



## Water Resources Management in Tanzania: Legal Frameworks and Practical Challenges

By

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### Abstract

*This article provides an in-depth analysis of the legal frameworks governing the protection of water resources in Tanzania. It evaluates the effectiveness of the institutions that are legally mandated to oversee, manage and safeguard these vital resources. Additionally, the article explores the role of community involvement in the protection of water resources, emphasizing the importance of local engagement and participation in ensuring sustainability. The article begins with an introduction that offers a comprehensive overview of water resources in Tanzania, highlighting their significance and the challenges they face. The main body of the article delves into the relevant policies and legislative instruments that underpin water resource management in the country. It examines the legal provisions, their implementation and the practical challenges encountered in enforcing water protection laws. The analysis also considers the institutional framework responsible for water resource governance, assessing the roles and effectiveness of government bodies, regulatory agencies, and other stakeholders involved in water management.*

*A significant portion of the article focuses on the legal obligations of local communities and their active engagement in the protection of water resources. The study highlights the importance of community-based water management practices, as well as the challenges faced by communities in adhering to legal and regulatory frameworks. It also addresses the gap between legal mandates and practical enforcement, identifying key barriers to effective water protection. The article concludes with a set of recommendations aimed at enhancing the legal and institutional mechanisms for water resource protection in Tanzania. These suggestions focus on improving legal frameworks, strengthening institutional capacity, fostering community participation, and addressing key challenges to effective water governance.*

**KEYWORDS:** Water Resources, Water resources management, Regulatory agencies, Stakeholders, Local community

### 1.0 Introduction

Water is an essential resource for agriculture, industry, and domestic use, making its legal protection and sustainable management critical to the development and well-being of Tanzania's population.<sup>1</sup> Water resources can be defined as a natural resource of water that are potentially useful for human<sup>2</sup>. The country's water resources, which include rivers, lakes, rain and groundwater, are integral to the livelihoods of millions of people and the health of its ecosystems. Among the most significant of these water sources are the vast Great Lakes of Victoria, Tanganyika, and Nyasa, which are crucial

not only for Tanzania but also for the surrounding countries. Additionally, major rivers such as the Rufiji, Ruaha Mkuu, Malagarasi, Mara, Ruvu, Kagera, Ruvuma, and Pangani provide essential water for irrigation, energy generation, transportation, and domestic consumption. These water bodies are vital for sustaining biodiversity and supporting the local communities who rely on them for their daily needs. As such, safeguarding these water sources is not only necessary for ecological balance but also for the socio-economic growth of Tanzania. Water resource management involve the process of planning, developing and managing water resources in terms of both quality and quantity<sup>3</sup>. Legal protection for water sources in Tanzania is primarily governed by laws and policies all of which aim at ensuring the sustainability and

<sup>1</sup> [2030WRG Tanzania-Basin-Prioritization-Report-June-2014.pdf](#) – Accessed on 04/12/2024 at 08:45 A.M

<sup>2</sup> <http://en.wikipedia.org>

<sup>3</sup> <http://www.globalwaters.org>

management. The principal legislation is the Water Resources Management Act of 2009. The Act<sup>4</sup> provides for water sources conservation, allocation and equitable use. This Act<sup>5</sup> promote National water Policy and emphasizes participatory approaches to water management and the involvement of local communities in decision-making processes.

National Water Policy<sup>6</sup> serves as a foundational framework for the effective management of water resources across Tanzania. It outlines a broad approach to ensuring the sustainable use of water, with specific emphasis on water supply, sanitation, and environmental management. This policy is designed to address both the immediate needs of water accessibility and long-term sustainability, balancing economic, social, and environmental concerns. Complementing this policy are several key pieces of legislation that govern the protection of water sources and related environmental concerns. These include Environmental Management Act of 2004<sup>7</sup>, Land Act of 1999<sup>8</sup>, Public Health Act<sup>9</sup>, Forest Act of 2002<sup>10</sup>, Local Government Act of 1984<sup>11</sup>, and Water Supply and Sanitation Act of 2019<sup>12</sup>. Each of these laws plays a critical role in protecting the country's water resources by regulating aspects such as land use, forestry reserves, public health, and urban planning. Together, these legal instruments work in harmony with the Water Resource Management Act<sup>13</sup>, addressing various interconnected issues ranging from water management to environmental conservation and land use planning.

