

**AN INVESTIGATION OF THE BASIC AMENITIES IN WINDHOEK:  
A CASE STUDY OF HAVANA INFORMAL SETTLEMENT**

by

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## ABSTRACT

**Introduction:** Namibia has been undergoing a rapid transition from a rural-based society to an urban society. This transition has led to rapid urban growth which has affected the provision of amenities, especially in informal settlements.

**Research purpose:** Informal settlements are often found in urban areas and are home to low-income and marginalized populations. These settlements are characterized by poor infrastructure, overcrowding, and lack of basic amenities. The lack of basic amenities negatively impacts health, well-being, and quality of life.

**Research design, approach, and method:** The researcher adopted the qualitative case study research methodology to address the research objectives stated in Chapter 1. This research method is suitable for a context-specific understanding of organizational reality. The selected research design allowed the researcher to explore as well as understand the meaning urban residents ascribe to basic amenities.

**Findings:** The rapid growth of informal settlements has been identified as one of the most significant challenges to confront Namibian urban areas. The researcher believes that the main reason why informal settlements expand in such a disorderly manner is that the formal urban planning system and market do not serve the needs of low-income earners. As a result, they have no option but to live in informal areas. The absence of tenure security also prohibits a large percentage of informal settlement residents from building permanent housing. Havana Informal Settlement is characterized by overcrowding, inadequate infrastructure, and lack of services such as clean water, sanitation, and electricity. The researcher found that the lack of basic amenities mainly emanates from the absence of government investment and public policies, inadequate infrastructure and planning, as well as lack of community engagement.

**Conclusions and recommendations:** Considering the findings, it can be concluded that the City of Windhoek is faced with serious institutional challenges which hinder the effective delivery of basic amenities. Governance challenges such as political interference within the administration is one of the critical aspects that must be addressed. The City of Windhoek needs to prioritize the needs and challenges of all residents irrespective of their social status. Additionally, collaboration with local organizations such as NGOs will help in implementing public policies. Above all, regular monitoring and evaluation are important for progression.

**Keywords:** Provision of basic amenities, informal settlement, urbanization.

**DECLARATION**

I, Denise Kamolokamwe with student number 58539468 declare that “*An investigation of the basic amenities in Windhoek: A case study of Havana Informal Settlement,*” is my own unaided work both in content and execution. All resources I used for this study are cited correctly in the text and referred to in the reference list by means of a comprehensive referencing system. Apart from the normal guidance from my supervisor, I have received no other assistance. I declare that the content of this mini dissertation has never been used for any qualification at any tertiary institution.

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**Signature:**

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**Date:**

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## **ACRONYMS**

AR	Affirmative Repositioning
CBD	Central Business District
CoW	City of Windhoek
GIS	Geographic Information System
GRN	Government of the Republic of Namibia
ILO	International Labour Organisation
MAWF	Ministry of Agriculture, Water and Forestry
MDG	Millennium Development Goals
NSA	Namibia Statistics Agency
UN	United Nations
UNDP	United Nations Development Programme
WPA	Water Point Association
WPCs	Water Point Committees

## **CHAPTER 1: INTRODUCTION**

### **1. 1 Introduction**

Namibia has been undergoing a rapid and major transition from a rural-based society to an urban society since its independence in 1990 (Chitekwe-Biti, 2018). Chitekwe-Biti (2018) further explains that the transition is mostly apparent in rapid urban growth, especially in informal settlements that accommodate marginalized populations. Patterns of rapid, unplanned informal settlements are also seen in the rest of southern Africa, as well as in developing countries around the world (UN-Habitat III, 2018). The economic, social and environmental costs of unplanned urban development are high. Similarly, the absence of basic amenities is more visible in the informal settlements of Windhoek. However, relatively little information is available on the nature and characteristics of informal settlements.

UN-Habitat III (2018) defines basic amenities as public service provision systems that meet human basic needs including water, sanitation, hygiene, energy, mobility, waste collection, health care, education and information technology. Access to basic amenities implies that sufficient and affordable services are reliably available to all residents (The World Bank, 2018). The purpose of this study is to investigate the provision of basic amenities in informal settlements, with a central focus on Havana Informal Settlement.

#### **What is an informal settlement?**

Bobek (2019) defines an informal settlement as a residential area that is not officially recognized by the government and is often characterized by poor infrastructure, overcrowding, and lack of basic amenities. Informal settlements are often found in urban areas and are typically home to low-income and marginalized populations who do not have access to formal housing (Bobek, 2019).

The lack of basic amenities such as clean water, sanitation, and electricity are a major issue in informal settlements. The lack of infrastructure, inadequate government policies, and lack of community engagement contribute to this problem (Bobek, 2019). Residents in informal settlements often live in overcrowded, unsanitary conditions and are at risk of health problems. Informal settlements are areas where groups of housing units have been constructed on land that the occupants have no legal claim to (City of Windhoek, 2020). Hansen and Vaa (2014) define informal settlements as unplanned settlements and areas where housing is not in compliance with current urban planning or building regulations.

Both definitions seem to highlight that it is not the municipality, or government that is responsible for constructing the structures; instead, residents illegally claim and occupy land. Additionally, both definitions point out that the erection of these unplanned structures does not adhere to any form of formality; it is haphazard. On that note, informal settlements reflect attributes such as illegal occupation of land, non-adherence to urban planning and non-conformity to the standards of proper housing (Davis, 2016).

The UN-Habitat III (2018) defines informal settlements as residential areas where:

1) inhabitants have no security of tenure *vis-à-vis* the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) neighbourhoods usually lack, or are cut off from, basic amenities and city infrastructure and; 3) housing may not comply with current planning regulations, and is often situated in geographically or environmentally hazardous areas.

Windhoek is characterized by continued segregation of the city's population along racial lines and the separation of township areas from the city continues to divide Windhoek's urban fabric. Residents in informal settlements unlike the affluent have less or no access to a proper sewerage system, drainage and refuse removal. Residents in informal settlements often use bushes and riverbanks as toilets. Additionally, environmental factors also lead to health risks in informal settlements.

Findings, from the Namibia Intra-censal Demographic and Health Survey (2016) show that 32,9 % of the total population has access to adequate sanitation facilities while 67% use non-improved facilities. According to these findings, 32.9% represents 1.4 million people, mostly living in rural areas and in informal settlements around urban areas (Namibia Intra-censal Demographic and Health Survey, 2016). Furthermore, shared toilets, which are not regarded as improved systems according to the WHO/UNICEF Joint Monitoring Programme's definition, are used by 18% of the urban population (Namibia Intra-censal Demographic and Health Survey, 2016).

## **1. 2 Background of the study**

Informal settlements were not tolerated during colonial times, and only began expanding after Namibia's independence in 1990. Between 1991 and 1994, the City of Windhoek (CoW) established so called 'reception areas' to accommodate poor in-migrants temporarily, with the objective to relocate them to permanent areas once these were available. The reception areas soon became permanent and informal housing areas, both within as well as beyond the reception areas, grew rapidly (Huchzermeyer, 2015).

Uncontrolled growth has dominated the expansion of Windhoek's informal settlements ever since (Huchzermeyer & Karan, 2017). The population in Windhoek has grown from 141,562 inhabitants in 1991 to 322,300 inhabitants in 2011, this being a total growth of 128% at an annual growth rate of 4.2% (Hansen & Vaa, 2014). Many informal settlements in Windhoek are densely populated, filling river valleys and sprawling across hillsides. Most informal residents live in corrugated iron shacks (Huchzermeyer, 2015). The growth of Windhoek's informal settlements has taken place through two processes; urban growth caused by the building of homes outside built-up areas as well as the densification of existing informal settlements as a result of new structures being built on small patches of vacant land within built-up areas.

Migration shaped the African continent, from the central eastern region as the Great Lake's early populations spread all over the continent. Winter, Barchi and Dzombo (2018) assert that colonial capitalism attracted labourers and lured them to work in plantations, mines and urban centres. Winter, *et al.*, (2018) further explain that the independence of Namibia paved the way to considerable changes in terms of internal migration patterns. Rural impoverishment as well as economic and cultural attraction forced many peasants to move (Winter, *et al.*, 2018).

Weylandt (2018) asserts that creation of reserves and land homelands during apartheid were intended to control urbanization, yet more than a century of internal migration has led to the relocation of a vast number of the Namibian population. It is indisputable that colonial and post-colonial migrations have shaped the process of urbanization. Namibia's apartheid era was characterized by rules and policies that created economic and political inequalities. Black citizens were not only economically and socially marginalized, but they were also greatly affected by spatial segregation. According to Winter, *et al.*, (2018), the present-day Windhoek is characterized by continued segregation of the city's population along racial lines and the separation of township areas from the city continues to divide Windhoek's urban fabric. Segregation translates into the patterns of apartheid and post-apartheid city. Ulrich and Meurers (2015) explain that segregation in residential areas occurs along racial lines and ethnic division. Segregation has also been created along class lines due to the emergence of black elites in the post-apartheid city.

Independence came with increased mobility of the rural population from the rural areas to urban areas in search of employment, better educational facilities and social services which are scarce in rural areas. An increase of births in urban areas has led to the increase of population in informal settlements as more families are established. Nangombe (2015) explains that this rapid urbanization results in poor electricity supply, pollution, poor water supply, few employment opportunities, drugs, gangs, poverty, poor health, poor garbage collection, poor sewerage systems and lack of decent shelter.

Since independence, the City of Windhoek invested considerable resources to provide services to many informal settlement areas. Communal water points, shared flushing toilets and access to roads have been delivered on a large scale. Nevertheless, the growth of informal settlements has tested the City's capacity, and more areas remain without basic amenities.

In 2011, 66% of the city's residents used electricity as the main source of energy, while the remaining 34% of residents mainly relied on gas, paraffin and wood (Huchzermeyer and Karam, 2017). In 2021, 19% of Windhoek's families consisting of about 61,000 people did not have access to toilet facilities and the lack of toilet facilities has serious implications on public health (Namibia Statistics Agency, 2021). Shared flushing toilets have been constructed in many informal settlements to provide basic sanitation. In some parts of Havana Informal Settlement, an average of six families share one toilet (UN-HABITAT, 2021). However, residents frequently avoid shared toilets because they are often dirty and unhygienic. Communal water points are a common feature in many of Windhoek's informal settlements. Water cards are often provided for free and can be re-charged at local offices of the CoW. According to observations by residents, a 25-litre quantity of water is priced at 40 cents (Brown-Luthango, 2017). Additionally, it is reported that a monthly water expense of N\$50 is sufficient to cover the needs of a household consisting of 4-5 individuals and this equates to approximately 25 litres of water per person per day (Brown-Luthango, 2017). In numerous informal settlements of Windhoek, solid waste is gathered from conveniently positioned dumpsters. The municipality supplies residents with refuse bags on a weekly basis in specific zones, and the dumpsters are emptied weekly. Some areas are insufficiently serviced, and waste is dumped in the open.

Most informal settlements in Windhoek lack electricity or street lighting, one reason being that the CoW's upgrading strategy does not allow for electricity to be provided to low-income residents (Republic of Namibia, 2019).



Windhoek houses about one sixth of Namibia's population. It has the most vibrant economic and industrial development of all urban centres in Namibia, this being the major pull factor for in-migrants. Apartheid era spatial segregation has been replaced by segregation based on income and wealth. Windhoek reflects Namibia's social and economic inequality, with upper income residential areas juxtaposed with large informal settlements slighted by poverty, no tenure and limited services (Angel, 2018).

### **1.3 Problem statement**

A notable number of studies have been done on informal settlements in Africa and Namibia, included. Studies done by the Integrated Land Management Institute (ILMI), a centre at the Namibia University of Science and Technology (NUST) promoting trans- disciplinary research, outreach and education in the fields of land, livelihoods and housing conducted in Namibia, has provided information, on the number of informal settlements throughout Namibia (Park, 2019).

Namibia's urban areas now have 140,000 informal houses, a number likely to double over the coming 7 or 8 years if this trend is not addressed (UN-HABITAT, 2021). Similar patterns of rapid, unplanned informal settlement growth are also prevalent in southern Africa and developing countries around the world (Kamalipour & Dovey, 2017). The economic, social and environmental costs of informal growth and unplanned urban development are huge for Namibia as a country. New forms of poverty and inequality will be entrenched over generations to come if towns fail to develop sustainable ways that will ensure a smooth transition from a rural to an urban society.

The rapid growth of informal areas is one of Namibia's major development challenges. However, there is insufficient information available on the nature and characteristics of informal settlements, as well as their growth in towns across the country.

Blei (2018) reiterates that the absence of a national public policy has also led to the uncontrollable expansion of informal areas. The government of Namibia stated that about 600 people migrate to Windhoek from rural areas every month (Republic of Namibia, 2019). The ongoing urban migration to Windhoek has often resulted in overcrowding and unplanned developments, The Municipality of Windhoek is bound to face negative environmental and social consequences that will spill over to the rest of the population (Republic of Namibia, 2019).

In many developing countries, public management policies and approaches have been implemented to contain the rapid expansion of informal settlements with limited success. Informal settlements continue to grow, and new ones are being formed on land that is not legally obtained from municipalities or town councils. Recently, the government of Namibia's response to informal settlement expansion and development was to evict and demolish structures found on land occupied illegally. This approach, however, has not succeeded in stopping the expansion of informal settlements, instead the situation worsened, leading to the formation of new informal settlements without basic amenities.

The CoW has adopted public municipal policies to guide basic service delivery. Irrespective of the policies, challenges persist, and service delivery is not provided in an equitable manner. Several organisational and community challenges seem to be contributing to the lack of service delivery. The payment for amenities is a major issue and negatively impacts the CoW's ability to provide services. Communities receiving poor services are reluctant to pay for the services and this has a negative impact on local government's income. Communities also vandalise public property to show their dissatisfaction with poor service delivery. Other challenges such as low staff morale impact the provision of basic amenities. This study seeks to investigate and understand the provision of basic amenities at Havana Informal Settlement.

