Integrated Development Plan (July 2017-June 2022) mentioned that current housing demand in the Cape Metropole sits at 479 200 – 529 3000 housing opportunities (see Figure 2.1) with the result that 47 920 – 52 930 housing opportunities need to be created per annum over the next 10 years, to meet this demand (City of Cape Town, 2019).



Figure 2.1: Cape Town Housing Demand

Source: CoCT (2019:14)

The housing backlog remains a challenge, and demand and supply do not match, despite the national government efforts. The NDHS as a whole is thus under pressure and this filters down through the spheres and onto the PL to relieve this backlog. However, the PL has to deal with their own demand and supply issues, as their project sometimes cannot cater to all.

2.2.4 Housing delivery decline

The steady decline in housing delivery was noticed from 1998 onwards, which indicated various reasons for the decline (Napier, 2005). According to Financial and Fiscal Commission

(FFC) (2013), the decline in public sector project delivery is caused by a number of challenges starting from: higher delivery norms and standards; increase in unit size from 30m² to 40m²; the global financial crisis that started in 2007; the escalation of construction costs; as well as under-spending by provinces because of poor programme management. Furthermore, the FFC (2013) points out that pure inefficiency and an inability of the NDHS to account for housing units delivered, are other problems that caused low project delivery by the public sector.

Smit and Abrahams (2010) noted that although the housing policy has been successful in delivering houses to low-income households, it has not been able to meet the full demand, nor will all residents of informal settlements qualify for subsidies. This indicates that the housing policy is not in line with the needs of the people living in informal settlements as not everyone is catered for under the subsidy. However, the fact that they remain homeless and unable to afford housing, maintains the burden on the government. Furthermore, population growth and migration to cities also directly affect the housing demand as these people need to be catered for within cities (World Bank, 2000). Cities prepare spatial development and master plans to assist them to plan for future growth within cities, which need to be in line with provincial and national plans.

2.2.5 Urbanization

Urbanization plays a crucial role when it comes to HS, as the demand for housing is directly related to informal settlements as well as to the overall population growth. The BNG's focus was directly linked to the eradication of informal settlements, according to the Concept Notes: Human Settlements Spatial Planning Framework (SPF) (Department of Human Settlement, 2014). Industrialization and economic growth tend to attract urbanization (World Bank, 2000). Harod and Satterthwaite (1989) noted that the reason people migrate to cities is for a chance of survival. Through better output, improved quality of life, opportunities for employment and extensive investment in infrastructure and services, urbanization has assisted many to overcome poverty (UN-HABITAT, 2016:34). In Africa, urbanization is unconstrained and described as "the urbanization of poverty" because people migrate to the cities to avoid rural destitution (South African Cities Network (SACN), 2016:24). African urbanization can be regarded as the effect of people in rural areas trying to escape hardships in these areas and the shift in political independence (that used to control urban settlement).

The proliferation of informal settlements and backyarders is the reflection of population growth in South African cities and towns (Mavuso, 2014). The influx of individuals into urban areas is uncontrollable. Abbott et.al, (2001:4) note that South Africa's national policy must acknowledge the reality that informal settlement is a part of its urban landscape. The local authority is obliged by the South African Republic Constitution and mandate to provide the same services to people that are living in these urban areas. This requires the local authority to provide housing to these individuals, and if that is not immediately available, then provide them with temporary basic services. Once a project is identified, the PL is appointed by the local authority to attend to provision of the appropriate solution.

2.3 Human settlements

The concept of HS derives from the Vancouver Declaration Conference as it is defined HS as "the entire community" (within a village, town or city) with all the essential needs that sustain it, and not just a house. These needs include material, social, business, religious and cultural elements that sustain it, expressing the entire socio-economic network of the city, town or village (Sarkar, 2010:2). All these components need to be sustained through organizational, cultural, social and physical elements, which are the summary of characteristics of a human settlement. Human Settlements can thus be articulated as the whole environment and not simply a house.

2.3.1 Human settlement sustainability

In South Africa, in 2009 the shift from housing provision to the broader aims of Human Settlement was mostly influenced by the importance of providing access to resources and opportunities that influence active participation in the social and economic fabric. This was a clear demonstration by BNG in 2004, as the focus moved from being concerned with notions of the single house to a community with the fundamental element of building up assets for the poor within a community and social fabric (NDHS, 2014) and (SACN, 2014). The BNG introduced the new model of housing development as it shifted its focus from housing only to sustainable human settlement.

A sustainable human settlement is defined according by the NDHS Annual Performance Report, 2017/18, as the quality of life of an individual and the community, with access to

adequate accommodation, basic services including the security of tenure, social services and economic opportunities (National Department of Human Settlement, 2017). With this being said, the definition implies that the achievement of a sustainable human settlement fundamentally relates to the individual and to the community, in terms of their quality of life. Therefore, the PL needs to take into account these elements that make up a sustainable human settlement, when embarking on a human settlement project. Furthermore, to assist the PL with the creation of a human settlement development, DHS (2014) have identified five principles for reaching sustainable development goals. It exists in compact, connected and integrated settlements with the assistance of the application of the relevant legislation, spatial and financial components (see Figure 2.2).

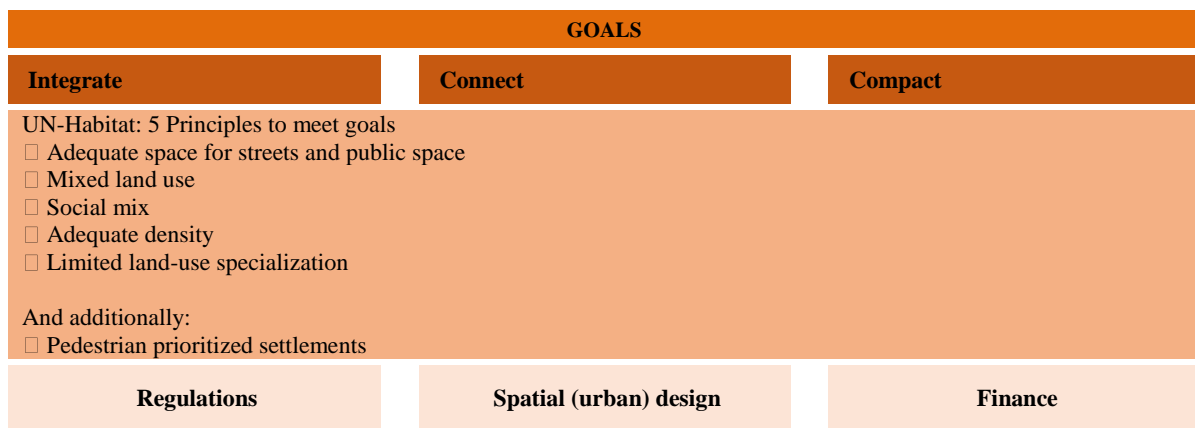


Figure 2.2: Sustainable Human Settlement Goals

Source: DHS (2014:6)

These goals should drive PLs in their project work up to the point of completion, as a set of guidelines and measuring tools for human settlement developments.

2.3.2 The role of the Department of Human Settlements

The Constitution of the Republic of South Africa 1996, Section 26, has three subsections which note the right that everyone has access to housing, the responsibility to provide adequate housing to make access to housing a reality, and the prohibition and conditions for evictions. This is further backed up by the NDP 2030 in Chapter 8, where it provides the Department of Human Settlement with its core mandate that “everyone has the right to have

access to adequate housing” and asserts the aim of NDP to transform HS and the spatial economy (National Development Plan, 2011).

It also provides the national executive with the authority to establish and facilitate a suitable human settlement process through collaboration with provincial and municipal (local) departments; and, to determine national policy, national norms and standards for housing delivery goals and monitor the financial and non-financials of provincial government and municipalities. Figure 2.3 indicated the process flow between the spheres of government.

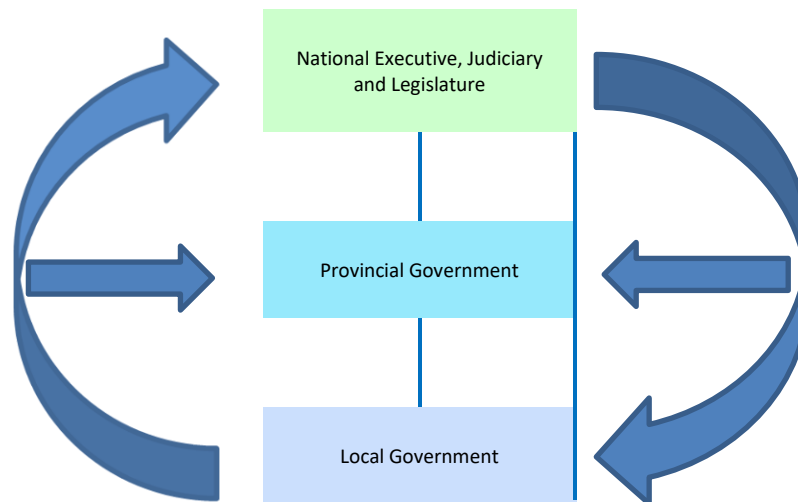


Figure 2.3: Spheres of Government

Source: Du Toit and Van der Waldt (1999:193)

In Human Settlement the national executive’s role is to formulate the national housing policy. Republic of South Africa, (1996) in Chapters 3, 6 and 7 specifies the sphere's role and responsibility, indicated in Table 2.1.

Table 2.1: Spheres of Government

SPHERE	EXECUTIVE	ADMINISTRATION	LEGISLATURE	ROLES AND RESPONSIBILITIES
NATIONAL	President and Cabinet	Director-General and Departments	Parliament	Macro Planning, deal with the country's issues, set goals, set laws and policies, coordinate government work, provide direction and strategic support, provide money to provincial and municipal government, monitor and evaluate overall government progress
PROVINCIAL	Premier and Executive Council	Heads of Department and staff	Legislature	Set and approve provincial laws, pass the provincial budget, comply with the Provincial Growth and Development Strategy, and with the Spatial Development Framework, coordinate, monitor and support municipalities in the province, cooperate with municipalities to implement programmes, policies and legislation.
LOCAL (MUNICIPAL)	Mayor and Mayoral Committee	Municipal Manager, Heads of Department and staff	Council	Elected local council approves policies and by-laws, passes the budget each year, decides on the development plan and service delivery in the municipal area. Municipal administration is led by Municipal Manager and other officials, with the responsibility of employing staff and coordinating the resources to implement programmes, policies, and legislation.

Source: Republic of South Africa (1996)

According to the Housing Act of 1997, the Provincial government was given the mandate to create an enabling environment by doing everything in its power to promote and facilitate the provision of adequate housing in its province, including allocating housing subsidies to municipalities. According to Tissington (2010), local government (that is the municipal government) needs to implement policies and planning that are geared towards the delivery of housing. The direct responsibility to implement housing by taking reasonable steps within the framework set up by National and Provincial legislation is realized at the municipal level. Dugard et al., (2016:6), note that the national executives also monitor implementation of the national housing policy through the promulgation of the National Housing Code and the establishment and maintenance of a national housing data bank. The Provincial government deals with matters within their limitations (own province), creates their own set of laws about housing, and must comply with schedule 4 and 5 lists of responsibilities.

The local government is responsible for the delivery of housing through Section 139 of the Constitution. Municipalities are responsible for service delivery within their borders. This means that the local authorities/municipalities are the implementing sphere of government,

however when resources are required, provincial spheres may assist with implementation. Legislation has split municipalities into three categories with different authority (See Table 2.2).

Table 2.2: Municipality Categories

CATEGORY	DESCRIPTION
Category A	Metropolitan municipality: has the authority of municipal policymaking and law-making within its border line.
Category B	Local municipality: has the authority of shared municipal decision-making and law-making within the border of the category C municipality, within whose border it falls.
Category C	District municipality: has the authority of municipal decision-making and law-making within its border, and consists of the Category A and B municipalities that fall within its border.

Source: Republic of South Africa (1996)

South Africa is divided into nine provinces, 44 district municipalities, 205 local municipalities, and national, provincial and municipal bodies being elected and established by the government. The CoCT is a Category A municipality and is situated in the Western Cape. In the Western Cape, the DHS assists the CoCT Municipality in the metropolitan area due to housing needs and urban growth. One can thus assume that when it comes to the human settlement projects, the national department is the client, the municipal department is the developer and the provincial department is the regulatory body within human settlements. That means the PL works for the developer and therefore has to implement the project accordingly, while following the client specifications and regulator's rules. Hence, knowledge about policies is important for the PL to understand decision making and how politics influence the HSE.

2.3.3 Legal and policy framework

The institutional, legal and policy framework in housing is complex, with a plethora of policy and legislation. The institutions and inter-governmental relation implications play a major role in the challenge to address the housing need. In other words, Human Settlement has its own unique mandate and a prescribed system of co-operative governance within national, provincial and municipal spheres. Listed below are the main central housing laws in South Africa:

- The Constitution of the Republic of South Africa Act 108 of 1996
- The Housing Act 107 of 1997
- (Amended by Acts 28 and 60 of 1999; Act 4 of 2001) (Housing Act);
- Prevention of Illegal Eviction from and Unlawful Occupation of Land Act 19 of 1998 (PIE);
- Division of Revenue Act (DoRA) 2013
- Rental Housing Act 50 of 1999
- (Amended by Act 43 of 2007) (Rental Housing Act);
- National Norms and Standards for the Construction of Stand Alone Residential Dwellings Financed through National Housing Programmes
- (April 2007) (National Norms and Standards); and
- Social Housing Act 16 of 2008 (Social Housing Act).
- Spatial Planning and Land Use Management Act 2013
- Breaking New Ground 2004
- National Development Plan 2011
- Western Cape Provincial Framework Policy for the Selection of Housing Beneficiaries in Ownership-based Subsidy Projects.

2.3.4 Political influence

Communities mainly rely on political leaders to address their immediate service delivery needs. In turn, the leaders convey the demands to the public sector forums which results in the needs being addressed in the Integrated Development Plan (IDP). Projects in the public sector are identified or emanate from political decision making (Van der Waldt, 2001). The ruling party selects projects which match their political agenda, and the political structure determines the priorities, which are mostly geared to the ruling parties' wards. This opinion is shared by Mabelebele (2006), that projects and programmes implemented in the public sector take place in the context of power, authority and the unpredictable political environment, which is a very fluid environment compared to other sectors. The Member of the Executive Council (MEC) holds the power and authority to distribute funds to the province and projects which he/she deems fit. At the municipal level, the power and authority reside with the Mayoral Committee (MayCo) to achieve efficient service delivery.

Public housing delivery is highly influenced by politics, as the decision-making in prioritizing projects depends on political representatives within MayCo. CoCT (2016) HS standard operation procedure explains that “No project can be implemented without a Council approved Budget, approved Project Funding and the legitimate appointment of Service Providers.” However, the implementation of such housing projects takes place through project management principles and techniques led by project leaders or managers to conform to policies and procedures. These factors influence the planning and programming of housing projects as well as the implementation. Van der Waldt (2001) argues that government projects are the result of policy formulation at the political level as it relates to service delivery. Most of the project delivery activity that takes place at the local government level is run by the human settlement PL, who manages the delivery process by appointing their own professional team and selected contractor(s). The management of a project is mainly about definable goals, measurable outcomes and also to ensure that the project output is realized by utilizing the project team and managing the interrelationship between all stakeholders and role-players (Van der Waldt, 2001).

2.3.5 Organizational structure and accountability

The NDHS is obligated to establish and facilitate a sustainable national housing development process by formulating housing policy. The provincial sphere must act within the framework on the national housing policy and provide housing accordingly through the implementation of local spheres. Its local sphere must operate within the framework of national and provincial legislation and policies to ensure that the constitutional right of housing is realized through actively pursuing housing development. As stated in the Constitution of the Republic of South Africa (1996, Section 26), the Minister of Human Settlements has the power to set the national housing policy, housing programmes, and funding. This is achieved by means of legislation and the National Housing Code as the vehicle to provide adequate housing to poor households through housing programmes. However, specifications for the allocation of funding lie with the Department of Revenue Act (DoRA) and the way it is utilized is further dependent on the MEC and MayCo.

The public sector has a classic bureaucratic command structure, as decisions flow from the top down. Starling (1993) emphasized that because the government has a bureaucratic

structure, managers on lower levels are not given authority to make adequate decisions pertaining to their projects. The project manager's decision making is limited by legislation and policies, even though they are held responsible and expected to deliver the project outcomes. The authority, responsibility and accountability are shared and delegated from the Provincial Minister to the senior manager(s). Senior management delegates responsibility and accountability to low-level managers to achieve service delivery. In HS, this senior management relies on project managers to achieve project delivery. However, the authority they have is limited by the organization's policies and by-laws which interfere with the PL's ability to deliver the project objectives. (As discussed later in this chapter, the roles of project manager and project leader are interchangeable – see Section 2.10). Within the provincial level of DHS, the Head of Department is the highest level of authority, followed by Chief Director, with their respective directors below them, of which the PL is a member. (See Figure 2.4 on the next page.)

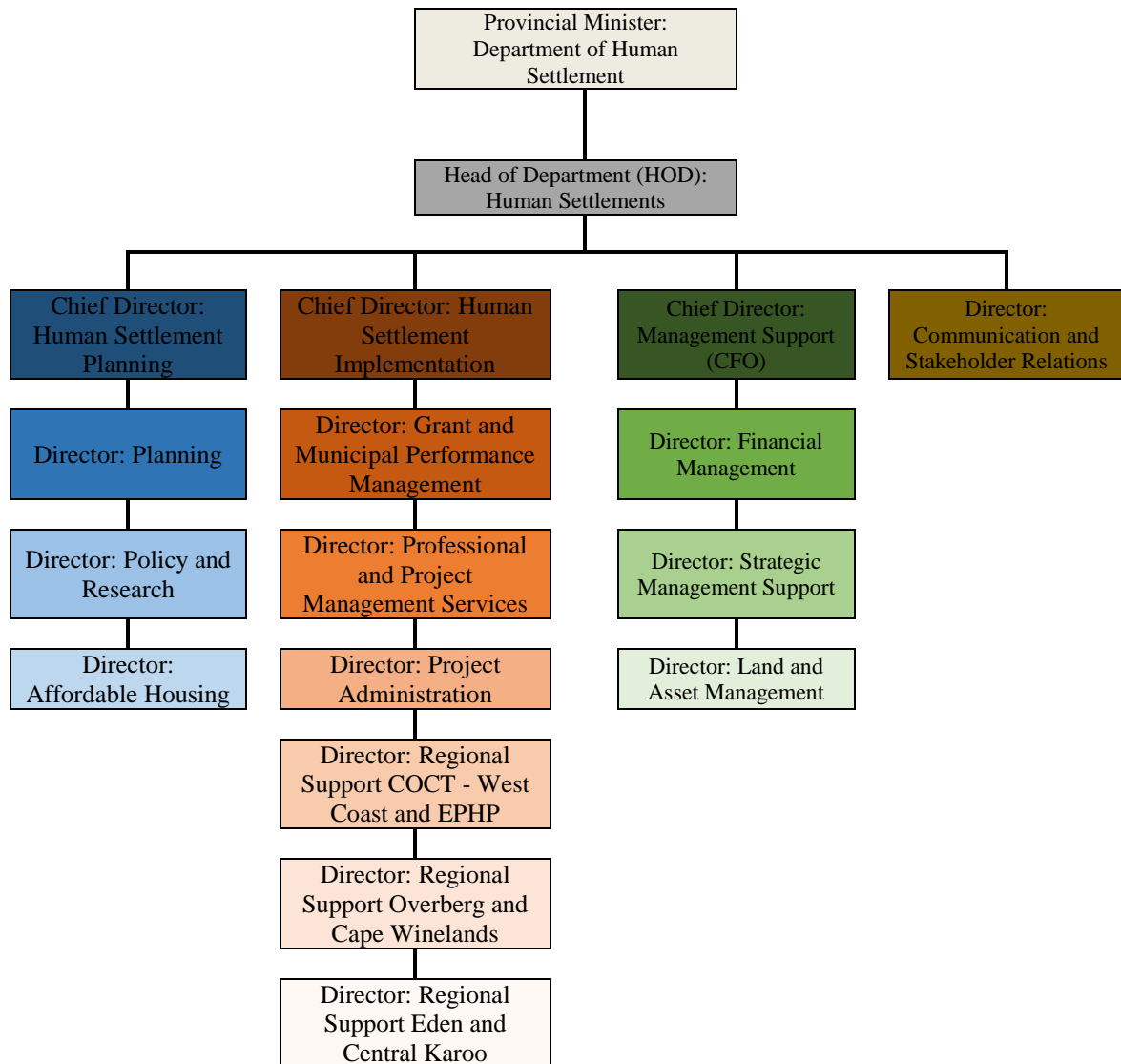


Figure 2.4: Provincial Organogram

Source: WCDHS, Annual Performance Plans 2018/19

At municipal level, unlike the provincial department, the human settlements department resides among other service departments within local government such as Corporate Services; Compliance and Auxiliary Services; Health; Human Settlements; Utility Services; Finance; Community Services; Transport, Road and Stormwater; Economic, Environment and Spatial Planning; Tourism, Events and Marketing; Social Development and Early Childhood Development; and, Safety and Security. The authority, responsibility and accountability are similar to the provincial department with the exception that it starts with the City Manager, then devolves to the Deputy Minister, then to the Executive Manager of Human Settlements, then to the Director, of whose team the PL is a member (see Figure 2.5 below).

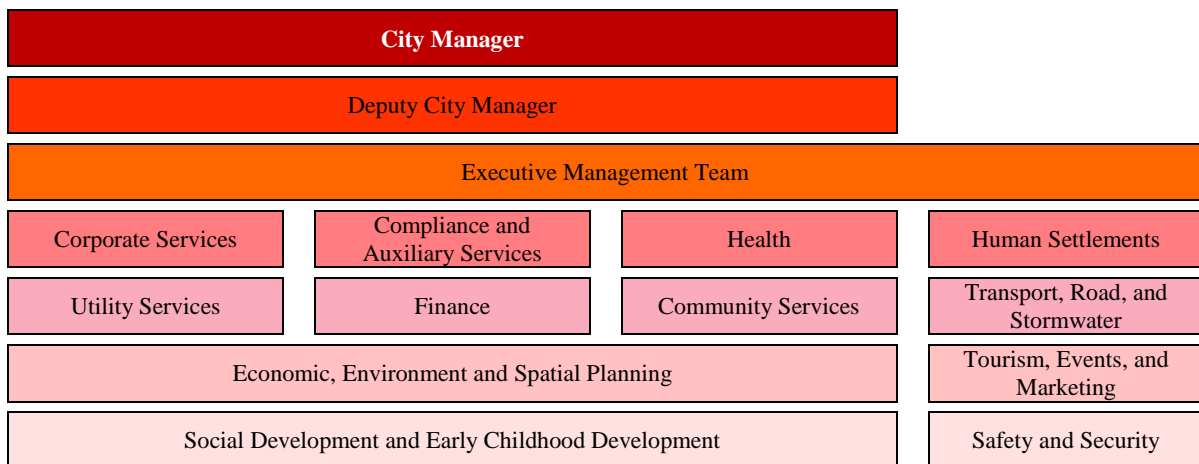


Figure 2.5: City of Cape Town Organogram

Source: CoCT Integrated Development Plan 2012-2017 (IDP) (2019)

Both provincial departments and the municipality have functional organizational structures dedicated to a specific function, as specialists are grouped in accordance with their profession as per the examples shown in Figures 2.4 and 2.5. Kerzner (1984:5). A roleplayer's specialization is noted when a bureaucratic command structure and a functional organizational structure are added together, forming operational islands (silos) (see Figure 2.6). As Max Weber's theory expressed by Serpa and Ferreira (2019) points out, some characteristics of bureaucracy are functions defined by law; hierarchy of authority; assessment specialization; selection of employees for technical competence; formal social relationships according to the position held; employees' regular wages; separation of ownership and the employees' function; regular career of employees; overtime; and, division of work, with high specialization and standardization of the functions to be performed.

