



**REPUBLIC OF ZAMBIA**

**REPORT OF THE COMMITTEE ON ENERGY, WATER  
DEVELOPMENT AND TOURISM**

**ON THE PERFORMANCE AUDIT REPORT ON THE SUSTAINABLE  
MANAGEMENT OF WATER RESOURCES IN ZAMBIA 2019-2022**

**FOR THE**

**THIRD SESSION OF THE THIRTEENTH NATIONAL ASSEMBLY**

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## FOREWORD

Honourable Madam Speaker, the Committee on Energy, Water Development and Tourism has the honour to present its Report on the consideration of the Performance Audit Report of the Auditor General on the Sustainable Management of Water Resources in Zambia for the period 2019-2022, for the Third Session of the Thirteenth National Assembly. The functions of the Committee are set out under Standing Orders 197(d) and 198 of the National Assembly of Zambia Standing Orders, 2021. Standing Order 198(g) specifically provides that a portfolio committee shall consider special audit reports referred to it by the Speaker or a resolution of the House.

The Committee held eight meetings to consider the Audit Report. In order to acquaint itself with the Performance Audit Report under consideration, the Committee sought both written and oral submissions from stakeholders. The list of the stakeholders who appeared before the Committee is at Appendix II. The Report is organised in two parts. Part I presents the audit's objectives and comments from the Auditor General while Part II constitutes the Committee's findings from its deliberations and the Committee's observations and recommendations. The Committee wishes to pay tribute to all stakeholders who appeared before it and tendered both oral and written submissions. It further wishes to thank you, Madam Speaker, for affording it an opportunity to consider the Performance Audit Report on the Sustainable Management of Water Resources in Zambia for the period 2019-2022. The Committee also appreciates the services rendered by the Office of the Clerk of the National Assembly throughout its deliberations.



Mr Romeo Kangombe, MP  
CHAIRPERSON

November, 2023  
LUSAKA

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## ACRONYMS

IDPs	–	Integrated Development Plans
NHCC	–	National Heritage Conservation Commission
NWASCO	–	National Water Supply and Sanitation Council
NWRSP	–	National Water Resources Strategy and Plan
WARMA	–	Water Resource Management Authority
WRM	–	Water Resources Management
WRPA	–	Water Resource Protection Areas
ZARI	–	Zambia Agriculture Research Institute
ZEMA	–	Zambia Environmental Management Agency

## **PART I**

### **1.0 MEMBERSHIP OF THE COMMITTEE**

The Committee consisted of:

Mr Romeo Kangombe, MP (Chairperson); Mr Chanda A B Katotobwe, MP (Vice-Chairperson); Ms Kampamba S Mulenga, MP; Eng Raphael S Mabenga, MP; Mr Michael J Z Katambo, MP; Mr Lameck Hamwaata, MP; Dr Chitalu Chilufya, MP; Mrs Mirriam B Chonya, MP; Mr Gregory Ngowani, MP; and Mr Davis Chisopa, MP.

### **2.0 AUDITOR GENERAL' S COMMENTS**

The Auditor General informed the Committee that in accordance with the provisions of *Article 250 of the Constitution of Zambia (Amendment) Act, No.2 of 2016*, the *Public Audit Act Chapter 378 of the Laws of Zambia* and the *Public Finance Management Act, No.1 of 2018*, the Office of the Auditor General is mandated to carry out performance audits in ministries, provinces and agencies and report the results to the President and Parliament for debate.

#### **2.1 BACKGROUND OF THE AUDIT**

The Committee was informed by the Auditor General that performance auditing was an independent, objective and reliable examination of whether or not the Government undertakings, systems, operations, programmes, activities or organisations were operating in accordance with the principles of economy, efficiency and effectiveness, and there was room for improvement.

The main objective of the audit was to assess whether the Ministry of Water Development and Sanitation (MWDS) through the Water Resource Management Authority (WARMA) had put in place efficient and effective measures that ensured sustainable management of water resources.