Despite these efforts, Tanzania's water resources<sup>14</sup> face growing pressures from a range of human activities and natural factors. Population growth continues to drive increased demand for water, while agricultural expansion, industrial development, and urbanization place additional stress on available water sources. Moreover, issues such as water scarcity, pollution, economic conflicts, and the adverse effects of climate change are significantly affecting the quantity and quality of water. Agriculture, particularly irrigation and the use of fertilizers and pesticides, is a major contributor to water depletion and contamination. Industrialization, while contributing to economic growth, also introduces pollutants into water bodies, further complicating the challenges of water management. In light of these pressures, it is clear that the existing legal framework must be strengthened and complemented by more integrated, strategic

management practices to ensure the sustainability of Tanzania's water resources.

Recognizing the importance of safeguarding these critical resources, Tanzania has developed a comprehensive legal<sup>15</sup> and institutional framework<sup>16</sup> aimed at ensuring the protection and sustainable use of its water sources. This framework not only includes the national policies and laws already mentioned, but also encompasses various regulatory institutions responsible for implementing and enforcing these laws. Through this multi-faceted approach, Tanzania seeks to address the challenges posed by human activity, climate change, and other factors, ensuring that its water resources are protected for the benefit of current and future generations.

## 2.0 Policy and legislative Instruments

This part articulate on policy and legislative instruments that govern water protection and overall management. Articulation highlights the existing legal framework. National Water Policy<sup>17</sup> (NAWAPO) outlines the government's vision, mission and strategic framework for the management, development and conservation of water resources in the country<sup>18</sup>. The policy address various challenges related to water availability, quality, and equitable distribution. It<sup>19</sup> provides a comprehensive framework for the sustainable management of water resources, emphasizing integrated management, stakeholder participation, and equitable access.

This policy encounters various challenges relating to implementation, enforcement, and coordination and requires a review process to capture current development.

National Environment Policy<sup>20</sup>, first adopted in 1997 and later updated, constitute a framework aimed at ensuring sustainable development while addressing environmental concerns. The policy emphasizes integration of environmental considerations into all sectors of development in order to promote sustainable use of different resources. It aims to balance economic growth with environmental protection. It focuses on the conservation and management of natural resources such as water, forests, and wildlife. The policy promotes sustainable practices to prevent depletion and degradation. It addresses pollution as one of the significant aspect. These includes measures to reduce air, water, and soil pollution through regulatory frameworks and enforcement. The policy<sup>21</sup> encourages community participation in environmental management. It outlines the roles and responsibilities of various government institutions, local authorities, and other stakeholders in implementing environmental policies and regulations. The policy acknowledges the impacts of climate change and outlines strategies for mitigation and adaptation to reduce

<sup>4</sup> S.5 Water Resources Management Act 2009

<sup>5</sup> S. 4 and S. 6 Water Resources Management Act No. 11/2009

<sup>6</sup> Preamble, National Water Policy 2002

<sup>7</sup> S. 109, Act no. 8/2004

<sup>8</sup> Act no. 4/1999

<sup>9</sup> Act no. 1/2009

<sup>10</sup> Act no. 7 /2002

<sup>11</sup> Act no. /1984

<sup>12</sup> Act no. 5/2019

<sup>13</sup> Act no. 11/2009

<sup>14</sup> <http://en.wikipedia.org>

<sup>15</sup> Act no. 11/2009

<sup>16</sup> S. 22 of Act No 11/2009

<sup>17</sup> National Water Policy 2002

<sup>18</sup> S. 7 Act no. 11/2009

<sup>19</sup> Preamble National Environment Policy

<sup>20</sup> National Environmental Policy 1997

<sup>21</sup> National Environmental Policy 1997

vulnerabilities and enhance resilience. It supports the development of legal instruments and regulations to enforce environmental standards and address violations. The policy stresses the importance of environmental education and raising awareness among the public to foster a culture of environmental stewardship.