The theory revolves around the development of a hierarchical system in an organisation and the creation of procedures, methods, rules, and regulations, according to which organisations may operate and transact. With the government, this system has a broader context as the system consists of national, provincial, and local governments; with each having their own operation and transactions, so that the alignment becomes confusing. For example, NDHS is only one service department, there are other services like water and sanitation, electrical, environmental affairs, etc. The provincial and provincial on its own, while local authorities all that services are under one umbrella concentrating on the full spectrum of services with

each department have their own national and provincial department too. With each sphere departments having their own objective(s) to achieve, which all are not aligned to human settlements at a given time but all for human settlement at the end of the day as it makes up a city.

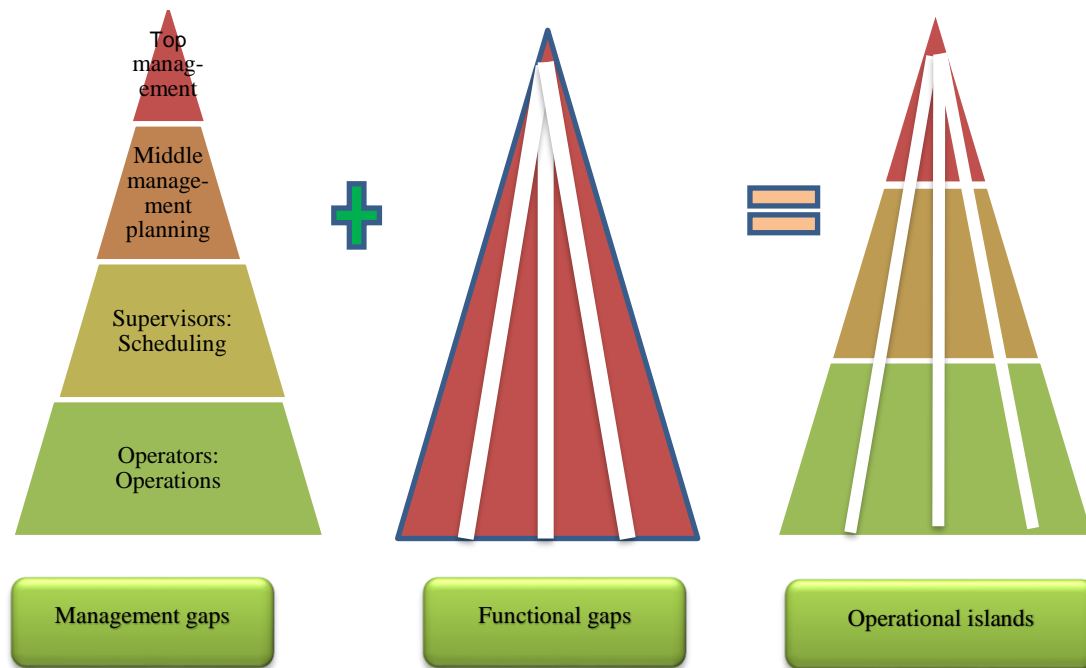


Figure 2.6: Command Structure

Source: Kerzner (1984:5)

The result of a functional organizational structure is that the Project Manager (PM) does not staff a project, as it is the responsibility of the line function, leaving the PM to request resources from a line manager who has authority over the staff. Within the public sector, this becomes even more difficult as there are no resources from functional lines allocated to the project and the PM needs to procure the relevant resources required. Furthermore, when he/she requires assistance from line departments, they do not even regard him/her as a colleague, but as an applicant for resources. According to Kerzner (2016:29), public sector project implementation involves managing both the project team (internal and external) and the community. Within the hierarchy that exists in the public sector, senior management is held accountable for project delivery through various government programmes.

Based on the fact that municipalities use public funds to implement projects, it is legislated that they consult with other governmental bodies such as parliament, the Provincial Legislature and the Municipal Council, for approval on how these funds are to be invested (which is also guided by legislation). Municipalities also have their own by-laws which allow senior management to delegate some responsibilities to committees, directors, and individuals. Through the authority of delegations, the HS director and a PM are responsible and accountable for the implementation of housing programmes (CoCT, 2016). One can assume that within provincial departments there are similar delegations. It can be inferred from the foregoing that public sector project authority, responsibility and accountability are complex, however, the responsibility and accountability of the project remain with the PL. An introspective review of the housing policy took place only ten years after 1994, and this policy shift acknowledges the need for housing to be integrated into the broader HS goals. Although all three spheres have independence when it comes to budget, policies, and activities, aspects of these that fit across all spheres should be coordinated and integrated, because the development of South African communities depends on the public sector. This government developed the BNG policy to address the values of a sustainable HS in 2004 (DHS, 2004). Ultimately it means that all subsidized projects are supposed to follow the guidelines of sustainable HS set by that policy.

2.4 Housing instruments

The Housing Code was published in the year 2000, to set the policy principles and guidelines, that the National Housing programmes contain. The Housing Code is binding on provincial and local government spheres (Dugard, Cark, Tissington and Wilson, 2016). The Housing Act of 1997 refers to a programme as a “national housing programme” which relates to any national policy framework that enables housing development. This includes initiatives such as: providing aid to people who are unable to afford their own housing requirements; assisting with the roll-out of the housing; and, reconditioning and improving current housing. The Housing Code was revised in 2009 and addresses the aspirations of a sustainable NDHS. The PL is therefore guided by this legislation, by-laws and policy when it comes to the implementation of any housing project. All these programmes are listed in the housing code with grant conditions, and guidance is given about how to access each programme. These programmes range from new developments, installation of temporary basic services, emergency housing, housing refurbishment, new community residential units, and social

housing. Thus, service delivery under this context refers to housing and infrastructure which becomes the main output of NDHS and its different spheres (see Table 2.3).

It is worth noting that the public sector in South Africa delivers services to communities through policy; portfolios, programmes, and projects. These categories are spread across the low-income housing market to cater for various housing needs. Mabandla (2003) acknowledges that housing programmes are a direct investment by government, which restored the dignity of the people living in poverty, by giving them physical assets. The ultimate goal for various housing programmes (see Table 2.3 and 2.4) is to provide housing to low-income households who cannot afford to purchase or rent a formal house in the open market. Manomano, Tanga and Tayi (2016), state that South Africa established programmatic interventions that are supported by policies, to assist in addressing the growth of the housing need (in general) and the problems that have transpired from several housing legislations.

Even with this progress, the programme still lacks the capabilities to speak and cater to the poor on the ground, as it comes with terms and conditions in the form of quality criteria for a subsidy. Not all people staying in informal housing qualify; also, the programme adopts a one-size-fits-all solution, while not all the conditions and environments are the same. A project is unique in nature and this requires assessing the individual applicants and catering for them individually. The limited resources provided by the subsidy place a further burden on PLs, as they cannot tailor the project according to the specific conditions; they have to complete the project within the existing requirements, by fitting it into the programme resource limitations. (See Table 2.3 on the next page).

Table 2.3 Housing Programmes

HOUSING PROGRAMMES: FINANCIAL INTERVENTIONS		
9	INDIVIDUAL HOUSING SUBSIDIES (NON-CREDIT LINKED)	<p>The individual subsidy programme provides beneficiaries with access to state assistance where qualifying households wish to acquire an existing house or vacant serviced stand linked to a building contract (National Housing Code, 2009:29). Non-credit linked subsidies are provided to beneficiaries who satisfy the criteria of the housing subsidy and do not qualify for credit from financial institutions (National Housing Code, 2009:30). Beneficiaries are able to acquire an existing house solely from the subsidy amount awarded (National Housing Code, 2009:30). The non-credit linked subsidies are also made available for beneficiaries who do not wish to access credit from a financial institution (National Housing Code, 2009:30). The following criteria are used to determine whether beneficiaries qualify for an individual housing subsidy:</p> <ul style="list-style-type: none"> • Married or co-habiting (with or without financial dependents) or single or divorced with financial dependants; • South African citizen in possession of a green barcoded identity document or in possession of a permanent residence permit; • Competent to contract (i.e. 18 years of age or older or legally married or legally divorced or declared competent by a court of law and of sound mind); • Gross monthly household income of up to R3 500; • Have not previously benefited from government assistance; and • Have not previously owned fixed residential property, except where the applicant has acquired a vacant site from own resources and needs assistance to construct or complete a house.
10	FINANCE LINKED INDIVIDUAL SUBSIDY PROGRAMME (FLISP)	<p>The Finance Linked Individual Subsidy Programme (FLISP) provides beneficiaries with access to state assistance, where qualifying households wish to acquire an existing house or vacant serviced stand linked to a building contract. The subsidy is paid to the beneficiary's bank or financial institution and will reduce the beneficiary's monthly loan installments. The following criteria are used to determine whether beneficiaries qualify for an individual housing subsidy:</p> <ul style="list-style-type: none"> • Earn between R3 501 to R22 000; • Be a South African citizen with a valid Identity Document, or be a permanent resident with a permanent residence permit; • Not have qualified for a government housing subsidy before; • Not have owned a fixed residential property before; • Be competent to contract – over 18 years or legally married or legally divorced and of sound mind; • Be married or co-habiting; or be single with financial dependants.

Source: WCDHS Annual Performance Plan (2018-2019:10-11)

Table 2.3: Incremental Housing Programmes

INCREMENTAL HOUSING PROGRAMME		
11	INTEGRATED RESIDENTIAL DEVELOPMENT PROGRAMME (IRDP)	The Integrated Residential Development Programme (IRDP) was introduced to facilitate the development of integrated human settlements in areas that provide convenient access to urban amenities, including places of employment (National Housing Code, 2009:13). The IRDP provides for the acquisition of land and servicing of sites for a variety of land uses, this includes the provision of residential stands for low, middle and high-income areas (National Housing Code, 2009:13). The programme has been designed on the basis of a phased in implementation approach (National Housing Code, 2009:32). These phases include, inter alia, the securing of land, the installation of municipal services and construction of top structures (National Housing Code, 2009:32).
12	UPGRADING OF INFORMAL SETTLEMENTS PROGRAMME (UISP)	The objective of the Upgrading of Informal Settlements Programme (UISP) is to upgrade the living conditions of the people living within informal settlements. The Programme contributes to the strategic objectives of the State by providing secure tenure and access to basic services. The Programme focuses on the in situ upgrading of informal settlements; however, in instances where the area is not suitable for human settlement (due to flooding, shallow underlying conditions, etc.) residents may be relocated (National Housing Code, 2009:17). The Programme only finances the creation of serviced stands (National Housing Code, 2009:17). The Department will provide the serviced sites including the following engineering services: clean water; sanitation; roads; and storm water drainage.
13	INSTITUTIONAL SUBSIDY PROGRAMME	The Institutional Subsidy Programme was introduced to provide capital grants to social housing institutions, which construct and manage affordable rental units for at least four years (National Housing Code, 2009:25). Furthermore, the Programme provides for the sale of rental units by the social housing institution after four years from the initial occupation of the units (National Housing Code, 2009:25). The units are predominantly constructed in a high density block development. Units are owned and managed by an Institution (either offering permanent rental or rent-to-own options to tenants), which must be accredited in terms of the Social Housing Act, 16 of 2008. The subsidy is provided on condition that beneficiaries will not take transfer to the property for at least four years after the date of occupation (National Housing Code, 2009:13). If the beneficiary decides to purchase the property, the grant is converted to an individual ownership subsidy (National Housing Code, 2009:13).
14	PEOPLE'S HOUSING PROCESS	The People's Housing Process (PHP) Programme assists households who wish to enhance their homes by actively contributing towards building their own homes. Beneficiaries play an active role in the design and building of their neighbourhood and homes through the PHP Programme. The active participation by beneficiaries in the process is regarded as a contribution towards the achievement of their housing opportunities (National Housing Code, 2009:45).

Source: WCDHS Annual Performance Plan (2018-2019:10-11)

2.5 Financial instruments

The Housing Code introduced the administrative guideline for the implementation of all Housing programmes, so the PL has to deliver projects within this rigid framework. In essence, housing programmes and grant funds are strictly prescribed, such that they are restraining to the extent to which housing development may be implemented. Every housing programme in the public sector is linked to a grant fund, as described in Figure 2.7 below. The various fund sources are Grants, Capital Replacement Reserve (CRR), External Financing Fund (EFF) and Revenue. These are the four primary capital funding sources that a local municipality utilizes to manage the municipality. The available grants utilized for housing are the Public Transport Network Grant / Public Transport Infrastructure Grant (PTNG/ PTIG); Urban Settlement Development Grant (USDG); Human Settlements Development Grants (HSDG); Integrated Network Electrification Programme (INEP); Integrated City Development Grant (ICDG); and Neighbourhood Development Partnership Grant (NDPG). The housing policy is income-related, and aimed at providing qualifying beneficiaries with land, the security of tenure, infrastructure, and a basic house (Charlton and Kihato, 2006).

All the programmes in HS (see Figures 2.3 and 2.4) are linked to grant funds, of which the HSDG provides for the top structure (the house) and the USDG provides for services and land infrastructure (see Figure 2.7). NDHS (2014) reports that increases in the cost of development undermine the viability of projects. Freeman (2008) mentions that the South African subsidy program has been adjusted to cope with inflation.

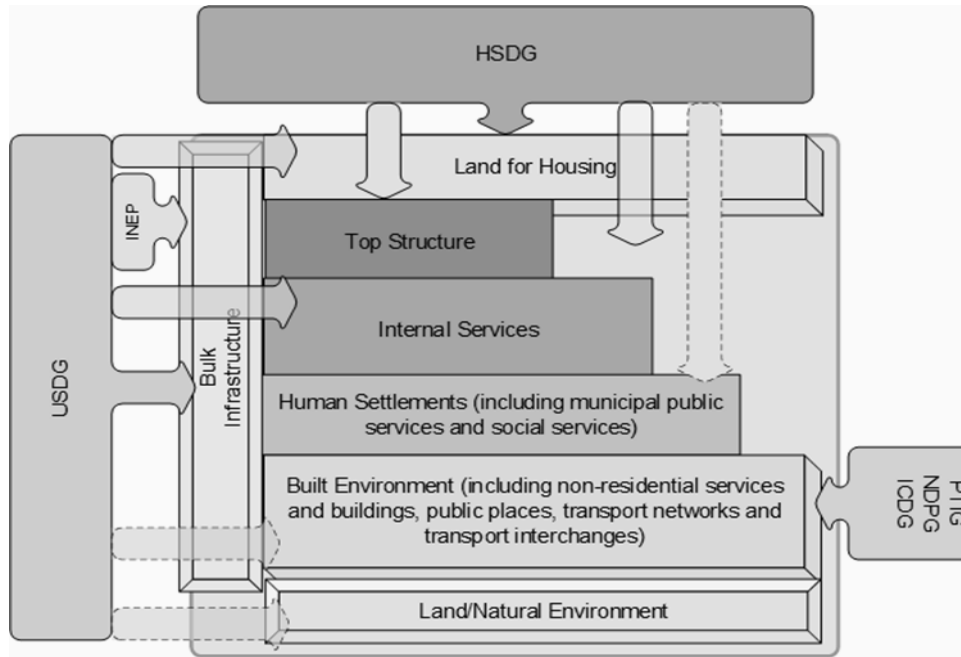


Figure 2.7: Financial Grants vs Project Elements

Source: CoCT (2016:7)

The latest circular from National Government Ref:13/1/P (2017) addressed to the WCDHS indicates that “the adjustment of the subsidy quantum and grant levels is based on the 2016 building cost escalation indicator, as determined by the University of Stellenbosch’s Bureau of Economic Research Cost Index (BER-BCI) effective as of 1 April 2018.” However, in reality the implementing agents are struggling to build within the housing subsidy and the higher building standards, due to higher building costs.

The decline in project delivery indicated in this section was caused by a lack of long term planning by policymakers in the HSE. Successful project management involves achieving a continuous stream of project objectives that is within time, cost, and desirable performance/technology level, while the resources assigned are utilized effectively and efficiently, resulting in the acceptance of the customer and stakeholders (Kerzner, 2017). The project objective is crucial to the organization and their business, therefore the PM is responsible for achieving the objective with the understanding of all stakeholders (Steyn, Carruthers, Dekker, du Plessis, Kuschke, Sparrius, van Eck and Visser, 2012).

2.5.1 Grants

Figure 2.7 demonstrates the different applications of grants. According to the CoCT Built Environment Performance Plan (BEPP) 2018/19, the HSDG and USDG are the two primary grants for housing developments, followed by PTG (City of Cape Town, 2019:52). Grants are allocated on an annual basis and reviewed at the end of each financial year. The allocations are then published in the Division of Revenue Act (DoRA) and distributed from national to provincial departments and municipalities. All funds available from DoRA, including the City's own funds such as CRR and the EFF, are utilized to maximize service delivery aligned to the IDP. The purpose is to ensure long term financial sustainability of the City, and delivery against strategic imperatives, with a special focus on previously disadvantaged areas (CoCT, 2019).

The way it all works is, for example, that the DoRA allocates funds to the CoCT and pays it in predetermined tranches. The municipality has a budget financial cycle that runs for three years, while a financial year runs from July to June. If the project is planned for more than a three-year budget cycle, they need to apply for provision from Section 33 in accordance with the Municipal Finance Management (MFMA). This involves a process whereby the Municipal Manager, MayCo and the community/public must advise the MFMA on the project and the intended expenditure of the public funds over the three-year financial year cycle, for them to approve such funding. If this funding is approved, only then are the municipality and the PL allowed to spend the funds. With the limitation of funds, it is imperative that the PL should understand the municipal financial structure, to see the various options available to leverage funds and the conditions attached. The lack of organizational institutional knowledge and funding regime within the organization can cripple a project if sudden budget cuts are made, or for some unknown reason grant funds are stopped. If the PL has understanding and grasps the funding complexities of the organization, then when financial constraint affects the grant funds, they can navigate with some alternative means until they can recover the funds from grants. For example, the PL may apply for Capital Replacement Reserve (CRR) or External Financing Fund (EFF) or a Special Operating Account (SOA) for funds to assist the project during a specific timeframe, while awaiting grant fund approval.

2.6 The Housing development process

In order for the public sector to fulfil its mandate, it relies on the built environment (specifically housing development) to provide information about civil engineering services and the construction of houses. Project management thus becomes a vital tool to the NDHS, because it is the process that guides the built environment to achieve its project objectives. Project management in the public sector is the best way of harnessing technology and knowledge that is found in private sector businesses (Van der Waldt, 2001). Kerzner (2017:2) defines a project as a sequence of events with a precise objective that has a beginning and an end, financial restrictions, consumes both human and non-human resources and fulfils several functions with a unique result. The Project Management Institute (PMI) mentioned the programme as an assortment of projects with connections to each other, implemented individually but still having the benefits of such a project being realized within one programme (Project Management Institute, 2016:13). Housing projects follow a development process to deliver houses. Umhlaba Consulting Group (2013) has developed a generic housing process, that is similar to the five stages of the property development process, that models the Project Management Body of Knowledge (PMBOK) guide (see Table 2.5 on the next page).

Table 2.4: The housing development process

PROCESS	DESCRIPTION
PROJECT APPLICATION/ PRE-FEASIBILITY	The process involves the confirmation and commitment from the municipality via its signed Council Resolution, including a statutory project agreement and funding for feasibility studies.
FEASIBILITY ANALYSIS	Is the phase in which land is procured that is suitable for human settlement development and all the statutory requirements and restrictions are identified. It includes the campaigning for the project and registration and screening of potential beneficiaries, ending with a pre-planning funding proposal
PRE-PLANNING	Consists of a topographical survey, obtaining land use permission from the local municipality, the process of an environmental assessment, general plan approvals, engineering designs including their approvals, National Housing Builder's Registration Council (NHBR) registration, the implementation of funding applications, and finally, approval.
IMPLEMENTATION	Involves the procurement of a contractor to construct houses and the transfer of the units to beneficiaries with a signed title deed.
POST CONSTRUCTION	Involves the transfer and re-sale of subsidised housing units, a rates and taxes payment and an agreement to include the maintenance of the housing unit by tenant.
EVALUATION AND MONITORING	Involves the process of measuring the plan worked against the actual outcomes during implementation, to see if what was promised is being delivered, as well as utilising the information (data captured) for future planning.

HS projects thus also conform to the development process, just like any other development. It is only the process of the organisation's internal operation of implementation, namely appointing professional services and contractors to implement the work, which has its own procurement system to follow. Thus the HS project is not exempt from any regulation and legislation.

The HDA Annual Performance Plan 2018/19:10 further supports the Umhlaba Consulting Group housing delivery process as it is incorporated in the Human Settlement Value Chain, as demonstrated in Figure 2.8 (Housing Development Agency, 2018). The value chain demonstrates that projects are split into the land assembly and town planning, as well as project packaging and implementation, of which each relevant technical activity process from land identification to closure is highlighted. The housing development process, therefore, depends on the national policies, Housing Code, strategic frameworks, development plans, spatial development plans, and strategic documents, as it provides long-term development goals and vision as to what type of human settlements environment it is inspired to achieve.

Furthermore, the process is grounded in project management stages that allow the PL to plan their project accordingly. However, it is a step by step process in which one step cannot be skipped. Provincial departments and municipalities have created strict compliance measures to make sure that all steps are completed.

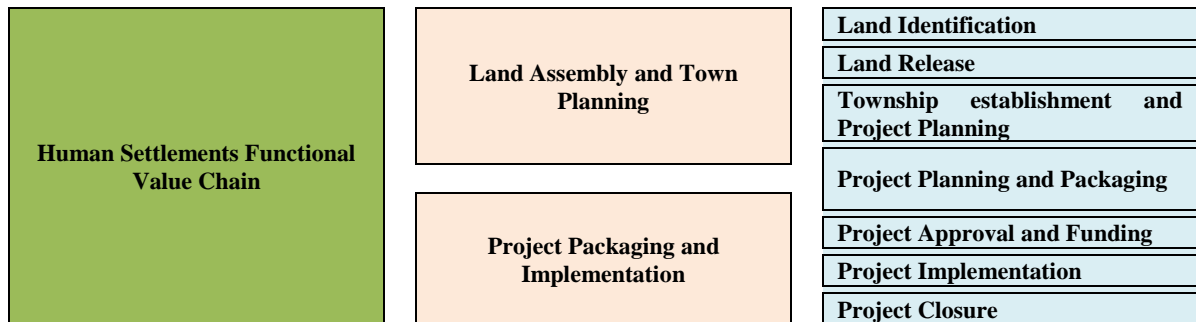


Figure 2.8: Human Settlement Value Chain

Source: HDA Annual Performance Plan (2018/19:10)

The CoCT has also introduced Project Portfolio Management (PPM), which is a project management information system, to help assist the organization with tracking compliance. The PL has to operate under strict compliance measures within the housing development process, with no exception for processes affecting the housing project delivery momentum.

2.7 The project delivery process

The development of HS is guided by National Policy that cascades down into project planning and delivery at Provincial and Municipal (local) levels. Service delivery under the context of HS is referred to as Housing and Services delivery. According to The Housing Act (2017) various programmes include services (water and sanitation, roads, stormwater, and electricity) and housing (various typologies). The laws, regulations, and programmes of one or a combination of more than one of three of the government's spheres (National, Provincial Departments and the City of Cape Town) manage the required actions for effective service delivery. The Housing Act of 1997 refers to a project concerning "housing development" which is the establishment of liveable and sustainable public and private residential locations. The Act relies on the project management value elements that support liveable and sustainable human settlement through accountability and transparency; control and compliance; risk

management; consistency in delivery; and ensuring value for money, to achieve the project benefits and objectives are reached by the PL and PM (see Table 2.6 below).

Table 2.5: Project Management values

ELEMENT	DESCRIPTION
ACCOUNTABILITY AND TRANSPARENCY	In terms of sound processes and systems, by means of audits and reviews, and senior management sponsorship of projects, ensuring the enhancement of accountability.
CONTROL AND COMPLIANCE	Monitoring and control over projects via the scrutiny of Treasury, politicians, the public and media to deliver services according to expectations.. Compliance relates to audits and reviews, as control the organization has is linked to managing risk.
RISK MANAGEMENT	Dealing with public money makes the public sector more risk-averse as they need to account for each cent. Transparency is key and results in minimising the risk, as media and politicians are always on the watch.
CONSISTENCY IN DELIVERY	Rely on the evidence to prove the capability to implement policy and change as well as the commitment to deliver. Continued improvement becomes a vital aspect of the organization to provide effective and efficient service delivery.
ENSURING VALUE FOR MONEY	Is the insurance of the money invested equivalent to the product or service? Is the money linked to the benefits of the organization's delivery?