#### **2.2 MOTIVATION OF THE AUDIT**

The Auditor General informed the Committee that WRM was the process of planning, developing, and managing water resources, in terms of both water quantity and quality across all water uses. The Committee learnt that WRM sought to harness the benefits of water by ensuring that there was sufficient water of adequate quality for drinking and sanitation services, food production, energy generation, inland water transport and water-based recreational activities.

The Auditor General submitted that Zambia had several rivers, lakes, streams, swamps and vast groundwater resources that were unevenly distributed across the country. The northern part of the country generally had higher levels of rainfall and water resources, while the southern part of the country had lower rainfall levels and was more prone to drought.

The Committee learnt that unsustainable exploitation of natural resources and poor environmental management had contributed to increased incidences of adverse climate change impacts such as droughts, floods, and extreme temperatures. The country's wetlands and aquifers had come under severe pressure from development activities as the demand for housing and water increased. Further, the Auditor General added that groundwater

contributed significantly to domestic and municipal water supplies, with its importance being very visible in rural areas where it was accessed from a variety of sources, most commonly via boreholes or dug wells.

The Committee was informed that Zambia's population had been on the rise rapidly over the last decade and stood at 20,017,675 citizens. In many urban areas, water scarcity was already a reality. Further, the increase in urbanisation resulted in an increase in pollution and damage to water resources.

The Auditor General informed the Committee that Zambia's natural environment and ecosystems had come under threat on account of poor environmental management practices including air, water, and land pollution, as well as poor sanitation and waste management. The Committee learnt that water pollution was widespread with the manufacturing, mining and agricultural activities and inefficient sewerage treatment facilities being the major polluters of both surface and groundwater, thereby limiting access to safe water.

The Committee was informed that the Government had recognised the need for appropriate technologies and approaches for effective water resource management. Further, the Government intended to enhance mitigation and adaptation to climate change while promoting sustainable management of the environment, ecosystems, and natural resources to promote green growth and environmental sustainability in the Eighth National Development Plan – 2022-2026.

The Auditor General submitted that the audit was carried out to establish the extent to which sustainable management of water resource measures had been made by the Ministry of Water Development and Sanitation through WARMA.

### **2.3 OBJECTIVES OF THE PERFORMANCE AUDIT REPORT**

The audit objective was to assess whether the Ministry of Water Development and Sanitation through WARMA had put in place efficient and effective measures to ensure sustainable management of water resources.

### **2.4 AUDIT SCOPE AND COVERAGE**

The main auditee was WARMA, an agency of the Ministry of Water Development and Sanitation. Other stakeholders included the Ministry of Tourism – National Heritage Conservation Commission (NHCC), the Ministry of Green Economy and Environment – Forestry Department, the Ministry of Local Government and Rural Development, the Zambia Environmental Management Agency (ZEMA) and selected local authorities.

The audit covered the period from January 2019 to December 2022 to ensure that the most recent activities regarding WARMA's management of water resources were assessed. The audit team visited two out of six catchment areas, namely: Kafue and Luangwa Catchments. The team also visited only eleven out of 116 districts, due to inadequate resources. The districts visited were: Lusaka, Livingstone, Chisamba, Chibombo, Kabwe, Ndola, Mpongwe, Monze, Luanshya, Chipata and Solwezi.

### **2.5 AUDIT QUESTIONS**

In line with the audit objective, the audit questions were as set out below.

- (a) To what extent has WARMA managed water resources and the surrounding areas to ensure their sustainability?
- (b) How does WARMA monitor water resources and enforce the law to ensure sustainability?
- (c) To what extent do stakeholders manage water resources to ensure water resources protection under their jurisdiction?
- (d) To what extent is there collaboration of different stakeholders to ensure the sustainability of water resources?

## **PART II**

### **3.0 CONSIDERATION OF THE AUDIT REPORT BY THE COMMITTEE**

The Committee considered submissions from various stakeholders including the Permanent Secretaries from the ministries of: Water Development and Sanitation; Ministry of Lands and Natural Resources; Green Economy and Environment; Tourism – National Heritage Conservation Commission; Mines and Minerals Development and Local Government and Rural Development. The comprehensive list of the stakeholders who appeared before the Committee is at Appendix II.