Tanzania's approach to environmental policy reflects its commitment to addressing both current and future environmental challenges while supporting socio-economic development.

The Water Resources Management Act (WRMA) of 2009, as amended, serves as a critical legislative framework for the sustainable management, development, and protection of water resources in Tanzania. The Act<sup>22</sup> constitutes provisions aiming at ensuring equitable use of water as a resource, promote stakeholder involvement and safeguard water quality and availability for various uses. The Water Resources Management Act (WRMA) of 2009, as amended, serves as a critical legislative framework for the sustainable management, development, and protection of water resources in Tanzania.

The Environmental Management Act (EMA) 2004 is a comprehensive legislative framework promoting sustainable environmental management and conservation in Tanzania. This Act addresses various environmental issues, establishes institutions for environmental governance and provide principles and mechanisms for environmental protection and management. The Act<sup>23</sup> has led to significant improvements in environmental governance, public participation, pollution control, and natural resources conservation.

The Water Supply and Sanitation Act No. 5/2019 is a pivotal piece of legislation in Tanzania for ensuring the provision of safe, reliable, and sustainable water supply and sanitation services. This Act establishes a regulatory framework and emphasizes quality service delivery, public health, environmental protection, and stakeholder participation.

The Act<sup>24</sup> expand access to safe and clean water supply and sanitation services for all Tanzanians, particularly in underserved and rural areas. The law fosters sustainable management and utilization of water resources with the aim of ensuring long-term availability and reliability of water supply and sanitation services and improve the quality and reliability of water supply and sanitation services to protect public health and enhance living standards.

The efficacy of laws relating to the protection of water sources and resources in Tanzania is assessed by examining how well these laws achieve the intended goals, address existing challenges, and improve water resource management. Analysis of the law will consider the weaknesses, successes within the existing legal framework.

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<sup>22</sup> S. 5, Act No. 11/2009

<sup>23</sup> S. 7, Act 8/2004

<sup>24</sup> Preamble, Water Supply and Sanitation Authority no 5/2019

### 3.0 Implementation Challenges

Water Resources Management Act<sup>25</sup> is limited by financial and human resources constraints. The situation hinders effective implementation of Water Resources The effectiveness of laws designed to protect water sources and resources in Tanzania can be assessed by evaluating how well these legal provisions meet their objectives, address the prevailing challenges, and enhance the overall management of the nation's water resources<sup>26</sup>. While Tanzania has established a comprehensive legal and institutional framework<sup>27</sup>, several challenges hinder its full potential. This analysis will critically examine the existing laws, identifying both their successes and the areas in which they fall short.

One of the primary weaknesses in the legal framework is the lack of robust enforcement mechanisms<sup>28</sup>. Although there are numerous laws aimed at protecting water resources, enforcement often remains inconsistent due to insufficient capacity, limited resources, and a lack of coordination among institutions. This gap between law and practice results in ineffective implementation and weak regulatory oversight, allowing for the continued degradation of water sources. Furthermore, the legal framework is often fragmented with overlapping jurisdictions and unclear responsibilities between various governmental bodies, leading to inefficiencies and confusion in the management of water resources<sup>29</sup>.

Another significant challenge is the limited involvement of local communities<sup>30</sup> in water resource management. While laws such as the Water Resource Management Act<sup>31</sup> emphasize community participation, in practice, local communities often lack the necessary resources, education, and legal empowerment to fully engage in the management and protection of water sources. This disconnect between national policies and local realities undermines the overall success of the legal framework<sup>32</sup>.

Additionally, climate change and the growing pressure from industrialization, agriculture, and urbanization pose significant challenges to the implementation of water protection laws. The existing legal provisions may not be adequately adapted to address the emerging threats of climate variability, pollution from industrial activities, and unsustainable water usage practices. The laws may also fail to take into account the increasing competition for water resources, particularly in water-scarce regions.