## **1.4 Significance of the study**

Livelihoods are important in understanding how poor households earn their living. According to Bobek (2019), livelihood is sustainable when there are coping strategies in place for the present-day and the future. This study investigates the access that low-income individuals, families and communities have to basic amenities. There are a limited number of scientific studies about Windhoek's informal settlements, covering a wide range of topics. The researcher hopes the findings of this study will be used by public policy makers, to come up with initiatives or interventions to improve living conditions in informal settlements.

The investigation of the lack of basic amenities at Havana Informal Settlement in Windhoek addresses the challenges faced by residents residing in informal settlements. Informal settlements are often found in urban areas and are home to low-income and marginalized populations who do not have access to basic amenities. These settlements are characterized by poor infrastructure, overcrowding, and lack of basic amenities. The lack of amenities is a major issue that negatively impacts the health, well-being, and quality of life.

This study aims to understand the specific needs and challenges of the population residing in informal settlements. The researcher believes that the findings will be used to develop infrastructural development policies for Havana Informal Settlement and surrounding informal areas. The study will also contribute to the ongoing conversation around the provision of housing, basic amenities, and inclusive urban development.

## **1.5 Research objectives**

- To identify the socio-economic factors that contribute to the lack of basic amenities in Havana Informal Settlement.
- To assess the multifaceted impact of the absence of basic amenities on the overall well-being of residents in Havana Informal Settlement.
- To identify different approaches to urban planning and development that have been applied by the City of Windhoek to address informal settlement growth and its challenges.
- To provide evidence-based recommendations to improve the provision of basic amenities in informal settlements.

## **1.6 Research questions**

- How do socio-economic factors contribute towards the absence of basic amenities in Havana Informal Settlement?
- How does the lack of basic amenities impact on the well-being of the residents in Havana Informal Settlement?
- What urban planning strategies have been employed by the City of Windhoek to address the expansion of informal settlements and their associated challenges effectively?
- What evidence-based recommendations can be provided to improve the provision of basic amenities in informal settlements?

## **1.7 Rationale of the Study**

The investigation of basic amenities in Windhoek, with specific reference to Havana Informal Settlement, stems from a convergence of historical, social, and urban development factors.

The post-independence era in Namibia witnessed a surge in urbanization marked by a significant influx of individuals from rural areas who sought better opportunities, education, and services which they lacked access to in their place of origin (Winter et al., 2018). Rural-to-urban migration influenced by historical colonial legacies and post-apartheid changes, reshaped the urban landscape, which led to the rapid growth of informal settlements in Windhoek (Huchzermeyer, 2015). The urban structure of Windhoek has been permanently impacted by the historical repercussions of apartheid and post-apartheid policies, which have resulted in pronounced divisions (Huchzermeyer, 2015). Moreover, spatial segregation has led to an increase in affluent areas which are situated alongside extensive informal settlements (Angel, 2018).

The burgeoning informal settlements lack fundamental amenities such as electricity, sanitation, water, waste management, and housing (Namibia Statistics Agency, 2021). Despite efforts by the City of Windhoek to provide communal services, the rapid expansion has strained their capacity, which has resulted in a significant percentage of the informal settlements without adequate amenities (UN-HABITAT, 2021). The lack of proper sanitation, clean water, and adequate waste management in these settlements posed a severe public health risk (Nangombe, 2015). Furthermore, inadequate access to basic amenities perpetuated the cycle of poverty as well as social marginalization (Nangombe, 2015).

This study endeavoured to investigate the multifaceted challenges faced by the residents in informal settlements, especially with regard to basic amenities. By examining the current state of the amenities, accessibility, shortcomings in the provision of services by the City of Windhoek, and the socio-economic implications, the researcher aimed to propose evidence-based recommendations which could contribute towards enhancing the provision of basic amenities within Windhoek's informal settlements.

### **1.8 Limitations of the study**

Limitations of a qualitative case study are associated with its reliability and validity. It is generally conducted in a natural setting and is not easy to duplicate. Alternative explanations cannot be dismissed; hence inferences cannot be made.

To address these limitations, the researcher referred to extensive literature to increase credibility. The researcher also used a conceptual framework to guide the research process.

### **1.9 Delimitation of the study**

The study focused on Havana Informal Settlement which is in Windhoek, Namibia. Although there are many informal settlements in different towns of Namibia, Havana Informal Settlement provided insight on factors that affect other informal settlements.

## **1.10 Outline of the study**

### **Chapter 1: Introduction**

This chapter is essentially the outline to what the mini dissertation is about i.e., provides the background of the study, problem statement, research objectives, research questions, significance and conceptual framework.

### **Chapter 2: Literature Review**

This chapter summarises literature relevant to the research project and how the study fills in the gaps in literature.

### **Chapter 3: Research Methodology**

This chapter outlines the research method adopted for this study. Information and data were gathered from secondary sources, such as, legislation, government policies, accredited journal articles, newspaper articles and internet sources. This chapter also outlines the techniques used to analyse the data.

### **Chapter 4: Analysis and Findings**

This chapter describes the findings of the study and clearly outlines the results of the analysed data in relation to the research objectives.

### **Chapter 5: Recommendations and Conclusion**

In this chapter, the findings are discussed followed by recommendations. Also, a clear outline of the implications of the study's findings are provided as well as the conclusion.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter provides the conceptual framework and previous research on informal housing and lack of basic amenities. Furthermore, the chapter discusses studies, reports and scholarly writings on informal settlements as well as factors that have led to the lack of basic amenities.

### **2.2 Global perspective on Informal Settlements**

Informal settlements are a global concern. Approximately a quarter of the world's urban population reside in informal settlements (UN-HABITAT III, 2018). In Latin America, informal settlements grow faster than the rate of poverty (Acolin & Kim, 2017). According to UN-HABITAT (2018), 90% of urban growth takes place in cities of the Global South, which increases the population by approximately 70 million residents annually. In Africa, 61.7% of the urban population reside in informal settlements while in Asia, this statistic stands at 30% who live in similar informal housing (Acolin & Kim, 2017). Similar to developing countries, urban areas in developed countries also suffer from high levels of inequality (Acolin & Kim, 2017).

Globally, there is a direct relationship between informality and a shortage of basic amenities (Bapat et al., 2021). According to World Bank Group (2020), economic disparities, limited access to resources, and insufficient urban planning significantly hinder the provision of basic services in informal settlements. Furthermore, inadequate funding, rapid urbanization, and population growth, impede governments' capacity to cater to the needs of marginalized communities (World Bank Group, 2020).



Countries such as Brazil, India, and South Africa exhibit similar challenges of overcrowding, inadequate amenities, and infrastructural deficiencies (UN-HABITAT, 2021). Bapat et al., (2021) highlight the lack of clean water and proper sanitation facilities in India's urban 'slums.' Moreover, in the Brazilian 'favelas', overcrowded neighborhoods suffer from substandard housing conditions and limited infrastructure (Alves & Sanchez, 2019). These settlements lack basic amenities such as electricity and proper waste management, which escalates health and safety risks for the residents. Similar challenges can be observed in African countries such as South Africa, where informal settlements face issues related to poor sanitation and limited access to clean water (Cloete, 2019).

Comparative studies by UN-HABITAT III (2018) have highlighted the consistent patterns of deficient delivery of basic amenities across informal settlements. The lack of proper housing, waste disposal, and healthcare emerge as common threads, which affects the well-being of the residents. The lack of basic amenities affects the daily lives and well-being of residents in informal settlements profoundly, for example, lack of electricity limits opportunities to study including economic activities (Smith, 2022). Furthermore, inadequate waste management leads to environmental degradation, health hazards, and a heightened risk of diseases (Smith, 2022).

### **2.3 Insights from South Africa**

Compared to other countries in Southern Africa, South Africa has a high number of people who live in informal settlements (UN-HABITAT, 2021). Nkoane (2019) explained that informal settlements in South Africa emerged as a response to the government's inability to meet the high demand for housing. However, informal tenure categories have also become commercialised to limit access for low-income groups, which has made it difficult for them to secure housing or property within the informal systems (Nkoane, 2019). Moreover, limited space and resources exacerbate the lack of housing, which underscores the similarities between South Africa and Namibia (Cloete, 2019).

Cloete (2019) highlights the challenges faced by the poor in South Africa, particularly inadequate infrastructure, and overcrowding, which mirrors the difficulties experienced in Namibia. Cloete (2019) further asserted that informal settlements such as Khayelitsha in Cape Town as well as Diepsloot in Johannesburg struggle with high population density and strained basic amenities.

#### **2.4 Legislative framework in Namibia**

Namibia's legislative framework encompasses a spectrum of legislation, policies, as well as regulations at both local and national levels (Bobek, 2019). The Urban and Regional Planning Act of 2018 and the National Housing Policy Framework revised in 2020 outline provisions which guide urban development and housing. However, the efficiency with which the challenges of informal settlements is being addressed remains debatable (Nguyen, 2022).

The lack of legal recognition or secure tenure often results to vulnerability and displacement for the residents (Huchzermeyer, 2015). The lack of tenure security not only affects the residents' access to basic amenities but also inhibits community development (Amutenya, 2020). Amutenya (2020) further asserted that legislation related to infrastructure and service provision for informal settlements remains a critical challenge. Moreover, bureaucratic hurdles, insufficient resources, inter-agency coordination issues, and corruption impede the effective execution of policies aimed at improving the conditions in Windhoek's informal settlements (Affirmative Repositioning, 2016).

#### **2.5 Conceptual framework of factors affecting service delivery**

There are various factors that pose challenges in acquiring basic amenities, especially in urban areas. However, each case or municipal area has different dynamics that are unique to that specific geographical area. Evidence suggests that the income gap between the rich and the poor remains high in Namibia (Brown-Luthango, 2017). Informal housing for low-

income groups is constructed far away from their places of employment (Namibia Housing Action and Shack Dwellers Federation, 2017).

The report argues that this has more financial implications, such as high transport costs due to long distances employment (Namibia Housing Action and Shack Dwellers Federation, 2017). As a result, residents cannot afford to rent or buy housing in formal residential areas employment (Namibia Housing Action and Shack Dwellers Federation, 2017). Namibia Housing Action Group (NHAG) asserts that low-income groups are better suited to address their own housing needs, provided they have land tenure security. However, outdated municipal public policies do not promote land or house acquisition by low-income groups (NHAG, 2017).

NHAG (2017) further argues that national policies and strategies exclude implementation measures that enable effective service delivery in informal settlements. (Ndeunyema, 2017) maintains that Namibia's town planning rules are not aligned with community needs. Evidence from research shows that the process of planning and approval of building plans, especially for the layout and proclamation of new townships, can take up to five years to finalise (Ndeunyema, 2017). This is due to the legal and administrative procedures that need to be followed (Ndeunyema, 2017).

Financial stability has a reciprocal relationship with housing and provision of basic amenities (Weber, 2017). One of the major contributing factors in the movement of people from rural areas to urban areas is the pursuit of better living conditions and employment (Republic of Namibia, 2019). The demand for serviced land, the mortgage market and the increase in prices of construction materials are hindering the ability of low-income groups from owning formal houses with basic amenities (Brown-Luthango, 2017).

The neo-classical economic theory posits that informal settlements are a result of market failure (Bobek, 2019). This theory suggests that informal settlements reflect a failed housing market which cannot provide affordable housing for low-income individuals (Bobek, 2019). Another perspective presented by Karuaihe and Wandschneider (2018), is the social

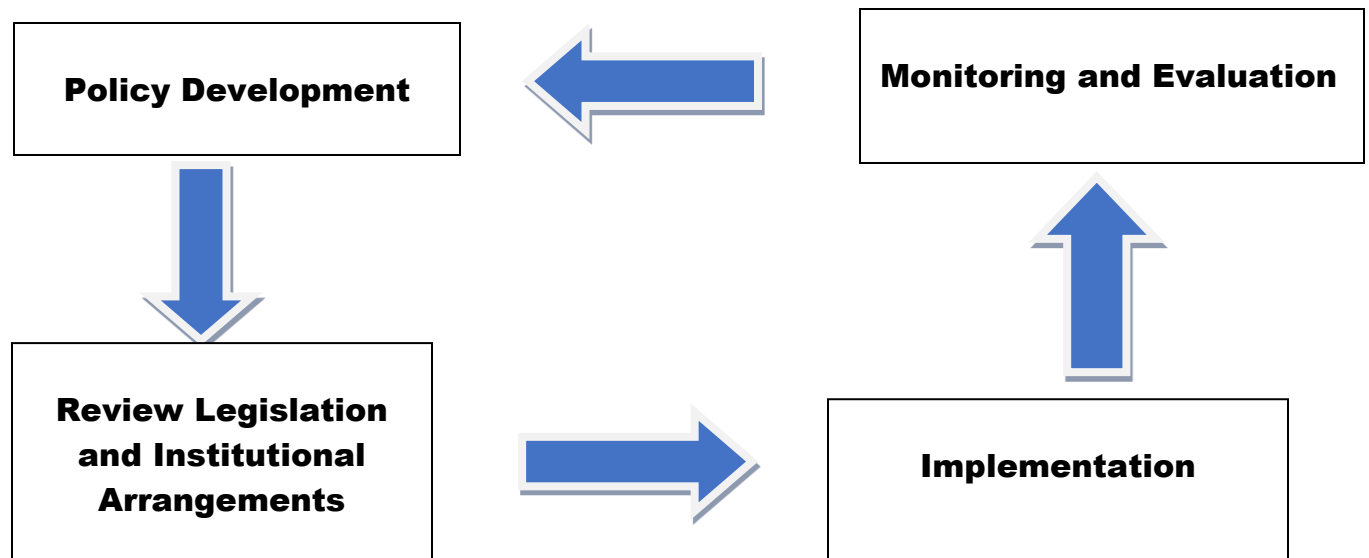
exclusion theory, which argues that informal settlements are a result of the exclusion of certain groups from the formal economy and society.

According to this theory, the lack of basic amenities in informal settlements reflects how low-income groups are excluded from accessing resources and basic amenities. The exclusion is used as a tool for maintaining social and economic isolation (Bobek, 2019).