#### **3.1 MANAGEMENT OF WATER RESOURCES TO ENSURE SUSTAINABILITY**

##### **3.1.1 National Water Resources Strategy and Plan**

Stakeholders submitted that WARMA delayed meeting the target to develop the National Water Resources Strategic Plan (NWRSP) by December 2021. The development of the document, which was initially scheduled for four years, extended beyond the expected timeline, leading to its launch in October, 2022. Additionally, only four out of six catchments had been operationalised, while only Kafue Catchment had developed a draft Catchment Management Plan.

##### **Ministry's Response**

The Ministry of Water Development and Sanitation informed the Committee that the NWRSP was formulated by December 2021. However, the official launch was slightly delayed to 2022 due to the COVID-19 pandemic as physical visits and assessments in the field were prohibited. Financial constraints also contributed to the delays in launching the NWRSP. However, WARMA had sought financial support from cooperating partners for the formulation of the plan. This made the formulation and launch dependent on the availability of these financial resources. The Ministry also indicated that the absence of the NWRSP during the period under review could not have contributed to unjustifiable or inadequately informed national developments allegedly taking place in strategic and sensitive freshwater as the *Water Resources Management Act, No. 21 of 2011* had enabling provisions on water resources protection, preservation and conservation.

##### **Committee's Observations and Recommendations**

The Committee is not satisfied with the submission by the Ministry that the absence of the NWRSP during the period under review may not have contributed to unjustifiable or inadequately informed national developments.

In this regard, the Committee recommends that WARMA should fast-track the development of catchment plans and operationalise the remaining catchments. The Committee further

recommends that WARMA should ensure that future planning documents are developed and launched in a timely manner, while establishing clear timelines, resource mobilisation and allocating adequate resources for the development of plans.

### **3.1.2 Functional Catchments**

The Committee was informed that WARMA operationalised four of the required six catchments namely: Zambezi, Chambeshi, Luangwa and Kafue, while Luapula and Tanganyika had not yet been operationalised. The report further indicated that non-operationalisation of the catchments could have led to illegal activities such as infrastructure development, mining and agriculture.

#### **Ministry's Response**

The Ministry of Water Development and Sanitation submitted that WARMA had been managing water resources in all six catchments of the country. However, due to the lack of financial resources, Chambeshi and Tanganyika Catchments were being managed administratively by the Catchment Office in Kasama. The Committee was also informed that WARMA had set up an office for the Luapula Catchment in Mansa District to enhance its operations. Further, the Department of Water Resources Development staff were present in all districts to enable WARMA to take services closer to the people. WARMA also collaborated with local authorities by signing memoranda of understanding to address illegal water usage and encroachments in areas where its direct presence was limited.

#### **Committee's Observations and Recommendations**

The Committee observes that the non-operationalisation of the catchments may lead to illegal activities such as illegal infrastructure development, mining and agriculture being conducted in catchment areas which could lead to the destruction of water resources.

The Committee, therefore, recommends that the Government should provide adequate financial resources to catchment and sub-catchment councils to enable them to put in place systems as well as create comprehensive databases for water users in order to increase the number of permit holders and the consequent finance base.

### **3.1.3 Identification, Declaration and Protection of Groundwater Resource Areas**

The Committee was informed that WARMA did not meet the target of identifying fifteen groundwater water recharge zones, as only six had been identified. Stakeholders were of the view that the failure to identify water resources might defeat the objective of protecting water resource buffer zones from human activities, which might result in depletion and destruction of water resources. The development of activities in the zones may compromise water quality as well as threaten the existence of water resources.

#### **Ministry's Response**

The Ministry of Water Development and Sanitation submitted that during the period under review, WARMA, in collaboration with stakeholders, identified a total of twenty strategic and eco-sensitive water resource areas among which were eight sensitive surface water resource areas, and seven sensitive groundwater resource areas. The Committee was further informed that the protection of water resources from human-related activities was a challenge particularly because these catchment areas were vast and endowed with natural resources mostly based in remote areas. In addition, there was a historic legacy of unplanned human settlements around water resources in the country, which negatively impacted the resource.