This analysis will highlight the successes of the legal framework<sup>33</sup>, such as the establishment of policies aimed at

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<sup>25</sup> S. 25, Act no. 11/2009

<sup>26</sup> <http://www.gwp.org>

<sup>27</sup> Part vi., Act no. 11/2009

<sup>28</sup> Part xiii, Act no.11/2009

<sup>29</sup> <http://www.globalwaters.org>

<sup>30</sup> S. 80, Act no 11/2009

<sup>31</sup> S. 80 and 81, Act on. 11/2009

<sup>32</sup> Law Environment and Development Journal, Leticia Nkonya

<sup>33</sup> Part iv(a-e), Act no 11/2009

improving water access, sanitation, and environmental management, but it will also emphasize the key shortcomings that hinder effective water resource protection. By identifying these weaknesses, the article will offer recommendations for strengthening the legal system and ensuring that Tanzania's water resources are sustainably managed for future generations.

### 3.1 Water Resources Management Act 2009 as amended in 2022.

The responsible institutions<sup>34</sup> with mandate to manage water resources faces insufficient funding and low capacity to the effect of affecting the ability to carry out inspections, monitoring, and enforcement.

Enforcement of the law and regulations is inconsistent. This is observed in remote or underserved areas as compared to urban areas where law enforcing institutions are mainly based. This inconsistency undermines the effectiveness of the provisions and thereby leading to the non-compliance of the law.

Likewise effective water management requires coordination among various government agencies and stakeholders. Government agencies lacks coordination giving rise to overlaps, gaps and sometimes even conflicts of laws in water management efforts in various areas.

Additionally, there are challenges in data collection and monitoring that has limited the ability to assess water quality and usage accurately. Data gaps indirectly hinders effective decision-making and management<sup>35</sup>.

The Water Resources Management Act<sup>36</sup> encourages public participation. Practical challenges in engaging all relevant stakeholders especially marginalized communities, limits community outreach. Indigenous communities around water sources continue with economic activities at the water sources and causing pollution thereby.

Some water users and polluters are not fully aware of the regulations or the importance of compliance. This situation results to unintentional law violations by continued economic and human activities.

Sometimes economic and social pressure among the community and other stakeholders leads to resistance against regulations, particularly in areas where water is heavily utilized.

Legal and bureaucratic procedures related to water management is complex and time-consuming. The legal procedures potentially slow down decision-making and enforcement processes.

On the other hand Water Resources Management Act (WRMA)<sup>37</sup> offers a strong legal and regulatory framework for managing and protecting water resources, with strengths in its comprehensive approach, emphasis on catchment

management, pollution control, and stakeholder involvement. These Challenges and weaknesses can be addressed through improving coordination, enhancing capacity building, better data management and increased public awareness to enhance the overall effectiveness of the Act in safeguarding Tanzania's water as a natural resource<sup>38</sup>.

### 3.2 Environment Management Act (EMA) Act No. 8 of 2004

Environment Management Act (EMA)<sup>39</sup> provide a legal framework for environmental protection and sustainable management of resources including water resources. This Act lacks effective enforcement mechanisms. The regulatory agencies are under-resourced and lacks authority. As a result they fail in the struggle to enforce compliance with required water protection standards.

The law does not specify detailed standards for water quality or resource management. This situation result in vague guidelines that are difficult to implement or measure.

The Environment Management Act<sup>40</sup> mainly and broadly focus on environmental protection without delving deeply into specific issues related to water resource. This leads to a lack of targeted measures for managing and protecting water sources.

One of the key challenges in the management of water resources in Tanzania is the absence of a shared understanding across sector institutions regarding what constitutes an effective Monitoring and Evaluation (M&E) system. This lack of clarity obstructs the development of cohesive, coordinated M&E strategies within the water sector. Moreover, the failure to integrate M&E sub-systems and processes leads to fragmented data collection, analysis, and reporting. As a result, the assessment of water management outcomes is weakened, making it difficult to identify areas for improvement. The situation is further compounded by the insufficient institutionalization of M&E practices within critical water sector agencies, such as the Ministry of Water. Without a comprehensive and integrated M&E framework, it becomes challenging to evaluate the progress of water protection laws, measure their effectiveness and ensure accountability in water resource management. These gaps in the M&E system contribute to broader challenges in the implementation of water resource management laws, limiting the ability to make informed decisions and take timely corrective actions.<sup>41</sup>The current legal framework also falls short in addressing the crucial need for public participation in water resource management. It fails to adequately recognize the role that local communities and various stakeholders play in ensuring the sustainable use and protection of water resources. Meaningful engagement of these groups is vital, as