Source: Adapted from Crawford and Helm (2009)

These locations should ensure that practical housing and communities can be established in areas that enable appropriate access to economic opportunities, health services, educational and social facilities. Residents should have access to permanent housing structures which allow them privacy and provide sufficient protection against the elements. They also need access to potable water, adequate sanitary facilities and domestic energy supply. There are four subsidy programmes for housing delivery in the public sector, namely: fully subsidized housing, social housing for rental, serviced sites and temporary accommodation. The public sector is thus relying on project management value from a governance perspective as they see project management as an essential tool for housing delivery. For example, the procurement policy of the public sector compels one to follow strict policies of compliance. Section 217 of the Constitution of South Africa avers that by implementing a system like procurement it needs to be fair, equitable, transparent, competitive and cost-effective (Republic of South

Africa, 1996). This means that a standard process needs to be followed regardless of the size of a project subjected to similar time frames. Mabelebele (2006) noted the following decrease in resources over the years: after 1994, the number of civil servants decreased from 1,2 million to 1 million by 2001; with the effect that 25% of the public sector's procurement budget is spent on consultants to provide information technology, policy advice, and project management services. The lack of resources resulted in the public sector having to obtain resources from the private sector through a procurement process. The public sector procurement policy also placed the demand on public housing delivery through its requirement of compliance mechanisms. Charlton (2003) argues that the procurement regime places another demand on the overburdened local government, which is one of the factors leading to the downturn in delivery of housing. The National Government decided to utilize procurement as a mechanism to correct the imbalance of the past in its effort to promote equal opportunities and the attainment of value for money. It is bound to operate within public sector procurement policies (Bolton, 2006). The weakness of the public procurement process is the rigorous steps that a project has to follow regardless of its size, which eventually extends the timeframe for implementation.

2.8 Procurement

Procurement in the public sector can be referred to as a means of acquiring goods and services from the external organization, due to capacity constraints and the risk of not having enough resources. Procurement management is determined by the organ of state preferential procurement policy; resources obtained have to be implemented within the framework prescribed in such policy, conforming to the MFMA in Chapter 11 and the Public Finance Management Act (PFMA) in Chapter 9 (Government, 1999 and Government, 2003). However, there is various legislation that also needs to be satisfied, to ensure consistency, including the following: the Preferential Procurement Policy Framework Act; the Broad-Based Black Economic Empowerment Act; the Construction Industry Development Board Act; the Local Government Municipal Systems Act; the Promotion of Administration Justice Act; and the Promotion of Access to Information Act. Wisner, Tan and Leong (2016) state that even if all spheres of the public sector have active policies, when any legislation is enhanced or amended and is in conflict with the current public sector policy, state legislation takes precedence.

This means that a government official and especially PMs and PLs need to be aware of current legislation matters. The NDHS creation of subsidy housing does not only need to comply with procurement, but due to the social nature and environment in which these houses and services are being developed, it is also subject to social considerations such as the creation of jobs, fair labour conditions, promotion of local labour use, prevention of discrimination, and protection of the environment. Within the public sector, it is laid out in the PFMA. It avers that national and provincial governments' financial management must be measured; that all revenue, expenditure, assets, and liabilities be managed successfully. It describes the accountability of officials who are assigned to financial management; and it allows for matters linked thereto. PMFMA Chapter 5 - Part 3 defines the responsibility of officials. MFMA describes the responsibility of officials by affirming that the management of all financial dealings within the local spheres of government be protected and maintainable; that standards be introduced which are on a par with those of Treasury; and identifies the responsibilities pertaining to any issues linked therewith.

2.9 Multi-stakeholders

The most remarkable thing about multiple stakeholders in the human settlement project is that they all have an invested interest due to public funds being utilized. It is the PM's responsibility to integrate the efforts of all project stakeholders to achieve the project goal (Nicolas and Steyn, 2017). The Association for Project Management (APM) Body of Knowledge notes that stakeholders are all those who have an interest or role in the project or are impacted by the project (Association for Project Management Body of Knowledge, 2006:20). To achieve the project success, the project manager needs to identify all stakeholders (internally and externally) in the project and apply the appropriate management strategy to each (Antonsen and Jorgensen, 1997). Therefore, it is crucial for the PM to manage all stakeholders, to ensure that the intended outcomes can be achieved. The APM (2012) supports this view and states that the day-to-day management of the project is the responsibility of the PM. These stakeholders can adversely affect the project objectives and outcomes, as their influence may reflect stem from a diverse cultural setting or political bureaucracy (Antonsen and Jorgensen, 1997, and Gomes, Liddle & Gomes, 2010).

The stakeholder's value profile, project tasks and project environment further amplify the complexity of housing projects, as the PM needs to deal with various multiple demands from stakeholders (Antonsen and Jorgensen, 1997). In order for a PM to understand how the project

will be affected by the stakeholder, the characteristics of the project need to be understood. Antonsen and Jorgensen (1997) noted that public scrutiny and pressure; multi-source of external influence and authority; the broad scope of work, various, ambiguous and often conflicting objectives; elaborate bureaucratic structure; less flexibility for independent managerial decision making; and the slow rate of change acceptance are characteristics of public projects. Public projects such as human settlements projects are prone to be influenced by external stakeholders due to the public interest and the organization's long term goals, value system and the vagueness of tasks which gives them leverage for influence over these elements (Antonsen and Jorgensen, 1997). Although project management deals with stakeholder management and it is part of project management education to understand that stakeholders are different, Gido and Clement (2012:23) acknowledge the uniqueness of each stakeholder in a project, and that each stakeholder requires separate attention rather than being grouped together with others.

Stakeholders, in general, are divided into internal and external categories. When it comes to public sector projects such as HS, these categories expand due to the number of public and organization interests. Kerzner (2017) noted that to manage these stakeholders is a challenge, regardless of whether they have a stake in the project or not. Some of the stakeholders are phased out during the course of the project as their duties expire; not all stakeholders remain for the entire duration of the project life cycle. Furthermore, due to the broad interest groups, the PM is responsible for aligning and managing these interests towards the project objective.

2.10 Project Manager and Project Leader

Project management is not an exclusive one-man operation, but requires a group of people striving towards one common goal (Kerzner, 1984). The Human Settlement project comes from urbanization and population growth resulting in political and community pressures. Project management is a multi-disciplinary field that consists of several schools of thought as it draws its tools and techniques from nine general management schools (the optimization school; the modelling school; the governance school; the behaviour school; the success school; the decision school; the process school; the contingency school; and marketing school) (Kerzner, 1984). PM and PL roles have become highly popular in the project management environment. Pretorius, Steyn and Bond-Barnard (2018) assert that project managers are both managers and leaders. They have both authority and accountability to

deliver vertical leadership for the project team while taking full responsibility. In their role as managers, they are responsible for conducting and achieving project objectives, and as leaders, they influence to guide and direct team members. In the human settlement environment, the terms PM and PL are used interchangeably. There is no clear definition for the PL role expressed in the literature or recorded in the bodies of knowledge (Project Management Institute, 2017 and Association of Project Management, 2012).

2.10.1 Project management and leadership in human settlements

Leadership is linked to the change and behaviour of the environment and management to order and control. Gillard (2009) made the following distinctions: management deals with the present, resources and facts, while leadership deals with the future, people's personalities and ideas. Hence, it is important to decide what type of leadership style is suitable for the management/ matrix environment. Northouse (2013) agrees with the distinction between management and leadership because it evolved over time. Thamhain (1991) noted that throughout the years, the intricacies of projects and the commercial environs have intensified in terms of labour, and also in the structure and general managerial mechanisms of organizations. These changes call for a combination of numerous professional specializations, innovative approaches, modern organizational structures, strategic alliances, and a continuous learning organizational culture.

The PM is responsible for managing the project delivery process by managing the project team. Gido and Clement (2012:324) agree with the statement above when highlighting that the PM provides leadership to the project team to accomplish the project objective. Pulmanis (2013) notes that Government and organizations usually embark on different projects with the aim of creating new service or improving the functional efficiency of the existing ones. Gillard (2009) expressed the opinion that it is important to distinguish the difference between management and leadership as it requires different knowledge, a different skill set and accomplishes different purposes. The terms "manager" and "leader" have been a topic of discussion for decades, and are described as being different yet complementary. The PL utilizes both skill sets in order to achieve the project's objectives successfully.

Tubey, Odeny, Chebet and Rotich (2015) note that leaders create cultures within the environment and their essential role is to influence others whilst sharing the effective role of radical change and transformation with managers (See Table 2.7). The two constructs overlap, for example when managers exercise influence over a group, this involves leadership, and when leaders get involved with planning, organizing, staffing, and controlling, they are involved with management, but each process has a distinctive activity that separates them (Northouse, 2016). Leaders and managers are indeed different as indicated in Table 2.7, but, as much as they differ, they also similarly strive towards one common goal. Leadership carries the overall authority over the organization and team, while the manager carries some authority which the leader delegates. However, both roles require leadership skills and this is crucial to human settlement projects as the project environment demands the PL to lead and manage. Project leadership is a critical skill of a PL, which requires a focus on inspiring the team to work together to implement the project plan and successfully accomplishing the project objective (Steyn and Schmickl, 2016 and Gillard, 2009). (See Table 2.7 on the next page.)

Table 2.6: The difference between Leaders and Managers

LEADERS	MANAGERS
Transform (change)	Order (keep as is)
Innovate	Originate
Inspire with vision	Control (monitor workflow)
Focus on long-term	Focus on short-term
Ask what and why?	Ask how and when?
Pioneer and risk	Stabilize
Challenge the status quo	Accept the status quo
Do the right things (effective)	Do things right (efficient)
Launch the missile	See it delivered on target
Strategy formulation	Strategy equals execution
Informal	Structure, plan and organize
Lateral thinking	Conventional thinking
Optimistic	Less so
Learning and grow	Systems and procedure

Source: Steyn and Schmickl (2016)

2.11 The project manager defined

Organisations have recognised the importance of project management, as it has the capacity to influence the project outcomes as well as the effectiveness of the organisation (Bakar, Karim, Yusuf and Pin, 2012). The professional who is appointed to carry out project management is referred to as the PM and possesses the authority and power granted to utilise organizational policies, protocols, and procedures to successfully complete the project's objective. The PMI (2017) defines a PM as someone who is assigned by an organisation to a project to lead the team to achieving the project objective. Nicolas and Steyn (2017) support this definition as they note the project manager is the individual who has the overall responsibility to plan, direct and integrate project stakeholder efforts towards achieving the project goal.

With this said, the responsibility the project manager has within public sector is not equal to the responsibility in the private sector, due to the bureaucratic authoritative structure of state organisations (see Figure 24. and 2.5). Project and programme implementation in the public sector takes place in the context of power, authority and an unpredictable political environment which is very fluid, compared to other sectors. It is not compatible with the standard project management role, as it involves political principals with the authority to make decisions that affect the PL's work and project (Mabelebele, 2006). Thomas and Mengel (2008) support this by noting the complexity, chaos and uncertainty within projects, and which have become a well-known factor in both practice and research. Although project management is globally familiar and widely spread, some controversy within the profession itself still exists as it is not a uniform domain; application, method and professional certification may differ in different countries.

2.11.1 Professional status of the Project Manager

Most PMs usually feel the need to set themselves apart by acquiring a professional status such as Project Management Professional (PMP) certification from the Project Management Institute (Mersino, 2013). There are various international professional bodies, each of which has their own certification criteria with regard to education, experience, knowledge and professional tests. For example, the Project Management Institute, International Project Management Association, Association of Project Management, Royal Institute of Chartered Surveyors, to name a few, but many more exist worldwide. Within the South African context, professional bodies include: Project Management South Africa established in 1997 – offering membership and PM and Senior PM designations; the South African Council for Project and Construction Management Profession, established in 2000 – offering Candidate and Professional Construction Project Manager designation; the Association of Project Management South Africa established in 2009 – offers membership and Certification Level A to D; and the Association of Construction Project Management established in 2010, which offers membership.

Human settlement projects fall within the built environment, and the PL appointed by the government is required to have a qualification in the studies related to the built environment

Membership of the South African Council for Project and Construction Management Profession (SACPCMP) is recommended. Project management, as part of the fourth industrial revolution, is becoming inherent in almost all industries

In this fourth industrial revolution, almost every industry utilises a project management system, whereby PMBOK by PMI's is seen as the general norm. These various methods imply that there is no certification process that caters to all. Human Settlement PLs usually possess a built environment qualification but do not necessarily have certification, even though they may have the education and experience. Mersino (2013), for example, explained that having professional certification like the PMP does not make a PM more capable. It just confirms that these individuals have the requisite project management experience and have passed the multiple certification exams. The true capabilities of the PM reside within being truly effective in implementing projects, working with the team and providing emotional intelligence (Mersino, 2013).

2.11.2 Project Manager competence

The PM's authority depends on the project size and complexity and differs from situation to situation, but in general he/she holds normal authority over the team, with no authority over stakeholders outside the team, including limited leadership authority (Association for Project Management, 2012). According to the PMI (2017) instead of full authority and power being granted to the PM, the project work needs to operate within the boundaries or organizational policies, protocols, and procedures. Within the public sector, the project and tasks are dominated by these factors because the related processes are set out by legislation, by-laws, and policies. The PM therefore, has to rely on various competencies to navigate and nurture the project to achieve the project objective within the criteria set.

Competency is defined by the International Project Management Association (IPMA) (2015) as the application of knowledge (collective knowledge and experience information a person possesses), skills (technical capabilities the person possesses to perform a task) and abilities (effective delivery of knowledge and skill in a given context) in order to achieve the desired result. APM (2012) agrees with this definition; however, it suggests replacing abilities with behaviour or skills, to make use of personal control of knowledge and skills. Competency of

a PL thus depends on education and training, knowledge, skills, abilities and behaviour to achieve the project objective. Mersino (2013) refers to all these features as emotional intelligence (see Table 2.8).

Table 2.7: Emotional Intelligence competencies

ELEMENT	DESCRIPTION
SELF-AWARENESS	This component refers to the leader's awareness of their means of knowing themselves, their state of emotions; it also highlights their capabilities and weaknesses.
SELF-REGULATION	The emphasis of this component is for leaders to be always in control of their emotions, without being overwhelmed by them and giving way to impulses.
SOCIAL AWARENESS	In this quadrant, Goldman highlights empathy used by leaders in their interaction with their subordinates, co-workers or people in general; it stresses the ability to understand the social context and colleague's emotions from their point of view.
RELATIONSHIP MANAGEMENT	In all leadership dimensions, this one is easily recognized; it is the potential to motivate individuals and teams working towards a certain goal, which is the most important aspect for PMs.
TEAM LEADERSHIP	It is identified as the strongest overall on project success and an important fact in all phases of projects, team motivation is the strongest driver and if lacking it becomes the strongest restraint, the driving force of a team motivation includes good interpersonal skills.

Source: Mersino (2013)

2.12 The concept of project leadership

Leadership revolves around two important aspects of reform, namely change and people; for example when it comes to changing an organization, the key is to change the behaviour of the people (workforce), and this requires leadership (Developing Public service Leaders for the Future, Organisation for Economic Co-operation and Development (OECD), 2000). Riaz, Tahir, and Noor (2013) state "project leaders create a vision for projects, bring together the resources, and provide motivation and inspiration to project stakeholders in doing the right things to achieve the project objectives." The project leader's duties include gathering and distributing information, leading, planning, coordinating, moderating, and controlling the project team (Ahmed, Azmi and Masood, 2013). Although these definitions of a PL are well structured, they draw their elements of description from the concept of leadership. In order

for one to grasp the PL concept, it should be approached from a leadership point of view, before applying it to a project.

2.13 Leadership

Leadership is linked to managing change and the static or dynamic behaviour of the environment. Thus, the definition of a leader keeps on evolving over time, including the fact that leadership abilities and qualities vary with the circumstances and also change over time. With this being said, change and behaviour are linked to leadership. According to Manning and Curtis (2009), the perception of leadership is current and timeless and encompasses social influence; which leaves a mark through initiating and guiding the results of change, indicating a new direction that portrays leaders as teachers, heroes and rulers (which requires experience, leading by example, having a qualification, showing integrity, commitment to the job, and people building skills). Leadership outcomes are the result of the application of attributes and competencies of leadership (see Figure 2.9). Leadership is crucial to the aspect and environment it is being applied to, as it provides a platform for action (Northouse, 2013). Hence, when leadership is applied to a project, project leadership almost automatically becomes a critical skill for the PL, which requires a focus on inspiring the team to work together to implement the project plan to successfully accomplish the project objective. Hao and Yazdanifard (2015) agree that leadership is a factor that can encourage and push people to change. (See Figure 2.9 on the next page.)

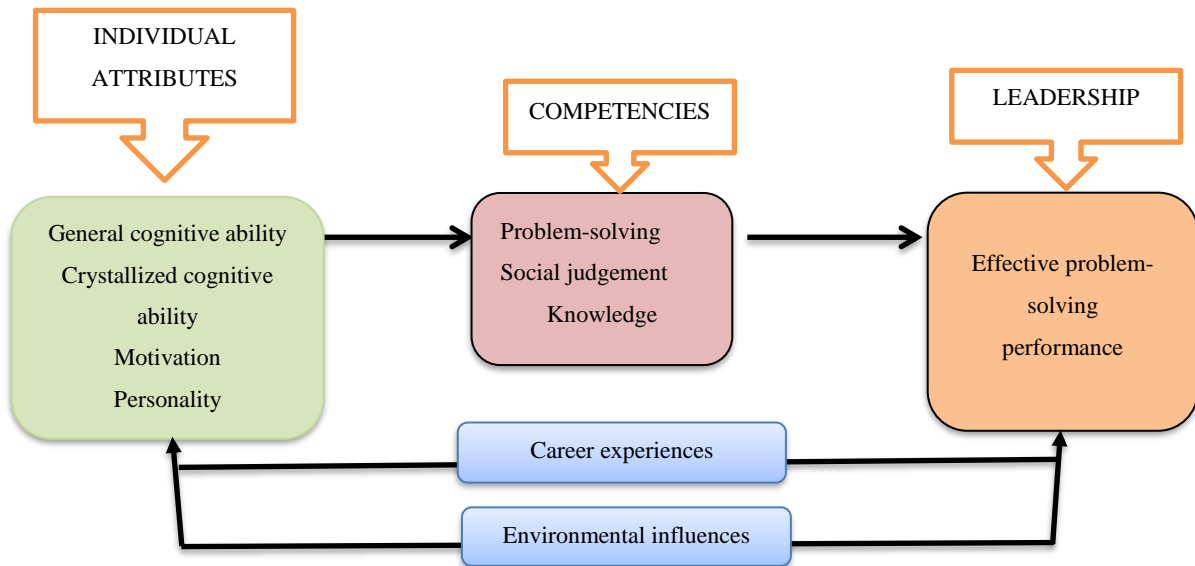


Figure 2.9: Leadership Outcomes

Source: Northouse (2013)

The HSE is a dynamic environment, resulting in constant change within the HS project. The PL is required to push the project team and stakeholders to change, as the project brings change to its environment.

2.13.1 Individual attributes

It is recommended that a PL should have some type of ingrained appetite for being a leader. Northouse (2013) identified four individual traits that have an impact on leadership and knowledge. These traits are: general cognitive ability, which refers to a person's intelligence quotient (IQ); crystallized cognitive ability, which involves the person's capacity to store knowledge over time as they experience things; motivation, which refers to the person's appetite to take on complex problems for the good of humankind, and accept full responsibility defined by willingness, dominance and consideration of the social good; and lastly, personality, which refers to the person's openness, tolerance for ambiguity, and their curiosity, confidence, and adaptability that helps them cope with complex problems. When a person does not demonstrate these traits, it does not mean that a person cannot be a leader, but it does have an impact on the person's leadership capability.

2.13.2 Leadership attributes

The description of leadership attributes has changed dramatically within the 21st century. Arguments about whether a leader is born or made, may have been debated for centuries, but it is evident that traits like persistence, dominance, and masculinity which were regarded as essential between the 1940s and 1980s, are no longer important leadership attributes. Northouse (2016) highlighted that intelligence, self-confidence, determination, integrity and sociability are the major leadership traits. Stout-Roston (2014) agrees and notes that self-awareness, self-direction, vision, ability to motivate, ethical integrity and social awareness are crucial characteristics of a good leader. Although the traits and characteristics of leadership have changed and adapted over the years (see Figure 2.10), these attributes are numerous, and it is not specified to what degree a leader may mobilise all of them. However, it can be inferred that it depends on the level of the leadership process.

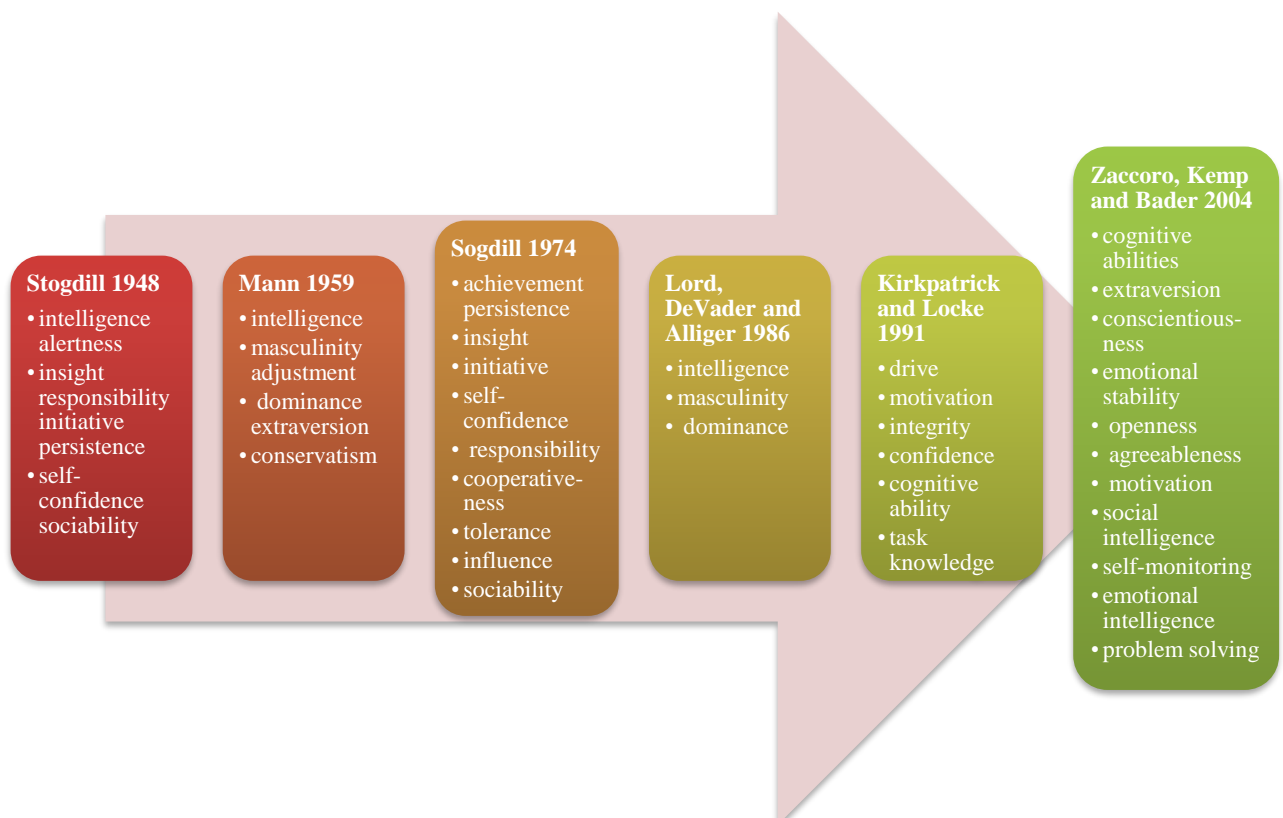


Figure 2.10: Leadership Evolution

Source: Northouse (2016)

2.14 The project leader in the human settlements context

The Constitution with its right of access to adequate housing made it possible for anyone to seek the benefits of housing opportunities, job opportunities, political opportunities and other socio-economic aspects of public housing. Almost all human settlement housing projects tend to attract people from all walks of life, seeking a better quality of life, to benefit from a housing project. However, the project management team members possess limited soft skills to deal with social and communal challenges; this means that the PL may have to take charge in leading the way through turbulent times. Radmila, Gragana and Bojana (2011) point out that the PL may have to lead the organization to successfully adapt to change. Human settlement projects require both management and leadership in order to get to successful project delivery. Leadership and management are not the same but they complement each other and should work in harmony towards the same desired objective (Sharma and Jain, 2013). The project management part deals with the contractual component of project delivery; whereas the project leadership part matches the organizational process, which the community needs in order to realize a housing project.

