



# An Investigation on The Availability of an Entreprise Risk Management Framework or Policy and its Impact on The Performance of National Water and Sanitation Council of Zambia (2010-2020)

Angela Mayaba, Dr Zavanai Mazhambe Degree of Master of Business Administration Finance, The University of Zambia

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# **ABSTRACT**

Scholars have argued that although Enterprise Risk Management (ERM) is a necessity to organizations or companies, the rate of implementation is still low (Mc Neil, 2015). The problem however, remains that most authors have not specifically looked at the impact of Enterprise Risk management on the performance of public regulatory bodies such as NWASCO. The purpose of this study was therefore to evaluate the impact of Enterprise Risk Management Strategies on the problems that affect the performance of the National Water Supply and Sanitation Council in Zambia.

To achieve the study objectives, the study adopted a mixed research approach in which both qualitative research design and quantitative research design were used. It also used an experience survey design and the study the target population of this study was managers and assistant officers of the four water utility firms. An estimate of 200 people to choose sample from was selected. The sample of this study consisted of 20 managers and 44 officers who were purposively selected from the National water and sanitation company body and the three (3) utility companies. In this sample, 5 managers and 11 assistant officers were selected from Finance, Audit and Risk management departments from all the study points. The data collected was analysed using the content analysis for qualitative data and Microsoft excel for quantitative data.

From the findings, most of the information given by the respondents indicated that there is no specific ERM being used by NWASCO. After the analysis of documents and interviews were conducted with management as well as other respondents, no proper ERM was brought about by the respondents. Some respondents also lacked knowledge on Risk Management being used by NWASCO in their operations. The Company has not employed a qualified risk officer and it does not have a Risk department which looks into the company risks. However, NWASCO has put in place measures that would lead to a reduction in its exposure to risk to achieve the objectives, these measures included but not limited to; the Provision of incentives for service providers who comply with regulations set by NWASCO, Penalties For non-compliance to regulations, Community involvement and Audit-based regulation approach. NWASCO has also involved the Community in getting feedback on service provision from the WSS service providers. When the community is involved in decision making or any activity there is more acceptance, greater participation, willingness to support and strong sense of ownership.

ERM can offer exceptional value if it is soundly applied. It is not only a team effort, but also an organization effort and not a random one. It needs to be based on a strong risk culture, and it requires the sponsorship of the executives in the company or institution. In addition, the aggregation of risk information needs to be performed according to clear rules that everyone would understand and abide by.

Key words: Enterprise, Enterprise Risk Management, Performance Risk and NWASCO.

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#### INTRODUCTION

All organizations and businesses whether public or private, large or small generally have to manage risks in order to stay afloat (Beasley, 2016). According to the World Bank (2018), a risk refers to the possibility that an adverse development will occur that negatively may affect the performance of an institution or may hinder the achievement of the set objectives. Worldwide, risk management in organizations has been done for decades. The goal of an ERM process is to generate an understanding of the top risks that management collectively believes are the current most critical risks to the strategic success of the enterprise(Committee of Sponsoring Organisations, 2009). In Zambia, following the devolution of water and sanitation services from Council authorities saw the establishment of quasi-government institutions known as commercial utility companies. This has been necessitated with the aim of increasing efficiency and sustainability in operations. In Lusaka, the Lusaka Water and Sanitation Company is the sole commercial utility providing water and sanitation services to Lusaka residents in both urban and peri-urban areas. The utility is regulated by the National Water Supply and Sanitation Council (NWASCO) in terms of performance and tariffs among others.

# PURPOSE OF THE STUDY

The purpose of this study was to establish the impact of Enterprise Risk Management processes on the problems that affect the performance of the National Water Supply and Sanitation Council in Zambia.

# RESEARCH OBJECTIVE

To establish the impact of Enterprise Risk Management used by NWASCO.

# **RESEARCH QUESTION**

What is the impact of Enterprise Risk Management on the performance of NWASCO?