Lastly, the dependency theory suggests that informal settlements are a result of the unequal distribution of wealth and resources between developed and underdeveloped countries (Weber & Mendelson, 2017). According to this theory, informal settlements are a result of the dependence of underdeveloped countries on developed countries for resources, which leads to the concentration of wealth and resources in developed countries. In this regard, informal settlements are deprived of basic amenities as they are not prioritized by the government and developed countries. In investigating the provision of basic amenities at Havana Informal Settlement, the researcher was guided by the neo-classical economic theory, social exclusion theory as well as the dependency theory. It is worth mentioning that these perspectives are not mutually exclusive and can overlap to a certain extent.

## **2.6 Conceptual model**

The model below shows how the provision of basic amenities should be an ongoing process in Namibia (Amutenya, 2020). Policy development is a dynamic activity that needs to take account of changes that occur in the society. Figure 2.1 below shows that the development of public policies needs to follow through reviews of current legislation and institutional arrangements if they are to be implemented. Legislation and the regulatory stakeholders must also create an environment that allows change.



*Figure 2.1: Model of the policy formulation process (Amutenya, 2020)*

## **2.7 Service delivery inequality**

Inequality in terms of service delivery refers to the unbalanced provision of basic services such as water, sanitation, healthcare, and education among different populations within urban areas (Bobek, 2019). Inequality is driven by a variety of factors, including income, race, ethnicity, and location. Informal settlements often cater to low-income and marginalized residents and citizens of the country who do not have access to efficient and economical (cost-effective) formal housing and as a result, lack basic amenities such as safe potable water, sanitation systems, and electricity reticulation.

Weylandt (2018) emphasizes that Namibia is characterized by great economic inequality and segregation despite the end of apartheid. Shaningwa (2019) explains that there is racial

class hierarchy and upward mobility of a lesser number of coloured residents as well as black elite.

Shaningwa (2019) further explains that poverty is not entirely a matter of income levels but also a structural condition defined by unequal access to resources. The evidence is reflected in the differential access to housing, health services, basic amenities, and education. To support this notion, the United Nations Development Programme (UNDP) report ranks Namibia as one of the most unequal countries in the world; in terms of social development (UNDP, 2020).

According to Angel (2018) the term segregation literally means set apart and implies the existence of an agent, or a system that actively sets people apart. Segregation may be voluntary, where the agent resides within the segregated group itself, or forced, whereby the agent is to be found outside a particular group (Angel, 2018). Shaningwa (2019) defines segregation as the separation of people based on common attributes which set a particular group apart from other members of a given society. Such attributes may include socio-economic standing, ethnicity/race, or demographic aspects (such as age).

Seliger (2016) explains that in post-apartheid Windhoek, access to urban space and basic amenities have been based on wealth rather than racial lines. According to Weylandt (2018), Windhoek's urban planners continue to follow a suburbanization strategy and the suburban planning model promotes continued exclusion of informal settlements. City of Windhoek (CoW) (2021) argues that residents in informal settlements are sometimes forced to relocate to new housing projects which are on the periphery of the city.

Figure 2.2 below shows the continued division along the Western Bypass and the growing number of residents in the informal northern fringes of Katutura. Residents in the informal northern fringes of Katutura are excluded from functional systems of basic service delivery.

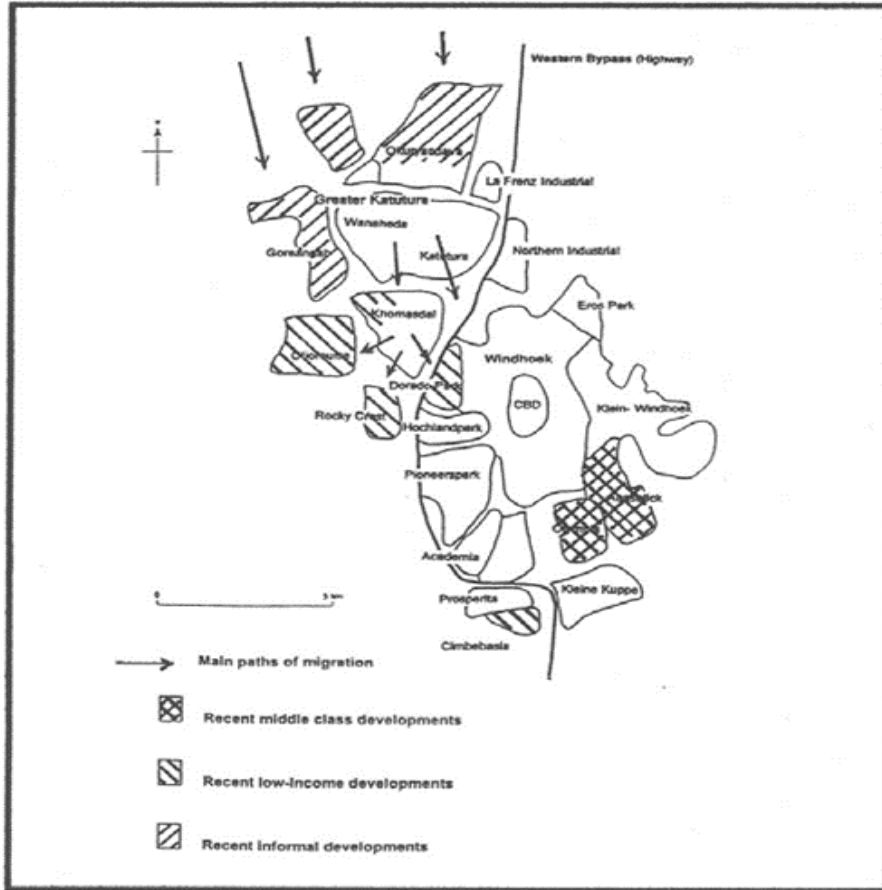


Figure 2.2: Spatial separation in Windhoek (Mendelsohn, 2019)

Havana Informal Settlement, which is the central focus of this study is on the periphery, both spatially and socially. The inhabitants are secluded because they live far away from the city. They must commute or walk 10 to 15 kilometers to seek job opportunities in the Central Business District (CBD). Mutyambizi (2020) explains that segregation remains a major problem and affects Namibia’s present-day social fabric. Formations such as the ‘Herero Mall’ could be seen as representing a specific form of social organisation of a post-apartheid city. Formations represent a fractional number of movable establishments on open space which eventually take on a permanent outlook in the form of shacks (Mutyambizi, 2020).

Population pressure due to an influx from all over Namibia as well as the inability to afford formal housing leads to several families choosing to erect make-shift housing units with waste materials on illegally occupied land. Additionally, most informal settlements reflect extreme anxiety and residents wish to access land where they can live closer to job prospects offered in Windhoek (Amutenya, 2020). The overpopulation of cities in Africa is mostly evident in informal settlements. According to UN-HABITAT (2021), over 60% of the urban population of Africa is crammed into informal settlements.

Informal settlements are typically marked by unhealthy surroundings, deteriorated housing units, and inadequate or neglected infrastructure (UN-HABITAT, 2021). Furthermore, the unfavorable characteristics of informal areas within the urban landscape hinder the sustainable progress of cities, as these regions are detrimental to the well-being of current as well as future generations. (UN-HABITAT, 2021).

Similarly, Havana Informal Settlement reflects social disparities in a post-apartheid city (Mendelsohn, 2016). Despite many attempts at reconstruction, cities still reflect the footprints of the past in their spatial patterns and informal settlements are seen as a cheap alternative for those who cannot afford a better housing in formal settlements (Mendelsohn, 2019).

Endjala and Botes (2020) reported that in-migrants in cities and towns might not build or rent formal houses with basic amenities due to four major reasons:

- Having no entitlement rights.
- Having no capital available to make a one-time housing investment or purchasing power.
- Cultural and traditional tendency of accumulating remittances to invest in their communal lands.



- The low cost associated with staying in shacks vs cost in formalised areas and lack of understanding of urban life as well as the costs or rates that come with ownership or renting.

## **2.8 The characteristics of informal settlements**

Informal settlements are areas where groups of housing units have been constructed on land where the occupants have no legal claim (Hansen & Vaa, 2014). Another definition of informal settlements means unplanned settlements and areas where housing is not in compliance with current planning or building regulations (Hansen & Vaa, 2014). Both definitions seem to highlight that it is not the municipality, or state in charge of constructing the buildings but rather the people decide whether to claim any land and occupy it without considering laws or regulations concerning housing. Both definitions seem to point out that the erection of these unplanned houses does not follow a particular structure, but it is rather haphazard. It can be noted that informal settlements may reflect attributes such as illegal occupation of land and non-adherence to state land or regulatory framework (Davis, 2016).

Informal settlements were not accepted during the colonial era, and their growth emanated after Namibia gained independence in 1990. In the period between 1991 and 1994, the Municipality of Windhoek established designated "reception areas" to provide temporary accommodation for impoverished migrants, with the intention of eventually relocating them to permanent areas once they became available (Huchzermeyer & Karan, 2017). However, the reception areas eventually became permanent settlements. Moreover, informal housing, both within and beyond the reception areas, experienced rapid and uncontrolled expansion, which has continued to dominate the growth of informal settlements in Windhoek (Huchzermeyer & Karan, 2017).

According to the World Bank's Country Assessment Report (2015), informal settlements came into being between 1991 and 1998, when the Windhoek City Council established three Reception Areas.

These areas were intended to be temporary accommodation until people could be resettled in accordance with squatter policies that were in place. In 1992, the first Reception Area, Big Bend, today known as Havana, was established, followed by Okuryangava Extension 6, locally referred to as Babylon and Kilimanjaro. In 1998 a third Reception Area, consisting of four erf blocks in Havana Informal Settlement was developed.

The World Bank (2015) further points out that informal settlements consist of tracts of land where earth roads were cut to a rudimentary layout, a lifeline water supply and in some cases communal toilet facilities. Informal settlements are usually built without legal tenure and dwellers do not follow established building or urban planning regulations (Mendelsohn, 2016). The main reasons for the growth of informal settlements include poor statutory planning and a strong rural-urban migration that leads to substantial urban population growth.

Although the growth of informal settlements is predominantly spontaneous, housing in these settlements usually exhibit growth patterns. (UN-HABITAT, 2021) defines an informal household as a group of individuals living under the same roof in an urban area, lacking one or more of the following: housing of a permanent nature, easy access to safe water in sufficient amounts at an affordable price, access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people, and security of tenure that prevents forced evictions.

According to the City of Windhoek (2021), the expansion of informal settlements in Windhoek can be attributed to two processes, urban sprawl, where homes are built outside established urban areas, and densification, which involves constructing new houses on small vacant patches of land within already developed informal settlements. The UN-Habitat III (2018) defines informal settlements as residential areas where residents lack secure tenure rights to the land or dwellings they occupy.

Surrounding areas often lack basic amenities, are disconnected from city infrastructure, and their housing may not comply with current planning regulations (UN-Habitat III, 2018).

Additionally, they are frequently situated in geographically and environmentally hazardous locations (UN-Habitat III, 2018).

Earlier, the role of colonial legacy in creating spatial segregation in cities was discussed. The increasing number of people without access to basic services in urban areas is closely tied to the rapid growth of informal settlements in developing countries. Local and national governments often struggle or are unwilling to provide adequate water and sanitation facilities to these communities. The population residing in slums or informal settlements increased from 650 million in 1990 to approximately 900 million (UNESCO, 2015). Despite some progress made through the Millennium Development Goals (MDGs), there is still significant pressure on service delivery (Urban Dynamics, 2017). Currently, informal settlements in Windhoek are found in the townships of Goreangab, Hakahana, Havana, Okuryangava, and Otjomuise.

The locations of informal settlements and low-income land in these townships are evenly distributed in order to form a uniform land development (City of Windhoek Plan, 2017). The City of Windhoek Plan (2017) states that population growth is fueled mainly by migration. It is stated that “northern areas” contributed 57.7% of in-migrants. A model that has been developed to explain the reason why people move is called the ‘push and pull’ model and Weylandt (2018) noted that many large cities in developing countries are growing at a rate of more than 20% every decade.

This growth is partly heightened by rural push and as well as urban pull factors. Push and pull factors are those factors that compel or encourage migrants to leave the rural areas (Weylandt, 2018). Some people may move because of lack of services such as schools, hospitals water supply, the activities of transnational companies and sometimes the government may force them to move. Migrants move to cities hoping for better housing, basic amenities, better job prospects, improved lifestyle, more reliable sources of food and better services in health and education.

Weylandt (2018) further asserts that most people are willing to endure short-term difficulties in the hope of better prospects of economic gain and improved welfare in the long term, even if this only works for their children.

Tenure security is a vital element to improving living conditions in informal settlements. Informal settlements are areas where residents have constructed houses without permission of a governing authority or owner of the land. These areas are characterized by a lack of tenure security, poor housing conditions, combined with social exclusion and inadequate water and sanitation. Residents in informal settlements do not adhere to building or planning legislation. Due to the lack of formal housing options, low-income populations are accommodated in informal settlements. Moreover, informal settlements are not static, but are continuously changing as complex, energetic social systems (Arfvidsson, et al., 2017).

The UN-Habitat (2018) definition of informal settlements is criticized by Arfvidsson, et al. (2017) because it lacks emotion. Arfvidsson, et al. (2017) argue that the lack of basic amenities in informal settlements equates to a lack of dignity. Arfvidsson, et al. (2017) further explain that most governing institutions are more concerned about attaining targets, such as the MDGs rather than improving living conditions. In the early 19th century, the slum concept had negative connotations (Croese, et al., 2016). Unfortunately, authorities viewed informal areas as urban anomalies that needed to be eradicated (Croese, et al., 2016).

During the early 2000's, informal settlement upgrading was replaced by integration, focusing on physical, social and judicial integration (Croese, et al., 2016). However, cities without the integration approach aimed to reduce and improve informal settlements by increasing evictions (Croese, et al., 2016). Kovacic and Giampietro (2017) caution describing informal settlements based on physical characteristics, as this may mislead policy implementation. Describing physical attributes tends to deviate attention from social constructs that explain informality and growth.

Mahabir, et al. (2016) suggests that policy makers need to consider both physical and social constructs to understand the complexities of informal settlements as this will provide details on the causes behind population influx despite the lack of basic amenities.

