

Legislation and Policies for the City of Windhoek to Carry on With Water and Sanitation Service Delivery in Havana Informal Settlement

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ABSTRACT

National and local policies are formulated to ensure the provision of sustainable service delivery. The City of Windhoek is legislatively required to deliver basic services to the community. This paper examines the process of formulation and implementation of national drinking water and sanitation policies in Namibia. The study used a cross-sectional qualitative survey of the people living in Havana informal settlements and a selection of city council members. The study reveals that although the local authority is making efforts to improve basic services, lack of funds, lower income, high density of population, unplanned migration, and lack of community participation and awareness are major challenges. Nonavailability of serviced land and lack of effective policies and legislations and poor implementation are barriers to proper service delivery. The study recommends that policies that can protect the water resources from pollution should be enforced such as the 'polluter pays principle' and regular water quality monitoring on all proposed projects should be implemented.

KEYWORDS

Drinking Water, Informal Settlement, Legislation, Local Authority, Policy, Sanitation, Sustainable Human Settlement, Urbanisation

Namibia is one of the driest countries in sub-Saharan Africa. Less than 5% of the country is arable due to the low, erratic rainfall and scarce ground and surface water. Fresh water scarcity thus remains a major environmental challenge in Namibia. Although the National Development Plan (NDP) target of providing 95% of the population with sustainable access to safe water has been reached, sound water management ensuring social, economic and environmental benefits remains high on the agenda (MRLHRD, 2008). Scarce water resources must be shared between the growing population, an increasing number of livestock and crops, and an expanding industrial sector. Water supply is a

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major challenge in Namibia, especially in the rural areas. The water supply infrastructure has to be maintained, facilities have to be managed, and fees should be collected in order to organise water supply. In this sense, appropriate policies, legislations, and regulations are of great significance (Hanson, 2007).

Since Namibia's independence in 1990, the country has preserved water instead of sanitation as a constitutional right. Moreover, with the aim of promoting health, the United Nations has implemented safe drinking water and sanitation as a legally binding resolution. The main concern is whether these rights are achievable in developing countries such as Namibia that have an ever-increasing population with an economy that is not strong (UNICEF, 2010). According to Namibian Statistics Agency (2001) there are no reliable statistics and acceptable sanitation definitions, but it is important that individual mindsets are changed to find solutions to the current sanitation problems and establish a better human rights approach, as it requires public participation, governance, social science management, and the private sector for sustainability. Safe water supply and improved sanitation constitutes an important component of water sector governance.

The existing challenges related to limited coverage and inadequate access to water and sanitation facilities clearly highlight the need for policy reforms in this area. Additionally, the international development organizations' emphasis on achieving Sustainable Development Goal (SDG) 6, which aims to provide accessible and sustainable water and sanitation services for everyone, has increased the pressure on national governments to implement appropriate policy changes to meet these targets. This has been highlighted by Saleth and Dinar (2005). The Sustainable Development Goal (SDG) would require Namibia to halve, by 2030, the proportion of people without access to safe drinking water and basic sanitation. The government claims that Namibia could achieve complete access to water and sanitation in the next decade or so in urban and rural areas if sufficient funding is made available. Since fresh water is essential for water supply and sanitation, an examination of the fresh water situation in Namibia is required. Fresh water availability is uneven across Namibia, and huge disparities exist, from basin to basin, region to region, and in many cases, even within the capital city (Heyns, 2005).

PROBLEM STATEMENT

The formulation of service delivery policies in any local authority is crucial in ensuring the provision of sustainable services and to guide basic service delivery. The City of Windhoek has faced several institutional and community challenges which has made it difficult for the local authority to provide these services and ensure that the delivery of services is carried out in an equitable and sustainable manner. Challenges such as debts owed by community members and businesses have negatively impacted the City of Windhoek's ability to provide services, as these individuals and businesses are reluctant to pay and others cannot afford to pay. Communities further vandalise public property to voice their dissatisfaction with the local authority which puts the City of Windhoek in a difficult position to constantly replace damaged public properties. Although the local authority is faced with the mentioned challenges, it is legislatively required to deliver basic services to communities. Hence, it is important to understand what these challenges are and to make recommendations regarding the legislation and policies to make it suitable for the City of Windhoek to carry on with its mandate of clean water and sanitation service delivery.