### **Committee's Observations and Recommendations**

The Committee observes that the failure to identify water resource areas can pose several dangers and challenges, particularly in the context of water management and environmental sustainability.

In this regard, the Committee strongly recommends that WARMA and ZEMA should work closely with other stakeholders such as the Department of Water Affairs, academia, research institutions, among others, to mobilise financial resources and complete the mapping of underground water and delineation of water recharge zones. The Committee is of the view that partnering with academic and research institutions will accelerate the identification of these critical water resources through data sharing, collaborative research, and internships for students.

#### **3.1.4 Protection of Wetlands, Dambos, Marshlands and Headwaters**

The Committee was informed that inspections of Mass Media and Shaft 5 wellfields in Lusaka established that the wellfields were encroached upon with structures built within the 50 meter buffer zone of the water resources. Further, the Committee learnt that water resources such as the Kabushi Stream, Kafubu River and Itawa Spring in Ndola, had been extensively encroached upon. Stakeholders also observed that people were conducting agricultural, construction, waste dumping, as well as sand and gravel mining activities on the river banks.

#### **Ministry's Response**

The Ministry of Water Development and Sanitation acknowledged that the encroachment of water resources was prevalent and that the Mass Media and Shaft 5 wellfields were indeed encroached upon, which threatened the groundwater supply for the city of Lusaka. The Ministry added that WARMA had identified and mapped the reported areas in Kabushi Stream, Kafubu River and Itawa Spring to enhance the protection of water resources. However, the Ministry submitted that a buffer zone of 50 meters was only applicable to surface water resources.

### **Committee's Observations and Recommendations**

The Committee is concerned with the limited protection of wetlands, dambos, marshlands, and headwaters which can have significant and far-reaching ecological, social, and economic consequences as these areas play crucial roles in maintaining the overall health of ecosystems and the well-being of human communities.

In this regard, the Committee recommends that WARMA should take bold steps including demolishing structures in the Mass Media area and Shaft 5 wellfields and compensating the owners to salvage the wellfields before irreparable loss occurs. Further, the Committee urges the Government to take a multi-faceted approach to the protection of these areas including imposing legal sanctions, and undertaking scientific, educational, and community-based sensitisation.

#### **3.1.5 Water Quality Assessments**

Stakeholders submitted that WARMA was supposed to carry out a total of 38, 850 tests on all 111 surface water monitoring points in the six catchments for the fourteen quarters during the period under review. An analysis of the 2020 Trend Report revealed that WARMA carried out less than 1 per cent of the required assessments in Zambezi, Luangwa and Kafue Catchments, while it assessed less than 5 per cent in Luapula, Tanganyika and Chambeshi

Catchments. Further, analysis of the tested elements revealed that the authority tested 0.3 per cent of the required elements. The Committee was also informed that WARMA and ZEMA did not control the pollution of water resources as the sampled returns indicated that some of the parameters assessed were above the Zambia Bureau of Standards (ZABS) standards. An analysis of the effluent returns from eight companies revealed that six did not adhere to ZEMA/ZABS standards.

### **Ministry's Response**

The Ministry of Water Development and Sanitation submitted that it had fifty-five surface water and eighty-two groundwater stations on its National Water Quality Monitoring Network and that water quality assessments were performed on stations on a quarterly basis. Further, the Committee was informed that the Ministry through WARMA had set a target of achieving four water quality trend reports per annum. Additionally, the Ministry submitted that the number of water quality tests depended on the nature of water quality. Therefore, the 38, 850 tests on the 111 surface water monitoring points reported in the report were not accurate.

### **Committee's Observations and Recommendations**

The Committee observes that WARMA's target of producing four water quality trend reports per year is insufficient given the potential range of pollutants that could impact the water quality during that timeframe. The Committee, therefore, recommends that the Ministry of Water Development and Sanitation invests in smart technologies for real-time monitoring of water quality such as sensors and digital systems as opposed to conventional water quality assessment methods.

The Committee further observes that disagreements between the Office of the Auditor General and WARMA concerning the accuracy of information in the report arose due to certain information sent by WARMA to the Ministry of Water Development and Sanitation not reaching the Office of the Auditor General. The Committee, therefore, recommends that institutions undergoing audits should adhere to the stipulated requirements set by the Auditor General's Office, including meeting deadlines for submitting information.