The decline of informal settlements is reliant on an inclusive legal process (Kovacic & Giampietro, 2017). Informal settlements have similar characteristics across the world. The main cause for informal settlement development is rapid urbanisation, population growth, poor urban governance, high cost of housing, poor land information systems and inappropriate land tenure systems (Alemie, et al., 2016). Different case studies highlight that people living in informal settlements do not have the financial means to invest in infrastructural development. Walker (2016) points out that most residents in informal areas would rather remain in informal housing because financially other options are way beyond their reach. The role of municipalities should be to provide basic amenities to all communities irrespective of their financial status (Walker, 2016).

Studies on aided informal housing show that policies related to creating an enabling environment for informal settlements have conflicting results. According to Walker (2016) it is important to develop regulatory policies that promote self-help housing although other scholars discourage informal housing, as they view it as not adhering to formalised approaches.

Different factors hinder the delivery of basic amenities in informal settlements. These include poor housing structures, limited diverse construction processes as well as contradictory and overlapping legal frameworks which tend to threaten tenure. In some instances, residents fail to access basic amenities as residents on the periphery of the urban areas are often excluded.

Character	Indicator	Definition
Access to water	Inadequate drinking water supply	A settlement has an inadequate drinking water supply if less than 50% of households have an improved water supply household connection;
Access to sanitation	Inadequate sanitation	A settlement has inadequate sanitation if less than 50% of households have improved sanitation.
Structural quality of housing	Location	Proportion of households residing on or near a hazardous site, under garbage mountains, high-industrial pollution areas and unprotected high-risk zones (e.g. railroads, airports, energy transmission lines)
	Permanency of structure	Proportion of households living in temporary and/or dilapidated structures.
Overcrowding	Congested housing	Proportion of households with more than two persons per room. The alternative is to set a minimum standard for floor area per person (e.g. 5 square meters).
Security of tenure	Forced evictions and ambushes	Proportion of households with formal title deeds to both land and residence. And in addition to enforceable agreements or any document as a proof of tenure arrangement.

*Figure 2.3: Indicators of an informal settlements (UN Habitat III, 2018)*

## 2.9 Urban planning approaches to basic service provision

Many scholars believe that informal settlements are inevitable if there is rapid population growth and urbanization. However, the existence of informal settlements is neither an inevitable consequence of population growth nor an inevitable result of rapid urbanization (Brown-Luthango, 2017).

According to Affirmative Repositioning (2016) urbanization is not the major challenge, the real issues are rooted in outdated institutional structures, governance policies, inappropriate legal systems, incompetent national and local governance as well as short-sighted urban development policies.

After Namibia gaining independence, the City of Windhoek has since allocated significant resources to provide basic services to numerous informal settlement areas. Extensive efforts have been made to establish communal water points, shared flushing toilets, and improve access to roads. However, the continuous expansion of informal settlements has strained the city's capacity, leaving several areas without adequate basic amenities.

Amutenya (2020) highlights the importance of effective policy formulation and implementation, as deficiencies in these areas have led to the service delivery program failing to address the present needs of informal settlements. Amutenya (2020) further discusses Namibia's three-tier system of governance which is central government, regional councils, and local authorities. The Local Authority Act of 1992 distinguishes between municipalities, towns, and villages, with municipalities being the highest and most autonomous type of local authority (Amutenya, 2020). According to Amutenya (2020), the major principle of local government in Namibia is that they should be financially autonomous hence Namibia's 45 local authorities have the following duties:

- To operate on a full cost recovery basis for all services that they deliver, although some may be sector specific and area based.
- To generate most of their funds from user fees except for more well-established authorities with levy property taxes.
- To receive limited funding from the government, mainly for specific investment projects on an ad hoc basis, although there might be some recurrent cost support on an ad hoc basis.

The local government primarily depends on user charges, particularly for water and electricity, as their main source of revenue to fund their operational activities (Amutenya, 2020). This revenue is generated by a surcharge added to the cost of the utilities that local authorities typically buy from the utility companies (Mutymbizi, 2020). If the authority produces the utility, the surcharge is added to the cost of producing it (Mutymbizi, 2020).

However, most town councils are not charging tariffs in accordance with the approved tariff policies hence, several trading services, including water distribution, are operated with significant losses in many councils. Mutyambizi (2020) reiterates that the situation is worsened by outstanding debtors in all local authorities, for instance consumers who do not pay for basic amenities due to various reasons, including affordability.

Despite renewed focus and increased investments in recent years, urban sanitation strategies and planning frameworks in Windhoek are not yet adequate to achieve the Sustainable Development Goal target (Hutchings, et al., 2018). The provision of basic amenities is falling behind other development targets. Moreover, sanitation interventions in informal settlements have not matched the urban complexity as well as the dynamics of households in urban environments (Karuaihe & Wandschneider, 2018).

The Namibia Housing Action Group (2017) argues that competing service improvements, weak planning controls and limited resources for inter-sectoral collaboration present significant barriers to local governments therefore it is important to adopt a more integrated approach.

## **2.10 Challenges associated with residing in informal settlements**

Huchzermeyer and Karam (2017) uphold that 66% of the City's residents use electricity as the main source of energy, while the remaining 34% of residents mainly rely on gas, paraffin, and wood. It can be assumed that most of the 34% reside in informal households. Huchzermeyer and Karam (2017) further explain that 19% of Windhoek's families consisting of about 61,000 people have no access to toilet facilities. This has had serious implications on public health. Shared flush toilets have been constructed in many informal settlements to provide basic sanitation. For instance, in some parts of Havana Informal Settlement, six families share a toilet (UN-HABITAT III, 2018).



However, residents tend to avoid sharing toilets because they are often dirty and unhygienic. Communal water points are a common feature in many of Windhoek's settlements. Water cards are often provided for free and can be re-charged at local offices of the City of Windhoek (CoW), such as those in Ombili or Wanaheda. Twenty-five litres cost 40 cents, and according to some residents N\$50 may pay for water for a home of 4-5 people each month. The prices correspond to roughly 25 litres per household member per day (Brown-Luthango, 2017).

Solid waste is collected from centrally located dumpsters in many of Windhoek's informal settlements. The municipality provides refuse bags to residents on a weekly basis in certain areas and empties the dumpsters once a week. Some areas are insufficiently serviced, and waste is dumped in the open (Brown-Luthango, 2017). Most informal settlements in Windhoek lack electricity or street lighting, one reason being that the city's upgrading strategy does not allow for electricity to be provided to low-income residents (Republic of Namibia, 2019).

Windhoek has housed about one sixth of Namibia's population (Republic of Namibia, 2019). The city stands out as the most thriving urban center in Namibia, with a strong focus on economic and industrial development, which acts as a significant pull factor for attracting migrants (Angel, 2018). However, the city's landscape reflects the social and economic inequality present in Namibia, as it juxtaposes affluent residential areas with large informal settlements lacking tenure and basic amenities (Angel, 2018). Sanitation encompasses more than just procedural matters; it encompasses socio-economic, ethical, cultural, psychological, and political aspects (Angel, 2018).

The Namibian Statistics Agency (2021) indicates a lack of reliable statistics and acceptable definitions for sanitation but emphasizes the need to shift individual mindsets to find solutions to the current sanitation challenges. Access to infrastructure and basic amenities plays a crucial role in strengthening the socio-economic development of households.

Electricity, water, sanitation, and efficient transportation enhance the lives of urban residents, allowing them to allocate more time to productive economic activities while reducing socio-economic burdens (Urban Dynamics, 2017).

Many informal settlements in Windhoek receive partial or no services. The 2021 Namibian census revealed that the percentage of urban residents without toilets doubled from 24% in 2011 to 52% in 2021 (NSA, 2021). Chitukwe-Biti (2019) highlights Namibia's struggle to efficiently provide basic amenities, as the country has the lowest levels of sanitation coverage in Southern Africa, with no improvement seen since 2006. Beyond the mere provision of basic amenities, it is important to consider the affordability of these services, as many residents in informal areas rely solely on informal income to sustain themselves. Establishing a functional system that alleviates financial burdens is crucial, especially for residents engaged in informal trade and production.

Despite investments made to service certain informal areas, the municipality has not kept pace with the rapid growth of informal settlements. As a result, many settlements remain partially serviced or completely unserved. The lack of hygienic conditions has a significant negative impact on the safety and health of individuals residing in informal settlements, as well as on residents in formal areas. For instance, women face safety risks when they are compelled to use open spaces at night, and the presence of open defecation can lead to airborne diseases, particularly among children. According to UNDESA (2019), diarrhoea is the third most common cause for hospitalization and the second highest cause of pediatric admissions in Windhoek. This serves as a strong indication of the detrimental effects of poor sanitation conditions on residents of informal settlements, further burdening the already vulnerable populations.

### **2.11 Water and Sanitation Systems**

The Namibia Sanitation Situational Analysis Report defines sanitation as interventions that improve the management of human excreta and "grey water" or sullage (Government of the Republic of Namibia, 2017).

The report states that a wide range of sanitation systems exist to properly and safely manage excreta. All these systems are complex, but they all follow the human excreta management cycle which generally includes the following steps: disposal (user interface and storage), collection, treatment (on site or off site), transfer and re-use (sludge or treated effluent), (Government of the Republic of Namibia, 2017). This cycle depicts that sanitation is waterborne and does not leave room for decentralised dry sanitation systems.

Other options for a decentralised sanitation system have not been explored in detail in Namibia even though some models such as the Otji toilet and VIP toilets have been implemented to varying degrees of success. The Water Supply and Sanitation Policy states that its operative strategy is to “guarantee safe and affordable sanitation, encouraging decentralised sanitation systems where appropriate,” (Ministry of Agriculture, Water and Forestry, 2015: 2). The strategy also promotes recycling through safe and hygienic recovery and use of nutrients, organics, trace elements, water and energy or the safe disposal of all waste, including sewage and industrial effluent, in an environmentally sustainable fashion (Government of the Republic of Namibia, 2017). The policy provides a framework for decentralisation of sanitation services, which could be used as the basis for implementing systems that are sustainable given the arid conditions as well as water scarcity in Namibia. However, Banda and Mwale (2018) argue that decentralised systems such as dry toilets are not readily welcome by most Namibians residing in informal settlements. The City of Windhoek (2021) explains that communities should have the right to determine which sanitation solutions and service levels are acceptable to them within the boundaries of national guidelines. Beneficiaries should also contribute towards the cost of water and sanitation services they desire (Banda & Mwale, 2018).

Namibia is a divided society, in other words two different societies exist due to socio-economic inequality and other legacies of apartheid. These societies are best demonstrated by the structure of urban areas, which usually comprise of the rich in formal parts and the poor in informal parts of the city. The two societies have two different types of sanitation technologies, waterborne and other alternatives. One is left to wonder whether the poor,

who cannot afford sanitation have to call for welfare so that they can have access to sanitation and dignity (Kasote, 2018). The situation is exacerbated by the fact that Namibia is an arid country and water is a scarce resource (Kasote, 2018).

## **2.12 Conclusion**

The provision of basic amenities is the responsibility of municipalities, such as the City of Windhoek. However, informal settlements in Windhoek have been faced with significant internal as well as external challenges that have hindered the provision of basic amenities such as infrastructure development, water, electricity and sanitation. Havana Informal Settlement is testament to the structural issues that still prevail in contemporary urban Namibia. Literature related to informal settlements emphasises the lack of basic amenities such as water, sanitary facilities and electricity as a cause of concern which puts residents' safety, health and well-being at risk.

Namibia is a divided society, in other words two different societies exist due to socio-economic inequality and other legacies of apartheid. The differences between formal and informal areas also reflect Namibia's social and economic inequality. The researcher believes that in order to address the sense of inhumane conditions and humiliation caused by the lack of basic amenities in Namibia's informal settlements, there is need for an adoption of sustainable approaches based on active community involvement on various levels.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

As explained in Chapter 1, a research design is a conceptual blueprint that outlines the study of a specific problem. The blueprint for this study was a qualitative approach. The qualitative approach is geared towards understanding and describing the research phenomenon and in this regard, it is the most appropriate approach for this study. This approach was appropriate for this research, because it afforded the researcher an opportunity to investigate the lack of basic amenities in Havana Informal Settlement. The value of qualitative analysis is its ability to establish relationships between variables and eventually provide a coherent description of the unit of analysis.

### **3.2 Research Methodology**

Creswell (2018) clarifies the differences between research approach and research design. Research design is the master plan specifying the methods as well as procedures for collecting and analysing the required information in a research study whereas the research approach defines the research strategy (Creswell, 2018). Research methodology on the other hand, is the path through which researchers formulate their problem and objective. It is more about the instruments used to collect data that will ensure an organised and accurate implementation of the design (Sileyew, 2019).

Research methodology refers to a technique adopted to collect data which may involve the utilisation of a specific instrument, for example, written documents (Bertaud, 2017). According to Walliman (2017), research methodology is also an arrangement of tools that are used for different types of enquiries.

Zambrano, Kirschner and Sweller (2018) posit that research methodology constitutes the outline for the collection, measurement and analysis of data. It is the most crucial part of the research as it includes all the four important considerations namely, strategy, conceptual framework, identification of what to study as well as the tools and procedures to gather and analyze data (Walliman, 2017). Furthermore, Bryman (2016) asserts that an empirical investigation incorporates the research design, sampling, instrumentation, data collection, data analysis, limitations and delimitations of the study.

The researcher adopted the qualitative case study research methodology to answer the research questions stated in chapter 1. This research design is suited to a context-specific understanding of organizational reality and allows researchers to explore and understand the meaning individuals or groups ascribe to a social or human problem (Creswell, 2018). Extensive review of relevant literature was derived from secondary sources such as books, articles, journals, relevant newspaper reports and theses. The researcher also consulted relevant internet search engines such as Google Scholar, Sabinet Online and African Digital Library. The researcher prioritised African (inclusive of Namibia) sources in order to understand African viewpoints on the lack of basic amenities in informal settlements.

The major advantages associated with qualitative case study research is that it is cost effective and convenient. Since another researcher has already collected the data, the researcher does not have to devote financial resources to the collection of data. When good secondary data is available, researchers can gain access to high quality data, especially if the data has been collected by funded studies or agencies that involve larger samples. Larger samples are more representative of the target population and allow for greater validity as well as more generalizable findings (Bertaud, 2017).