#### LITERATURE REVIEW

The objective of enterprise risk management is to develop a holistic, portfolio view of the most significant risks to the achievement of the entity's most important objectives. In other words, ERM attempts to create a basket of all types of risks that might have an impact both positively and negatively on the viability of the business. This is an enterprise-wide approach to risk management which enables an organisation to consider the potential impact of all types of risks on all processes, activities, stakeholders, products and services.

A recent study by Beasley et al. (2019) in Setapa et al (2015), conducted at North Carolina State University showed that current stage of ERM implementation in most organization is under developed and still relatively immature. In the study, only 28 percent of respondent described ERM adoption in their departments as systematic, robust and repeatable with regular reporting process, 60 percent of them indicated it as informal and unstructured with minimal and ad hoc reporting process, while the other 12 percent said that their institution has no structured process for identifying and reporting process.

In Africa, Macha (2010) conducted a study in Tanzania and found that 56 financial intermediaries, only 20 of them had insurance against operational risk. According to Bank of Tanzania, it is very risk and possibility of the bank failure is very high if the bank will not secure its cash or properties by insuring them.

Wanjohi (2012) studied the effect of financial risk management on the financial performance of commercial banks in Kenya. The research concluded that there was a positive correlation between financial risk management practices and financial performance of commercial banks in Kenya. A large share of the

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Kenyan banks practiced proper risk management. Waweru and Kisaka (2013) carried out a study of the relationship between Enterprise risk management implementation and value of 20 companies listed on the Nairobi Securities Exchange. Using Tobin Q as a measure of the company value and ERM level of implementation the study found out that there was a positive relationship between level of ERM implementation and a firm's value.

In Zambia, a study by Muchemwa, Karim and Phiri (2017), titled 'A critical literature review on safety and health hazards that pause huge potential of affecting operations at Konkola Copper Mine (KCM), Zambia revealed that operational risk management with a focus on safety and health was taken seriously within the mining operations. This was evidenced by the over whelming information on risk management documented within the organization. It was further revealed that operational risks concerning safety and health at KCM were managed through Safety management programmes. However, the papers submitted that central to the successful ability of any mining company in order to achieve its mining, milling recoveries and produce a saleable mineral product, are the management of operational risks. Based on the findings, it was recommended that risk management should cover all the safety and health issues at the mine and that the operational risk system management should be embedded into the operations of the mine as part of its culture.

In terms of the challenges occasioned by implementing the reforms over the past 10 years include; declining infrastructural investment, reluctance to provide services to low-income communities, growing affordability burden for poor household, increasing vulnerability of many households, inability to cope with the growing demand due to increased population and the ageing infrastructure. Some of these challenges are manifested in the water utility firms' inability to expand the network to un-served areas, especially in low-income communities.

# **METHODOLOGY**

This study adopted a mixed research approach and it employed both qualitative research design and quantitative research design. According to Creswell (2009), qualitative research is a means for studying a topic by exploring and understanding the meaning individuals or groups assign to a social or human problem. This design was selected for this particular study because the research study aimed at establishing the Enterprise Risk Management processes and their effects on the performance of water utility companies in Zambia. Interest was geared at understanding the lived experiences of both managers and their assistants in their risk management experiences and the financial aspect of it.

This study was carried out at four (4) different points. In Lusaka it was conducted at the National Water Supply and Sanitation head offices and at Lusaka Water and Sewerage Company (LWSC) offices, Southern Water and Sewerage Company (SWSC) offices in Choma Southern province, and in Kabwe Central province at Lukanga Water and Sewerage Company (LWSC) offices.

According to Bryman (2004), sampling is a process of examining a representative set of elements out of the whole population. It is a process of selecting a number of individuals from a population such that the selected group contains the characteristics representative of the entire group. A sample is a representation of elements of the target population. It consists of the list or set of directions for identifying the target population (Naresh, 2010). In this study, purposive sampling was used in the selection of research participants. Maykut and Morehouse (1995) argue that purposive sampling helps qualitative researchers to gain a deep understanding of phenomena experienced by a carefully selected group of people.