OBJECTIVES

1. To explore the course of formulation of drinking water and sanitation policies
2. To establish operational challenges faced by the City of Windhoek in delivering clean water and sanitation services

LITERATURE REVIEW

The City of Windhoek Institutional Service Delivery

Access to safe water and sanitation is a human right as declared by the United Nations. In carrying out their humanitarian mandate to alleviate and improve the conditions of the vulnerable populations of the world, both in ordinary times as well as in emergencies, the International Federation of Red Cross, local authorities, individuals, and societies are increasingly involved in the provision of water and sanitation services as part of the overall health and care interventions (UNICEF, 2010).

Articles 102 and 111 of the Namibian Constitution empowers the parliament to enact legislation relating to local authorities. Furthermore, Article 102 (3) of the Constitution states that every organ of the regional and local government shall have a Council as the principal governing body, freely elected in accordance with the Constitution and the Act of Parliament referred to in 13 Sub-Article (91) hereof, with an executive and an administration which shall carry out all lawful resolutions and policies of such Council subject to the Constitution and any other relevant Laws (Republic of Namibia, 2000).

Furthermore, the Local Authorities Act (Act No. 23 of 1992), as amended, provides for three types of local authorities, namely municipal councils, town councils, and village councils. It is at those local institutions that economic opportunities are identified and harnessed using local economic development strategies. Local authorities are the third tier of government, and their powers, duties, and obligations are set out in detail under Section 30 of the Local Authority Act. The main function of a local authority is service delivery; that is, provision of water to maintain and operate a sewerage system, the provision of streets and public places, and the supply of electricity, and thereby the development of the respective towns.

The Local Authority is also responsible for all major borehole repairs. Communities must contact the municipality, and responses to calls of this nature typically take a minimum of one month. As such, communities in need of repair often go without adequate water supply for extended periods. Mitullah (2008) states that while the City of Windhoek municipality has rehabilitated some boreholes, these facilities are not regularly maintained. The water they provide is not treated, nor is the quality monitored. The Department of Infrastructure, Water, and Technical Services manages the water supply of informal settlements.

NamWater's policy mission regarding water quality is to ensure continuous functionality of all the water sources throughout the country. Communities appoint one member to be a caretaker to facilitate borehole maintenance. This caretaker is responsible for minor repairs, and the municipality is obligated to provide training to these individuals. However, an educational gap has developed. Often, community members with proper training as caretakers move and new residents do not receive formal training or instruction. The major challenge in many rural communities is the pollution of the water supply. These isolated communities rely heavily on groundwater as their primary water source. Recent fieldwork identified that livestock and community impacts are the cause of pollution (Simataa, 2010).

Moreover, community involvement is critical in establishing feasible water and sanitation management policies. Isolation poses many problems for the communities and limits many potential solutions. Basic services such as transportation, water, communication, and electricity are severely limited in these communities (Okpala, 2009).

Haindongo (2017) state that the City of Windhoek, like other municipalities and town councils in Namibia, has also developed its Local Economic Development (LED) Strategy which aims to align the City of Windhoek's objectives and projects with those of the national government as indicated in Vision 2030. In general, LED aims to build up the economic capacity of local authorities to improve their economic future and the quality of life for all. It offers the local government, private and non-governmental organisations, and local communities the opportunities to work together to improve the local economy (MRLHRD, 2011).