According to Bertaud (2017), the key features of qualitative case study research methodology include:

**In-depth investigation:** Qualitative case study research is characterized by an in-depth investigation of a particular case. In this study, the researcher aimed to gain a detailed understanding of the lack of basic amenities at Havana Informal Settlement by collecting and analyzing a wide range of secondary sources related to the topic. Additionally, multiple sources enabled the researcher to gain a more comprehensive understanding of the study.

**Subjectivity:** Qualitative case study research is based on understanding that the researcher's perspective is important in shaping the research outcome. Therefore, it allowed the researcher's subjective interpretation of the data while taking into account the perspectives of multiple sources of data.

**Flexibility:** Qualitative case study research is flexible and adaptable, this allowed the researcher to change ideas, and convictions as new information emerged.

**Holistic approach:** Qualitative case study research takes a holistic approach, considering the case as a whole unit rather than breaking it down into smaller parts. This allowed the researcher to understand the study in its context, as well as its relationship to other factors such as socio-economic and cultural components.

**Generalizability:** The main goal of qualitative case study research is not to generalize the findings to a larger population, but to gain an in-depth understanding of the specific case being studied. The researcher was focused on providing insightful findings suitable for extrapolation.

**Iterative process:** Qualitative case study research is an iterative process, hence with this study, data collection and analysis occurred simultaneously. Moreover, the findings from one phase influenced the next phase of the research.

### **3.3 Approach and design**

The researcher chose to use a qualitative approach because it provides a thorough and succinct way of investigating the lack of basic amenities in informal settlements. According to Bryman, (2016) a qualitative research technique typically emphasises words rather than collecting, quantifying and processing of data. A qualitative study is generally interpretive and uses an inductive rather than deductive model. A qualitative approach is also useful because it allows the researcher to apply a context-based interpretation of the situation.

A qualitative approach helps in the exploration of a phenomenon, and it undertakes the exploration through a variety of lenses in order to reveal multiple facets of the phenomenon (Bickman and Rog, 2016). In this regard, case study research is useful because it focuses on many components related to the access to basic amenities in informal settlements. Additionally, in analysing previously published work, the researcher was able to pass reference to the different epistemological approaches by key researchers in the same field of study.

Generally, case studies have been critiqued for lacking precision, allowing for bias and not providing sufficient opportunity for scientific generalisation (Takahashi and Araujo, 2020). However, the researcher believes that drawing inferences through a review of published documents addressed the problem statement comprehensively.

### **3.4 Research procedure**

Data was collected from books, research reports, policy documents and newspapers with information related to the provision of basic amenities in informal settlements.

The researcher scrutinised the documents, arranged related information and grouped the information into themes as well as categories.



Keywords and themes were generated to determine their frequency in the different documents. Additionally, handwritten notes were converted into write-ups which were further analysed.

### **3.5 Content Analysis**

The nature of this research required an in-depth analysis of textual documents to search for information related to the provision of basic amenities in informal settlements. Content analysis is an approach that emphasizes the role of the investigator in the construction of meaning in texts (Bell, Brymann & Harley, 2019). Content analysis is useful because of its unobtrusive nature. Content analysis also helps researchers to identify, document the attitude, views, and interests of individuals, small groups, or large and diverse cultural groups (Drisko & Maschi, 2016).

Additionally, the researcher systematically organised, categorised and analysed concepts related to the research topic. The process enabled the researcher to draw meaning and inferences from existing literature to support research objectives. Its application is also useful for the systematic collection of data and objective analysis of the findings. The disadvantage of content analysis is that it is limiting in responding adequately to the scope of the research and in establishing the quality of the information required (Bell, Brymann & Harley, 2019). However, content analysis is an important step in research as it aims to examine the validity and reliability of data.

Analysing data of either primary, or secondary data, involves the application of statistical techniques (nominal/categorical variables) to the collected data, and relates to the data reduction by grouping textual materials into themes through coding of each transcript, whereby data broken into component parts is given labels, as preferred categories in case of qualitative data, so that an informed decision can be made through sensible interpretation

of collected data, identification of patterns and synthesis (Brown-Luthango, 2017). The researcher applied a systematic literature review relating to informal settlements, the historical background, living conditions and access to basic amenities. Secondary data means the data is readily available and is not originally collected by the researcher but rather obtained from published or unpublished sources (Creswell, 2018). This study utilised a scoping literature review method. A scoping literature review is a comprehensive overview of literature on a given research topic (Tricco, Lillie, Zann & O'Brien, 2016). It is an organised process consisting of five stages. Firstly, analysing the research topic. The second stage is to review available literature that is relevant to the research topic. The interpretation and analysis of data collected is conducted in the third phase, symbolic reflection of the information collected takes place in stage four and the fifth stage presents the findings and recommendations of the study (Takahashi & Araujo, 2020).

### **3.6 Sampling and unit of analysis**

Units of analysis are defined as, "the aspects that the researcher examines to construct a summary description and to explain the differences among all the aspects," (Babbie & Mouton, 2017:85). In this study, national and international survey reports, national reports written by government, national reports written by non-governmental organisations (NGO's) and national reports on Namibia written by international agencies were the unit of analysis. The researcher used purposive sampling, which entailed selecting all textual units with the greatest probability of providing information on lack of basic amenities in informal settlements.

Purposive sampling as a non-probability sampling technique in which participants are selected based on their knowledge of a subject (Creswell, 2018). This sampling methodology directed the focus of the research to those textual units that could adequately respond to the research question. The sampling was done through a collection of extensive

literature and report analysis. Further refinement of the criteria meant that only those documents that met the inclusion criteria were selected.

Databases and websites were used to identify reports that were relevant to the study. The selection of search engines, databases and websites was based on whether the researcher could access full text reports to ensure text analysis. Although the initial results were useful in that they directed the researcher to those websites that contained the relevant document, it was necessary to apply the following inclusion criteria:

- Reports on Namibia published from 2016 to 2022.
- Reports with a national coverage (excluding those that only cover certain regions in Namibia).
- Reports that fit onto the criteria of national, regional and international surveys, evaluation reports, analytical reports and policy briefs.
- Reports that cover socio-economic topics.

The researcher's intention was not to identify reports that might have a coverage of the provision of basic amenities in informal settlements, but to also include general reports that met the inclusion criteria. This process led to the identification of 80 documents that were found useful for this research. From the initial 80 documents selected, 20 reports were excluded because they did not meet the criteria. The documents that met the criteria were then organised into different categories according to author, nature, content and context. The categories used to group these documents are shown in Table 3.1 below:

*Table 3.1: Report categories (Research, 2022)*

Type of document	Category definition
National survey reports	These are reports with findings from national surveys such as the National Census and the Namibia Inter-censal Demographic and Health Survey. These are mainly surveys conducted by the National Statistics Agency.
International survey reports	These are surveys conducted by international organisations such as UN agencies and other global bodies.
National analytical reports by government	These are reports written by Namibian government agencies on urbanization, urban planning, infrastructural development and the provision of basic amenities.
National analytical reports by international NGO's	These are reports with a national coverage and include situational reports on spatial segregation, informal settlement growth as well as access to basic needs.
National evaluation studies	These include any research studies conducted in the country such as Development Workshop Namibia.
National analytical reports by NGO's	These include analytical reports written by civil society in the country, for example UN Habitat.

### **3.7 Coding data**

Coding in content analysis helps to structure large sets of information into manageable observable categories (Saldana, 2016). It helps summarise text, observe patterns and create meaning to the text. It helps the researcher to conceptualise data and translate it into meaningful categories that are useful for data analysis and interpretation. Coding is guided by a coding frame, which lays out key concepts, their definitions and criteria for recognition and analysis of the data (Saldana, 2016).

Coding is a crucial step in the qualitative research process as it helps researchers to identify patterns, themes, and relationships in the data. The coding process also involved preparation as the researcher had to select an appropriate coding framework or methodology. Secondly the researcher reviewed the data and identified initial codes which were themes that emerged from the data. The researcher focused on the most important themes and refined the coding framework. Lastly, the researcher verified the codes and themes to ensure accuracy and consistency. However, since coding is an iterative process, the researcher had to go back and forth between different stages of coding to gain deeper insights and understanding of the findings.

Saldana (2016) further explains that there are two types of methods to develop coding frameworks, namely emergent coding and a priori coding. Emergent coding refers to establishing coding categories only after a preliminary evaluation of the data, while a priori coding refers to identifying the coding categories before data is identified. This research study adopted the a priori coding approach, where the coding categories were predefined in terms of the adapted definition of basic amenities and the research objectives. The purpose of coding the information in this way was to identify the frequency of information on the provision of basic amenities in the various reports.

It is worth noting that the coding process can be prone to human error, such as typos, missing data, or inconsistent coding practices. The coding process can also be subjective. Moreover, without proper context, coding can result in misinterpretation of the data which can lead to inaccurate conclusions and results (Saldana, 2016).

In this regard, the researcher conducted the coding process twice at separate intervals to test the reliability of the information. During the first coding process, which was considered the pilot phase there were errors in the coding process. These errors included duplication of codes, codes assigned to more than one code group and lack of definition for some of the code groups. To address these challenges, the researcher used the updated version of ATLAS.ti (Version 22) to analyse and recode the data. However, the recoding could only take place after the researcher had reviewed and defined the code categories. The definitions for the code categories were further refined and reduced to three main code groups with a further 40 indicators. This systematic process addressed the issue of reliability in the research design and methodology.

### **3.8 Ethical implications**

There is a code of conduct and/or code of ethics developed for various professions aimed at governing ethical behaviour in conducting research (Bickman & Rog, 2016).

#### **Scientific misconduct/fraud**

The researcher acknowledged work/ideas of sources, namely, other writers/researchers/students without misrepresenting their own (Park, 2019).

#### **Avoiding bias**

The researcher discouraged biasness by not deliberately trying to hide the study findings or highlighting a matter unreasonably different from facts.

### **Using inappropriate research methodology and incorrect reporting**

The researcher ensured that methods and procedures used were appropriate to prove and disprove the research study using valid instruments as well as ensuring fair reporting of findings.

### **3.9 Conclusion**

This chapter describes the research methodology, including the design, approach, procedure, content analysis as well as strategies used to ensure ethical standards. The researcher obtained secondary data from books, articles, journals, relevant newspaper reports as well as theses. The researcher utilised a scoping literature review method to gather a large amount of data within a short space of time. The researcher also used a systematic and transparent coding process, involving multiple coders to ensure accuracy and consistency.

## CHAPTER 4: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

### 4.1 Introduction

This chapter focuses on the examination and analysis of data obtained from secondary sources. The findings shed more light on the factors contributing to the absence of basic amenities in the Havana Informal Settlement. The researcher also discusses the challenges faced by residents living in informal settlements due to the lack of basic amenities. Additionally, various urban planning and development approaches implemented by local authorities to tackle the growth of informal settlements in the Havana Informal Settlement are examined.

Based on the predetermined objectives, the discussion presents the following key findings:

#### **1. To identify the socio-economic factors that contribute to the lack of basic amenities in Havana Informal Settlement.**

- Land ownership challenges: Havana Informal Settlement is located on land that is not legally owned by the residents, making it difficult for the government to invest in the provision of basic amenities.
- Rapid population growth: Rapid population growth in recent years has put a strain on existing basic amenities.
- Poverty: Many residents in Havana Informal Settlement are low-income earners and are unable to afford basic amenities.
- Vandalism: Residents in informal settlements also play a role when it comes to factors influencing the lack of sanitation and basic amenities. Vandalism has been described as a common occurrence as some residents are accused of breaking as well as stealing communal taps and doors from communal toilets.



- Limited government funding: Informal settlements have not been a priority for government funding, leading to a lack of resources for infrastructure and basic amenities.

## **2. To assess the multifaceted impact of the absence of basic amenities on the overall well-being of residents in Havana Informal Settlement.**

Lack of access to clean water: Without access to clean water, residents at Havana Informal Settlement are at risk of waterborne illnesses as they rely on unsafe sources of water such as water from Goreangab dam which is highly contaminated with organic substances hence unfit for human consumption.

- Poor sanitation: Without proper sanitation facilities residents at Havana Informal Settlement resort to open defecation, leading to health hazards and above all lack of human dignity.
- Poor housing conditions: The lack of proper housing in Havana Informal Settlement has led to overcrowding and poor living conditions, which has a negative impact on residents' physical and mental health.
- Social isolation: Havana Informal Settlement is located on the periphery of Windhoek therefore residents are socially isolated, making it difficult for them to access social services, jobs and other resources.

## **3. To identify different approaches to urban planning and development that have been applied by the City of Windhoek to address informal settlement growth and its challenges.**

- Forced evictions.
- Relocation residents to other informal remote areas.
- Neglecting the provision of basic infrastructure and services.
- Lack of community participation.
- Overreliance on physical solutions.

#### **4. To provide evidence-based recommendations to improve the provision of basic amenities in informal settlements.**

Regulatory frameworks should be put in place.

- Policies should recognize the inevitable influx of informal settlements and allow service provision within the settlements.
- A cost-effective plan of service provision should be developed comprehensively.
- Engaging the community.

#### **4.2 The woes of housing and sanitation**

Before independence, the City of Windhoek comprised of three categories of residential areas specifically for whites, coloureds and blacks (Weber & Mendelsohn, 2017). In this racially divided society, service provision was discriminatory. Different levels of service delivery were provided according to residential areas for example, hostels with communal toilets and bathrooms were for the black population in Katutura, who were largely migrant

workers employed in Windhoek in the framework of the contract labour system (Kasote, 2018). Interestingly, some of these features such as communal ablutions in Single Quarters residential area can still be seen today, testifying to the enduring legacies of apartheid.

According to Kasote (2018), communal sanitation survived collapse because of the servicing by cleaners employed by the municipality. The situation was unlike today where communal toilets are cleaned by residents. The apartheid regime implemented measures that limited movement of people into Windhoek hence provision of discriminatory sanitation services was easy for the municipality because until the end of the 1970's Africans were not allowed to own residential plots and could only rent accommodation provided by the municipality (Huchzermeyer & Karan, 2017). Moreover, unlike the current informal settlements, municipal accommodation during the apartheid era was serviced before any structures were erected.