This research adopted a mixed research design (i.e. Qualitative and quantitative research Design) but chose to use the purposive sampling in the selection of informants. Now, the purposive sampling technique is a type of non-probability sampling that is most effective when one needs to study a certain cultural domain with knowledgeable experts within. Purposive sampling may also be used with both qualitative and

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quantitative research techniques. The inherent bias of the method contributes to its efficiency, and the method stays robust even when tested against random probability sampling. Choosing the purposive sample is fundamental to the quality of data gathered; thus, reliability and competence of the informant must be ensured.

# DATA ANALYSIS, PRESENTATION AND DISCUSSION

# **NWASCO's 2021-2025 Strategic Objectives**

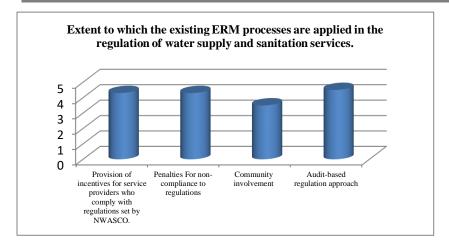
PERSPECTIVES	STRATEGIC OBJECTIVES
Internal Capacities	1. To strengthen the capacity of NWASCO in order to implement regulation for rural water supply and sanitation and urban onsite sanitation service delivery
Access and inclusion	2. To effectively regulate water supply and sanitation service delivery in order to ensure improved and inclusive service provision
Resource Mobilisation	3. To mobilise financial and other resources in order to facilitate for effective operations of NWASCO and ensure financial sustainability of the commercial utilities
Corporate Governance	4. To promote good corporate governance in order to ensure that NWASCO and Commercial Utilities are accountable, transparent and efficient in their operations
Information systems	5. To enhance information management systems in order to ensure availability of up to date information for effective decision making
Research, Development and Innovation	6. To coordinate and undertake research and development in order to generate innovation and information for evidence based sector policy formulation and implementation

Source: 2021-2025 strategic plans

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It was observed that NWASCO had put in place measures that would lead to a reduction in its exposure to risk to achieve the objectives, these measures included but not limited to; the Provision of incentives for service providers who comply with regulations set by NWASCO, Penalties For non-compliance to regulations, Community involvement and Audit-based regulation approach.

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In NWASCO's pursuit to achieve its objectives and to see to it that all Water Supply and Sanitation service providers are following the regulations put in place, it Assesses service provision. To regulate the water and sanitation service provision, NWASCO uses the audit-based regulation approach which requires the service provider to demonstrate compliance to standards by providing information to the regulator on a regular basis.

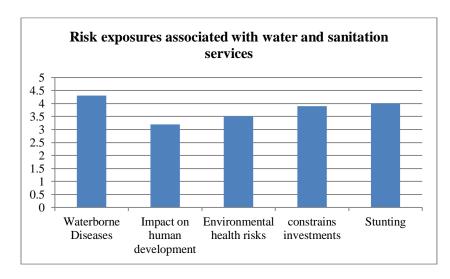


Figure 4.3 shows the risk exposures associated with water and sanitation services. According to the finding as shown in the table above, the risk exposures associated with water and sanitation include; impact on human development, waterborne diseases, and environmental health risks, constrains investments as well as stunting.

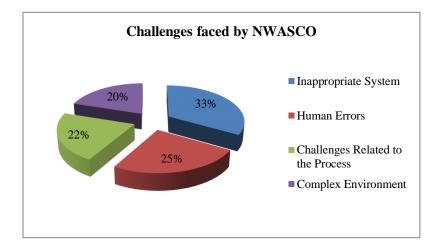
Lack of adequate water supply and sanitation results in environmental health risks and constrains investments that is dependent on reliable water availability. Currently only 63% of Zambians have access to clean drinking water supply, while 43% have access to adequate sanitation, of this 56% are in the urban areas and 34% in rural areas.





Zambia loses 1.3% of GDP due to public health impacts arising from poor sanitation (Water and Sanitation Program, 2019) which results in child malnutrition, illness and premature deaths. The economic burden of inadequate sanitation falls most heavily on the poor who lack adequate sanitation facilities. The adverse impact of poor sanitation is most acute in Lusaka due to its high population density and unplanned settlement areas.