Despite these efforts and strategies, Haindongo (2017) further states that the role of various stakeholders in enhancing LED to address socio-economic challenges in the City of Windhoek

seems not to be well defined. In fact, issues such as housing affordability (and, to some extent, homelessness), financial, and capacity-related challenges are visible. It is also clear that the local government, as the sphere of government closest to communities, has several institutional challenges. Among others, the challenges include the shortage of critical skills, weak governance arrangements, as well as administrative and political dynamics that affect the council adversely. In some cases, such limitations can lead to a point where councils are unable to perform their constitutional duties as expected, including the delivery of basic social and economic infrastructure (Haingongo, 2017).

Partnerships, according to Urban Trust of Namibia (2007), is the major principle upon which Vision 2030 is based and is recognised as a major prerequisite for the achievement of dynamic, efficient, and sustainable development. This involves a partnership between the government, communities, and civil society; a partnership between different branches of government, with the private sector, non-governmental organisations, community-based organisations, and the international community; and a partnership between urban and rural societies, and ultimately between all members of the Namibian society.

Developing local partnerships will enable municipalities to achieve resources much more locally and at the same time to identify and leverage additional resources for development. Municipal partnerships seek to develop a link between various local role players and stakeholders that have an interest in LED to ensure that the process is successful and sustainable (Urban Trust of Namibia, 2007).

Swinburn and Tijmstra (2006) point out that residents must be fully involved in the local development process if a successful LED is to be implemented. This is because the above mentioned will legitimise the process and de-politicise LED projects and ensure long term sustainability. Therefore, a practical developmental agenda must be adopted by the community. The agenda must focus on realistic and sustainable goals, long term plans, and small, visible achievements by involving people; this is key to empowerment.

Swinburn and Tijmstra (2006) argue that the private sector/businesses have a key role to play in LED, as they can increase the understanding of the local economy. They have a deeper knowledge of local economic issues and are likely to be more informed about local problems and opportunities that can be addressed by the LED strategy. Swinburn and Tijmstra (2006) further recognise the importance of cooperating with the government and civil society. Civil society should organise itself to participate appropriately in building the economy by cooperating with the government to create a favourable climate for investment.

Policy and Legislative Framework

The Water Supply and Sanitation Policy (WSASP) of 2008 is the main policy regarding water use and conservation in Namibia. This policy replaces the National Water Policy of 1992. Its principles are in line with the Integrated Water Resources Management plan, which include a strong focus on water demand management. Generally, it aims at ensuring equitable access to water resources sufficient to maintain life, health, and productive activities of citizens (MRLHRD, 2006). It further emphasises that under this policy, the government is the custodian of all water resources and has the right to control all water use and disposal. Integrated supply and demand planning is required in both the short and long term.

According to Wienecke et al. (2017), ecosystem values and sustainability is included in the national water policy, which states that water resources management must complement the human consumption requirements. Wienecke et al. (2017) further states that strategies put in place to safeguard environmental and cost-effective sustainability are to “ensure that in-stream flows are adequate both in terms of quality and quantity to sustain the ecosystem” (p.). WSASP (2008) stipulates that “the legislation provide for determining an environmental water reserve for clean water sources before it can be used to supply other demands such as domestic and subsistence” (p.). Although the new Water Act does not mention the environmental flows, it is important for legislation to stipulate the extent to which it will be adjusted within the Namibian policies, development plans, and the legislation.

Wheaton (2009) states that in 2002, a National Water Policy White Paper that formed the basis for the Water Resources Management Act was approved by the national government of Namibia. The policy provides a framework for equitable, efficient, and sustainable water resources management and water services. It clearly states that water is an essential resource to life and that an adequate supply of safe drinking water is a basic human need. The policy makes it clear that water concerns extend beyond human needs for health and survival, also recognising that water is essential to maintain natural ecosystems and that in a country as dry as Namibia, all social and economic activity depends on healthy aquatic ecosystems.

Wheaton (2009) further states that the National Water Policy includes a basic principle titled “ecosystem values and sustainability,” which stresses that the management of water resources needs to harmonise human and environmental requirements, recognising the role of water in supporting the ecosystem. One of the strategies provided to ensure environmental and economic sustainability is to confirm that in-stream flows are adequate both in terms of quality and quantity to sustain the ecosystem.