## **3.2 STAKEHOLDER MANAGEMENT OF WATER RESOURCES TO ENSURE WATER RESOURCES PROTECTION**

### **3.2.1 Protection of Water Recharge Points in Forest Protection Areas**

Stakeholders submitted that some forest reserves were threatened by human activities such as allocation of land for construction, mining and agricultural activities. The Committee was informed that the encroachment activities caused the drying of the Kasongo River in Luanshya and that most of the trees around the water recharge zones were cut down. Further, the main cause of illegal activities in protected areas was a lack of collaboration with Local Authorities because land was being allocated to citizens despite the forests being gazetted.

### **Ministry's Response**

The Ministry of Green Economy and Environment acknowledged the importance of managing forest reserves as protected areas. Mansansa National Forest in Luanshya District, which was a catchment area for the Kasongo River, had pressure since 2019 from the Luanshya Municipal Council, which requested for 1,489 hectares of the forest to be excised to pave way for developments taking place in the district. The Committee learnt that due to political pressure, a draft Statutory Instrument was submitted to the Ministry of Justice

proposing an excision of the Forest Reserve and the request was still pending. The Ministry was of the view, however, that the entire Forest Reserve with a total size of 3,577 hectares should be protected.

### **Committee's Observations and Recommendations**

The Committee observes that encroachment can have negative consequences on both the environment and society such as loss of biodiversity, deforestation, and soil degradation.

The Committee, therefore, recommends that the Ministry of Green Economy and Environment should implement sustainable land management practices, protect and restore forests, and find ways to balance human development with the conservation of the critical ecosystems. The Committee, further, recommends that the excision request by the Luanshya Municipal Council be denied because it will negatively affect the Mansansa National Forest in Luanshya District, which is a catchment area for the Kasongo River.

### **3.2.2 Management of Settlers in Forest Reserves**

The Committee learnt that there were illegal settlers within forest reserves who were issued with eviction notices. For example, the Central Province Monitoring Report for 2022 revealed that the Mulembo Local Forest FR. No. 210, which was about 19,395 hectares and was home to six river sources, had an influx of illegal settlers who were allocated land by the traditional leadership. However, the Department of Forestry continued to face challenges with enforcing the law against illegal settlers because the law was not clear on how to govern the administration of customary land located in forest reserves. It was further revealed that the lack of sensitisation of traditional leaders on the need to conserve and protect forest reserves contributed to the challenges being faced.

### **Ministry's Response**

The Ministry of Green Economy and Environment acknowledged that the issue of illegal settlers being allocated land in protected areas by traditional leadership was a common practice countrywide. The Ministry further stated that the sensitisation and engagement of traditional leaders on the need to conserve protected forests was of paramount importance and would continue to engage the traditional leadership on the matter.

### **Committee's Observations and Recommendations**

The Committee observes that the impact of illegal settlers in forests can have significant and far-reaching consequences such as deforestation, loss of biodiversity, soil erosion, and wildfires, among others. The Committee further observes that most of the water resources in Zambia were in areas under customary authority.

The Committee, therefore, recommends that the ministry should devise measures to sensitise traditional leaders on the need to protect the forest reserves through different engagements including, but not limited to, site meetings. The engagements will enhance the appreciation of the water resource and subsequently boost unsolicited community participation in the protection of the resource.

The Committee further recommends that the Ministry should work with cooperating partners who are involved in carbon trading activities to partner in forest regeneration initiatives and find alternative livelihoods for those located in gazetted forests.

### **3.2.3 Forestry Department**

Stakeholders submitted that a review of annual reports for the period 2019- 2021 and interviews with the Forestry Department officials at headquarters, provincial and district offices revealed that weekly monitoring and control activities of the forest were not consistently carried out as the Department did not have equipment such as drones, firearms and utility vehicles. In addition, the Department had challenges with the number of staff needed to conduct monitoring activities. Furthermore, officials revealed that there was a lack of prioritisation in terms of the allocation of funds to the monitoring activity.