The other risk exposure is Stunting. Zambia's high rate of child stunting (35 per cent) is in part a result of poor sanitation. From the findings and Analysis on the risk exposures, the researcher can conclude to say that Risk exposure is the quantified potential loss from business activities currently underway or planned. The current global water and sanitation crisis creates a profoundly negative impact on the environment. Water is the fundamental part of ecosystems and everything within a watershed is connected. The connectedness means that the use of a river or aquifer in one area will affect and be affected by its use in another area, even far away. When sewage and waste enters a water source, the effects can be geographically widespread. People get sick from drinking the contaminated water or eating the plants and animals that rely on it.



There are five main aspects that cause mistakes when implementing an Enterprise Risk Management tool. The challenges included; the system itself can be inappropriate, human errors, complexity of the environment and challenges in identifying risks.

Inappropriate system is the first challenge faced by NWASCO that will be discussed. A challenge could be to find the perfect framework. There are different types of frameworks, for example COSO, AIRMIC, Combined Code on Corporate Governance, FERMA and others. Related to that, the technologic part is important as well. Many risk management packages use a methodology that is not specifically based on the framework. If that happens, the deficiencies can lead to difficulties. Technology should be built around the methodology and used in several ways.

Some respondents failed to identify the Enterprise risk management framework being used by NWASCO.

This can be so due to lack of integration of human resource in the ERM system. The other challenge NWASCO faces is Human Errors. To ensure that the framework suits an organisation, the human factor needs to be minimised. Effective monitoring needs to ensure that the agreed-upon risk response is actually implemented and working. Complex Environment is the other challenge that will be discussed. Different studies state that the main reason for a complex environment is that the world faces VUCA (volatility, uncertainty, complexity and ambiguity). The other challenge that NWASCO faces are Challenges Related to the Process. The process from identifying risks to monitoring risks means a lot of challenges. Mostly the problems occur when identifying risks because that has to be done by a Risk Management-Team.

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# CONCLUSIONS

Entreprise Risk Management (ERM) is a process effected by an entity's board of directors, management and other personnel, applied in strategy-setting and across the enterprise, designed to identify potential events that may affect the entity and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

Most of the information given by the respondents indicates that there is no specific ERM being used by NWASCO. After the analysis of documents and interviews were conducted with management as well as other respondents, no proper ERM was brought about by the respondents. Some respondents also lacked knowledge on Risk Management being used by NWASCO in their operations.

In NWASCO's pursuit to achieve its objectives and to see to it that all Water Supply and Sanitation service providers are following the regulations put in place, it Assesses service provision. To regulate the water and sanitation service provision, NWASCO uses the audit-based regulation approach which requires the service provider to demonstrate compliance to standards by providing information to the regulator on a regular basis.

Lack of adequate water supply and sanitation results in environmental health risks and constrains investments that is dependent on reliable water availability. Currently only 63% of Zambians have access to clean drinking water supply, while 43% have access to adequate sanitation, of this 56% are in the urban areas and 34% in rural areas. The economic burden of inadequate sanitation falls most heavily on the poor who lack adequate sanitation facilities. The adverse impact of poor sanitation is most acute in Lusaka due to its high population density and unplanned settlement areas. Poor water, sanitation and hygiene are the main causes of infections like cholera and diarrhoea, and inadequate WASH continues to be the leading cause of death of children under the age of five in sub-Saharan Africa. Girls and women are particularly affected by poor WASH conditions. The drudgery of hauling water leads to loss of productivity and leisure time and the lack of toilets negatively impacts their dignity.

Among the challenges faced by Nwasco include; the use of an inappropriate system, human rights, challenges related to the process, lastly, complex environment which lead to poor service delivery.

ERM can offer exceptional value if it is soundly applied. It is not only a team effort, but also an organization effort and not a random one. It needs to be based on a strong risk culture, and it requires the sponsorship of the executives in the company or institution. In addition, the aggregation of risk information needs to be performed according to clear rules that everyone would understand and abide by. Besides, simplifying the complex can garner loyalty to risk in the company.

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