Precautionary environmental protection stipulates that the resource base shall be protected against any kind of contamination or pollution that would render any part of it unfit for beneficial human, economic, and environmental purposes applying the precautionary principle. Environmental considerations in decision making, the need to protect the environment in general, and the aquatic ecosystems in particular, including their biodiversity and the nation’s wetlands, will be factored into the allocation of water resources for use and will include the prior assessment of the environmental impacts of proposed water uses.

The totality of the principles found in Namibia’s policy framework for water resource management satisfies the criteria for sustainable use of shared watercourse systems and principles found in international law instruments that Namibia is party to and provides sound guidelines for future legislation and regulations (MRLHRD, 2011).

The fundamental principles utilized in Namibia’s National Water Policy, which serve as a framework for the development of water-related policies, have been adapted for the Wetlands Policy. This adaptation aims to complement existing national policy instruments that promote sustainable development and effective management of natural resources. It also aligns with Namibia’s commitments as a signatory to various international agreements and conventions, including the SADC Protocol on Shared Watercourse Systems, NEPAD, regional water commissions on shared river courses, the Ramsar Convention, the UNCBD, the UNCCD, and the UNFCCC.

The Water Resources Management Act

The 2004 Act was based on the National Water Policy and provided for the management, development, protection, conservation, and use of water resources. The Act introduced equitable access to water resources for all population groups in Namibia. It provided an integrated, enabling legislative framework to provide water services and manage Namibian water resources. The objective of the Act was to ensure that Namibia’s water resources are managed, developed, protected, conserved, and used in ways that are consistent with or conducive to certain fundamental principles set out in section 3 of the Act.

The Act has been approved and published in the Government Gazette; however, it has never come into force. Instead, it has been amended to consider certain practical aspects of its implementation and was repealed as a whole by the Water Resources Management Act No. 11 of 2013 for the purpose of comparison.

The Act provided for the establishment of Water Point User Associations at the community level, consisting of those rural community members who permanently use a water point. Their functions were to operate and maintain the water point in question and to make decisions about water use regulations. The Act provided for a Water Point Committee to monitor and enforce compliance with such regulations and for the establishment of a Water Resources Management Agency as well as a Basin Management Committee to manage water resources sustainably.

In part three, the Act provides for the establishment of a Water Advisory Council to advise the minister on issues such as water policy development and review' water resources management' and water abstraction and use. The Water Advisory Council is established upon nomination and "consists of 11 members who are persons with extensive knowledge and experience in water resource management and from authorities or institutions responsible for or involved in water supply or water management" (source, pg.).

Furthermore, a water regulator consisting of five members is to be established under the Act to determine the tariffs of fees and charges that may be levied by a water services provider or that are payable by licenced holders for the abstraction of water or the discharge of effluent or the supply or reuse of effluent. The water regulator also performs other functions with regard to water service providers, which have to be licenced according to the provisions in part ten of the Act.

Since 1990, the government has recognised the crucial role of sustainable management. The policy and legislative framework for the water sector has not changed significantly since the Water Act of 1956, except for the recent commercialisation of bulk water supply. Virtually the only legislation referring to sustainable water use at present is the Namibian Water Corporation Act of 1997, which requires that water is used sustainably, with exceptions requiring specific Ministerial approval and publication in the Government Gazette (Heyns, 2005).

NamWater, a government parastatal (responsible for bulk water supply) that began operating in March 1998, aims to put water supply on a commercial footing and to ensure that water use is sustainable. In the past, there has been a strong supply orientation which has been reinforced by extensive subsidies. NamWater aims for full historic cost recovery within five years, both as a policy and within the powers given to it by the Act. It will also have to be financially viable in such a way as to be able to raise money for future investments in water infrastructure.