#### **Ministry's Response**

The Committee was informed that the Ministry of Green Economy and Environment, through the Department of Forestry, did not consistently monitor and control activities in forests due to resource constraints. However, the Ministry engaged the Ministry of Finance and National Planning to consider providing additional funding to the provinces to enhance forest revenue collection. In addition, the provinces were receiving additional funding from appropriation-in-aid, which was being used to support the procurement of motor vehicles, conduct blitz patrols, forest maintenance and forest licence inspections.

#### **Committee's Observation and Recommendations**

The Committee observes that failure by the Forestry Department to consistently conduct monitoring and control activities in the forests may have given rise to illegal activities such as unsustainable harvesting practices resulting in the destruction and degradation of the forest reserves which are home to various water resources.

The Committee, therefore, recommends that the Ministry of Green Economy and Environment re-establish the position of forest guard in their structure and carryout a one-off mass employment of these officers in order to adequately carryout inspections of the vast forests that Zambia has.

## **3.3 MONITORING AND ENFORCEMENT OF THE LAW**

### **3.3.1 Allocation of Land and Encroachments on Water Resource Heritage Sites**

The Committee was informed that there were developmental activities within heritage sites because the Ministry of Lands and Natural Resources did not consult with the National Heritage Conservation Commission before allocating land. It was observed that the springs and surrounding riparian environment had increasingly come under pressure because of the establishment of informal settlements, subsistence agriculture, and the introduction of exotic plants, some of which were invasive by nature, and laundry and brick making activities.

#### **Ministry's Response**

The Ministry of Tourism, through the NHCC, informed the Committee that the gazettion of all water resource-related heritage sites would be prioritised to ensure that they were well maintained and protected. In order to strengthen law enforcement and prevent illegal activities in these areas, NHCC ensured that private and public entities interested in operating in water-based heritage sites, followed the stipulated guidelines and the law. The Committee was further informed that the Ministry would also ensure that it obtained title deeds for pieces of land where any natural heritage sites were located in order to enhance their management. These processes were ongoing following the directive for all Government entities to ensure that all the pieces of land they owned were on title.

### **Committee's Observations and Recommendations**

The Committee is concerned that the pieces of land where natural heritage sites are located are not on title, which affects the proper management of the land.

The Committee, therefore, recommends that the Ministry should expedite the process of putting all pieces of land where natural heritage sites are located on title in order to enhance their management. The Committee further recommends that the Ministry should improve enforcement to ensure that private and public entities operating in water-based heritage sites follow the stipulated guidelines and laws.

#### **3.3.2 Monitoring of Water Resources**

The Ministry submitted that WARMA's 2020 Annual Work Plan and Budget and the 2020 Annual Report did not plan to monitor the activities in water resources areas nor did the annual report highlight any work related to the protection of water resources. The reports further indicated that the Authority's Inspectorate Manual did not contain tools to assess the activities along the water resources buffer zones.

#### **Ministry's Response**

The Ministry of Water Development and Sanitation submitted that in 2020, WARMA planned and budgeted K1.7 million towards regulations and compliance enforcement activities. The planned regulations and compliance enforcement activities included work-related to the protection of water resources. In addition, the 2020 Annual Work Plan captured information on work-related to the protection of water resources under the section of Legal Affairs and Services. The Committee was further informed that the 2020 Annual Report equally highlighted how the WARMA engaged key stakeholders such as the Local Authorities responsible for district planning, other conservation agencies such as ZEMA and water users to enhance water resources protection.

### **Committee's Observations and Recommendations**

The Committee observes that failure to monitor and regulate activities along water resource buffer zones by WARMA can result in a range of negative consequences, as these zones are essential for protecting water quality, ecosystems, and overall environmental health.

In this regard, the Committee recommends that WARMA should establish and maintain effective monitoring systems for buffer zones. This involves regular inspections, data collection, and enforcement of regulations to ensure that activities within buffer zones adhere to environmentally sustainable practices.