In South Africa, some of these housing projects take place at infill sites where the community and its beneficiaries have their own expectations about the land parcels to be developed. The nature of housing projects is so unique and specific, that it creates conflict among various interest groups such as communities, politicians (ward councillors) and local authorities. In order for the project to continue under these conditions, a PL needs to utilize negotiating skills to mediate and unlock the project. Riaz et al. (2013) argue that the fundamental function of a leader is to produce change first and set direction accordingly, and then cope with that change. The PL stands as a mediator between the beneficiaries, local government and the project itself. The significance of involvement and consultation of the community at the beginning of the housing project is necessary to develop a successful project and all that has to be facilitated; as noted by the PL. Archer, Verster, and Zulch (2010) assert that the ideal project leader is able to engage the team members at a personal level and encourage them, empower them, and inspire them to participate in the project.

The role of the PL is to match the housing development process with the project management process. To accomplish a project objective, a PL needs to create a balance between the proactive planning, communicating and provide leadership to the team. Constraint factors

indicate that a leader is someone who: recognizes the need for change and implements it; establishes direction; aligns people; motivates and inspires; communicates a vision of where the organization is headed; builds teams and shares decision making; mentors and coaches subordinates; and demonstrates a high degree of integrity in their professional interactions.

The Housing Delivery process has multiple stakeholders within the project life cycle, with individuals or groups who are affected by the outcomes of a project. An understanding of people is important because PLs are responsible for taking communities, organizations and societies through change and the discomfort that change may bring (Verma and Wideman, 2002 and Hao and Yazdanifard 2015). The PL is equipped with the appropriate skills to manage various stakeholders' interests and expectations.

Hard skills are the more technical aspects of the PM's role, and generally involve the creation of a tangible deliverable such as a work breakdown structure (WBS), project schedule, critical path diagram, earned value reports, or project budgets and dashboards. Internal stakeholders such as the project team and organizational departments, are more geared towards hard skills because they can relate to the technical aspects of the project (Marando, 2012). By contrast, external stakeholders, such as the community, are more inclined towards soft skills because they do not readily understand technical elements in project communication. Marando (2012) describes soft skills as interpersonal skills that include traits such as leadership, communication, negotiation, managing expectations, influencing, problem-solving, and decision-making. PLs and PMs are thus closely linked but carry different responsibilities relating to the application of their individual knowledge, skills and experience.

Given that hard skills are more technical in nature, and they often incorporate the use of tools (project scheduling software, spreadsheets, modeling tools) in project management, it can be argued that project management is geared to hard skills, while project leadership is geared towards soft skills. Therefore, a PL does not necessarily need hard skills to lead, but a PM requires soft skills to become a PL. Marando (2012) explained that soft skills are largely intangible and not associated with a deliverable or concrete output. They are generally employed without the use of tools or templates. However, further in-depth research is required in the area to distinctly examine the two skills sets in practice.

2.15 Chapter summary

Public sector housing delivery is based on the open mandate given to the Department of Human Settlements by Chapter 2, Section 26 of the Constitution of The Republic of South Africa. The urbanisation of the past two decades has been highlighted as the fundamental cause of the housing backlog in cities and towns, as it resulted in more strain to meet the housing demand. The first few years of housing delivery recorded, highlighted a great number of housing units delivered nationwide; however after 2007, housing production slowed down. The PL is distinguished as the individual that is responsible for project delivery and in the HSE this is no different. The chapter provides an overview of project delivery within the context of HSE in Cape Town, taking into account the dynamic environment, organisational structure, the project management strategy, and the uniqueness of leadership. Maslow's hierarchy of needs theory provides some philosophical guidance for understanding the HSE. Max Weber's theory provides some insight into the complexity of public organisations assigned to service delivery and the project management theory and role of the PL.

The literature interrogated in this section of the study highlights a number of challenges that are encountered by PLs in the process of housing delivery. The review revealed that the HSE is both complex and dynamic, which influences both public sector organisational processes and the societal demographics of where the project takes place. An appraisal was made of the fragmented alignment of service delivery's expected organisational policies and procedures against the project management strategy of housing delivery.

The review established that the NDHS faces challenges through being part of the public sector when compared to the private sector. While within conventional projects, the PL, the employer, developer (implementer), and funder can be one organisation, on the other hand in the public sector, organisational operations have a complex framework due to policies and procedures, including the funds/grants that they rely on. Whilst the NDHS as the regulating body is unique as a public sector organisation, because it implements project management within all HS departments (local, provincial and national), its project environment is very different from the public sector's, because it must attend to community/ social and political engagement, as well as a plethora of legislative compliance requirements and organisational challenges within specific socio-economic constraints.

The review shows that the influence of socio-economics, dynamics and multiple stakeholders in HS project delivery surpasses conventional project management practices within the private sector. It is not within the scope of this research to decide on whether public implementation is still relevant for housing delivery. However, the dynamics within the HSE challenge the PL's capabilities to lead within the local socio-economic environment and public sector, with its multi-stakeholders that require both soft skills and hard skills.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an outline of the research methods applied in this study, including the research design, sampling technique, data analysis and ethical considerations applied. Research methodology provides a road map that is systematically laid out to test the research proposition, with the intention of finding a solution to the main research question (Leedy & Ormrod, 2005 and Denzin & Lincoln, 2005).

The research methodology is very crucial as it communicates explicitly the nature of the relationship between what is being studied, and the researcher. Therefore, there are logical steps that need to be followed in order to derive answers to the research question. Research is a scientific inquiry that relates to a system of interrelated practices and thinking, for which research methodology provides the link (Creswell, 2003 and Cohen, Manion & Morrison 2007). The methodology can therefore be described as the process of research (Creswell, 2003).

3.2 Research approach

The research adopted a qualitative approach. According to Ferreirra, Mouton, Puth, and Schurink (1998), the qualitative research objective is collecting data and analysing the data using an interpretive method: it is exploratory and descriptive. Exploratory research is used to explore the situation that is being studied without clear anticipated outcomes. It is going through the research process to study the phenomenon with an open mind-set, not taking any predetermined view on the matter. Yin (2004) noted it quite well, writing that exploratory studies are a valuable means of understanding what is happening; to seek new insights; to ask questions and to assess phenomena in a new light.

Creswell (2007) notes that qualitative research starts with an assumption of a worldview and enquiring into a social or human problem through a theoretical lens. Welman, Kruger and Mitchells, (2005) express the opinion that qualitative research is commonly known for an anti-positivist approach, while quantitative research is regarded as positivism. Qualitative

research is a multifaceted research method that comprises of an interpretative, naturalistic approach to the topic (Denzin and Lincoln, 2005). This research is designed to take into account the HSE and nature of project leadership, within the context of housing delivery.

3.3 Area of study

The research study is undertaken within the Cape Metropolitan area in Cape Town, which is a vibrant city that attracts people from all walks of life. Cape Town is located in the Western Cape and covers an area of approximately 2 461 km². Its population in 2016 was estimated at 4 004 793, with the number of households being 1 264 849 and average household size of 3,17 people (City of Cape Town, 2019).

3.4 Method of data collection

Collecting data in qualitative research is mainly done in words, rather than numbers, obtained from questionnaires, interviews and documents. According to Corbin and Strauss (1998:11), qualitative research is any type of research that produces findings not arrived by statistical procedures or other means of quantification. It is worth noting that all the respondents that were interviewed in this research came from the Provincial and Local Municipality Human Settlement Department. The structured interview technique allows the researcher to collect data about the participant's ideas, beliefs, views, opinions and behaviours leaving the questions generally open ended (Creswell, 2009). According to Creswell (2009:175) qualitative research collects data through examining documents and interviewing participants in order to gather unbiased information.

3.4.1 Sample techniques

The research sample is a process of selecting people, objects or items based on the interest of the study. The sample can be selected from the larger population group of people or items being studied, from which the study is collected. Terre Blanche, Durrheim, and Painter (2006:133) note that the population is the larger pool from which sampling elements are drawn and to which findings are generalized. There are two forms of sampling techniques, namely probability and non-probability. The probability sample relies on random selection of

participants, so that those included in the sample have an equal probability of being selected as those who were not selected. Non-probability sampling technique is purposive and selects research participants based on the fact that they possess features of the required data (Creswell, 2009). Purposive sampling was used in this research due to the nature of the objective.

The participants were purposefully selected based on their project leadership role in the HSE. In this study, a total of 37 participants were identified and invited to take part in the research. An information and consent form was provided to all participants regarding the research (Appendix 1). A total of 19 participants responded, of which 12 agreed to be interviewed personally and seven chose to self-report (fill in an interview protocol). Out of the total sample of 19 participants, only four women were invited and interviewed. This indicates the existing limits on women represented in the discipline of project management in the public sector. All the respondents were stratified based on their being PLs (mostly from the level of PM, up to the level of director) in the public sector (provincial and municipal) HSE. Creswell (2009) indicates that the purposive sampling method pre-selects participants on the basis of a certain criterion that is relevant to the research question.

3.4.2 Personal interviews

This research allowed for personal interviews in order to obtain specific information relevant to the research. Bryman (2012) acknowledges that “interviews are advantageous over participant observation as they enable the researcher to study issues that were not amenable to observe”. Interviews may hold emotional expressions of the respondents, and the information gathered through the interviews carries more weight when used in conjunction with other methods. The interview technique is essential for understanding the respondent’s experiences about the phenomenon. The interview schedule (see Appendix 2) was developed by the researcher prior to the interviews. Leedy and Ormrod (2012) state that the structured interviews follow a set of questions and also allow for a flexible and fluid structure that permits some space for divergence, based on the respondent's responses.

The personal interview process was clarified with each participant. The advantage of a structured interview is that the researcher can read non-spoken gestures of the respondents

(Creswell, 2009). Interviews were recorded to ensure the quality of information and later transcribed for analysis (Bryman, 2012). Permission for recording the interviews was requested from each participant prior to each interview. Field notes were also taken during the interview process to ensure that relevant information was captured accurately. The personal interviews were conducted using handwritten notes and audio recordings. Permission for the recordings was requested from the participants prior to conducting the interviews.

3.4.3 Self-report

This research adopted the method of self-report and personal interviews in data collection. The content of the questionnaire was aligned to the structured interview protocol, with the objective of allowing the participant's freedom to choose the most convenient way of responding, as far as confidentiality and anonymity in participating in the research study were concerned (Plotnik, 1993).

The personal interview has the advantage of being physically available and allows the researcher the opportunity to read unspoken gestures about the phenomenon, which can be time-consuming. By contrast, the self-report questionnaire allows the participants to be discreet during the process of information-gathering. A self-report questionnaire is an instrument utilized by the researcher to allow the gathering of data beyond the physical reach of the sources from which the data is obtained (Leedy, 1993).

A structured self-report questionnaire was used as an alternative for the participants who could not avail themselves for face to face interviews. The design of the structured self-report questionnaire was the same as the interview protocol in order to ensure that the information gathered through the interview and the questionnaire are unbiased and comparable (See Appendix 2). These self-report questionnaire items followed a logical sequence, divided into four categories, namely:

- Background information of respondents
- Professional experience and affiliated body of the profession
- Challenges faced by PLs in a dynamic HSE.
- Finally, the future of human settlement project delivery and advice to new professionals in the field.

This research followed Lazarsfeld (1944:38-60), who suggests the design of closed-ended questions at the beginning of the questionnaire and as it progresses towards the end, the questionnaire becomes open-ended to explore deviant responses to the close-ended questions. Foddy (1993:127) points out that close-ended questions limit the respondent to the set of alternatives being offered, while open-ended questions allow the respondent to express an opinion without being influenced by the researcher.

3.5 Method of data analysis

The use of audio recording allows the researcher to complete all the interviews and transcribe them. According to Creswell (2009), the purpose of qualitative data analysis is to examine its significant and symbolic content. This requires the coding of the data to highlight the important factors about the phenomenon being investigated. It provides guidance or estimation on how the phenomenon is constructed by analyzing various attributes.

Thematic analysis is a process of identifying patterns or themes within qualitative data. The advantage of this analysis is that it is a methodology used for teaching and learning a strict scientific method (Braun and Clarke, 2006). The information obtained from the interviews was transcribed from the recordings. This allowed the researcher time to listen to the recording several times, as well as read the transcripts to comprehend what the respondents said, and how it tied into the research question and objectives. This process of transcribing data from the interviews and allocating it to themes, guided the researcher to highlight patterns of views that the respondents articulated (Leech and Onwuegbuzie, 2007).

Tables are used to summarise the information pertaining to Part 1 of the questionnaire; information pertaining to Part 2 was analysed thematically, as it allowed for organization and description of the data collected in rich detail.

3.6 Ethical clearance

Ethical clearance was obtained from the University of Cape Town, City of Cape Town Municipality and Western Cape Department of Human Settlements in order to proceed with the topic and research (see Appendix 3). Secondly, the ethical clearance was obtained from the public sector organizations prior to interviewing the candidates, regarding their role in the

Human Settlement Environment (see Appendix 3). The condition of the clearance was that the intended participants and supervisors should be willing to participate in the research, so that no intimidation could be implied. Care was taken during interviews to ensure that no respondent was subjected to any risk. No compensation of any kind was offered to the participants and their participation was completely voluntary. All information obtained from the respondents remained strictly anonymous and confidential and the outcome of the research is not directly linked to any participant. Pseudonyms or numbers were used in the research to protect the identity of the participants. The specific public sphere was also not revealed in the report, for ethical reasons. The following identities were assigned:

3.6.1 Personal interviews:

- Participant 1, Participant 2, Participant 3, Participant 4, Participant 5, Participant 6 and Participant 7. Participant 8, Participant 9, Participant 10, Participant 11, and Participant 12.

3.6.2 Self-report questionnaires:

- Participant 13, Participant 14, Participant 15, Participant 16, Participant 17, Participant 18 and Participant 19.

3.7 Chapter summary

The chapter presented the research methodology adopted for this study, to address the research question identified in Chapter 1. The research adopted an interpretive philosophy and a qualitative research approach, using personal interviews, self-report questionnaires and document reviews as data collection methods; it also used thematic and descriptive data analysis techniques. All the relevant ethical protective measures were taken to ensure that the research did not pose any risk to the participants.

CHAPTER 4 DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

The findings and results are presented in line with the objectives of the research report. In addition, the design/structure of the self-report questionnaire and personal interview protocol were based on the objectives of the research. Part 1 contained introductory information to gain some background of the participants, and Part 2 pertained to technical information about the participant's experiences and challenges. This was followed by an analysis of the information obtained. The participants came from DHS provincial and local public spheres within the Cape Town Metropolitan Area.

4.2 Transcribed interviews

The interview of each of the participants interviewed was transcribed from an audio recording and notes taken during the interview. Within the comparative analysis, quotes from the interviews (participants 1-12) were extracted and referenced accordingly.

4.3 Background profile of the participants (Part 1)

The respondents are referred to as Participants 1 to 19. All participants were from the public sector; however, their organizational background has not been indicated for ethical reasons. Out of the nineteen participants, only four women took part in the research, and the remainder were males. The participant's profile and background were summarised, within the context of the questionnaire (See Appendix 4). The following questions sought to address objective a), c) and d):

4.3.1 Professional project management status

Question 1 sought to find out whether the participants were registered as project management professionals. This question was asked concerning objective a), namely to discover the number of individuals who have passed the professional certification criteria (competence criteria according to the professional body) and may be held accountable for their professional

behaviour. The study revealed that four of the 19 participants were registered professional PMs. Of these four registered participants, three indicated that they were registered with the South African Council for Project and Construction Management Profession (SACPCMP) and one participant with the Project Management Institute (PMI) (refer to Appendix 4).

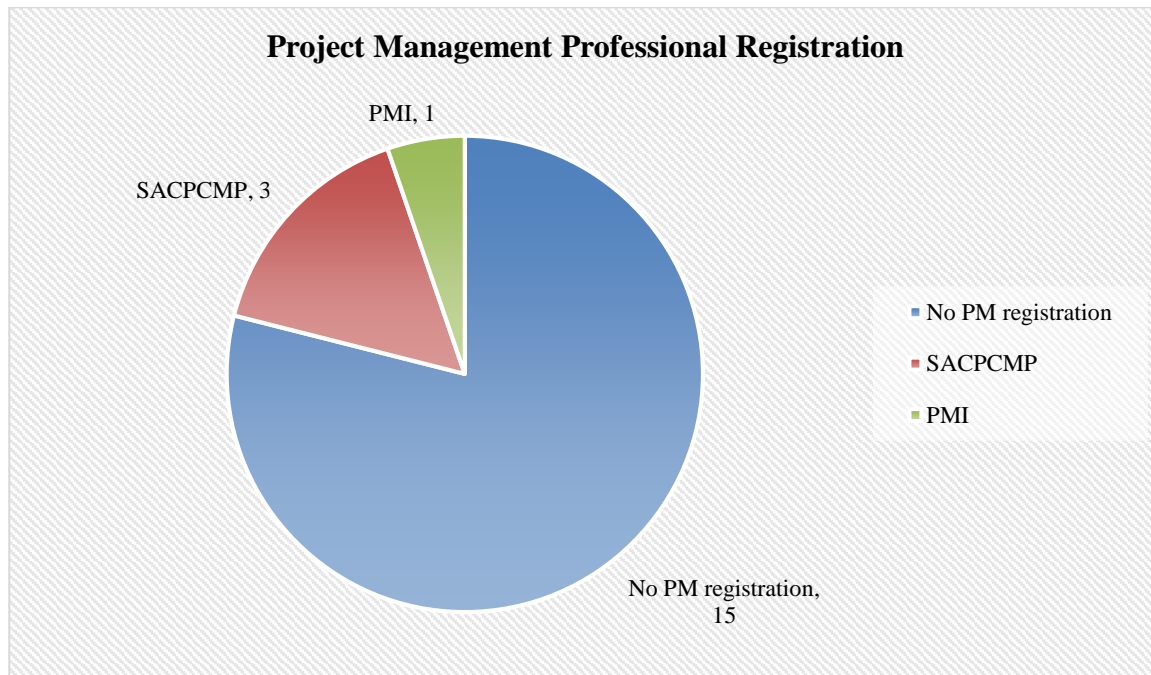


Figure 4.1: Question 1 Feedback

4.3.2 Additional Project Management qualification

Question 2 sought to find out whether the participants had any formal project management education in relation to objective a). The aim was to identify how many participants had theoretical knowledge of project management. The educational background of the participants is represented in the table above. The responses revealed the following: three participants had degrees, five participants had diplomas, five participants had certificates; one participant had attended a workshop, four participants had project management knowledge as part of their other degrees, and one participant had on-the-job training (refer to Appendix 4).

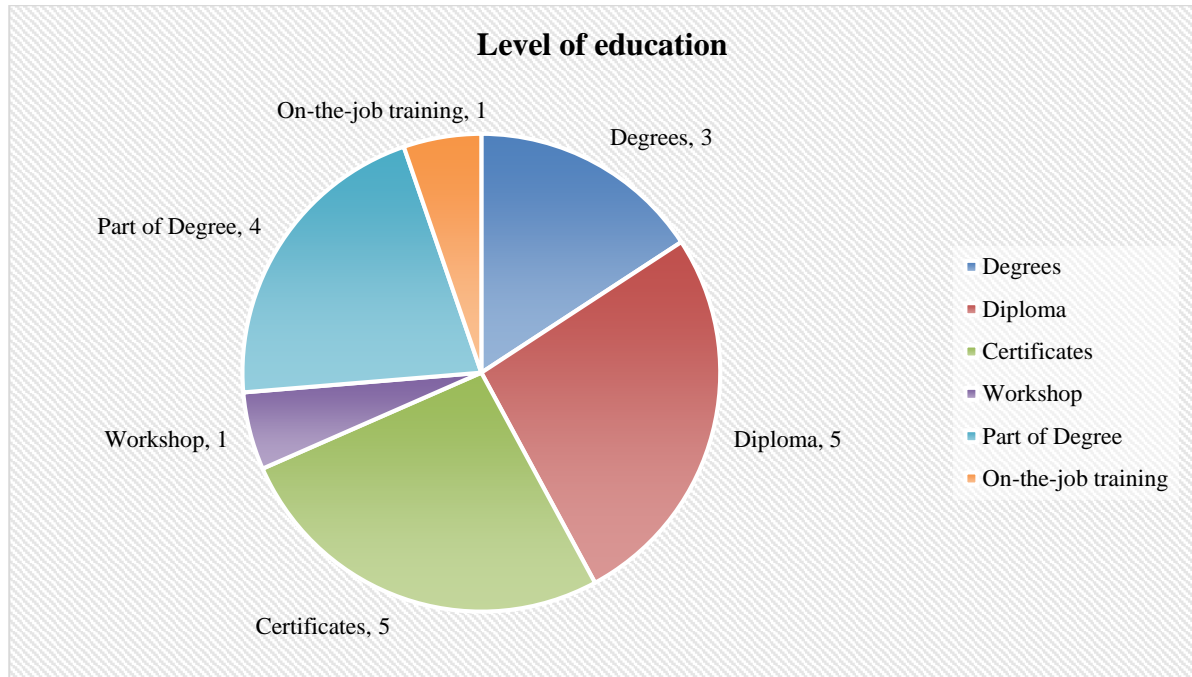


Figure 4.2: Question 2 Feedback

4.3.3 Registration with other professional bodies

Question 3 sought to find out whether the individual was a professional registered with any other professional body, in relation to objective a), to understand the participant's background and other professional codes of ethics they might draw from while implementing projects. The study revealed that seven participants were registered with another profession. Five participants were registered with the South African Council for Planners (SACPLAN), one participant with South African Council for the Architectural Profession (SACAP) and one participant with South African Council for the Quantity Surveying Profession (SACQSP) (refer to Appendix 4).