Senyakoe (2011) states that due to the absence of programmes implementing the sanitation policy in the past and insufficient sanitation facilities in rural and informal settlements, residents are compelled to defecate in the "bush," as there are no alternatives. The result of this action has caused contamination of veld, and water sources such as wells, ponds, and the Oshanas (ill-defined stream channels in northern Namibia). These water sources are also used for fishing, swimming, and as a source for domestic consumption for households and livestock.

Contamination could lead to the possible spread of diseases, although no research in Namibia is available to either prove or disprove this. The government has acknowledged the need for both rural and urban strategies to address the water sanitation problem in Namibia. Hence, the latter is used to understand and provide explanations for the differences between the Acts and Regulations of water and sanitation.

Lack of Institutional Legislation Challenges and Suitable Legislations

The challenges include, among others, the shortage of critical skills, weak governance arrangements, and administrative and political dynamics that affect the council adversely. In some cases, such limitations can lead to a point where councils are unable to perform their constitutional duties as expected, including the delivery of basic social and economic infrastructure (Haindongo, 2017). Policy is needed to improve current performance in the short run, and to create incentives to strengthen the overall institutional context in the longer run. The Namibia Housing Action Group (2008) states that at the highest level, a thorough review and overhaul of sanitation and hygiene promotion policy has been rare. The World Health Organisation (2013) similarly found that many African countries including Namibia do not include hygienic practices in their definition of access to "improved sanitation," an indicator that policies are not yet dealing with hygiene improvement.

Studies in the water sector describe policy changes with regard to water resources to bring out water institutional reforms as largely "a response to the emerging crisis in water resource development, allocation and management" (Saleth & Dinar, 2005, p.). The crisis has partly arisen because of the

failure of the existing institutional arrangements to cope with the emerging situations of water scarcity and the increased demand for both quantity and quality of water.

Often factors outside the purview of the water sector, such as population pressure, economic development, economic and political reforms, etc., have all contributed to the crisis in the water governance, resulting in greater pressure for inducing institutional reforms in the water sector. UNPFA (2007) stated that a new urban development policy that engages with urban governance, community participation, and decentralisation is required. This would involve reviewing all policies that relate to health and housing in order to determine whether they address the needs of all urban residents and are equity promoting.

Importantly, their effective implementation must be monitored and action taken by local government to address the challenges. National government is addressing the challenges that poor urban migrant groups experience in their ability to claim their rights to health care and housing. The State of the World's Cities Report (2001) states that further policy development needs to be based on a good understanding of the basic situation (population, coverage, investments, health status and institutional contexts, including the performance of service providers), how people are currently accessing services' what works (even on the small scale locally), and what has potential to be scaled up. Importantly, there is no point in developing policies that are beyond the capacity of the current institutional setup.

Mwanyengange (2014) noted that future research should implement a pilot project to evaluate the effectiveness of the application of "concept mapping" to assist local level urban health policy makers and planners in developing an "urban health plan" to respond to the interlinked challenges of migration and informal settlements in a context of service delivery. Decision makers are urged to consider the policy framework and the legislation put in place to improve service delivery. This policy framework and the legislation applies to local authorities in Namibia in order to improve upon service delivery using the public/private partnership.

Different legislations and policy frameworks should be examined depending on the service rendered before they can be considered. Water sector reform should be an ongoing process. Policy development is a dynamic activity that needs to take into account changes in society and technology. The development of policy needs to follow through into a review of current legislation and institutional arrangements if the policy is to be implemented.

There is an apparent need to review the policies and regulations on the construction of informal dwellings. Policies that can protect the water resources from pollution by enforcing the "polluter pays principle" and regular water quality monitoring on all proposed projects should be implemented.

Swinburn and Tijmstra (2006) point out that residents must be fully involved in the local development process if a successful LED is to be implemented. This is because the above mentioned will legitimise the process and de-politicise LED projects and ensure long term sustainability. Therefore, a practical developmental agenda must be adopted by the community. The agenda must focus on realistic and sustainable goals, long term plans, and small, visible achievements by involving people; this is key to empowerment. According to Thompson (2006), the challenge of delivering water and sanitation to low-income communities requires a collaborative approach that draws on the knowledge and experience of cities, communities, governments, the formal and informal private sectors, and external support agencies. The key to a successful strategy lies in the capacity of practitioners working in the water and sanitation sector to innovate and adapt solutions to address local constraints and opportunities.