Conversely, post-apartheid Windhoek experienced a contrasting phenomenon, the accelerated influx of rural migrants mainly from Namibian communal areas. Political freedom came with the freedom of movement and settlement guaranteed by the new constitution. Everyone, black or white, rich or poor has the right to move freely and settle wherever they wanted if they could afford to.

Kasote (2018) argues that freedom of movement, employment pull factors, better educational facilities and removal of all apartheid restrictive policies has resulted in the influx of people from rural areas and other smaller towns to Windhoek. The same individuals are residing in municipal land and congesting informal settlements without any basic amenities.

Studies by Tratschin (2016) and Ishmael (2016) confirm the drastic flow of people to Windhoek as well as social and health problems related to lack of services and uncoordinated occupancy. Namibia Statistics Agency (2021) reported an increase of 40% of the population of Windhoek between 2011 and 2021. The sudden influx of immigrants to

Windhoek puts pressure on the demand for services such as sanitation. The municipality has limited resources, both human and financial, limitations that bring the situation in the informal fringes of the capital city to the brink of a catastrophe (Kasote, 2018).

In the past, CoW created a temporary reception area where migrants arriving to Windhoek were placed in order to buy the CoW time to service land to allocate to them. In this regard, incoming immigrants were placed in Okuryangava, which was a reception area. Migrants were registered while waiting to be relocated to serviced land. This was done to ensure that the CoW had statistics of incoming immigrants and to ensure that none of them settled on areas without basic amenities.

The strategy also helped the CoW to settle people in a controlled and orderly manner. However, the same system failed due to the continuous influx of migrants who began to settle randomly in areas which had no water and sanitation services. This uncontrolled settling has led to informal areas like Havana Informal Settlement. The settling of people on unserviced land marked the beginning of housing and sanitation woes (Amutenya, 2020).

Shaningwa (2019) blames city planners for the challenges faced by CoW in the provision of basic amenities and argues that the problem is not only the untimely occupation of unserviced land but the fact that residents in informal settlements choose not to pay for allocated land, whether purchased or rented.

The extensive literature revealed that the CoW is aware that residents need to be allocated on serviced land, but they are failing to match the increase in population and the resulting need for housing, sanitation and infrastructural development (Shaningwa, 2019). Eventually, residents in informal settlements continue to occupy areas which are not serviced. Currently, about 70% of Windhoek's households are individually connected to the conventional sewerage system and the rest are either using septic tanks, communal facilities or forced to indulge in open defecation (Namibia Statistics Agency, 2021).

Additionally, 30% of households that are not connected to the sewage system or sanitation grid are mainly found in the informal fringes of the city (Namibia Statistics Agency, 2021).

### **4.3 Infrastructural challenges**

Access to infrastructure and services plays a crucial role in promoting the socio-economic development of households. Electricity, water, sanitation, and efficient transportation enhance the lives of residents by allowing them to allocate more time to productive economic activities and reducing socio-economic stress (UN-HABITAT III, 2018). However, despite investments made to improve services for the urban poor in Namibia since independence, these investments have not kept pace with the rapid growth of informal settlements. As a result, many settlements receive only partial or no services at all (Namibia Statistics Agency, 2021). The Namibia Statistics Agency provides indicators to assess the number of urban residents lacking basic amenities, focusing on the types of cooking fuel and toilets used.

While the use of electricity has increased since the last census in 2021, approximately 60,000 urban homes with around 300,000 people still rely on wood as the primary cooking fuel (Namibia Statistics Agency, 2021).

However, using wood as a fuel source has its downsides, including increased deforestation around informal settlements and the time as well as effort required to collect wood.

Additionally, open fires pose health and safety hazards, particularly during winter when they are used for heating informal structures (shacks). The Department of Emergency Management report (2022) reveals that at least five shacks in informal settlements burn down daily, and the lack of safe distances between dwellings exacerbates the outbreak of fires. For residents who purchase firewood, the expenses can sometimes exceed household income meant for food, education or transportation.

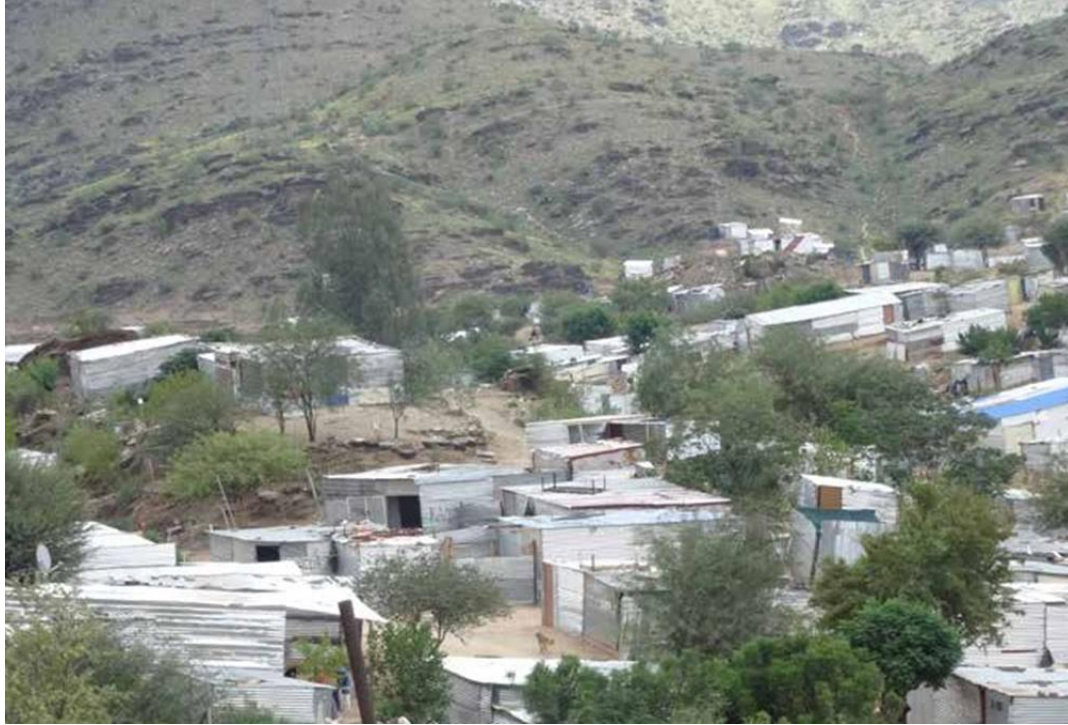
Regarding water access, the Dynamics report (2017) highlights the use of pre-paid meter systems, where households receive a pre-paid card that needs to be inserted into the meter for water dispensing. Users can recharge the cards with credit at designated points of sale in the settlements. Although this system ensures that households only pay for the water they consume, it has limitations. Notably, if a resident runs out of credit on the card, they will be unable to access water from the communal taps (Kasera, 2021). The cost of water at communal taps ranges from N\$8 to N\$9 per cubic millimetre (Kasera, 2021).

While the use of private and shared flush toilets has increased significantly, there are still approximately 60,000 urban households lacking access to any toilet facilities (Namibia Statistics Agency, 2021). The census results also reveal a doubling of the percentage of urban residents without toilets, from 24% in 2011 to 52% in 2021 (Namibia Statistics Agency, 2021). The lack of proper sanitation facilities has a significant negative impact on the safety and health of individuals residing in informal settlements. In the case of Havana Informal Settlement, the preference for dry toilets has become a health hazard due to poor construction, rendering the separation of faecal matter and urine impractical (Kasote, 2018).

#### **4.3.1 The downside of temporary housing materials**

Several houses in urban areas are constructed of either bricks or blocks (formal structures) or corrugated iron (informal structures). Additionally, a few homes are prefabricated or traditional structures.

Corrugated iron is cheap, and a simple shack can be erected within a day, and in case the shack has to be moved, the material can be used to erect a new structure in a different location as shown on Figure 4.1 below.



*Figure 4.1: Temporary housing material (Mendelsohn, 2019)*

Local authorities also tolerate corrugated iron in informal settlements, where the use of permanent construction materials for houses is often prohibited (Shaningwa, 2019). However, Seliger (2016) argues that many residents in informal settlements have the means to build with bricks if they were allowed to do so. Recent research reveals the broad range of monthly incomes in informal settlements, which in certain areas of Windhoek were found to range between N\$300 and N\$35,000, and up to three-quarters of heads of households had some sort of formal employment (Kasera, 2021). With the income presented by Seliger (2016) residents in informal settlements could invest in permanent housing structures, at least incrementally and over time. Residents of informal settlements in neighbouring countries with generally lower income levels than Namibia normally build with permanent building material (Mutyambizi, 2020).

The income presented by Seliger (2016) contradicts the AR Housing Charter (2015) which points out that ordinary Namibians cannot afford to build houses at their own pace through mass housing projects. However, Seliger's argument is supported by the City of Windhoek (2021) which upholds that although residents in informal settlements can afford formal housing, some of them regard informal settlements as temporary places to live in order to secure employment while they build or maintain good homes in the northern region of Namibia where most of them migrated from.

#### **4.4 Pressure on Windhoek's sewage infrastructure**

The expansion of Windhoek due to population growth, rural-urban migration and industrialization has substantially increased the demand for water. The increased demand is putting pressure on local water authorities and water planners to satisfy growing urban water demand. It is more challenging for developing arid countries such as Namibia. Water demand in Namibia has exceeded by 95% and it is expected to double by 2050 (Murray et al., 2018).

Satisfying growing water demand has necessitated the construction of additional costly water projects (City of Windhoek, 2021). Additionally, more projects mean policy makers should be financially as well as technically prepared which is not always the case (Arfvidsson et al., 2017).

The Gammams Water Treat Plant treats wastewater from central, eastern, and southern parts of the Windhoek and Otjomuise Water Treatment Plant treats wastewater from Otjomuise as well as surrounding suburbs as illustrated in Table 4.1 below.



*Table 4.1: The capacity of Windhoek’s sewage infrastructure (Nguyen, 2022)*

Wastewater treatment facility	Function
Gammams Water Care Works	Treating wastewater from central, eastern and southern parts of the city.
Otjomuise Water Treatment Plant	Processing wastewater from Otjomuise and surrounding suburbs.
Ujams Water Treatment Plant	Processing of industrial effluent.
Elisenheim Water Treatment Plant	Processing wastewater from Elisenheim, this is a private facility.
Goreangab Water Reclamation Plant	Processing wastewater into portable water for the City of Windhoek, the facility privately operated.

The City of Windhoek (2021) states that it is impossible to talk about sewage without talking about water, since sanitation is driven by water. Windhoek’s repeated experience of water scarcity proves that the City’s has inadequate capacity. Additionally, sewage treatment plants except Gammams have the capacity to cope with sewage infrastructure. This indicates a serious problem because Gammams is the main wastewater treatment plant which feeds into the Goreangab water reclamation plant.

In this regard, with the current number of erven connected to the sewage systems, Gammams is operating way above its limit (City of Windhoek, 2021). The plant is processing about 36 million cubic metres of wastewater per day, instead of its capacity of 28 million cubic metres per day (Nguyen, 2022). This exerts serious risks on public health as the city may end up supplying unclean and contaminated water to its residents if the number of houses connected to the current infrastructure continue to increase.

Most of the key informant interviewees interviewed by Nguyen in 2022 expressed that the current sewage infrastructure of Windhoek cannot cope with the sewage treatment needs of the city. Considering that most of the informal settlements are not connected to the conventional sewage grid, the planned mass housing project will only add to the already bad situation if the new developments are added to the existing sanitation infrastructure. Nguyen (2022) further argues that CoW does not have the human and financial resources to respond to accelerated growth due to rapid developments. The Ministry of Environment, Forestry and Tourism (2022) agrees that the current water infrastructure needs to be upgraded. The ministry further argues that the number of engineers is limited, and the city needs over N\$500 million to upgrade the current wastewater treatment plants (Ministry of Environment, Forestry and Tourism, 2022). The aforementioned factors are strong indications that the current sewage infrastructure cannot cope with the proliferation of informal settlements as well as sanitation needs of mass housing.

When sewage systems operate above their capacity, it can cause innumerable negative effects. One of the most significant effects is the potential for sewage overflow, which can occur when the system is overwhelmed and unable to handle the amount of waste it is receiving. Additionally, when sewage systems are operating above their limits, it can put additional strain on the system, leading to increased maintenance and repair costs.

Over time, this can lead to the system becoming less efficient and less effective to treat the waste.

Further impact can include:

- Increased risk of blockages and backups in the system.
- Increased risk of disease and illness, as untreated sewage can contain harmful bacteria and viruses.
- Poor water quality due to untreated sewage and wastewater being discharged into rivers and oceans.
- Reduced capacity for new development due to the limited capacity of the sewage system.

Overall, sewage systems operating above their limits can have serious and long-lasting negative effects on public health and the environment, and it is important to address these issues promptly to minimize the risks.

#### **4.5 Inadequate water supply**

Windhoek gets its water from NamWater, from the town's own aquifers and from recycled water. Currently, the CoW has no challenges with the quality of water as the recycling plant and other sources provide adequate water. However, there is fear over the adequacy of water if all residents and the intended mass housing projects are connected to the conventional grid (Mulvaney et al., 2020).

However, residents at Havana Informal Settlement have expressed the challenges they encounter in accessing water (Kasera, 2021). Most of them get water from one shared tap and they stand in long queues for water as shown on picture 2 below. Sometimes, after walking long distances from as early as 4am, they fail to fetch water due to malfunctioning access cards (Kasote, 2018).

Without adequate water supply, sanitation becomes a nightmare. Therefore, the researcher found that water as well as sanitation are intrinsically connected, and the two factors pose

a serious challenge in Havana Informal Settlement. On the other hand, the researcher discovered that informal settlement residents tend to be unenthusiastic when it comes to paying for water services as they are afraid of possible evictions.

That alone triggers some sense of insecurity from water service providers who should have some cost-recovery means to guarantee sustainability of the amenity. Brown-Luthango (2017) argues that if security of tenure could be secured informal settlement residents would gain confidence to pay for the services.