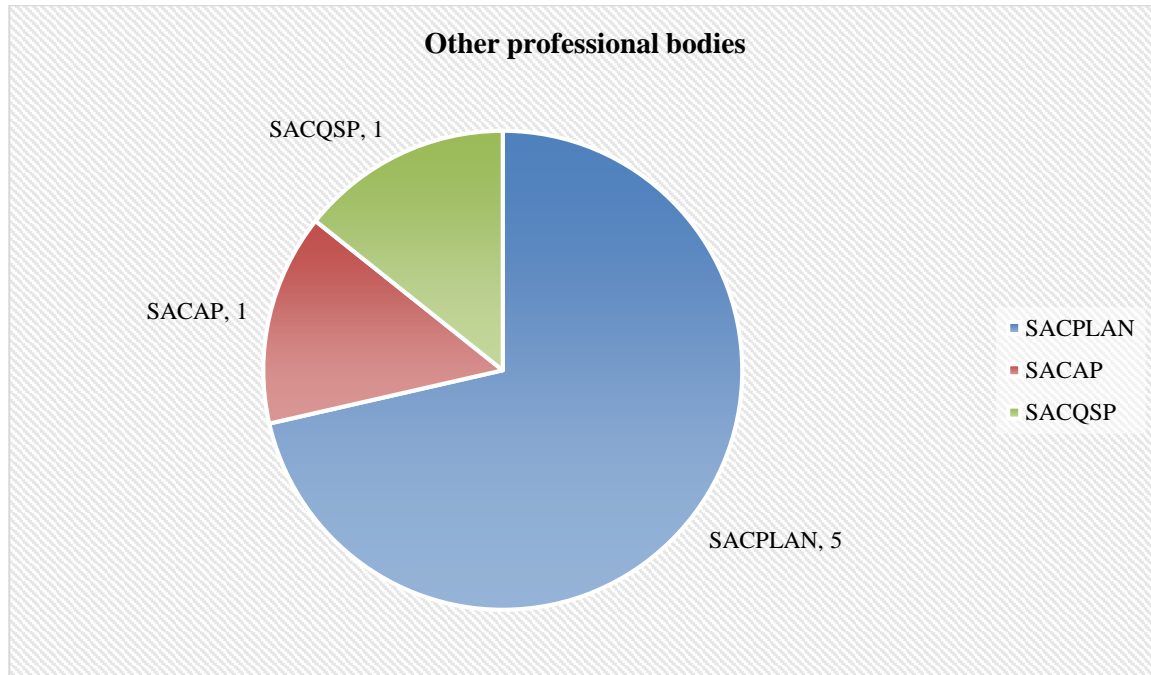


Figure 4.3: Question 3 Feedback

4.3.4 Number of years of experience in the built environment

Question 4 was directed to gain insight of the individual's overall experience in the built environment in relation to objective d), to ascertain general experience within the industry. The response was quite sequential, as three had less than five years' experience; one participant had six to ten years' experience; three participants had 11-15 years' experience; four participants had 16-20 years' experience; four participants had 21-25 years' experience; one participant had 26-30 years' experience; and three participants had more than 30 years' experience (refer to Appendix 4).

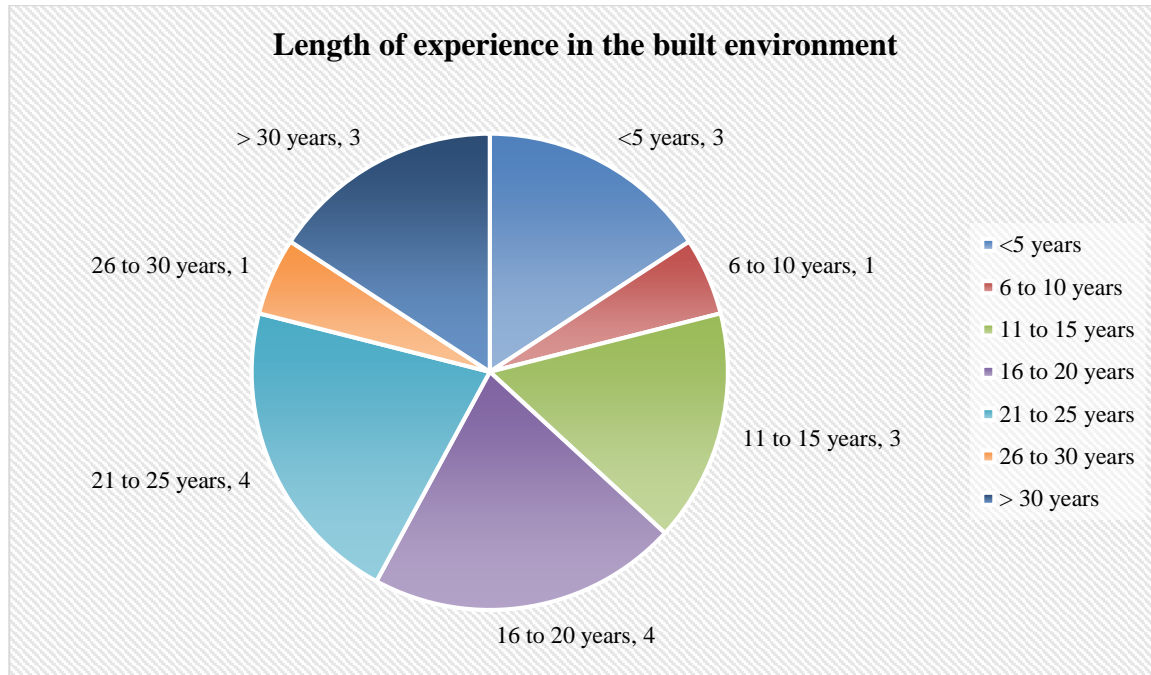


Figure 4.4: Question 4 Feedback

4.3.5 Level of skill in Project Management

Question 5 was directed to see how participants self-evaluated on the criterion of their own level of project management skills in relation to objectives c) and d). This was asked to provide insight about how the individual rated their own capabilities and competence in project management. The responses were that eight participants indicated that they saw their competence reflecting a professional level; four participants saw their competence reflecting a senior level; four participants rated themselves as being on an intermediate level; and three participants considered their competence as being at entry-level (refer to Appendix 4).

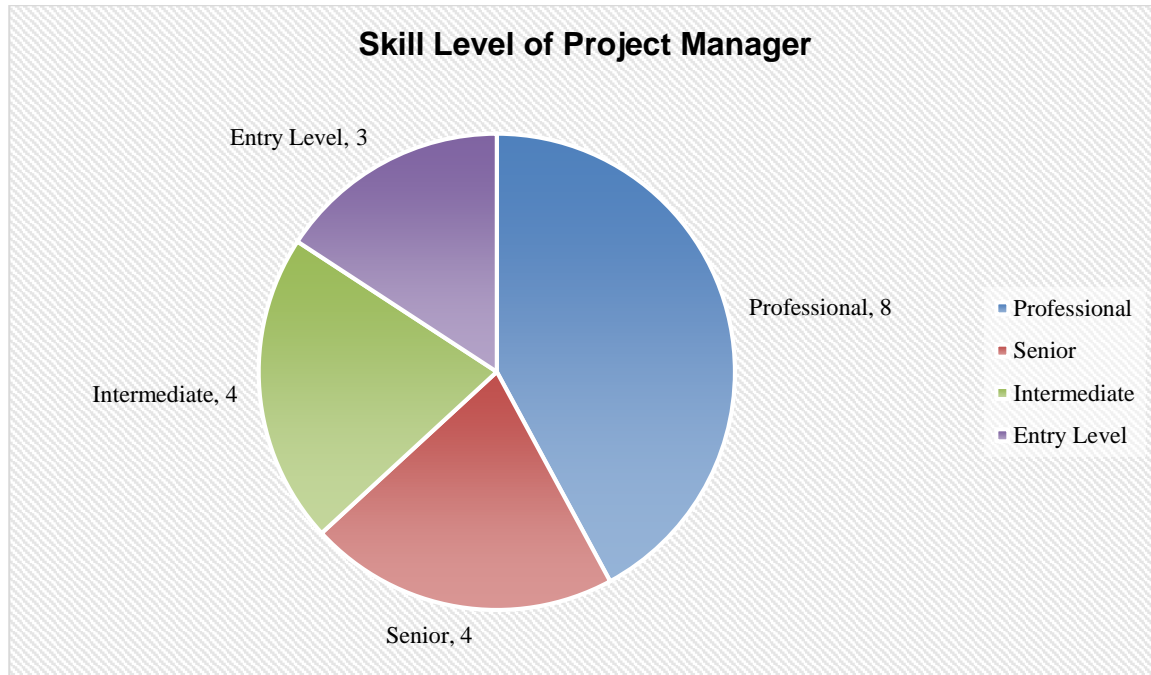


Figure 4.5: Question 5 Feedback

4.3.6 Number of years of experience as a Project Leader in the HSE

Question 6 was directed to find out for how long individuals had led projects in the HSE specifically. The aim was to understand their level experience in the environment, to understand the participants' direct experience in HSE, and to ascertain their encounter with the dynamics and challenges in that environment in relation to all four objectives (a-d). The response varied as two participants indicated they had a single year of experience; two participants indicated that they had seven years' experience; another two participants indicated eight years' experience; three participants indicated ten years' experience; three participants indicated 11 years' experience; two participants indicated 12 years' experience; and five participants each indicated 14, 15, 16, 21 and 28 years respectively (refer to Appendix 4).

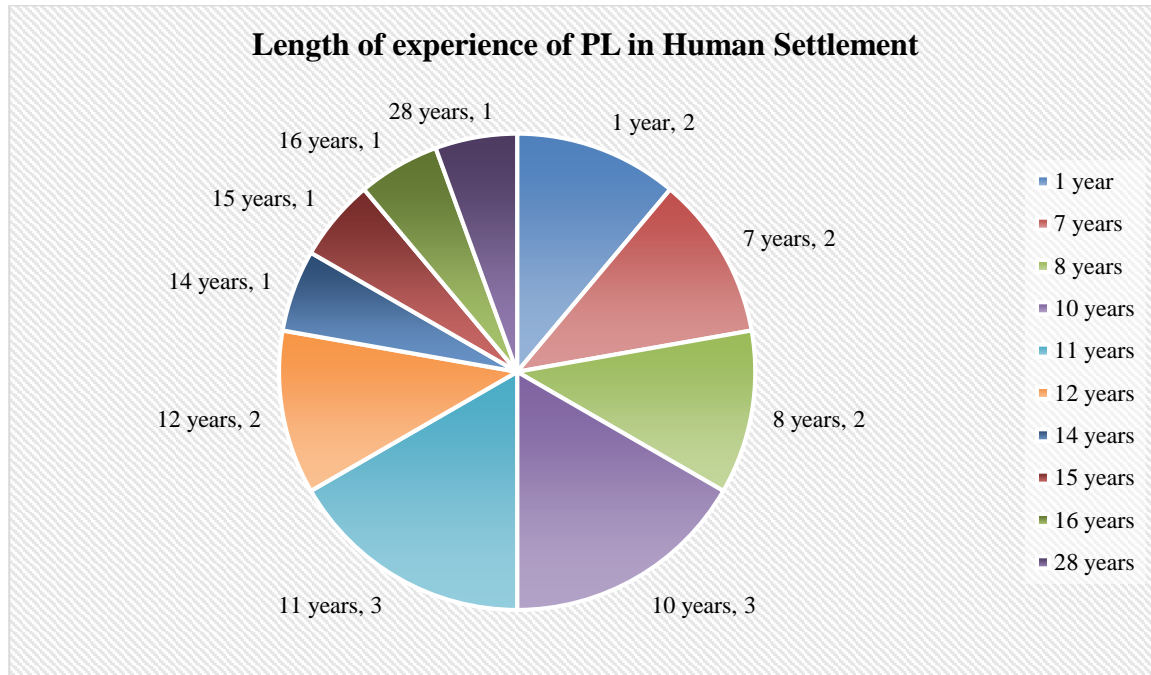


Figure 4.6: Question 6 Feedback

4.3.7 Perception of the difference between being a human settlement project manager and other PM roles

Question 7 was directed to see whether the individuals could differentiate between the different environments, based on their understanding and experience in relation to objective c). This question was asked to understand if participants could distinguish between HSE and other environments. Fourteen participants indicated Yes (asserting that there is a difference) while five participants indicated No (asserting that there is no difference) (refer to Appendix 4).

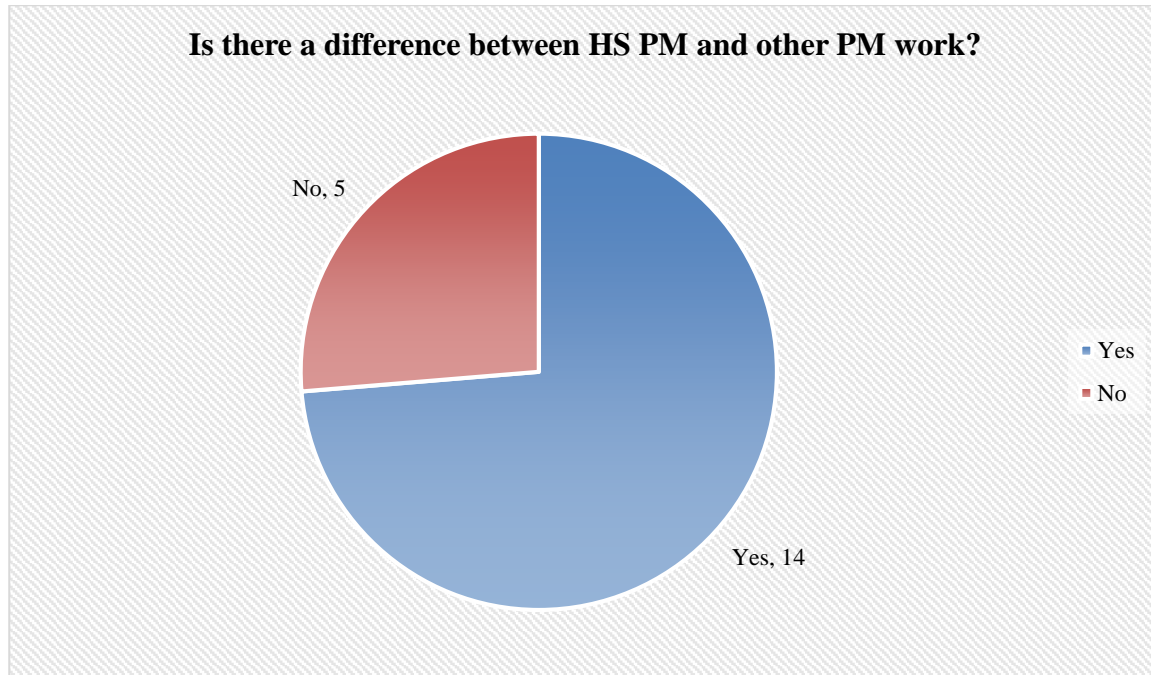


Figure 4.7: Question 7 Feedback

4.3.8 Number of projects completed in the built environment

Question 8 addressed the project leadership experience, in years, within the broad context of the built environment. This was to identify in relation to objective b), whether the participants have experience in completing a built environment project from start to finish. The responses varied, as three participants indicated they had completed no projects; one participant indicated four projects completed; one participant indicated five projects were completed; one participant indicated six projects were completed; two participants indicated eight projects were completed; four participants indicated 12,; one participant indicated 14, one 16 projects completed, one 18 projects completed; two participants each indicated 21 projects completed; one participant indicated 22, and another one indicated 27 projects were completed (refer to Appendix 4).

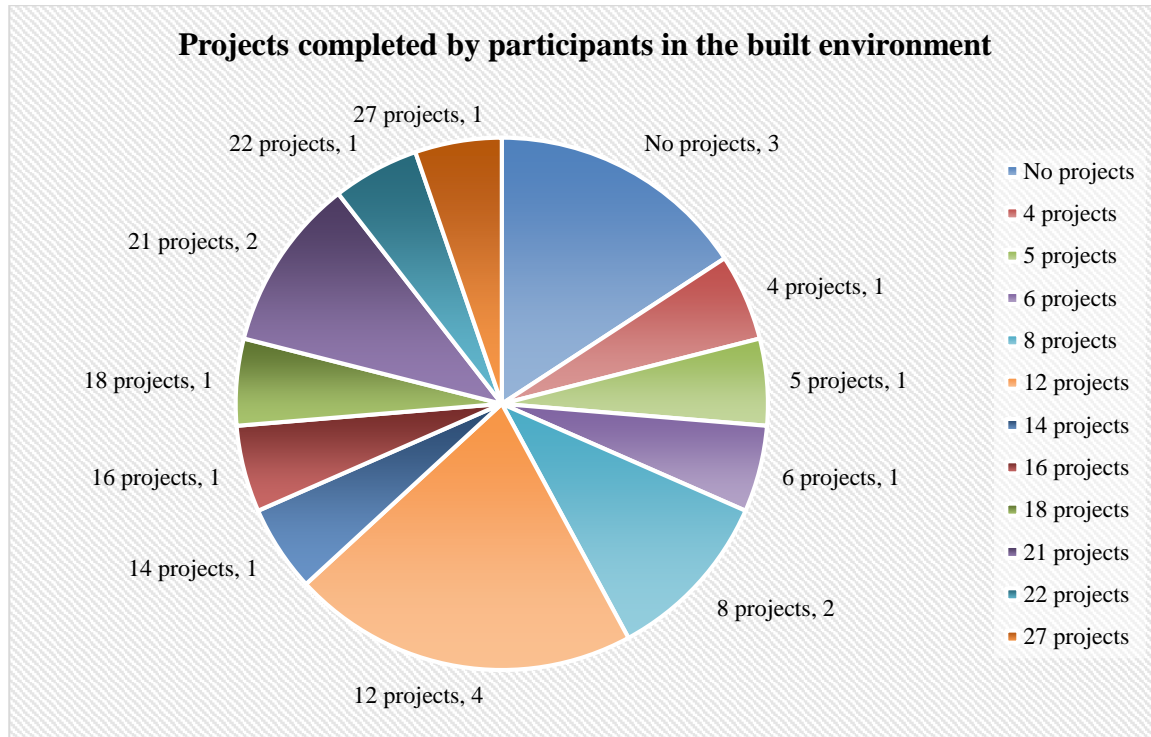


Figure 4.8 Question 8 Feedback

4.4 Technical knowledge (Part 2)

This section refers to technical insight into housing projects, which the participants identified hereafter referred to as a case study, summarising questions 9 to 14 (refer to Appendix 5). The following questions sought to address objective b) to establish how project delivery takes place in the HSE.

4.4.1 Number of projects completed in the HSE

Question 9 sought to address specifically experience of human settlement projects. This question was asked in relation to objectives b) and d), to identify participant's success rate in completing HS project. The responses varied: three participants each respectively completed four, 11 and 12 projects; two participants indicated seven projects; two indicated five projects; two indicated 18 projects; three participants indicated two projects; three participants indicated six projects; and four participants indicated they had completed no projects (refer to Appendix 5).

4.4.2 Number of HS of projects begun and completed successfully

Question 10 sought to understand the individual's success rate of human settlement projects undertaken in relation to objectives b) and c). This was to identify whether the participants have experience in completing an HSE project from start to finish. The responses varied as one participant indicated two, and another participant three projects; one participant indicated four projects; one participant indicated six projects; one participant indicated seven projects; one participant indicated eight projects; one participant indicated nine projects; three participants indicated two projects; four participants indicated one project; and six indicated they had not successfully managed any project from start to finish (refer to Appendix 5).

4.4.3 HS case study of projects participants completed successfully

Question 11 requested the participant to provide an example of a successful human settlement project they had undertaken, as a case study for the follow-up questions in relation to objectives b) and c). This was to identify the scale and diversity of projects that participants were involved in, in the HSE. This is an overview of the case study, of the participant HS projects which were completed within the identified criteria (refer to Appendix 5).

The following case study projects were identified within monetary ranges as shown below:

- Project location: All the projects indicated were in the Cape Metropolitan Area.
- Project value: The project costs varied from R 2 million –R 150 million.
- Project scope: Varied between professional services for investigative work, installation of civil services and construction of housing units.
- Initial Project scope: The number of housing units and services ranged from 60 – 1 000 units
- Final Project scope: The number of housing units achieved ranged from 60 – 1000 units.
- Project duration: The project duration was 2 -50 months.

4.4.4 Leadership skills:

4.4.4.1 Level of authority on the identified case study projects:

Question 12 sought to find out the level of authority the participants had in the housing projects in relation to objectives a) and b). Five participants indicated level one (*act on instruction*); ten indicated level two; two indicated level three; and, two indicated level four (*full authority on their particular project*). The data indicated that there were very few project managers who were able to take full authority on their projects (refer to Appendix 5).

4.4.4.2 Level of responsibility on the identified case study projects:

Question 13 sought to find out the sources of the level of responsibility the participants have on housing projects in relation to objectives a) and b). Five participants indicated level one (*act from instruction*); four indicated level two; ten indicated level three; and, none indicated level four (refer to Appendix 5).

4.4.4.3 Level of accountability on the identified case study projects:

Question 14 sought to find out the level of accountability the participants assumed on the housing projects in relation to objectives a) and b). Eight participants indicated level one; two indicated level two; nine indicated level three; and, none indicated level four (refer to Appendix 5).

4.4.4.4 Which challenges faced project leaders during the delivery of the case study housing project?

Question 15 sought to find out the challenges PLs faced during project delivery in relation to objectives b) and c). Most of the respondents mentioned a range of issues such as: social interference; lack of skills; compliance processes; community interference; procurement challenges; land availability challenges; legislation and policy-related challenges; organizational internal processes; political interference; senior management interference; population growth challenges; internal departmental support challenges; beneficiary administration and policy challenges; lack of social communities surrounding developments; media inquiries; and, the challenge the subsidy posed to the market. Through qualitative thematic analyses of these challenges, the notable themes were social, organizational, multi-stakeholders, legislation, law and policies, skills, political interference, and media (refer to Appendix 6).

4.4.4.5 Which challenges related to organizational internal processes that hindered the progress of the case study project?

Question 16 sought to find out which challenges the PLs had to face in relation to objectives b) and c), in relation to organizational internal processes. Based on the researcher's thematic analysis of the responses received, a variety of responses indicated challenges such as: the procurement process; various compliance processes; difficulty of aligning organizational processes with community needs; the effect of legislation and policy on progress; the non-cooperation or alignment of internal departments; lack of resources; political interference; the timeframe related to land allocation or acquisition; the lack of social, communication and people skills, the timeframe involved in project applications; community interference with project operations; the beneficiary administration process and policy challenges; the market conditions; crime; nature; site security; unemployment rate within the area; and, the social challenges. The most common themes that were drawn from these identified challenges are: social; organizational; multi-stakeholders; legislation; law and policies; skills; political interference; market; and, nature (refer to Appendix 7).

4.4.4.6 Which challenges during the delivery of the case study project were related to external factors outside the project and organization?

Question 17 sought to identify the challenges faced by the PLs related to organizational external processes, in terms of objectives b) and c). The responses were not many, but differed because some indicated challenges such as: stakeholder management; procurement process; political interference; legislation and policy; social challenges; community challenges; overall market condition challenges; beneficiary administration and policy challenges; and, project manager skills to deal with all of these. These challenges brought notable themes relating to: social issues; organizational issues; multi-stakeholders; legislation, law and policies; skills; media; political interference; and, market conditions (see Appendix 8).

4.4.4.7 Which major challenges were encountered by the project leader during the construction of the identified project?

Question 18 sought to identify the major challenges faced by PLs in relation to objectives b) and c) during construction implementation. There were various challenges identified in relation to construction implementation, but none were identified which related to physical

construction-related challenges such as the building of house or civil services. Participants indicated: budget-related challenges; their own lack of skills; stakeholder management; the environment challenges; lack of resources; land release timeframe challenge; beneficiary administration and policy challenges; organizational challenges; social challenges; political interference; compliance challenges; community-related challenges; and, subsidy challenges. Based on the responses received from participants, the prominent themes that emerged from the text were grouped according to: social; organizational; multi-stakeholders; legislation, law and policies; skills; environment; political interference; and community challenges (refer to Appendix 9).

4.4.4.8 Solutions to the challenges identified?

Question 19 sought in relation to objective b) and d) to find out what solution the PL can suggest to the challenges they identified. The responses received were diverse but the essence that was drawn from responses related to: leadership; communication; community and stakeholder involvement from an early stage; revision of policy; mentoring and skills training; and, standard that clarify roles and responsibilities (refer to Appendix 10).

4.5 Dominant themes

During the coding process, the data was further categorized into six themes that highlighted challenges the project leaders faced during project delivery. These themes were: social challenges; organisational challenges; political interference; multi-stakeholder management; legislation by-laws; policies; and skills.

4.5.1 Social challenges

All the interviewed participants noted that social/communal challenges were the most problematic when it came to project delivery. Most participants indicated that a varying degree of social issues had an impact on project delivery. For example, one respondent mentioned that communicating project technical details to the community was very difficult as it was necessary to break it down to a level that they could understand, while they lacked a basic understanding of those technicalities. Another respondent noted the challenging environment of the public sector housing project by noting that when beneficiaries have to move from one site to another, the relocation process becomes a challenge on its own, which

leads to a project within a project. These social dynamics tend to emerge as the project unfolds, and there is no academic knowledge within project management that empowers or prepares a project leader for these practical problems. As indicated in Appendix 4, most of the participants have a built environment background or experience which is technically-related, rather than social studies, to cope with such challenges.