METHODOLOGY

The study used a qualitative research method approach and took on a case study of the City of Windhoek. The study was conducted as a cross-sectional survey of the people living in Havana informal

settlements; thus, the sample was drawn from the Havana informal settlement residents and the City of Windhoek officials. The reason for the Havana informal settlement was to gain an understanding of the community regarding the problem. The City of Windhoek officials are responsible for policy formulation and implementation and therefore provided a different perspective to the problem. According to the Shack Dwellers Federation (2019), Havana informal settlement has an estimated total number of 13,800 shacks accommodating a population of about 50,000 permanent residents. Creswell (2014) states that on conducting a qualitative study, a sample size of 10–50 respondents on qualitative interviews and 30–50 on open-ended questionnaires is sufficient for data analysis. Thus, the study used 15 respondents for interviews and 30 for open-ended questionnaires. Given the COVID 19 pandemic, data was collected online through sending questionnaires via email and through telephone interviews for municipal officials. Formal ethical clearance was applied for in terms of the University of Western Cape’s research ethical clearance policy.

FINDINGS

This section covers the respondents’ deliberations on the City of Windhoek municipality council in providing water and sanitation services to the informal settlements.

What Are the Policy Challenges Affecting Water and Sanitation Service Delivery?

80% percent of the respondents indicated that indeed the City of Windhoek municipality is facing challenges when it comes to policy reviews, mostly due to the lack of time and expertise. The respondents indicated that the city embarked upon a few policy reviews to ensure policy relevance and that quality service is delivered. 20% of the respondents seemed to be unaware of the current policies and the policy reviews, which is a signal of either ignorance or that policy reviews are not taking place in a transparent manner.

Does the National Government Involve the City of Windhoek During Water and Sanitation Policy Reviews?

70% respondents stated that the national government involves the municipality during water and sanitation policy reviews because the municipality has a bigger role to play in the review and subsequent implementation of these policies. The government works in collaboration with the City of Windhoek officials, but the challenge is that the officials complain that they do not have adequate time to address all the issues and to provide a comprehensive report.

The City of Windhoek officials raised the issue of political influence in the administration as a major frustration in policy formulation and review. The technically “unqualified” councillors feel they have been voted in and are the people’s representatives and therefore have the right to interfere in the administration. 30% of the respondents in the top management argued that the government has a tendency to ignore other important issues levelling them as pertinent while they are critical, and they are overlooked in policy. In other cases, the government does not encourage stakeholder engagement, provision for budget, and subsidised infrastructure.

What Are the Problems Hampering Quality Service Delivery in Your Local Municipality?

50% of the respondents indicated that the Havana Informal Settlement is increasing at an alarming rate and the demand by far exceeds the pace of delivery. 20% of the respondents indicated that the lack of education contributes to the vandalism and unhygienic situation of the Havana Informal Settlement because residents are not knowledgeable about the challenges faced by the City of Windhoek. While the city is trying to improve sanitation and cleanliness within the informal settlement, people tend to just throw rubbish on the road and around the settlement instead of throwing it in the waste bins.

This will later contribute to the breeding of mosquitos, which leads to malaria and other critical environmental hazards such as Hepatitis E. The remaining 30% of the respondents indicated that the lack of enforcement of municipal by-laws and the lengthy planning process are major challenges.

What Are Your Suggestions on Improving the Service Delivery of Water and Sanitation?