#### **3.3.3 Provincial Planning Authorities**

The Committee was informed that according to the *Urban and Regional Planning Act, No. 3 of 2015*, an Integrated Development Plan (IDPs) indicated priority areas for protection of ecologically sensitive areas, heritage and cultural sites. Interviews with representatives from the Provincial Planning Offices in Kabwe, Ndola and Chipata, revealed that the Local Authorities did not prepare IDPs, which indicated priority areas such as water resources.

#### **Ministry's Response**

The Ministry of Local Government and Rural Development acknowledged that the observation was correct and that the Ministry had provided guidelines for the preparation of IDPs, which included engaging key stakeholders like WARMA in identifying and planning for the protection of environmentally sensitive areas including, but not limited, to water

resources. The Ministry further stated that as at September, 2023, forty-five districts had approved IDPs and it was expected that more would be completed in 2024.

### **Committee's Observations and Recommendations**

The Committee observes that failure to prepare IDPs may result in sensitive areas such as water recharge zones being used for developmental activities instead of being preserved.

The Committee, therefore, recommends that WARMA takes a keen interest in ensuring that all districts are preparing IDPs and ensures that the IDPs mainstream water resource management as a key priority in its implementation. The Committee further recommends that WARMA actively participates in the formulation and implementation of IDPs, either directly or indirectly, by ensuring it carries out training of district officers responsible for the IDP formulation and implementation in the planning and protection of water resources.

## **3.4 COLLABORATION**

### **3.4.1 Collaboration between WARMA and the Ministry of Green Economy and Environment**

The Committee learnt that interviews with representatives of the Forestry Department in Kabwe, Ndola and Luanshya revealed that there was a weak approach to the management of water resource areas in Zambia in that there was no integrated system to allow information sharing on water resource management. Consequently, working in silos among stakeholders may have contributed to land allocation in the water-sensitive areas and illegal activities in the water resources buffer zones, which may result in water pollution and reduce the availability of both ground and surface water.

### **Ministry's Response**

The Ministry of Green Economy and Environment agreed with the observation in the report and that working in silos among stakeholders may have contributed to land allocation in sensitive areas.

### **Committee's Observations and Recommendations**

The Committee observes that the lack of coordination is highlighted by almost every stakeholder as one of the reasons that has contributed to the disjointed efforts to arrest the encroachment of forest reserves. The Committee is concerned that if not addressed, this will lead to the continued issuance of titles in protected areas and water recharge zones.

In this regard, the Committee recommends that the Ministry of Green Economy and Environment take the lead in coordinating the activities of all the players in the conservation of forest reserves. Further, there is a need to make use of the National Steering Committee of Permanent Secretaries on Biodiversity on matters relating to water resources as coordination at that level will lead to the implementation of plans.

### **3.4.2 WARMA's Collaboration with the Local Authorities, ZEMA, Forest Department and NHCC**

The Committee learnt that there was no collaboration, sectoral linkages and joint programmes between WARMA and stakeholders such as the Ministry of Tourism – NHCC; Ministry of Green Economy And Environment – Forestry Department; ZEMA; Local Authorities; and Ministry of Lands and Natural Resources with regards to the management of water resources. Stakeholders further submitted that the Ministry of Lands and Natural Resources and the

Local Authority allocated land in the Shamabanse/Luangwa dambos in Kabwe. It was further submitted that neither the Ministry of Lands and Natural Resources nor the Kabwe Municipal Council consulted WARMA as a regulator of water resources before plot allocation.

### **Ministry's Response**

The Ministry of Water Development and Sanitation submitted that ZEMA had engaged WARMA and the Local Planning Authorities when considering Environmental Impact Assessment (EIA) applications that fell within the jurisdiction of the said authorities. However, this engagement was not always proactive as it was triggered by an EIA application. The Committee was further informed that ZEMA intended to be more proactive in engaging Local Authorities on the need for the said authorities to update their IDPs and conduct strategic environmental assessments prior to the designation or zoning of particular areas. This would ensure that developments and land allocation of various activities take environmental matters into consideration.

### **Committee's Observations and Recommendations**

The Committee observes that WARMA's collaboration with the Local Authorities, ZEMA, Forest Department and NHCC is very limited.