The communities in which these projects often take place have a social and political dynamic stemming from their communal history, which the PL needs to manage. The social and political dynamics, which have been highlighted in Chapter Two of this research, were described by all respondents during the interviews and they confirmed that these dynamics could drive project implementation to the edge of failure. Various interested parties in communities seek to take advantage of the project which has been initiated, and that is the risky situation that the PL must mitigate against.

Furthermore, the interviews revealed that to achieve project delivery within the public sector is not easy; and, it requires more organizational knowledge and soft skills to navigate and achieve project delivery. Communication and participation of relevant stakeholders are key drivers in keeping up the social morale of the PL. A lack of support in either resources, such as the lack of a social or community facilitator, or the PL not receiving training to equip him/her with the ability to adapt to the communities is a definite shortcoming within the project, which markedly affects project delivery. It becomes apparent that the public sector has not invested enough in resources and skills training to capacitate PLs to cope with project delivery in the Cape Metropolitan Area.

4.5.2 Political interference

The political interference from ward councillors or MayCo members was highlighted as a major hindrance by project leaders. Most of the respondents indicated that political members tended to make promises to communities which were not in line with the project objectives or what legislation and policy would allow. The challenges that were created due to these promises caused social and community interference during the roll-out and implementation of the project, and negatively affected the project timeframes.

The fact that housing delivery takes place within the political domain opens it up to political interference. Public housing in South Africa has been highly politicized. The successes of housing provision can always be attributed to the intervention of politicians in one way or the other. HS projects are initiated when a politician promises the community housing opportunities within the wards. The community then finds out, when the beneficiaries are allocated houses, that not everyone has qualified for a subsidized house. This creates friction between the PL and the politician, because the PL is limited by housing policy and cannot deliver the full extent of the politician's promises.

Furthermore, the resources (such as project funding) depend on a political committee and this is in direct conflict with the PL because even though the committee may have the authority, the PL must bear the responsibility and accountability for bringing the project to realisation. The findings suggest that politicians believe they have the power of authority and that the PL needs to act on their promises, while the PL is governed by legislation, by-laws, policies and compliance, which are mostly in conflict with the politicians' promises. Although projects are born out of the political realm, the implementation of the project depends on its legislative and organizational compliance. The decision-making of the PL on public housing projects is always subjected to political interference, which is either local area politics or municipal management politics.

4.5.3 Organizational challenges

These challenges manifest themselves as different expressions of the human settlement environment (with regards to population growth and urbanization) and organization environment (structure, behaviour, and operations). The respondents generally deal with organizational challenges related to procurement; non-cooperation from line departments; lack of resources, compliance measures; lack of alignment between community needs and the project objectives; and organizational changes that influence project implementation. All participants unanimously stated that fusing the organizational and contract management (private sector management techniques and public policies) at the project level was challenging and it required a multi-disciplinary approach by a person who understood the organizational policies, including procedures and contract law.

The findings confirmed that the bureaucratic nature of the public sector organization does not allow PL the authority for decision making over the project. It was revealed that the PL acts from instructions or when instructed on their projects. Only four of the respondents out of 19 indicated they had full authority over their own projects. The findings show that prioritization of housing projects within the organization is a challenge as the infrastructure service departments do not emphasise housing in their allocation of resources, and that can often lead to an increase in scope and budget for housing projects.

4.5.4 Legislation, by-laws and policies

Public sector project delivery takes place in a bureaucratic process and project management is subjected to various legislative policies of compliance. The magnitude of legislation and policies that impact on housing developments alone is quite broad in nature. The participants considered this as a burden to project delivery as it affects the way the project is structured and implemented. Most participants indicated that public housing depended on the subsidy, which was not market related, while utilizing consultants and contractors from the private sector, who charged market related fees. A number of respondents had highlighted the problem that PPM, which is a project management system, was a compliance measure that did not assist them in their work.

It emerged that everything PLs have to do within HS is prescribed by legislation, by-laws or policies. This places the PL in a peculiar position when it comes to implementation, especially when dealing with revisions on construction contracts, as Supply Chain Management (SCM) overrules the contract law, according to the PMFA and MFMA. The findings indicate that compliance measures such as housing standards, housing financial instruments, MFMA, PFMA, procurement, legislation, standard operating procedure, subsidies and grants all overrule project management in the public sector. This hinders the process of housing project delivery. Municipalities are excellent regulators; therefore, the project is compliance driven.

The challenges of this organizational compliance are that it requires the PL to be organizational process-driven than project-delivery driven. It burdens the PL to perform duties as a manager and leader, which result in project delays. This lack of authority does not give the PL the power to make an immediate decisions on projects, which results in scope,

cost, time and quality implications. This triggers an organizational compliance process, resulting in a project delay, for which the PL has to take responsibility and accountability. This implies that the organization itself is not production orientated and is more compliance-focused.

4.5.5 Multi-stakeholders

The participants considered the number of individuals, groups and organizations (both public and private) involved in a human settlement project as quite extensive, which makes the communication unnecessarily complex. HS projects have a number of stakeholders, and the PL is responsible for managing them. Most respondents indicated that it is becoming a challenge to manage multi-stakeholder interests. In addition, the respondents indicated that not having control over these stakeholders becomes a co-ordination challenge because it affects the project objectives. Various respondents also agreed that the procurement process is challenging, as the internal infrastructure service departments are not allowing housing projects the importance they demands.

4.5.6 Skills

A HS project involves managing stakeholders who have different interests. Even the skills that are required to manage these stakeholders differ. Most participants considered technical or hard skills as not a problem on a project. However, their view was that stakeholder management required soft skills (to interact with politicians and community members). The respondents, in general, noted that a lack of soft skills could lead to project disruptions. Their idea of instilling these soft skills was through mentorship and learning on the job.

Managing stakeholders in housing is very complex due to the number of internal and external stakeholders. The literature review indicated that it is the PL's responsibility to manage all the stakeholders. Stakeholder management is not something new to project management. However, HS projects fall within the public domain and attract various public and private interests, which puts no limitation on the number of stakeholders that may become involved in the projects. The study revealed that the PL lacked the various soft skills to deal with these stakeholders.

The study revealed that the lack of project management skills and professionals within the local government sphere was the reason why most PMs in this sector rely on consultants, organizational policies and procedures in executing their duties, instead of professional competency. It also emerged that a PL's lack of public management skills and social skills to deal with community and political issues, prohibits them from exerting an ability to creatively transform and lead. The lack of mentorship within the department of human settlements makes it impossible for the project leaders to learn from their successes and failures. The findings suggests that most PLs have the technical competencies, but lack the organizational, institutional knowledge and soft skills for delivering HS projects.

4.6 Discussion of findings

A further discussion is drawn from both literature and the finding above, to provide context and perspective.

4.6.1 Objective a: Determine the role, importance, and limitations of project leadership in the HSE.

Findings revealed that 15 of the participants interviewed were not registered as project management professionals. This shows that public sector PLs rely on organizational operational processes, policies, and procedures to guide them in terms of the project management approach. Mersino (2013) noted that PLs believe that to demonstrate competence, they require certification such as a PMP to set them apart from the rest of the project managers. The author further maintains that the capability of a project manager relies on effectively implementing a project and working cohesively with a team. The majority of the respondents indicated that they have some form of project management education, with only one participant indicating on-the-job training only. Furthermore, seven of the respondents specified that they were registered with other professional bodies, which indicates the diversity within the PL training and knowledge. Bakar et.al, 2012 noted the importance and influence of project management and influence on the success of a project, and the PMI noted that that the PM is responsible individual for project success, thus indicating the importance of the PL is importance to the success of a project. Mabelebele (2006) pointed out that decisions in public sector projects are influenced through the political

regime that gives the PL his authority, accountability and responsibility, which are filtered through the public organisations policies and processes. PL leadership ability is linked to changes in or the dynamics of the HSE (Verma and Wideman, 2002 and Hao and Yazdanifard 2015). PLs are responsible for taking communities, organizations and societies through change, and managing the discomfort that change brings. In order to be effective, PLs need both management and leadership competence, which depend on both hard and soft skills (Sharma and Jain, 2013).

4.6.2 Objective b): Establish how project delivery takes place in the HSE.

Experience amongst participants reflected that 16 of them had more than five years' experience, of which eight deemed themselves at professional project management level, four at senior project management level, and four at an intermediate project management level. Mersino (2013) noted the capability of a project manager relies on effectively implementing a project and then working with a team. This demonstrates that project management knowledge is indeed important for PL. Additionally with regards to all objectives, when it comes to applying project management within the public sector, 14 participants were of the view that there is a difference between public and private sector project management. According to Van der Waldt (2001) and Du Toit and Van der Waldt (1999), the public sector uses project management as a toolkit, while in the private sector, project management is institutionalized within the organization. The Housing Act of 2017 presents various programmes in relation to the grants available. HS is guided by National Policy, through the three spheres of government as mandated by the Constitution. Mabelebele (2006) noted that the three spheres do not possess the resources to implement projects, and they depend highly on the private sector (Wisner, Tan and Leong, 2016). In order to purchase these resources, the public sector has to follow a regulated procurement process (SCM), which is systematically governed by the PMFA and MFMA. This is legislative and compliance driven, which is different from the project management procurement process identified by the knowledge area, although it shares the same concept. HS projects further fall within the public domain which make it liable to multiple stakeholders as government funds are utilised (CoCT, 2016). The identification and management of human settlement projects is complex, due to the compliance requirement set out by public sector. It is important that the PL should understand and have the experience to marry public institutional processes and needs with the

professional project management process, to ensure HS project success. PLs are responsible for steering the various processes, and these become complex when needs and priorities increase; so it is a complex management challenge to concurrently run all these processes to achieve success.

4.6.3 Objective c): Identify the different challenges confronted by PLs in the dynamic HSE.

In accordance with objective c), the respondents generally had seven years and more experience as PLs within the HSE. This demonstrated that they have the knowledge and experience to lead HS projects. The interesting finding was when respondents were asked about human settlement projects completed; four indicated they had not completed any, and 15 indicated they had completed between two and 18 projects. This implies that the majority of these respondents were indeed the implementing representatives of human settlement projects in the Cape Metropolitan Area. The success of human settlements projects, is usually measured according to the traditional project management triple constraints, namely: scope, cost and time. Out of the 19 participants, the success rate was less than half to none with regards to objective c). This low percentage is directly linked to the challenge PLs face during project delivery. The FFC (2013) highlights the policy challenges such as the increase in building standards, increase in unit size and cost. These challenges are the leading causes of a decline in effective project delivery. Participants 1, 8 and 11, for instance, highlighted organizational, social and political challenges related to project delivery. In essence, it is the combination of elements such as the National Housing Policy, and organizational and stakeholder challenges that can be linked to the decline in housing delivery. The respondents' comments were as follows:

“Political interference because there will always be a ward councillor or MayCo member who have their own agenda. The overall lack of leadership in human settlements, as the politicians change, so does the priorities of projects. Your project which is planned to happen in the future can shift to this year, or resources like budget can be moved from your current project to the one that management feels is a priority at that particular moment. Internal disputes, internal policies and procedures are forever debated amongst departments. Political interference

by ward councillors: for example, the beneficiary criteria because when we need to upgrade an area, people are usually promised that all of them will get houses. Later they find out about the beneficiary qualifying criteria policy and if they don't qualify it leads to all kinds of issues such as protests.” – Participant 1

“Political interference especially MayCo or ward councillor they always want to tell us what to do and how we need to do it. SCM is also a challenge due to market prices that do not line up with the subsidy, leading to tender cancellations. Community protest and the theft on-site are affecting the projects. The fact that we also don't look at another social service also becomes an issue when you present the layout to communities as for example if there is no school within the development and the kids need to travel far for schooling.” – Participant 8

“The buy-in from communities is a challenge; sometimes the solution that we propose does not suit the needs of the community in the contexts of the allowed resources. This requires a negotiation with the community and working with them to achieve a solution that fits both parties. Political interference, the influence of ward councillors and Mayco members is big in the project if they are not informed or even if they are, they make promises to communities which the project cannot provide.” – Participant 11

4.6.4 Objective d): Find out whether the PL exerts an ability that can creatively lead and transform the project organization.

Van der Waldt (2007) and Starling (1993) noted that it is difficult for lower-level managers, such as a PM, to exercise authority on public sector projects as the hierarchy and government bureaucracy are complex and the approval processes impact on project success, and because the PMs authority is limited. Respondent 2, points out that

“Not being able to make critical decisions on the spot is one of the challenges because as a PM nor the consultants or yourself have the authority to make decisions about the project such as scope change, as you need higher ranked officials approval as well

as Supply Chain Management (SCM) approval and Bid Adjudication Committee (BAC) on these matters takes a lot of time.” - Participant 2

The project leader’s responsibility, accountability and authority are given by the organization, and play a fundamental role in project delivery in the public sector.

4.7 Discussion and overview of the research objectives

In order to address the housing need on the ground, the public sector relies on the IDP to address the matter strategically, as it is a five-year plan. Mabelebele (2006) noted due to this lack of resources, the public sector needs to procure resources. Representative respondent’s views are as follows when pointing out internal challenges:

“Lack of internal support from line departments and getting approvals from other compliance departments are a challenge.” – Participant 1

“Not enough resources to assist you with the management of projects.” – Participant 6

“Lack of in-house skills.” – Participant 8

“No staff to assist you with the project administration.” – Participant 11

Lack of resources was also noted by the participants as a challenge. To accomplish the tasks set out in the IDP requires resources, but the lack of resources within the public sector adds a further challenge to project delivery. The public sector procurement process is prescriptive and rigid, for example, it does not matter if one is doing a project consisting of 50 or 5 000 housing units, the same procurement rules and processes apply. This is an example of the systemic challenges to obtain these resources. An SCM process needs to be followed which is governed by the MMFA and PFMA. The PL is monitored for compliance with these processes. High demand for housing cannot be resolved if the public sector is not committing resources to project delivery, especially when the right to adequate housing is open to all. Mabelebele (2006) avers that this SCM process is not compatible with the standard project management role because it involves political principals with the authority to make decisions.

It appears that the rigidity of a bureaucratic organization prohibits the PL from exercising their creative ability to successfully deliver projects because of the lack of authority to make decisions. Overall, the respondents indicated that they act “on” or “from” instruction (levels 1 and 2) when it comes to the authority, responsibility and accountability they have on a project.

The identified project of the participants further revealed that the success of human settlement project can range from professional services, completion of civil service, top structures (houses), or the entire scope of these activities forming the whole project. All that is contrary to the PMI (2017) and APM (2012) because understanding of project manager’s authority, responsibility and accountability depends on professional competencies within the context of a project complexity and differs from situation to situation. Schwella and Wissink (1991) highlight these contradictions in a management approach, saying that public and private sector organizations share a common understanding of development techniques, but not so much at the level of political and managerial judgement and decision-making. Although project delivery in human settlements is also done according to project management principles, it seems as if the public sector organization does not utilize the professional body of knowledge such as PMBOK or comply with the necessary delegation of project authority prescribed to be given to the PL.

The challenge of developing human settlements is much broader than housing, it requires other components that make it socio-economically viable. According to the UN-HABITAT (2007:1): these informal settlements are excluded from opportunities; physically, politically and economically marginalized; and, slum dwellers are particularly vulnerable to crime and violence. With regard to the overall evaluation of the challenges to project delivery which confront project leaders in the dynamic human settlement environment, some respondents’ views include:

“Employment opportunities also become a challenge to the project because within these communities, unemployment rates are high.” – Participant 4

“Market condition also influences our project due to inflation and availability of material resulting in one to change the design or material.” – Participant 5

“Poverty in these areas is usually high and employment opportunities in the project becomes a battlefield for a politician and the community that you need to resolve otherwise it stops your project dead.” – Participant 9

The project leader is responsible for more than just housing; instead, they must ensure that sustainable Human Settlements reach the people in need. It is clear that housing delivery is more about addressing the entire range of human settlement needs, and not just housing. When it comes to public sector projects, Kerzner (2017:29) made it clear that these projects involve the community, and that the PL is responsible for managing the community as well as the project team. According to Steyn et al., (2012), stakeholder management forms part of the responsibility of project management in general. When it came to stakeholder management, some respondents’ views included the following:

“The control over external stakeholders namely PRASA, NHBRC, ESKOM, NGO'S, TRANSNET, etc. All stakeholders have input in how to deliver the project, but sometimes their priorities change during the course of the project and can lead to delays.” – Participant 1

“The various stakeholders one needs to deal with requires coordination as when land belongs to other departments there is a process that needs to be followed to obtain ownership of land to develop it accordingly, which does not always speak to the project timeframes, ending in delays.” – Participant 5

“External stakeholder is always a challenge ... each has their own needs ... negotiation skills are very important at this point because there is a trade-off to be made between all stakeholders.” – Participant 7

“The impact and input of Eskom is also another issue for us as their timeframe if not managed carefully can lead to the development with no power.” – Participant 12

Therefore, project leaders in housing delivery face an insurmountable task of trying to satisfy different stakeholders with conflicting goals. Moreover, all respondents agree that the most

critical stakeholder is the community who requires soft skills to be managed. Radmila et al., (2011) and Archer, Verster, and Zulch (2010) noted that it is the PL that leads the organization through these challenging times by inspiring individuals to participate in the project. On one hand the PL relies on soft skills to address social and multi-stakeholder challenges. On the other hand, PLs require enhancement of their hard skills to deal with the organization, legislation, and skills.

Van der Waldt (2001) states that project management requires one to manage technical and non-technical aspects of a project. Northouse (2016) and Marando (2012) support this by averring that a project manager needs to continuously learn and evolve their craft. Knowledge within organizations, intelligence, self-confidence, determination, integrity, and sociability are the major leadership traits that will provide the necessary skills to resolve problems they may face.

4.8 Chapter summary

This chapter presents the findings collected from personal interviews and the self-report questionnaire. The data was analysed using the method described in Chapter 3 and the discussion involved the results of data retrieved, compared with the literature review in Chapter 2. The analysis of the results identified that the challenges which the PL faces relate to six themes, namely social, political, organizational, multi-stakeholder participation and skills. Findings further revealed that the bureaucratic nature of the public sector creates rigid limits to the PLs responsibility, accountability and authority overall. The policies, procedure, legislative and compliance regime within the government are bound by the Constitution, as well as by the MFMA and PMFA that drive the public sector. A summary of findings, conclusions and recommendations follow in the next chapter, based on these findings.

CHAPTER 5 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a reflection of the research question, objectives, summary of findings obtained, conclusions and recommendations.

5.2 Achievement of the research objectives

The objectives of the research were to:

- a) Determine the role, importance, and limitations of project leadership in the HSE.
- b) Establish how project delivery takes place in the Human Settlements environment through housing programmes.
- c) Identify the different challenges confronted by PLs in the dynamic HSE.
- d) Find out whether the PL exerts an ability that can creatively transform, maintain and lead the project organization.

5.2.1 Determine the role, importance, and limitations of project leadership in the HSE.

The review of literature relating to human settlement and project leadership was effectively accomplished. The literature review referred to the dynamic Human Settlement environment and the project leader's role within projects, as well as overall sustainability of the human settlement initiative, and the frameworks that govern housing projects. Furthermore, the bureaucratic structure and processes of the public sector were also identified and how these affect the project leader and the project. In addition, the multi-stakeholders, grants and programmes were reviewed and the current project delivery status; which links to the project leader's ability to successfully deliver a project.

5.2.2 Establish how project delivery takes place in the HSE.

In Chapter 2 the literature review indicated that public sector projects and project delivery take place as mandated by the Constitution, guided by legislation and policies and also

implemented through housing programmes. These programmes highlighted in the housing policy are the People's Housing Process; the Institutional Subsidy Programme; the Upgrading of Informal Settlements Programme (UISP), the Integrated Residential Development Programme (IRDP), the Finance Linked Individual Subsidy Programme (FLISP); and, Individual Housing Subsidies (non-credit linked). No housing project can be implemented in the public sector without making use of these prescribed programmes.

5.2.3 Identify the different challenges confronted by PLs in the dynamic HSE.

Interviews and questionnaires were utilized within the study, which served to identify successful human settlement projects which could be discussed by the respondents, as these were their own case studies of a project they had completed as a PL. This method was chosen to gather data to describe the challenges PLs face within the dynamic HSE. The data retrieved was then collated and compared to the literature through a comparative analysis. It was revealed through the analysis that six themes emerged, namely social, political, organizational, multi-stakeholder and skills. These challenges were reflected in the literature review.

The organizational bureaucratic nature of the public sector revealed that is difficult for a PL to lead because they lack decision-making authority in that setting, and therefore, may only react to and from instructions. Further, the challenges of compliance within the organization are a burden on the PL. It is expected that the PL should perform their duties as prescribed by legislation, by-laws or policies, but these are factors over which the PL has no control, resulting in project delays. The prioritization of housing projects within the organization and other internal departments becomes another challenge as all resources are not necessarily aligned to the project objective (if it is for example a community centre or a bridge which is one specific objective that must be built in the environs of the settlement, not all line departments are affected, and have minimal input, if any), whereas a housing project relates to infrastructure services (community centre, bridge, water, sewer, electrical, stormwater, landscaping, etc.) and the houses to be constructed require a multi-disciplinary focus to be aligned to one objective, namely to achieve a human settlement. The PL has no control over these various internal resources, and may also lack financial and supporting resources.

The social and communal environment in which these projects take place is another challenge as it may bring forth political interference as well as various community and social dynamics that the PL needs to manage. Urbanization and population growth, together with the migration of people into cities, have an uncontrollable impact on the project because the number of people can increase rapidly, and most projects cannot accommodate such an increase. In order for a PL to manage these challenges, he/she requires soft skills, which most respondents revealed they didn't have, and this poses another challenge. The literature asserted that it is indeed a necessary requirement for a PL to have to lead within such difficult situations.

5.2.4 Find out whether the PL exerts an ability that can creatively transform, keep up and lead the project organization.

The findings revealed that the public sector is highly prescriptive through legislation pertaining to housing, including housing policy, grants and housing programmes. This dictates to the PL the housing process to follow, as well as prescribing which subsidies may be used, thereby setting out the cost limits. These aspects do not allow the PL to be creative or innovative to transform and lead the project organization. However, the room they do have to be creative and innovative lies within the ability to match the housing need with the organizational process and improve the successful cooperation between stakeholders. There are aspects which were not so evident from the literature review and which emerged from the interviews. The strict framework of human settlements was traceable within the literature review.

5.2.5 Validation of the research proposition

The study aimed to answer the main research question, "What are the challenges confronted by project leaders during housing delivery in a dynamic human settlement environment?"

It emerged from the study that the challenges confronted by project leaders during housing delivery in the dynamic human settlement environment are: Social challenges; Political interference; Organizational challenges; Legislation; Multi-stakeholders; and Skills.

5.3 Conclusions

Based on the findings, the research concludes that:

Social and political interference can influence a project either positively or negatively. PLs have no authority in the work of housing delivery projects. Without this authority, it is difficult for a PL to make critical decisions on a project while still bearing all the responsibility and accountability of project delivery.

Bureaucracy dominates the NDHS, WCDHS, and CoCT as organs of state. Thus, it does not encourage or allow flexibility for the PL to deal with the realities of housing demand and human settlement environment challenges as a whole.

The provincial and local government is not geared for production as it is an organ of state which is mandated to govern society, but must nonetheless provide service delivery through project implementation.

The compliance-driven nature of the HSE is mandated by the South African Constitution which regulates the public sector organizational structure. Both provincial and local governments are driven by legislation, policies, and procedures to implement service delivery, and this hinders the human settlement project delivery process. As the human settlement department is purely an implementation department, it does not retain, operate, or maintain any of its developments. The new civil engineering infrastructure developed is handed over to the different departments, and the houses are handed over to the beneficiaries, which results in service delivery completion. These products produced by human settlements departments attract multi-stakeholders, which the PL needs to manage throughout the project delivery process.