For the provision of water to be sustainable there must be an adoption of proper service planning strategies and approaches. There should be sustainable strategies which consider a wide array of factors that influence the efficacy of water provision in informal settlements. In the opinion of Banda and Mwale (2018), strategizing water provision entails consideration of demographic and service information such as, the current population, the number of households, the number of residential consumer units, the income related to these consumer units, current levels of water service, current and expected consumption, the demand for services in terms of the willingness to pay, population growth, economic growth, growth in number of consumer units, level of service provided to residential consumer units and changes in income levels of residential consumers.

Karuaihe and Wandschneider (2018), explain that 85% of the households in Havana Informal Settlement had access to water through Water Point Committees (WPC's). About 18% of the sampled households accessed water through prepaid meters. This implies that over 80% of the sampled households were serviced mainly with water and no other services were rendered. Comparing the results to the study by Brown-Luthango (2017), the researcher found that there is little or no progress in the type of services offered to informal settlements over time. This is an indication that the Windhoek City Council is only responding to an increase in demand, but the quality and type of services offered remain relatively the same as shown on Figure 4.2 below:



*Figure 4.2: Havana Informal Settlement in 2018 and 2021 (Karuiahe, 2018; Marufu, 2021)*

Communities in informal settlements in Windhoek access water through institutional arrangements, by a Water Point Committee (WPC). The role of the WPC is to collect monthly fees from residents, manage the communal water points and control access of members who belong to their Water Point Association (WPA).

The consensus was that all members support the institutional arrangement and its governance structure, despite some defaults on payments. The rules of governance also include agreement on how to handle surpluses or shortfalls in a particular month.

Findings show that the need for land ownership was more immediate and pressing compared to water access, which communities believed was a way to govern themselves towards land acquisition. The relationship between CoW and the WPC is quasi-formal and not legal or binding in any way. The CoW charges a flat rate per cubic meter (m<sup>3</sup>) for water in Havana Informal Settlement, with the first 6m<sup>3</sup> provided for free to households in informal

areas given their low-income levels. Moreover, the CoW argues that it has been supporting communities where possible, especially in guiding them with governance of the institutional arrangements, such as monthly meetings, record keeping and reporting (City of Windhoek, 2021). According to CoW, their staff has been assisting communities despite the lack of a proper enabling framework or policy, due to lack of the Urban and Regional Planning Bill, which was only enacted in December 2017 (Beukes, 2017; Weylandt, 2018).

The CoW has been blaming the central government on lack of policy, while government leaves the responsibility of service delivery to the CoW. Despite the back- and-forth regarding the different roles, land tenure formalisation is a requirement for communities to access private municipal services, where the CoW provides private municipal services to households and households pay their municipal bills to the CoW. But, in the case of informal settlements, communities use their own resources to ensure that the collective bill for communal water is paid by all members who access that water point.

The CoW finds this method more efficient and reliable than dealing with individual households (City of Windhoek, 2021).

Although the prepaid method system is efficient and reliable for the CoW, it has not been favourable for residents, and this emphasises the disconnection between enacted policies and concerns of residents in Havana Informal Settlement (Amutenya, 2020). Findings reveal that it is less costly and more convenient for the CoW to deal with the WPC than with individual households, who may fail to honour water payments given their low levels of income. Figure 4.3 below illustrates the prepaid water system.



*Figure 4.3: Prepaid Water System (Karuaihe & Wandschneider, 2018)*

The WPC approach is also efficient in ensuring that water payment is done on time, without council having to cut off households who fail to pay. It is in view of this that the researcher believes that the WPC performs the duty of the CoW. While there could be mutual benefits in this arrangement, such as the CoW acting as a banker for the urban poor; the WPC is carrying that burden of ensuring that monthly water fees are paid on time. In cases where the collected amount is greater than the monthly water bill (based on meter readings by CoW), the WPC pays all the money collected and keeps a surplus with CoW. According to the WPCs, having a surplus with CoW is more common than having a shortage for water payment.

This implies that communities entrust their money with the WPC, which in turn relies on trust from CoW instead of saving the extra money collected with banks to earn interest. The CoW uses the surplus payment from one month to cover any shortage in future months, where the bill exceeds the monthly contributions. In some cases, the extra funds collected are believed to be kept with the CoW as savings for securing land in future. While such arrangements may be working, the implications are that the CoW acts as the bank. The CoW has control over the bill as well as the allocation of the extra funds as it deems fit. This shows there is uneven power in decision making between communities and the CoW. Communities do the work of collecting the fees and managing the water points, but they have a limited say in the allocation of the money collected.

Unlike the WPC in rural communities where members are paid for work done, members of the urban WPC are volunteers and are not paid. In rural Namibia, as in some other parts of the developing world, power has been devolved to the regions, giving community institutions like the WPCs some formal recognition. However, in Windhoek and other major cities, the urban WPCs are self-organized and quasi-formal. Although they manage the water points like in the rural areas, they are not a formally recognized part of local governance.

The lack of community engagement in local governance can lead to negativity, for example:

- Inadequate representation: When community members are not engaged in the decision-making process, their needs and concerns may not be properly considered. This will lead to policies and programs that do not meet the needs of the community.
- Lack of trust and accountability: When community members feel disconnected from local governance, they are less likely to trust in the decisions that are being made. This can make it difficult for local officials to build trust and maintain accountability to the community.



- Poor communication and transparency: Without community engagement, it can be difficult for local government to effectively communicate with the community. This can lead to a misunderstanding of government policies.
- Lack of participation and ownership: Community engagement helps to foster a sense of ownership and participation in the community. Without this, community members feel less invested in the community and local government activities.
- Low voter turnout: Low voter turnout can be one of the consequences of lack of community engagement in local government. When residents are not engaged in the process, they are likely to vote.

#### **4.5.1 Unsafe water sources**

The scarcity of portable water, the unaffordability of municipal water cards, lack of awareness on the health implications and sometimes sheer ignorance among some of the residents in Havana Informal Settlement has led to residents using unsafe water sources (Nghaamwa, 2017).

Havana Informal Settlement is near the Goreangab Dam and according to Nghaamwa, 2017, tests show that the water is highly contaminated with organic substances hence unfit for human consumption. Nghaamwa also states that 11% of residents in Havana Informal Settlement collect water from the Goreangab Dam daily, 11% used it for drinking, whereas the majority used it for household activities such as cooking, bathing and washing dishes 65%, business activities such as construction 8%, fishing 5% and gardening 11%.

Those living closest to the river indicated that they use the water for domestic purposes, as it is close and free, making it more accessible than the communal taps. Figure 4.4 below shows one of the communal taps in Havana Informal Settlement.



*Figure 4.4: Residents fetching water from a communal tap near toilets (Kasera, 2022)*

Statistics presented by (Nghaamwa, 2017) show that households with a better financial status use municipal taps while poorer households rely heavily on Goreangab dam to meet some of their needs.

#### **4.5.2 Unsafe cooking fuels**

Residents in Havana Informal Settlement rely on wood as the main cooking fuel. According to the (Namibia Statistics Agency, 2021) 300 000 people living in Windhoek's informal settlements relied on wood for cooking.



*Figure 4.5: Residents fetching firewood as an alternative fuel source (Kasera, 2022)*

The lack of electricity as a basic amenity poses several risks such as:

**Environmental degradation:** The use of wood for cooking leads to deforestation and increased carbon emissions. This can have a negative impact on the local environment and contribute to global warming (Kasera, 2022).

**Health risks:** Burning wood for cooking produces smoke which is harmful to human health. This leads to respiratory problems, such as asthma, bronchitis, as well as other health issues like eye irritations and headaches (Kasera, 2022).

Safety hazards: Cooking with open fires is dangerous, especially in informal settlements where housing is often overcrowded and poorly constructed. Over the years, there have been accidents as well as deaths related to fires, putting residents at risk (Park, 2019).

Economic burden: Obtaining wood for cooking is time-consuming and costly for residents who already have limited resources. This can put a strain on household budgets and make it difficult for families to afford other necessities (Park, 2019).

#### **4.6 Impediments: Urban planning and provision of basic amenities**

The pursuit for development has been the primary focus for urban planning in informal settlements. However, it is not viable to connect a house to the waterborne sanitation grid if the occupant will not be able to pay for the water. Shaningwa (2019) established that the rocky topography of Windhoek is also a key determinant when planning the provision of basic amenities. Shaningwa (2019) further explains that the terrain of Windhoek requires professional knowledge for land to be properly serviced. In this regard, the way most residents have settled in informal settlements makes it impossible to service land. Additionally, the bulk of sewage transportation depends on gravity hence it is impractical for some areas to have access to the sewage grid (Dynamics, 2017).

It is apparent that water treatment and reticulation facilities are overburdened, and the upgrading of bulk infrastructure is long overdue. The government and CoW need to invest enough resources for the provision of basic amenities to formal and informal areas in Windhoek because informal settlements are here to stay. Affirmative Repositioning (2016) argues that the lack of basic amenities mirrors inequality and social stratification perpetuated by concentration of wealth in the hands of a few influential individuals.

As a result, politics and bureaucracy continuously impede CoW's progress (Affirmative Repositioning, 2016). Influential members of society benefit from a situation characterised by informality hence any effort to manage the population in informal settlements in relation to basic amenities is sabotaged (Affirmative Repositioning, 2016).

Provision of basic amenities is also negatively affected by the lack of an integrated model when it comes to urban planning. Houses cannot be built without the initial development of services. Affirmative Repositioning (2016) accuses local authorities such as CoW for lacking capacity and having inadequate qualified staff to service land. Their study concludes that the current infrastructure cannot cope with further expansion of housing and provision of land as envisaged by the government housing programme meaning it is impossible to integrate informal settlements into the existing grid (Affirmative Repositioning, 2016).

Wijesinghe (2019) views the lack of basic amenities differently. He argues that since the CoW or government cannot get money to build the so-called mass houses which cost around N\$500 000 per unit, they should service land, provide basic structure, a toilet and a shower as well as security of tenure. He insists that residents should be allowed to build at their own pace as the place will have value in the future.

However, Affirmative Repositioning (2016) argue that any mass housing project led by the government is a cash cow for some powerful politicians. Affirmative Repositioning (2016) further explains that ordinary Namibians cannot afford to fund mass housing projects. Linking mass housing projects and the issue of sanitation, the researcher believes that the lack of basic amenities will not be solved if housing programmes do not start concurrently with the development of sanitation facilities.

Residents in informal settlements also play a role when it comes to factors influencing the lack of sanitation and basic amenities.

Vandalism has been described as a common occurrence as some residents were accused of breaking as well as stealing communal taps and doors (The Namibian Sun, 2020) as shown on Figure 4.6 below.



*Figure 4.6: Vandalism of communal toilets (The Namibian Sun, 2020)*

#### **4.7 Social implications**

Inadequate service provision hinders the efforts of low-income populations to overcome vulnerability. The lack of basic sanitation among residents in informal settlements fuels feelings of dejection and a sense of not belonging. The unavailability of toilets, flush toilets to be specific, is widely viewed as an attack on human dignity and as the epitome of low social status or class (UN-HABITAT III, 2018).

In Havana Informal Settlement, social actors are not particularly intrigued with the perceived assault on their dignity (Kasote, 2018). Sharing toilets is not comfortable and the study done

by Kasote (2018) explains that the lack of individual household toilets forces the residents of Havana Informal Settlement to use the bush or riverbeds when shared toilets are overbooked which does not leave room for their dignified practices.

Moreover, residents at Havana Informal Settlement believe that poor hygiene and threat to public health undermine their human dignity (Kasote, 2020). In this regard, hygiene and public health are major concerns in Havana. The Namibia National Sanitation Strategy 2010-2015 supports the argument that sanitation has social implications and the lack of it is tantamount to lack of dignity (Ministry of Agriculture, Water and Forestry, 2015). The strategy document says that “improving safe excreta disposal and safe hygiene practices has a great health impact. Sanitation and hygiene are also more than just health and environmental protection, it brings additional benefits such as, social benefits, dignity, convenience, privacy, social prestige, security for women (women get assaulted when they go to the bush); increased school enrolment for girls...” (Ministry of Agriculture, Water and Forestry, 2015:12). The effects of overcrowding and congestion leads to lack of privacy with the possibility of abuse and assault within the informal settlement.





*Figure 4.7: Communal toilets in Havana Informal Settlement (Kasote, 2020)*



On the other hand, the CoW argues that currently there is not much that can be done about shared toilets illustrated in Figure 4.7 above, as the resources available will not meet the rapid population growth (City of Windhoek, 2021). CoW agrees that shared toilets are not as effective as individual toilets, but that is the best that the CoW can do in providing sanitation facilities that are connected to the conventional sewer network (City of Windhoek, 2021). There is no doubt that residents associate waterborne sanitation with dignity and superiority. Alternative systems such as VIP toilets, the Otji toilet or pit latrines are viewed as interim solutions or second choice. Some of the residents categorically rejected them while others accepted them, given that they do not require sharing with neighbours. City of Windhoek (2021) provides the policy platform for Windhoek residents, including those in informal settlements, to choose the type of sanitation they want. Communities should have the right to determine which water, sanitation solutions and basic service levels are acceptable to them within the boundaries of the national guidelines. However, Seliger (2016) argues that beneficiaries should also contribute towards the cost of the water and sanitation services they desire as residents in informal settlements are not always willing to do.

Without basic amenities, it can be difficult for residents of informal settlements to start and sustain businesses, which can limit economic opportunities and trap residents in poverty. Havana Informal Settlement lacks proper housing, drainage and lighting which is a safety and security risk for residents. Additionally, without access to basic amenities, residents in Havana Informal Settlement are more likely to experience stress and anxiety related to their living conditions. This can lead to poor mental health and well-being. Many accidental injuries are attributed to poor quality and overcrowded housing; accidental fire, burns, and scalds usually occur in informal structures as the use of flammable materials increases the risk of accidental fires. The material used to build informal housing is not strong enough and the structures can easily be affected by environmental conditions such as rain or wind.

## **4.8 Conclusion**

This chapter presented findings from secondary sources providing information as well as statistics regarding the provision of basic amenities in a socially, economically and environmentally sustainable manner. Social and economic factors were found to be the major determinants in the provision of basic amenities. The study found that the influx of migrants into Windhoek and unplanned settlement has put immense pressure on the provision of infrastructure, water and sanitation. Findings also show that the mass housing programme and the AR housing project are likely to add more pressure to the already struggling infrastructure.