The Committee, therefore, recommends that WARMA in collaboration with the NHCC should ensure that all water resources related heritage sites are well maintained and protected by strengthening law enforcement to protect them from illegal activities as well as undertake land audits and boundary marking of all-natural heritage sites to define boundaries for enhanced protection of the sites. The Committee further recommends that WARMA in collaboration with the Ministry of Green Economy and Environment – Forestry Department and the Ministry of Lands and Natural Resources, should put in place measures that will engage traditional leaders who may also engage their subjects in protecting the forests. This will prevent activities that may lead to deforestation and promote the sustainability of water resources within the Forest Reserves.

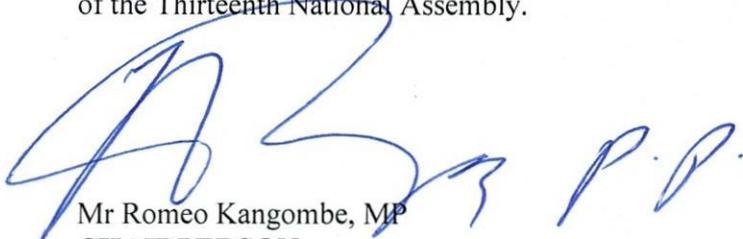
## **3.5 GENERAL OBSERVATIONS AND RECOMMENDATIONS**

- I. The Committee acknowledges that while WARMA has established measures for sustainable water management, its effectiveness has been hindered by consistent underfunding. The Committee, therefore, urges the Government to urgently revise fees for commercial water users in order to make them cost-reflective in order to generate the necessary funds for WARMA's critical operations. WARMA is further encouraged to seek partnerships and alternative funding sources as its continued failure to execute its mandate will have severe consequences on Zambia's water resources.
- II. The Committee observes that while the Lands Tribunal was effective when handling a limited number of cases, it has encountered difficulties in managing the increased caseload, resulting in significant delays in adjudication, sometimes extending over multiple years. The Committee, therefore, recommends that the Lands Tribunal be moved from the Ministry of Lands and Natural Resources to become a division of the High Court.

#### 4.0 CONCLUSION

The Committee commends the Office of the Auditor General for undertaking this audit aimed at evaluating the performance related to sustainable management of water resources in Zambia. The Committee calls for WARMA to be fully funded in order to enable it to fully carry out its mandate of ensuring the safety of water resources in Zambia. The Committee further emphasises the need for all ministries, departments and agencies involved in the management of water resources to work more collaboratively.

We have the honour to be, Madam Speaker, the Committee on Energy, Water Development and Tourism, mandated to consider the Performance Audit Report on the Sustainable Management of Water Resources in Zambia for the period 2019-2022 for the Third Session of the Thirteenth National Assembly.

A large, stylized handwritten signature in blue ink, appearing to read 'R. Kangombe'.

Mr Romeo Kangombe, MP  
**CHAIRPERSON**

November 2023  
**LUSAKA**

## **APPENDIX I – LIST OF NATIONAL ASSEMBLY OFFICIALS**

Mr Stephen Chiwota, Principal Clerk of Committees (FC)  
Mrs Angela M Banda, Acting Deputy Principal Clerk of Committees (FC)  
Ms Chitalu R Mulenga, Senior Committee Clerk (FC 2)  
Mr Leon J N Haangala, Committee Clerk  
Mr Eugene Malewa, Intern  
Mrs Ruth T Mwila, Administrative Assistant II  
Mr Daniel Lupiya, Committee Assistant  
Mr Muyembi Kantumoya, Parliamentary Messenger

## **APPENDIX II – LIST OF WITNESSES**

Copperbelt University  
Local Government Commission of Zambia  
Lusaka Water Supply and Sanitation Company  
Ministry of Green Economy and Environment  
Ministry of Lands and Natural Resources – Forestry Department  
Ministry of Local Government and Rural Development  
Ministry of Mines and Minerals Development  
Ministry of Tourism – National Heritage Conservation Commission  
Ministry of Water Development and Sanitation  
National Water Supply and Sanitation Council  
Office of the Auditor General  
Water Resources Management Authority  
Zambia Agricultural Research Institute  
Zambia Environmental Management Agency