HSE is dynamic and the DHS needs a new approach for project delivery, as well as a review of the responsibility and accountability given to PLs. The limited responsibility, accountability and authority within the organisation steers PLs towards compliance with bureaucratic requirements, but not necessarily project delivery. This limitation does not allow or give PLs the ability to manage and lead projects to improve project delivery, as it is driven by strict legislative requirements and compliance with the organisation's operations.

The project management body of knowledge as well as the built environment educational framework does not provide PLs with emotional intelligence or soft skills to deal with multi-stakeholders within the HSE.

The public sector's organisational structure and its operations and procedures are legislature-bound, which means that each action taken on behalf of the organisation needs to be legislatively governed through a policy, and that is a different working environment from project management in the private sector. The project management body of knowledge does not describe projects under the unique governing constraints of the public sector, especially in the HSE, and HS projects are comprised of infrastructure and housing with multi-stakeholders, including the entire public. Dynamic HSE has been identified and defined as a new variable, supported throughout the literature review which contribute to the body of knowledge.

The HSE is unique as it integrates the entire built environment, which requires a unique understanding of the public sector, built environment, and communities, and a balance of soft and hard skills to navigate a project to success. A PL needs to utilise organizational policies, protocols, and procedures to complete the project, however when it is compliance-driven as within the public sector, that negatively impacts upon the PL's ability to lead.

5.4 Recommendations

The following recommendations are made, based on the findings and conclusions:

Housing projects consist of three fundamental elements, namely people, land and money. PLs need to equip themselves through exposure to the HSE to obtain the necessary knowledge and skills on the ground which will enable them to understand housing needs.

PLs needs to develop social and facilitation skills to manage the needs of the individual and the community for all the benefits of human settlement provision. Better understanding of the people's needs will enable the PL to initiate a project with a bottom-up approach, instead of waiting for the IDP. This can be done through community engagement and participation, or a socio-economic and social compact study at the start of the project.

PLs must also adapt to working within the rules by understanding that the rules were intended as assistance and guidance. However, they should be able to challenge the rules that are not legislative, or policy driven, but can pose problems for the projects. This challenge must be made by means of logic supported by facts.

A clear understanding of legislation and by-laws will assist the PL to utilise them appropriately on projects, especially when challenged by political or social interference.

The organisation must provide compulsory soft skills training to the PL because those skills are becoming increasingly important in the corporate world. Approximately 65% of people entering the public sector today are directed into working with different stakeholders who have different expectations.

Local government needs to invest and adopt a project management methodology/approach such as PRINCE 2 (Projects in Controlled Environments) to guide projects under the compliance constraints.

Housing delivery in the public sector should search for new approach models that support efficiencies and compliance, so that resources can be dedicated to production with all necessary support systems in place.

To combat all the dynamic HSE challenges, the PL needs to embrace and develop the “Art of Project Management” to successfully deliver projects to completion.

5.5 Limitations and directions for future study

The study was limited to the Cape Metropolitan area, so a bigger sample size is required to provide confirmation of the accuracy of the information gathered in this study. It is further recommended that future studies must also consider private sector participants to elaborate on the PL capabilities within both organisational contexts. A workshop could also be used to provide insight on the PL role, importance, and limitations; discuss the challenges PLs face in dynamic HSE; and opportunities for transformation through leadership.

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APPENDICES

APPENDIX 1: Information and consent form

APPENDIX 2: Questionnaire

APPENDIX 3: Organisation Ethical Clearance letters

Request for ethical clearance A

Request for ethical clearance B

Request for ethical clearance C

APPENDIX 4: Questions 1-19

APPENDIX 5: Technical knowledge and completed projects

APPENDIX 6: Challenges facing the project leader during the project

APPENDIX 7: Challenges of internal processes during case study project

APPENDIX 8: Challenges of external factors during case study project

APPENDIX 9: What major challenges and themes did the PL encounter?

APPENDIX 10: Suggested solutions to identified challenges

APPENDIX 1: Information and Consent Form

INFORMATION SHEET & CONSENT FORM

EVALUATION OF THE CHALLENGES TO PROJECT DELIVERY CONFRONTING PROJECT LEADERS IN THE DYNAMIC HUMAN SETTLEMENT ENVIRONMENT

Good day, my name is Fabio Companie, and I am conducting research towards a Master's degree in Construction Economics and Management at the University of Cape Town. The research involves the Evaluation of the challenges to project delivery confronting project leaders in the dynamic human settlement environment and would like to invite you to participate in this research because I feel that your knowledge and experience as an expert in human settlement projects can contribute much to the research topic.

Completing and providing information to this questionnaire should take about 30 minutes of your valuable time. If you accept to participate in this study, the questionnaire form will be provided to you. I would appreciate it if you could complete all questions. However, if you do not wish to answer any of the questions, you may skip them and move on to the next question. This questionnaire contains two parts: Part 1. Introductory Information and Part 2. Technical Information.

In Part 1, you will provide information to some introductory questions such as profession, position, and years of experience related to human settlements.

In Part 2, you will provide technical information from your knowledge and experience with questions about your project leadership role. Also, answer some questions about a recent project you have completed in the last five years, to gain a better insight into your experience.

All the information provided is confidential, your name will not be included on the forms, and only a number will identify you. No information that you provide will be shared with anybody outside, and nothing will be attributed to you by name. Data collected will be collected in an

aggregate form and identification information will never be used in a publication or presentation.

Please understand that your participation in this research is entirely voluntary. The choice to participate is yours alone. If you choose not to participate, there will be no negative consequences. If you choose to participate but wish to withdraw at any time, you will be free to do so without any negative consequence. However, I would be grateful if you would participate in this study.

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics such as completion cost and project income. You do not have to answer any question or take part in the questionnaire if you feel the question(s) are too personal or if talking about them makes you uncomfortable. There is not any risk of emotional, upset, or stigmatization that you encounter during this survey.

There is no direct benefit to you by participating in this research. The knowledge gained may benefit the public in the future. The knowledge obtained from this research will be shared with you before it is made widely available to the public. Also, you will receive a summary of the results if you indicated this on the questionnaire.

This document acknowledges your understand of your rights as a participant in this study, which the researcher has explained to you prior to signing the document.

I acknowledge that the researcher has explained my rights, the requirements of this study, and the potential risks involved in participating in this study. I understand there is no compensation for or direct benefit of participating in this study. By signing below and providing my contact information, I am indicating that I consent to participate in this study that I am at least 18 years of age, and I am eligible to participate in this study.

Name of participant Date

Signature of participant

Contact Information

Thank you for your participation,

You may withdraw from this study at any time by notifying the researcher by email. If you have concerns regarding your participation in this research study, you may contact the research supervisor.

Researcher: Fabio Companie

Department of Construction Economics and Management

University of Cape Town

Email Address: CMPFAB001@myuct.ac.za

Research Supervisor: Professor Abimbola Windapo

Department of Construction Economics and Management

University of Cape Town

Email Address: abimbola.windapo@uct.ac.za

APPENDIX 2: Questionnaire

PARTICIPANT NO:

EVALUATION OF THE CHALLENGES TO PROJECT DELIVERY CONFRONTING PROJECT LEADERS IN THE DYNAMIC HUMAN SETTLEMENT ENVIRONMENT

Part 1 - Introductory Information

1. Are you a Professional Project Manager?

Yes	No
-----	----

2. What project management qualifications or training do you have additional to your highest qualification (if any)?

Degree	
Diploma	
Certificate	
Workshop	
Part of degree or diploma	
On the job training	
Other	

3. Are you registered with any other professional body?

Yes	No
-----	----

If you answered yes above, please state the name of professional body below.

<u>Comment:</u>

4. Please indicate how many years of experience you have in the built environment.

<5 years	
6-10 years	
11-15 years	
16-20 years	

21-25 years	
25-30 years	
>30 years	

5. Please rate your level of skill in project management, by using the table below as a guideline.

Level	Rating	Meaning
Entry level	1	Qualified with less than 1-year experience.
Intermediate 1	2	Qualified with two years' experience and maybe registered as a Candidate
Intermediate 2	3	Qualified with three years' experience and registered as a Candidate
Senior	4	Qualified with at least four years' experience and registered as a candidate.
Professional	5	Qualified with more than five years' experience and registered as a professional.

Please make a X to indicate your answer in the relevant box below:

Entry level	Intermediate		Senior	Professional
1	2	3	4	5

Part 2 - Technical Information

6. A project leader is defined as someone who is responsible for a project. How many years of experience do you have in the human settlement project environment, specifically as a project leader (irrespective of your job title being a project leader)?

	Years
--	-------

7. Do you think there is a difference between being a human settlement project manager and being a commercial/industrial/retail/etc. project manager?

Yes	No
-----	----

Please provide a reason for your answer above.

Comment:

--

8. How many projects have you completed in the built environment?

Number	
--------	--

9. How many of the completed projects above (Question 8) were undertaken within the human settlement environment?

Number	
--------	--

10. How many of the above (Question 9) human settlement projects were completed successfully within the allocated scope, time and cost?

Number	
--------	--

Comment:

--

11. Please identify a housing project, within the human settlement environment, that you completed within the last five years and complete the table below:

Project location	
Project Value	
Project Scope	
Initial Project Scope (Number of units planned)	
Final Project Scope (Number of Units completed)	
Initial Project duration (Number of months)	

Final Completion Time (Number of months)	
Initial Project duration (Number of months)	
Final Completion Time (Number of months)	

12. Rate your level of authority on the housing project identified in Question 10. Below are the typical authority levels, choose the relevant number applicable to you.

- 1) **Act from instruction:** At this level the individual implements decisions made by others. There is no choice and staff have to do as they are told.
- 2) **Act after approval:** The person weighs factors and acts only after their manager has approved their chosen action.
- 3) **Decide, inform and act:** Power to decide is added, but people remain accountable to someone else. There is a need for this person to inform their manager of their actions.
- 4) **Decide and act:** Provides complete authority and accountability. No approval is required.

Level	
-------	--

13. Please use the measurements below to rate your level of responsibility on the housing project identified in Question 10. Below are the typical responsibility levels, choose the relevant number applicable to you.

- 1) no responsibility for project performance
- 2) partially responsibility for project performance
- 3) full responsibility for project performance

Level	
-------	--

14. Please use the measurement below to rate your level of accountability on the housing project identified in Question 10? Below are the typical accountability levels, choose the relevant number applicable to you.

- 1) no accountability
- 2) partially accountability

3) full accountability

Level	
-------	--

15. Describe the challenges you faced during project delivery of the housing project identified in Question 10?

Comment:

16. What are the challenges you faced during project delivery of the housing project identified in Question 10 that relate to organizational internal processes that hindered your progress? For example, challenges related to community unrest, land ownership, bulk infrastructure not adequate, etc.

17.

Comment:

18. What are the challenges you faced during project delivery of the housing project identified in Question 10 that relates to **external factors (outside the project and the organization)** that hinder your progress? For example, challenges related to political interferences, community protest, local forums, theft, etc.

Comment:

19. From the challenges you listed in Question 14 to 16, what would you say was the major challenge you encountered (as a project leader) during the construction process of the housing project identified in Question 10?

Comment:

20. What do you think is/are the solution/s to the challenges you identified in Question 17?

Comment:

Thank you for your response.

You may withdraw from this study at any time by notifying researcher by email. If you have concerns regarding your participation in this research study, you may contact research supervisor.

Researcher: Fabio Companie

Department of Construction Economics and Management

University of Cape Town

Email Address: CMPFAB001@myuct.ac.za

Research Supervisor: Professor Abimbola Windapo

Department of Construction Economics and Management

University of Cape Town

Email Address: abimbola.windapo@uct.ac.za

APPENDIX 3: Organisation Ethical clearance letters

Request for ethical clearance A

Application for Approval of Ethics in Research (EIR) Projects
Faculty of Engineering and the Built Environment, University of Cape Town

APPLICATION FORM

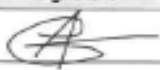
Please Note:

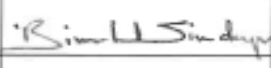


Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form **before** collecting or analysing data. The objective of submitting this application prior to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the **EBE Ethics in Research Handbook** (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/ebe/research/ethics1>

APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant		Fabio Companie
Department		Department of Construction Economics and Management
Preferred email address of applicant:		CMPFAB001@myuct.ac.za
If Student	Your Degree: e.g., MSc, PhD, etc.	MSc Project Management
	Credit Value of Research: e.g., 60/120/180/360 etc.	120
	Name of Supervisor (if supervised):	Associate Professor Abimbola Windapo
If this is a research contract, indicate the source of funding/sponsorship		n/a
Project Title		EVALUATION OF THE CHALLENGES TO PROJECT DELIVERY CONFRONTING PROJECT LEADERS IN THE DYNAMIC HUMAN SETTLEMENT ENVIRONMENT

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

SIGNED BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	Fabio Companie		26 Apr 2019

APPLICATION APPROVED BY	Full name	Signature	Date
Supervisor (where applicable)	A/Professor Abimbola Windapo		26 Apr 2019
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).	Click here to enter text.		Click here to enter a date.
Chair : Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the above questions.			28 Mar. 2019

Request for ethical clearance B



BETTER

Hazel Mzamo
Chief Directorate Implementation
E-mail: Hazel.Mzamo@westerncape.gov.za
Tel.: 021 483 2512

Reference No:

FOR ATTENTION: Mr Fabio Companie

RE: APPLICATION FOR ORGANISATIONAL ETHICAL CLEARANCE

Dear Mr Companie

Your request to conduct interviews and distribute questionnaires to project leaders is hereby approved.

As indicated by you, the research will concentrate specifically on project leaders.

Approval is granted to interview five (5) candidates as well as distribute questionnaires to the relevant participants to conduct your research.

Yours faithfully

PHILA MAYISELA
CHIEF DIRECTOR: IMPLEMENTATION
DATE: 24/05/2019

Request for ethical clearance C

OPF



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

Date: 14 June 2019
To: DIRECTOR: ORGANISATIONAL POLICY & PLANNING
Ref: OPPRR-0115

Research Approval Request

In terms of the City of Cape Town System of Delegations (March 2019) - Part 29, No 1 Subsection 4, 5 and 6 "Research:

- (4) To consider any request for the commissioning of an organizational wide research report in the City and to approve or refuse such a request.
- (5) To grant authority to external parties that wish to conduct research within the City of Cape Town and publish the results thereof.
- (6) To after consultation with the relevant Executive Director: grant permission to employees of the City of Cape Town to conduct research, surveys etc. related to their studies, within the relevant directorate.

The Director: Organisational Policy & Planning is hereby requested to consider, in terms of sub-section 6, the request received from

Name	: Fabio Companie
Designation	: Master's Degree student
Affiliation	: Depart. of Construction Economics and Management - UCT and as a CCT employee in a Project Manager capacity, in the Housing Development Dept, Human Settlements
Research Title	: Evaluation of the Challenges to project delivery confronting project leaders in the dynamic human settlement environment

Taking into account the recommendations below (see Annexure for detailed review):

Recommendations

That the CCT Director: Organisational Policy & Planning Department grant Fabio Companie, in his capacity as a MSc candidate in Project Management in the Department of Construction Economics and Management at the University of Cape Town (UCT) and as an employee of the City of Cape Town (CCT) as a Project Manager in the Built Environment Management branch, Housing Development Department, Human Settlements, to conduct research in the City of Cape Town subject to the following conditions:

- Confirmation of and approval by the Acting ED: Human Settlements - Royah Rughubar of the final list of CCT officials with a maximum of 31 officials participating in the study;
- The willingness and/or availability of individual CCT staff members to participate in the research, in a voluntary capacity;
- Adherence to the scope and scale of the study as proposed;
- Clear acknowledgement that inputs by CCT officials are not regarded as official CCT policy;
- Anonymising of all identities of participating CCT officials and their inputs;
- Submission of the completed research report to the Acting ED: Human Settlements, the Director: Organisational Policy & Planning and the Manager: Research Branch - Organisational Policy & Planning, within 3 months of completion of the research.

✓
C. Cole
14/06/2019

Delegated authority:

Approved Comment: _____

Not Approved Comment: _____

Hugh Cole: Director: Organisational Policy & Planning:

Date: 14/6/2019

Acceptance by Applicant:

I, FABIO COMPANIE confirm that I agree to abide by the conditions as stipulated above.

Applicant:

Date: 2019/06/18

CCT departments: No interviews or data to be provided unless acceptance of the conditions under which the research permission is granted.

Kindly return signed copy to Jameyah.armien@capetown.gov.za

CIVIC CENTRE IZIKO LEENKONZO ZOLUNTU BURGERSENTRUM
12 HERIZOG BOULEVARD CAPE TOWN 8001 PRIVATE BAG X9181 CAPE TOWN 8000
www.capetown.gov.za

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CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Making progress possible. Together.

DIRECTORATE: HUMAN SETTLEMENTS
PROJECT ASSESSMENT & MONITORING

Kamiel Velloo
Programme Manager

MEMORANDUM

T: 021 444 7885 M: 083 305 8260
E: Kamiel.Velloo@capetown.gov.za

To: Herman Steyn (Acting Director: Human Settlement Implementation)

From: Kamiel Velloo

Date: 1 April 2019

Subject: Request for permission to conduct Research Interviews

Mr Fabio Companie is currently registered with the University of Cape Town (UCT) working towards achieving a Master's degree in Construction Economics and Management and would like to conduct research on the topic "Evaluation of the challenges to project delivery confronting project leaders in the dynamic human settlement environment".

The research does however require interview of staff (project managers'/project leaders) who are engaged with implementation of capital projects within the Human Settlements Directorate will be required to approach and interview at least a sample of 15-20 candidates from the following departments:

- Finance (HS)
- Home Ownership Transfer, Tenancy Management and Staff Housing
- Housing Development
- HRBP Human Settlements
- Informal Settlements
- Office Administration (HS)
- Operational Policy and Planning
- Project Management Office: HS
- Support Services (HS)

The process will entail circulating a pilot survey questionnaire as agreed with the specific departments line supervisor, to reviewing the outcome and conducting an initial assessment from the specific departments. Dependant on the feedback on the pilot survey a second final survey questionnaire maybe be circulated if needed (based on the number of responses received).

The purpose of this memorandum is to obtain approval for Mr Companie to proceed with conducting his research.

A handwritten signature in black ink, appearing to read 'K. Velloo'.

.....
Kamiel Velloo



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Making progress possible. Together.

Acting Director: Human Settlement
Implementation

NAME

H. Stoy

DATE

5/4/2019

Comment:

supported

APPROVED

NOT APPROVED

Acting Executive Director: Human Settlements

NAME

RAYAN RUGHUBAR

DATE

24 JUNE 2019

Comment:

APPROVED

NOT APPROVED

APPENDIX 4: Questions on technical skill and professional qualifications

Participant No	Gender M/F	Professional Project Manager Y/N	Highest PM qualification	Registered with other professional body Y/N	Year of experience in Built Environment	Level of PM skills	No of years as project leader in Human Settlements	Difference between Human Settlement PM and other PM Y/N	No of projects completed in the built environment
1	M	M	Degree	Y (SACPLAN)	>30 years	Professional	28	Y	16
2	F	N	Part of Degree	Y (SACQSP)	16 to 20	Senior	11	Y	8
3	M	N	Diploma	N	21 to 25	Intermediate	12	Y	21
4	M	Y (PMI)	Diploma	N	21 to 25	Professional	15	Y	14
5	F	Y (SACPCMP)	Certificate	N	16 to 20	Professional	8	N	12
6	M	N	Certificate	N	>30 years	Senior	16	N	5
7	M	N	Certificate	N	25 to 30	Senior	12	Y	18
8	F	N	Certificate	Y (SACPLAN)	11 to 15	Intermediate	8	N	12
9	M	N	Diploma	Y (SACAP)	16 to 20	Professional	10	Y	22
10	M	Y (SACPCMP)	Degree	N	11 to 15	Professional	11	Y	8
11	M	N	Certificate	Y (SACPLAN)	>30 years	Professional	11	Y	21
12	M	N	Part of Degree	N	21 to 25	Professional	21	Y	27
13	M	N	Part of Degree	Y (SACPLAN)	21 to 25	Intermediate	10	N	0
14	M	Y (SACPCMP)	Degree	N	11 to 15	Professional	14	Y	6
15	M	N	Diploma	N	<5	Entry level	10	Y	0
16	F	N	Workshop	N	<5	Intermediate	7	Y	12
17	M	N	Diploma	N	16 to 20	Senior	7	Y	12
18	M	N	On the job training	N	<5	Entry level	1	Y	0
19	M	N	Part of Degree	Y (SACPLAN)	6 to 10	Entry level	1	N	4

APPENDIX 5: Technical knowledge and completed projects

Participant No	No of projects completed in the Human Settlement Environment	No of projects completed successfully in the built environment	Project Location	Scope	Time (months)	Cost	Level of Authority on Human Settlement project	Level of Responsibility on Human Settlement project	Level of Accountability on Human Settlement project
1	12	6	Delft	Construction of 288 housing units	13	R 33 500 000.00	3	3	3
2	2	0	Bellville	Electrification of 512 Social Housing Apartments	12	R 9 964 076.00	2	3	3
3	7	3	Manenberg	Construction of 555 PHP units	36	R 6 682 135.00	2	3	3
4	2	1	Delft	Construction of 288 housing units	13	R 33 500 000.00	1	1	1
5	6	2	Dido Valley	Bulk earthworks, electrification and street lighting (600 units)	50	R 41 329 238.00	1	3	3

Participant No	No of projects completed in the Human Settlement Environment	No of projects completed successfully in the built environment	Project Location	Scope	Time (months)	Cost	Level of Authority on Human Settlement project	Level of Responsibility on Human Settlement project	Level of Accountability on Human Settlement project
6	4	1	Mfuleni	Construction of Civil Engineering Services to 1092 units	18	R 39 952 515.24	2	2	1
7	18	7	Langa	Provision of Roads and Stormwater including construction of 463 CRU units	36	R 143 875 429.79	2	3	2
8	7	2	None	None	None	None	2	2	1
9	0	0	None	None	None	None	1	3	3
10	2	0	Mfuleni	Construction of Civil Engineering Services to 1092 units	18	R 39 952 515.24	2	2	2
11	11	8	None	None	None	None	2	1	1
12	18	9	Delft	Construction of 288 housing units	13	R 33 500 000.00	3	3	3

Participant No	No of projects completed in the Human Settlement Environment	No of projects completed successfully in the built environment	Project Location	Scope	Time (months)	Cost	Level of Authority on Human Settlement project	Level of Responsibility on Human Settlement project	Level of Accountability on Human Settlement project
13	0	0	Eerste Rivier	Available land to developer to develop affordable housing, manage contract for 84 housing units	50	R 40 000 000.00	2	1	1
14	6	4	Zwelitshwa Khayelitsha	Provision of basic services to 61 unit	10	R 2 000 000.00	4	3	3
15	0	0	Imizamo Yethu	Demolition of existing structures and supply and erect new temporary structures to 65 units	2	Not provided	2	2	1
16	5	1	Hangberg	Housing need survey	2	Not provided	1	1	1

Participant No	No of projects completed in the Human Settlement Environment	No of projects completed successfully in the built environment	Project Location	Scope	Time (months)	Cost	Level of Authority on Human Settlement project	Level of Responsibility on Human Settlement project	Level of Accountability on Human Settlement project
17	5	1	Phillippi	Provision of civil engineering services for Hazendal for 223 units	10	R 17 000 000.00	4	3	3
18	0	0	None	None	None	None	1	1	1
19	2	2	Mitchells Plain	Township establishment for 180 units	24	R 120 000 000.00	2	3	3