## **CHAPTER 5: RECOMMENDATIONS AND CONCLUSION**

### **5.1 Introduction**

Chapter five summarizes the key findings and implications of the study. It emphasizes the importance of adopting a holistic and integrated approach that considers socio-economic, cultural, and physical factors when developing interventions to address the lack of basic amenities in informal settlements. The chapter also presents a set of comprehensive recommendations derived from the research. Drawing upon the findings and insights from the previous chapters, the objective is to provide practical guidance and actionable strategies for policymakers, urban planners, community organizations, and other stakeholders involved in addressing the lack of basic amenities in informal settlements.

### **5.2 Summary of findings**

When comparing the provision of basic amenities in apartheid and post-apartheid Windhoek, the study found that pre-independence, Windhoek did not have informal settlements as municipal regulations forced all inhabitants to live in serviced areas. With the fall of apartheid towards the end of the 1970s and Namibia's independence in 1990, freedom of movement led to the influx of migrants into Windhoek, exerting pressure on housing and this marked the genesis of informal settlements.

In post-apartheid Windhoek, there have been efforts to improve the provision of basic amenities in informal settlements. The government has implemented programs to provide access to water and sanitation. However, these efforts have not been successful as many residents in informal settlements still lack access to basic amenities.

The rapid growth of informal settlements has been identified as the biggest challenge to confront Namibian urban areas. The researcher believes that the main reason behind informal settlements expanding in such a disorderly manner is that the formal land supply system and market does not serve the needs of low-income Namibians. As a result, they have no option but to live in informal areas. The absence of tenure security also prohibits a large percentage of informal settlement residents from building permanent homes. However, Affirmative Repositioning (2016) argues that with proper urban planning, local authorities can provide low- cost housing solutions for low-income populations as some of the residents in informal settlements have stable sources of income.

Findings also show that despite the lack of basic amenities, residents in informal settlements would rather stay in shacks and not pay water or electricity bills so that they can use their income to renovate their rural homes. This is a common phenomenon in many developing countries, where people from rural areas migrate to urban areas in search of work but continue to maintain ties to their rural backgrounds. For migrants, their rural homes often serve as a source of social as well as cultural identity, and as a place to which they can return in the future. Additionally, many migrants may also see their rural homes as an investment for the future, with the goal of eventually returning upon retirement. In this regard, the fight for tenure security and provision of basic amenities is a complex issue as residents have different priorities and goals. Furthermore, there are some residents who may be satisfied with their current living conditions, or have become accustomed to living in informal settlements, and may not see the need to change the *status quo*.

The study outlined the characteristics of Havana Informal Settlement, which included population density, poor urban appearance, lack of basic amenities as well as social perversion. The lack of basic amenities in Havana Informal Settlement and surrounding informal areas affects the health, well-being, and quality of life of residents.

Havana Informal Settlement is characterized by overcrowding, inadequate infrastructure, and a lack of access to basic amenities such as clean water, sanitation, and electricity.

The researcher found that the main causes include lack of government investment and policies, inadequate infrastructure and planning, and lack of community engagement and participation. To address this problem, a comprehensive approach that includes policy changes, infrastructure development, and community engagement should be in place. The City of Windhoek must be intentional about investing in water and sanitation systems, providing access to electricity, and involving residents in the planning and implementation process. It is also important to continuously monitor the situation and adjust the plan accordingly to ensure it addresses the ever-changing needs of the population.

Regarding the capacity of the City of Windhoek's sewage infrastructure in sustaining both formal and informal areas, the CoW maintains that the sewage infrastructure cannot cope with the demand (City of Windhoek, 2021). The CoW argues that the Gammams sewage treatment plant is already operating beyond its capacity and the wastewater treatment ponds in Havana Informal Settlement are not permanent or sustainable as a solution to sanitation (City of Windhoek, 2021). The study established that any new housing project should be implemented concurrently with expanded sanitation and water service plans. Furthermore, mass houses must be built on serviced land and the overstretched sewage infrastructure needs to be upgraded in terms of capacity to meet the demands of an expanding city. While alternatives such as dry sanitation were suggested, the general impression was that they were not sustainable due to technical reasons.

The study revealed that overburdening water treatment and reticulation facilities comes with several shortcomings such as, inadequate water supply, water contamination, sanitation challenges, increased health risks, environmental impact and social disparities. Dismally, residents with limited financial resources will struggle to access alternative sources of clean water or invest in private sanitation facilities. This eventually creates social disparities,

where those who can afford basic services have better access to facilities, while the less privileged bear the burden of inadequate services.

The provision of basic amenities also depends on the user's ability to pay for the services. The study established that this has become a new form of discrimination that denies basic amenities to members of society apart from race. Currently, socio-economic and spatial factors have become contributing factors. The ability to pay reflects social stratification and disparity. Topography is also a crucial determinant in the capital's provision of basic amenities. Windhoek's terrain makes some places difficult to service and to connect to sanitation infrastructure at a reasonable cost. This is the case in some informal settlements that are not connected to the sanitation grid.

The study also revealed that residents in Havana Informal Settlement have limited to no access to electricity and they use alternative fuel sources such as wood. Access to electricity will not only reduce incidences of fire outbreaks but it will promote economic development in informal areas as residents will be able to engage in income-generating activities such as running small businesses and utilizing electrical appliances for productivity as well entrepreneurship.

Informal communities rely on the Water Point Committees (WPCs) to manage their funds, rather than depositing the surplus money collected into banks to earn interest (Affirmative Repositioning, 2016). The City of Windhoek is entrusted with these funds and uses them to cover any future shortages in instances where the monthly bill exceeds the contributions. It is believed that the CoW keeps the extra funds as savings for acquiring land in the future (Affirmative Repositioning, 2016). While this arrangement may be functioning, it implies that the CoW acts as a bank and has control over the allocation of funds as it sees fit (Affirmative Repositioning, 2016). This situation allows the CoW to take advantage of the lack of policies to accelerate the upgrading of informal settlements.

It becomes necessary for these informal structures to be formally recognized and incorporated into local government structures. The role played by the WPCs should be acknowledged and rewarded, and the formalization of community informal structures and self-selected institutional arrangements would foster better working relationships between the CoW and the community (Shaningwa, 2019).

With the implementation of the Urban and Regional Planning Bill of 2017, there is an opportunity for the CoW to expedite the upgrading of informal settlements and address the issue of land tenure, which hinders access to other basic amenities (Amutenya, 2020). Additionally, communities should establish land committees responsible for collecting voluntary monthly contributions for collective land acquisition. In some cases, the funds raised for purchasing land are saved in local banks. However, due to lack of appropriate policies, communities are unable to hold title deeds for the land.

The City of Windhoek can lease plots to individuals or groups who have raised enough money as collateral, rather than selling them for private ownership (Amutenya, 2020). As only a limited number of households can be relocated to upgraded areas, some individuals living in undeveloped areas may be relocated to other settlements based on their standing within the community. Those in good standing may qualify for relocation to upgraded settlements where they can lease plots through group savings or loans.

Residents that are not in good standing may be forcefully relocated to undeveloped areas identified by the council (Karuaihe & Wandschneider, 2018). This situation presents challenges as the WPCs are responsible for identifying households to be relocated. Forced relocation seems to be well understood by the communities, and residents are already aware of who is likely to be relocated. For individuals willing and able to purchase plots individually, the CoW can sell them plots in formal areas. However, this arrangement poses a cost burden for poorer residents to relocate to serviced areas. The current policy benefits the CoW and reduces the incentive for reform (Affirmative Repositioning, 2016).

It is unclear whether the lack of a coordinated approach by the central government is due to its inability to perform its function or the absence of adequate policies.

Meanwhile, the CoW relies on self-organized WPCs to administer various aspects of water delivery in informal settlements (Affirmative Repositioning, 2016). On the other hand, experiences from Shack Dwellers International (SDI) indicate that proactive community involvement yields better results than relying solely on the government (Shaningwa, 2019). The complex role of WPCs highlights the importance of community engagement. Bobek (2019) argues that it is necessary for authorities to understand the intricate social structures of informal settlements before implementing upgrading projects.

Addressing the lack of basic amenities is essential to restore human dignity in informal settlements. The study revealed that living without basic amenities can have a detrimental impact on the psychological and emotional well-being of individuals. Constant exposure to unsanitary conditions, lack of privacy, and limited access to essential resources can lead to stress, anxiety, and a diminished sense of self-worth. The absence of reliable water supply, electricity, and sanitation facilities hinders economic activities, including small businesses and entrepreneurship within informal settlements. Lack of access to basic amenities perpetuates poverty, limiting residents' ability to maintain a dignified livelihood.

Policymakers should also engage communities in the design of municipal services, ensuring community understanding and support for the management costs residents will incur (Bobek, 2019). Further scientific studies will also contribute to the debate on access to resources such as land and municipal services.

The researcher also discovered that policies are outdated due to failure by councillors to review and evaluate them with sufficient regularity. Therefore, new policies need to be implemented. The major challenge is that government appears to be ignoring important issues levelling them as minor or non-urgent whilst they are critical.



In other instances, the government does not encourage regular stakeholder engagement or meetings regarding the allocation of a budget towards the provision of basic amenities (Kasera, 2021). The researcher discovered that CoW is governed by various outdated laws and regulations. This makes it easier for illegal land occupation to occur without retribution.

### **5.3 Recommendations**

Based on the findings this study makes the following recommendations:

#### **1. Comprehensive infrastructure assessment**

The City of Windhoek needs to conduct a comprehensive infrastructure assessment to evaluate the current capacity of the infrastructure. This assessment should guide city planners to integrate new developments, for example, mass housing initiatives.

#### **2. Community engagement**

The Community Development Department needs to organize regular stakeholder meetings in informal settlements. These meetings should prioritize education on hygiene while also encourage community participation. The Community Development Department also needs to include educational programs and platforms to facilitate dialogue between the stakeholders.

#### **3. Demographic data collection for informed planning**

The Community Development Department needs to facilitate a comprehensive door-to-door survey to gather reliable demographic data on informal settlements. This data would help the City of Windhoek to formulate resource allocation strategies to enhance service delivery.

#### **4. Collaborative partnerships for holistic development**

It is important for the City of Windhoek to collaborate with the private sector, NGOs, and academic institutions for technical assistance and resource mobilization. Furthermore, the City needs to establish sustainable partnerships to support the provision of basic amenities in informal settlements. These partnerships should entail joint projects, knowledge sharing, and capacity-building initiatives, foster inclusiveness as well as sustainable urban development.

#### **5. Aligning policy and practice**

It is important for the state to enact a legislative framework which supports electrification, as well as accessible tariffs to enhance access thereto in informal settlements. Currently, the policy does not align with actual practice. The legislation process should involve energy regulators and stakeholders for policy reformation and restructure tariffs.

#### **5.4 Conclusion**

The development of Namibia's rapidly growing towns should be guided by principles of social inclusion, economic efficiency and environmental sustainability. Proper urban planning provides opportunities to create areas that are conducive to the economic and social needs of its residents. Migrants from impoverished rural areas need homes that provide them with confidence, basic amenities, security and long-term outlooks to be economically productive.

The study was conducted to explore: the reasons for lack of basic amenities in informal settlements with major focus on Havana Informal Settlement, the challenges faced by individuals living in informal settlements due to lack of basic service provision as well as the different approaches to urban planning that have been applied by local authorities. The study employed qualitative case study research methodology.

Document analysis, which included scrutinizing secondary data was conducted and themes as well as categories were created.

The study revealed that limited financial resources make it challenging for residents to access and afford adequate housing, clean water, sanitation facilities and electricity. Additionally, inadequate urban planning and land tenure restrict residents' access to basic amenities and infrastructure.

Rapid urbanization and population growth strain existing infrastructure and services as the rapid influx of residents surpasses the capacity of the City of Windhoek. Moreover, insufficient government intervention and investment in informal settlements play a major role in the uneven distribution of basic amenities.

In essence, the lack of basic amenities in informal settlements compromises the health and well-being of residents, leading to increased risks of waterborne diseases, inadequate sanitation practices, and environmental pollution. The absence of clean water, sanitation facilities, and electricity hinders educational opportunities, economic development, and social inclusion, perpetuating cycles of poverty and inequality. The lack of basic amenities also undermines human dignity and further exacerbates social disparities.

For informal settlements to benefit from urban planning policies, all policymakers should prioritise infrastructure development. From a technical perspective, the researcher found that the current infrastructure does not have the capacity to meet the demands of an ever-expanding Windhoek population. The study established that the community needs to be actively involved in alternative sanitation projects so that they own future projects. By involving residents in decision-making processes, the City of Windhoek can tap into their local knowledge, expertise, and cultural practices. Moreover, the study recommended the City of Windhoek to look for benchmarking partners in the provision of basic amenities.

Informal settlements often consist of diverse communities with distinct cultural backgrounds. Ignoring cultural factors may lead to the marginalization of certain groups or the imposition of solutions that are incompatible with their way of life. This study proves that addressing the lack of basic amenities in informal settlements requires a multi-dimensional approach. Solely focusing on physical factors, such as infrastructure or housing, may neglect the underlying socio-economic challenges that perpetuate informal settlements.

By considering socio-economic and cultural factors, municipalities can develop integrated strategies that combine physical improvements with social and economic interventions, leading to more comprehensive solutions. There is a dire need for the CoW to incorporate a Research and Development department that will evaluate the efficiency as well as social, economic, and environmental sustainability of service delivery in informal settlements. The Research and Development department will also foster a culture of innovation and continuous improvement. Through research and experimentation, the department will be able to identify new approaches, technologies, and best practices that can enhance service delivery, optimize resource utilization, and address emerging challenges.

Considering the findings, it can be concluded that the CoW is faced with serious institutional challenges which hinder the effective delivery of basic amenities. Governance challenges such as political interference within the administration is one of the critical aspects that must be addressed. The CoW tends to spend too much of their time interfering in the affairs of the administration which leads to poor service delivery. A sustainable payment system must also be established to improve the municipality's revenue.

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