The respondents made several suggestions on how to improve service delivery. 30% of the respondents indicated that government should periodically review the regulations on water, waste, and sanitation. Another 30% of the respondents aired the same sentiments but highlighted the requirements to review the policy on the building of shacks in informal settlements. 20% of the respondents stated that currently, the law on water is that people should not use rainwater for cooking, drinking, and other activities whilst the same respondents feel that the rainwater has no harm, and it can be used for household activities provided that it is boiled. The remaining 20% of the respondents said that regulations must be set up to determine whether to work from the premises of total elimination of shacks or just to reduce them to make them safer and habitable. Suitable building materials for shacks as well as standards for shack construction taking into account health, safety, and security concerns need to be put into consideration by the local authorities.

Challenges Facing the Municipality Council in the Provision of Safe Drinking Water and Sanitation Services

30% of the respondents stated that the lack of financial resources and inconsistency when it comes to the national budget and stakeholder contributions add to the lack of safe drinking water and proper sanitation within the informal settlements. 20% of the respondents voiced that the number of informal settlements keeps increasing, making it difficult for the municipality to cope and provide the necessary services. Another 20% of the respondents further stated that the lack of cooperation from community members is a major challenge because the residents tend to vandalise infrastructures such as community toilets, pipes, and taps. An additional 20% of the respondents continued to stress that the residents of the informal settlement tend to occupy un-serviced land illegally, making it difficult to provide water and electricity to those areas. The remaining 10% of the respondents indicated that informal settlement residents are not paying their water rates, leaving the municipality with no choice but to terminate their water supply.

What Strategies Are Used to Address Water and Sanitation Problems?

20% of the respondents indicated that there are ongoing cleaning campaigns, and settlers are regularly educated on how to handle water and sanitation facilities. 10% of the respondents stated that the municipality has plans to recycle the Gammams Wastewater Treatment Plant, which is responsible for treating domestic and some industrial wastewater. There are also plans in place with WINCOR, which is a German private company working hand in hand with the municipality to purify water in informal settlements. Another 10% of the respondents expressed that the municipality has received R 150,000 to build more toilets for informal settlements. Currently, 25 toilets have been completed, which the residents are not happy with. 30% of the respondents stressed that the municipality needs more public partnership agreements and a specialised advisory committee that can assist to address such problems. 20% of the respondents further mentioned that the municipality needs to formalise informal settlements and relocate the settlers to proper residential places. The policies need to be reviewed to tackle the problems at hand. Finally, 10% of the respondents stated that informal settlers should probably have a formal lease agreement in place for the area that they occupy.

Are the Water and Sanitation Policies Reviewed Regularly?

100% of the respondents indicated that policies are reviewed after five years or sometimes when the need arises. Even though policies can be reviewed at those times, respondents further stressed that

they do not have time to regularly review policies, or the meetings do not have adequate time to tackle all the problems and community work that they have to attend to.

Are There Any Monitoring and Evaluation Policy Systems in Place?

According to the survey, 60% of the participants reported that the City of Windhoek effectively hires personnel responsible for monitoring and evaluating policies to ensure their continued effectiveness. On the other hand, 40% of the respondents revealed that there are no additional systems in place beyond the municipality's employed officials. In these cases, the municipality relies on on-site results and observations from the community, as reported by the municipality employees, to assess the effectiveness of current policies. This information is then used by councillors and community leaders to evaluate policy outcomes.

CONCLUSIONS AND RECOMMENDATIONS

Since the inception of Havana informal settlement, people have resided in the location without adequate sanitation. There were no monitoring mechanisms to ensure that the residents of the Havana informal settlement adhere to the unique housing standards that can incorporate sanitation facilities.

Policies are outdated due to failure by councillors to review and evaluate these with sufficient regularity. Therefore, new policies need to be implemented: those that will tackle informal settlement issues as situations in the informal settlements keep changing, and policies need to be in place to confront current emerging issues.

The government appears to be ignoring important issues, labelling them as minor or non-urgent, whilst these are critical and pertinent. These issues are overlooked and remain unaddressed in policies. In other instances, the government does not encourage regular stakeholder engagement or the budget provision and subsidised infrastructure relating to sanitation.

The study established that the City of Windhoek municipality is governed by various outdated laws and regulations. This makes it easier for illegal land grabs to occur due to the lack of regulations and the enforcement of some municipal by-laws, which also create unnecessary lengthy planning processes.