APPENDIX 6: Challenges facing the Project Leader during the case study project

Participant No	Response
1	<p><i>Political interference because there will always be a ward councillor or MayCo member who has their own agenda. The overall lack of leadership in human settlements, as the politicians change, so does the priorities of projects. Your project which is planned to happen in the future can shift to this year, or resources like budget can be moved from your current project to the one that management feels is a priority at that particular moment. Internal disputes, internal policies and procedures are forever debated amongst departments. Political interference by ward councillors: for example the beneficiary criteria because when we need to upgrade an area, people are usually promised that all of them will get houses. Later they find out about the beneficiary qualifying criteria policy and if they don't qualify it leads to all kinds of issues such as protests. Internal Quality Manage System (QMS) challenges the number of forms, reports, templates, guidelines, standard operating procedures, memos and processes like Project Portfolio Management (PPM) that you need to keep up with. Sometimes you don't know that something like a process exists until you need it, and then you need to learn it from start with no assistance.</i></p>
2	<p><i>Community participation, and thereby inn in projects. Advanced social skills that one needs to have when dealing with, various stakeholders. Not being able to make critical decisions on the spot is one of the challenges, because as a PM nor the consultants do not the authority to make decisions about the project such as scope change, you need Supply Chain Management (SCM) approval and going to the Bid Adjudication Committee (BAC) on these matters takes a lot of time. We also have this nice PPM project management system but it does not have any benefit to us it is more frustrating with all the information they want monthly.</i></p>
3	<p><i>Project Portfolio Management (PPM) system is one big challenge as it gatekeeping processes. The social benefits that need to be managing on the project are burdensome like employment of local labour. Promotion of local labour use, prevention of discrimination, protection of the environment, are challenging to housing projects. These are things that hinder your project and you are required to be directly involved with the contractor, community and other statutory bodies to ensure compliance. Interference by the politician on project, they make promises or get involve in the contractors running of the site.</i></p>
4	<p><i>Political interference, there is always someone who interferes with the operations of the project. If they don't give out wrong information about the project, they make promises which we can't be delivered. PPM is a challenge because it just consumes your time and doesn't give anything in return. Crime in these areas we do developments. It has gangsters who have their own running of the area and we usually get caught in the middle.</i></p>
5	<p><i>The amount of red tapes, one needs to deal with is a challenge. For every little project amendment, one is required to fill in an application form. The fact that one project can result in multiple projects, people just don't understand if we don't have control over an informal settlement, for example, we will start off with 50 households and enroll the project but as soon as people hear of the project is coming, the informal settlement easily increase to 500 households. This we need to accommodate all, based on policy and it leads you doing multiple projects because of this as your site cannot accommodate all. Political interference, ward councillors always want to run the show and you just need to make sure you work with them and keep them informed otherwise you will end up with community unrest due to promises made and now you cannot deliver.</i></p>

6	<i>Informal settlement population growth is a challenge, as the population grows there is more demand for services, jobs, land, and housing also increases. We all know that we as a city just need to plan better. This makes it difficult to control the number that your project will cater to, and one often finds yourself running another project within a project as getting land for relocation is difficult. Housing programmes that do not cater to all that leave in these areas. Supply Chain Management (SCM) is a challenge, it overrules the entire contract condition within your contract and running a project on supply chain condition is just not in line with contract law.</i>
7	<i>Relocating of informal settlements, moving people is just not easy; there is a lot of logistics and planning involved. Challenges associated with Community participation, tendering process as it takes longer as well as town planning. PPM is also another time-consuming aspect. Crime in most of the areas where our projects are. Contractors that are being liquidated during the construction process are a supply chain challenge.</i>
8	<i>Political interference especially MayCo or ward councillor they always want to tell us what to do and how we need to do it. SCM is also a challenge due to market prices that do not line up with the subsidy leading to tender cancellations. Community protest and the theft on-site are affecting the projects. The fact that we also don't look at other social services also becomes an issue when you present the layout to communities as for example if there is no school within the development and the kids need to travel far for schooling. Communication and dealing with communities and other stakeholders, everyone has an interest some are the same some are different. Your own safety and security these are volatile areas we need to go and work. I have been locked up in a container with other members and it is frightening as you never know if you going to be killed or not.</i>
9	<i>The community participation processes, it is just to obtain the communities' buy-in and approval takes time. Social aspects, such as who will benefit, type of houses that will be constructed, and employment opportunities. Beneficiary administration is always an issue as the people that are living in the informal settlement not all of them qualify for an opportunity in a project and to find alternative housing for them is a project on its own. The ward councillors and politicians are always interfering as they have their own agendas. Then PPM would say it is just a tick box system, to me that takes time but I must say it is an impressive system for the organization point and project management. The keep track of the entire thing and help the organization to look ahead to what is coming, the only thing is it does not help us as project managers to skip the amount of red tape or running project.</i>
10	<i>SCM is a project on its own if you put a schedule together it takes more than a year. Not understanding communities, you will struggle to communicate and get their buy-in. Also how to navigate in the area and plan around how do the community gets to work or kids go to school or shop to make the project work to allow minimum disruption. Participative planning with external stakeholders is challenging to align everyone to the project objective. NHBRC and Eskom, for instance, are the key role players but if they don't have resources like the budget for your project it becomes a nightmare. PPM is a challenge it's a monthly checking tool that is time-consuming.</i>
11	<i>The buy-in from communities is a challenge; sometimes the solution that we propose does not suit the needs of the community in the contexts of the allowed resources. This requires a negotiation with the community and working with them to achieve a solution that fits both parties. Political interference, the influence of ward councillors and Mayco members is big in a project if they are not informed or even if they are they make promises to communities which the project cannot provide. The complex funding framework for housing projects is not clear and does not specifically prescribe which funding source and a programme to utilize and sometimes projects are made up of various funding sources with each funding source having its own rules and reporting.</i>

12	<i>Project Portfolio Management (PPM) is a roadblock as it is more about compliance in terms of scope, budget and schedule including its various approvals that do not assist with taking off the load of work that we do. It is more about attaching schedules and writing statuses that take a lot of time. If you don't do it your project will hit a brick wall meaning that you will not be able to get a budget in the next financial year. Housing developments not geared for creating a sustainable environment as we only build houses. The rest of the social amenities lay with other internal departments and provincial departments. The organization structure is challenging. The complex funding framework for housing projects is not clear and does not specifically prescribe which funding source and a programme to utilize and sometimes projects are made up of various funding sources with each funding source having its own rules and reporting.</i>
13	<i>To keep within the contract due to dates for milestones, and if necessary to amend said dates.</i>
14	<i>Politics - ward councillor's involvement in wanting to employ certain people. No cooperative line department not willing to assist.</i>
15	<i>The community not happy with the layout. Executive mayor pushing for project to be done regardless of funds. Time to complete vs. relocation before winter rain.</i>
16	<i>Community dynamics and unrest, lack of resources and support.</i>
17	<i>Top structures were constructed before line department's co-operation.</i>
18	<i>No Comment</i>
19	<i>Water, stakeholder and community input/participation</i>

APPENDIX 7: Challenges of internal processes during the case study project

Participant No	Response
1	<i>Lack of internal support from line departments and getting approvals from other compliance departments are a challenge. Lack of consistency when it comes to applying policies and procedures. The lack of resources, because too fast track anything you need resources to support you. We need to fast track housing delivery but the resources are not available. The shortage of bulks infrastructure to unlock housing projects compels one to first acquire the infrastructural needs prior to the actual houses. PPM and QMS are time-consuming and not supportive in speeding up the delivery of the project. It is mostly about compliance.</i>
2	<i>SCM laws frequently change, and if you miss one thing in the application form you will have to start the process from the start. The complexity of the business environment means you have to understand the local economy because it affects your project as a whole.</i>
3	<i>I discovered that when applying for land use rights there are no exceptions and you are treated the same way as the external applicants. Support from line departments is a challenge because they have their own priorities besides your project. Internal resources are not enough and we don't have an assistant to whom we can delegate some of the work. PPM system takes a lot of effort and time to provide the information that is required.</i>
4	<i>Lack of patience on the organization side because they assume when the budget is allocated to a particular project, the next thing they request is the number of units to be built. The professional studies need to be undertaken and the legislative approvals to follow and then the implementation. The PPM reporting system takes a lot of time as PM doesn't have enough time to deal with our administration work. They want you to fill in longs reports but it does not help as things change so fast on the ground.</i>
5	<i>Bulk infrastructure capacity constraints because sometimes your projects have to construct new or additional bulk infrastructure over and above your development requirements. The lack of adequate housing definition makes it difficult to define what the people can and cannot get and which the housing policy does not clarify, but give you programmes instead.</i>
6	<i>Community unrest is always a challenge. Taking over an existing project from a project manager that has left with a lack of information on the progress of this project is a challenge. Not enough resources to assist you with the management of projects. Bulk services are challenging, you need to construct some of these bulk services before your project can start due to capacity constraints. The challenges find additional funding and the additional time it takes.</i>
7	<i>The land release process takes along. The Housing Subsidy is a challenge as it is not enough and not market-related leading tender cancellation which is therefore deemed as an unfruitful expenditure. PPM the amount of time and information it requires is a challenge. Deviation process, it is a very demeaning and long process as if you did something wrong when it is a simple variation or delays due to community protests.</i>
8	<i>The policy approach we take to solve the housing crisis. We cannot use policy to solve a housing project we need project management and policy to support it. Lack of in-house skills. No community and social facilitators available.</i>

9	<i>Town planning, Water license, EIA and Heritage processes and approvals take time. Not enough resources especially people, money and land is a challenge on a project. PPM and BAC are challenging processes that require time to complete and you have too much work to stop and concentrate on one thing.</i>
10	<i>There is no coordination between officials as some carry the voice from political and social aspects, while others from compliance and project perspective. The bureaucratic nature of the organization is concerned with compliance. BAC and all the SCM including finance processes and approval is just a nightmare. You have to do a lot of work then wait for someone to approve. By the time you get your stuff back, the application form is wrong or changed and you missed an agenda deadline which set you back months on a project and people don't understand. In cases like this, the process that was anticipated to take three months, end up taking nine months due to the processes that need to be followed internally. The way officials also read and treat legislation and policy differs and standards change from person to person even though they work from the same book. But if you want their approval you just need to go with it otherwise you end up not getting your approvals.</i>
11	<i>A normal variation order on a project becomes a deviation that requires a deviation report to the organization which needs approval from MayCo. Getting your project on the MayCo agenda is not easy because their meetings only take place at specific intervals in a month. This creates delays that you cannot plan like PPM expects you to. PPM is nice but just challenging due to the time it takes every month. No staff to assist you with the project administration.</i>
12	<i>PPM because it doesn't help me to deliver my project. The amount of compliance, the fact that everything is governed by policy from the moment you step on the organization property; eliminates the room for creativity in my line of work. It just becomes challenging when you need to implement a project and you need to comply while you need to deliver a project.</i>
13	<i>No Comment</i>
14	<i>No Comment</i>
15	<i>Timeframe set out by executive mayor.</i>
16	<i>Increase number of various reports to internal and external stakeholders (time consuming).</i>
17	<i>Bulk infrastructure pump station had to be constructed.</i>
18	<i>No Comment</i>
19	<i>Objection from community</i>

APPENDIX 8: Challenges of external factors during case study project

Participant No	Response
1	<p>The control over external stakeholders namely PRASA, NHBRC, ESKOM, NGO'S, TRANSNET, etc. All stakeholders have input in how to deliver the project, but sometimes their priorities change during the course of the project and can lead to delays. Sometimes the professional teams we appoint by following the SCM process are not from a housing background. This causes general issues as well as with the communities. Public projects often attract media attention due to public interest in service delivery matters. These interests are often sensationalized for news. Public housing projects tend to draw unwanted political attention and other interest groups. The key component that hinders project delivery for a PM is dealing with the Bid Adjudication Committee (BAC) which poses a challenge from the report template to getting on the agenda. PPM has not been established to help and guide these processes, but it is just another layer of compliance in addition to existing measures.</p>
2	<p>Social housing is managed by SHRA, an external organization. Hence, the reason we need to play by their rules and regulations. Community participation is always a struggle because the 'NIMBY' (not in my backyard) stigma often delays project enrolment on infill and well-established areas. Heritage often plays a role when it comes to allocated sites on height and environmental restrictions within the area. Coordination with other departments also becomes a challenging as DHS, Eskom, NHBRC all have inputs and influence on your project.</p>
3	<p>Beneficiary challenges because in housing projects you cannot secure funding if you don't have approved beneficiaries, and the community threatens the PM when it comes to beneficiary allocation. One needs soft skills to manage communities. The beneficiaries are the client and sometimes the beneficiary of a project does not come from one area, which causes tension in the community. The stakeholders grow and shrink on a project and it becomes overwhelming as you need to deal with so many people and send different information around.</p>
4	<p>Other social community needs such as schools and churches also become an issue to us as project managers, because it requires engagement with various other provincial departments. This has nothing to do with the project you are implementing, but impact it from a community level that can lead to protest. Employment opportunities also become a challenge to the project because within these communities unemployment rates are high. Most of these individuals are unskilled which leads to poor workmanship. The dealing with other organizations like NHBRC and Eskom is also challenging because you need to coordinate with them on a continuous basis and they have input to the progress of your project. The market and the rand value also play a role in your project because as the price goes up or a shortage of material occurs, it can also bring your project to a standstill.</p>
5	<p>The various stakeholders one needs to deal with requires coordination as when land belongs to other departments there is a process that needs to be followed to obtain ownership of land to develop it accordingly which does not always speak to the project timeframes ending in delays. Strategic movement of beneficiaries to take advantage of an ongoing project by moving closer to the production site tends to confuse the handover process. The market condition also influences our project due to inflation and availability of material resulting in one to change the design or material. The impact of procurement has opened up the door to consultants and contractor able to tender all</p>

Participant No	Response
	<i>over South Africa, sometimes these vendor does not understand local condition leading to tendering low that results in a few months into the project they can no longer continue ending up in cancellations.</i>
6	<i>The professional team is easy to manage but social challenges pose by the community are very difficult. Challenges are to decant beneficiaries from one side to the other when the land is not sufficient to accommodate all in one project. Inspection by the department of labour can also bring a project to hold as the contractor documentation may not be in order then they stop the entire site without consultation. Employment of local labour and subcontractors is always a problem in terms of quality management. They don't understand the impact on project schedule and quality but hold us accountable. Communities are all different and you need to have different skills to deal with them, you thus always need to adapt to the environment and culture. Theft is an issue within these communities regardless if you have security or not you need to combat these things with the assistance of the community and ward councillors. Also, just nature itself man and the people like fire and floods can happen at any time of the project were you have informal settlements then you need to act on it.</i>
7	<i>The land that is an earmark for housing sometime cross ward borders which often leads to political and social disputes among opposing sides. Beneficiary's administration is something else as the community you trying to accommodate within a development not all of them qualify and then the political issues start and the stoppage and buy-in from the community into the project as those individuals are opposing the development. The project leader conflict management skills are tested to its extreme ends, as he needs to ensure the project emerges in the midst of clashing interests. An external stakeholder is always a challenge each has its own needs negotiation skills are very important at this point because there is a trade-off to be made between all stakeholders.</i>
8	<i>Working with the municipality to get approval also takes forever and one really needs to have good contacts to make your project gets attention or put it on the political radar otherwise the official takes their time while your boss and community are screaming on your head. Dealing with various companies and government departments is just challenging on its own and it confuses one easily as things keep on changing. Politics is politics and yes it is a major challenge the politicians always want to run the show and if you don't keep them up to date with the correct information they tend to make promises which the project cannot fulfill and even if you do give them the information it is not guaranteed that they will use it. Theft of contractor's equipment and material is also another thing that is challenging as sometimes even the security the employee is not enough. Community is always an issue as if they don't get their way or we neglect to tell them what we doing it ends up in a protest or stoppage of some kind.</i>
9	<i>Communication with project beneficiaries is not easy as their education level does not relate to technical matters and one needs to break the information down into laymen's terms. The consulting teams I appoint struggle with this as I see in a community meeting and I then have to step in to simplify the details. Community protest due to social issues that sometimes don't reside within our department like cutting of grass on a public open space or trees posing danger to the community get somehow on the table of the project and site gets stop until something is done about it. Poverty in these areas is usually high and employment opportunities in the project become a battlefield for the politicians and the community that you need to resolve otherwise it stops your project dead. Politicians making promises to the community is another problem we also can't control but then it ends up that people expect certain things from the project that we can't deliver for various reasons. Impact of other provincial departments like</i>

Participant No	Response
	<i>environmental or public works that need to give approval also becomes a challenge as their focus is more on the impact the development will have than the actual problem we trying to solve and they sometimes not cooperative.</i>
10	<i>Legislation like EPWP poses conditions on contract that require various local labour to be employed, trained and utilized in the production line leading to delays due to quality compromise. Other regulatory bodies such as Department of Heritage that may deem certain areas as heritage site which should be subjected to heritage regulations. Thus putting a strain on limited resources of the project as specialist is required. Nature or the entire environment is also a challenge since you never know what you will get from rain delays, floods, fires, to market conditions can bring you to a hold and one don't have control over these things. The change in legislation can also bring you to a hold we had receive a memo from giving houses to people under 40 that change our entire beneficiary administration and handovers this cause various challenges which one need to deal with.</i>
11	<i>Influence by community or politicians affect process that result in time loss and extra costs. Professional team not familiar with human settlements project result in the delay in process for example architect that design typologies that does not suite the subsidy scheme. Promises make by senior management and politicians to communities sometime can put a project leader in a corner as the organisational processes and procedures demand their own time. The unskilled people we need to employ on project become a nightmare as they need to be trained and you pushed for progress. In some cases when the project comes to an end they start slowing the work as they know if the work is finished they unemployed again. Now you sit with progress issue and people are waiting for houses.</i>
12	<i>Housing has always been challenging from the organisation side, just how the development process is managed, housing beneficiaries that are promised various things by politicians who cannot deliver. Social challenges are not the problem, one need to study the community well in order to establish the influential figures that each community is made off. What we can deliver under the legislation is not always possible. It is all about matching the organisational systems and policies with the community need in order to let the project emerge successfully. The impact and input of Eskom is also another issue for us as their timeframe if not manage carefully can lead to development with no power. Unemployment and crime goes hand in hand within this area security we need to manage these impacts as well. Especially employment on developments as it's an EPWP requirement.</i>
13	<i>We were informed that the uptake of the unit's tool longer than anticipated as a result of people's affordability levels.</i>
14	<i>Ward councillors wanting to be involved o the employment of employees. MAYCO member interfering with the size of plots. Uncertainty of crime.</i>
15	<i>Political unrest between DA and ANC ward members. Protest. Battery and diesel theft on contractor's plant.</i>

Participant No	Response
16	<i>Community protest, community leader interference</i>
17	<i>This was an old Department of Rural Development project. The issue of subsidies was a constant item on PSC Agenda's.</i>
18	<i>No Comment</i>
19	<i>Community protest</i>

APPENDIX 9: What major challenges and themes did the PL encounter during construction of the identified project?

Participant No	Response
1	<i>To me the major challenge is that PM needs more training on soft skills. There is lack of coordination between departments. Human settlement Environment is very complex and there is no one size fits all solution in public sector housing delivery.</i>
2	<i>The lack of resources is a challenge because of too much reporting on PPM. Communication between stakeholders is also challenging because these departments work in silos.</i>
3	<i>Actually, Social and political interference are the main challenges in the human settlements. The land release process is too slow. Another challenge is beneficiary administration and stakeholder management.</i>
4	<i>Strictly speaking, political interference is a major concern. Not all project managers are geared for the complex community demands that human settlement projects attracts. Too much attention is given to reporting information, instead of rolling out projects.</i>
5	<i>The challenge is to match the organisational processes with community needs and the limited housing subsidy. The line departments have little desire to assist subsidised housing projects. Community engagement is not instigated early enough on these projects that are why people tend to rise against them.</i>
6	<i>The continuous growth of informal settlements undermined the progress that has been made by municipality to improve the living conditions of the urban poor. Social dispute for access to land is another challenge and lack of training on soft skills. The internal budgeting process, lack of resources and shortage of non-technical skills are major challenges. Project Leaders are not fully equipped to cope with ever changing policies and multi stakeholder interests.</i>
7	<i>What stands out most for me is political and community interference. Getting the infrastructure department buy in and community buy in is a problem.</i>
8	<i>The project approval process takes too long. Continuous change in priority project and political interference cause bottlenecks. Supply chain and subsidy limitations. Another challenge is the lack of social amenities that ensure sustainability of housing projects.</i>
9	<i>To mention a few, beneficiary allocation, political interference cripples the project focus. The ever changing standards and policies are challenging. The community demands on projects in their areas can lead to delays.</i>
10	<i>The misalignment of project goals amongst stakeholders. Ward councillors interference at project level often lead to project stoppages. The entire human settlement environment is challenging as the client is the public, so one has to put up with pressure from all sides.</i>
11	<i>Community and political interference and beneficiary administration to me are the major challenges. Public projects sometimes require the project manager to deal with media which leads to other problems. Community involvement should be instigated from the start of the project.</i>

Participant No	Response
12	<i>Lack of community understanding when it comes to lacking legislation and policy is a significant barrier. Deep understanding of the community as it changes. Obtaining the buy in of stakeholders such as project beneficiaries, consultants, City line departments, Eskom and public works is very imperative. Unemployment and crime is a challenge. The limitation of the subsidy is not adjusted annually posing financial limits on projects.</i>
13	<i>No real major challenges.</i>
14	<i>Crime and dealing with MAYCO member to understand what we do.</i>
15	<i>Trying to fulfil promises set to the community by the executive mayor.</i>
16	<i>No Comment</i>
17	<i>Cooperation from line departments within the City to deliver their mandate.</i>
18	<i>No Comment</i>
19	<i>Community protest and political interference</i>

APPENDIX 10: Suggested solutions to the identified challenges

Participant No.	Response
1	<i>Clear leadership direction that can group all stakeholders together, this will eventually yield to the alignment of internal departments and other stakeholders.</i>
2	<i>Project managers also need to learn to see a holistic view of the project to plan and manage the project when challenges come as there is no difference when it comes to a small or big project in housing. Setting up relevant stakeholder forums will assist in communicating the right information to the right people and keep them updated. We also need resources to support us in delivering the project in the consultants can only help one till a point or what their contract says but not with these internal processes.</i>
3	<i>I think we need a clear standard operating procedure, highlighting senior management, political leaders, project manager's role, and community involvement. We can start by coordinating, external and internal stakeholders towards one goal.</i>
4	<i>Community involvement should be embraced in the early stages of a project. Forum for strategic stakeholders needs to be set up for human settlements. The contract management units that will align SCM and contract law issues.</i>
5	<i>I guess project leaders should be familiar with all internal organization processes in order to be able to respond accordingly when one encounters obstacles. We need to appoint social facilitators, contract specialists in order to assist in their area of expertise when required.</i>
6	<i>To me there is no silver bullet that can solve the human settlement challenges; however, processes can be improved bit by bit. The budgeting process should be in line with how projects work. Make other line departments commit to the housing development, not with conditions this time but with their infrastructure resources too.</i>
7	<i>The contract management unit needs to assist project managers with organizational policies and contractual advice. The organization needs to encourage leadership mentoring for skills transfer.</i>
8	<i>We need to involve the private sector to speed up the service delivery process in the form of Public-Private Partnership and mixed-use developments.</i>
9	<i>I honestly do not know. I would think that senior management and political leaders need to align their project goals.</i>
10	<i>Housing is socially challenging, therefore the social skills or community engagement needs to be standardized. Subsidy needs to be increased to market-related pricing because not all conditions are the same.</i>
11	<i>Essentially, for beneficiary administration need to be relooked. Continuous workshops about social and community skills that need to a. Housing needs to consider other amenities that makeup settlements too such as schools, health facilities, shopping and libraries in the low-cost housing space.</i>

Participant No.	Response
12	<i>One needs to involve the community from the planning stage, taking into account their needs as the project progresses. Once you have the community buy-in, resistance or project stoppages are minimized. We need a Project Management Act that can absorb the PFMA and MFMA. The organization has to encourage mentorship programmes in order for upcoming project leaders to learn for the experienced ones.</i>
13	<i>A better understanding of people's debt levels and prior debt counseling or rehabilitation.</i>
14	<i>Regular engagement with the relevant people. Explain, over and over using different forms of communication pictorial, workshop, and participative engagements.</i>
15	<i>Supply all parties with information before community meetings and set realistic targets for completion, especially with the community.</i>
16	<i>No Comment</i>
17	<i>Political cooperation between the spheres of government.</i>
18	<i>No Comment</i>
19	<i>Extensive public communication pose to implementation</i>