Poor infrastructural facilities have resulted in degradation of both environment and the quality of life. The socio-economic and built-up environment is very much deprived. The housing and sanitation conditions in Namibia are far from the recommendations of the World Health Organisation, United Nations Sustainability Goals etc., for a developing country where infrastructural facilities need rapid growth. This is also seen in numerous parts of the country where a large migration of people is taking place. If priority is given to suitable legislation and policy implementation on water and sanitation in these areas, the quality of human life in urban areas may be improved.

There is an apparent need to review the policies and regulations on the construction of informal dwellings, which must be initiated to determine the total elimination of the dwellings or to make these safer and habitable in accordance with the United Nations Sustainability Goals, in particular, goal six regarding clean water and sanitation.

REFERENCES

- City of Windhoek. (2008). State of Environment Report. Volume 1. Baseline Report. City of Windhoek.
- City of Windhoek. (2015). The local economic development 2010-2015. Author.
- Creswell, J. W. (1994). Research design. Qualitative and quantitative approaches. *Sage (Atlanta, Ga.)*.
- Creswell, J. W. (2014). Research design. Qualitative and quantitative approaches. *Sage (Atlanta, Ga.)*.
- Haindongo, M. (2017). Current service delivery challenges for municipalities with regard to Water management. *Civil Engineering (New York, N.Y.)*, 41–42.
- Hanson, J. (2007). *Understanding slums: Case studies for the global report on human settlements, 2003 – The Case of Nairobi, Kenya*. UNHABITAT.
- Heyns, P. (2005). Water institutional reforms in Namibia. *Water Policy*, 7(1), 89–106. doi:10.2166/wp.2005.0006
- Mitullah, W. (2008). Understanding slums: Case studies for the global report on human. *International Transaction Journal Engineering, Management & Applied Sciences Technologies*, 2(2), 197–213.
- Mwanyekange, E. P. (2014). *An exploratory study of the role of the Shack Dwellers Federation of Namibia's (SDFN) saving schemes in housing development: A case study of Havana and Okahandja Park informal settlements in Windhoek* [Unpublished doctoral dissertation]. University of Namibia, Windhoek, Namibia.
- Namibian Statistics Agency. (2001). *Annual Report*. Windhoek: Namibian Statistics Agency. <http://www.nsa.org.na>
- Namwater. (2019). *Fighting the effects of drought. Namibia*. <http://www.namwater.com.na>
- Okpala, D. C. I. (2009). Financing housing in developing countries and potentials: A review of the pitfalls and potentials in the development of formal housing finance systems. *Urban Studies (Edinburgh, Scotland)*, 31(9), 1571–1586. doi:10.1080/00420989420081441
- Republic of Namibia, Ministry of Regional and Local Government, Housing and Rural Development. (2006). *Local economic development strategy: The urban trust of Namibia*. Author.
- Republic of Namibia, Ministry of Regional and Local Government, Housing and Rural Development. (2011). *Local Economic Development, White Paper*. Author.
- Saleth, R. M., & Dinar, A. (2005). Water Institutional Reforms: Theory and Practice. *Water Policy*, 7(1), 1–19. doi:10.2166/wp.2005.0001
- Senyakoe, P. (2011). *The challenges of financing municipalities' water and sanitation infrastructure by a development finance institution* [Unpublished doctoral dissertation]. North-West University, Potchefstroom, South Africa.
- Simataa, B. (2010, August 23). Key issues in development. *Economic and Political Weekly*.
- Swinburn, A., & Tjimstra, S. A. R. (2006). Local economic development in Sub-Saharan Africa. *Environment & Planning*, 25(4), 516–536.
- United Nations Children's Fund. (2010). *The State of the World's Cities Report 2001*. UNICEF.
- World Health Organisation. (2013). *United National Human Settlements Programme, the Challenge of Slums*. Global Report on Human Settlements.