<sup>38</sup> <http://www.wvi.org>

<sup>39</sup> S. 5 and S. 109, Act no. 8/2004

<sup>40</sup> S. 4, Act no. 8 2004

<sup>41</sup> [https://www.globalwaters.org/sites/default/files/7dec\\_tanzania\\_institutional\\_frameworkforwatersupply.pdf](https://www.globalwaters.org/sites/default/files/7dec_tanzania_institutional_frameworkforwatersupply.pdf) – Accessed on 4/12/2024 at 09:27 A.M

<sup>34</sup> S. 22, Act no 11/2009

<sup>35</sup> <http://gwp.org>

<sup>36</sup> S.5, Water Resources Management Act 2009

<sup>37</sup> S. 22, Act no.11/ 2009

it fosters a sense of ownership, increases awareness, and enhances the effectiveness of water management efforts. Involving local communities not only empowers them to take part in decision-making processes but also ensures that water management practices reflect their needs and local knowledge. By neglecting to formalize and promote such involvement, the law undermines the potential for collaborative efforts that can drive more responsible and sustainable water use practices at the grassroots level. This gap in the legal framework weakens the foundation for truly inclusive and effective water governance, hindering long-term success in the protection and management of water resources.<sup>42</sup>Water resource management is increasingly challenged by climate change, population growth, and industrial activities, all of which demand a more adaptive and forward-thinking approach. However, the Environmental Management Act is slow to respond to these evolving threats due to its lack of mechanisms for regular updates and revisions. This failure to adapt limits its effectiveness in addressing emerging issues and hampers the long-term sustainability of water resources.

In addition, effective water management requires adequate funding and resources, yet the Act does not adequately address financial constraints or provide clear mechanisms to ensure sufficient allocation of both financial and human resources for water protection. This oversight creates a significant barrier to the implementation of effective management strategies and undermines efforts to safeguard water resources.

The Act also suffers from weaknesses in its data collection and monitoring systems. The absence of robust, up-to-date data makes it difficult to assess water quality, track resource status, and make informed decisions about water management.

Without reliable data, the ability to respond effectively to changing conditions is severely compromised.

Water resources often cross regional or national boundaries<sup>43</sup>, yet the Environmental Management Act<sup>44</sup> does not adequately address the complexities of inter-jurisdictional management. This results in conflicts or inconsistencies in how water resources are protected and managed, further complicating efforts to ensure sustainable water use.

Furthermore, the Act fails to enforce best practices for water conservation and pollution prevention, which are essential to effective water management. This regulatory gap leads to inefficient management and the continued degradation of water resources, exacerbating the challenges faced by the country.

To address these shortcomings, a comprehensive revision of the Act is necessary. This revision should focus on improving coordination among stakeholders, strengthening enforcement

<sup>42</sup> 42 ibid

<sup>43</sup> <http://www.maji.go.tz>

<sup>44</sup> Act no. 8/2002

mechanisms, and ensuring that the law remains flexible and responsive to emerging challenges. By doing so, the law can be made more effective in supporting sustainable water management practices and better equipped to address the evolving needs of the country.

### 3.3 Water Supply and Sanitation Act, Act No 5 of 2019

Water Supply and Sanitation Act<sup>45</sup> implementation is limited by financial and technical resources by institutions with mandate to manage and protect the water resource situation which hinder effective enforcement of regulations<sup>46</sup>.

The Act<sup>47</sup> establishes Water Authorities<sup>48</sup>, COWSO<sup>49</sup>s and RUWASA<sup>50</sup>. These institutions with those established under Water Resources Management Act have overlapping mandates in managing the resource and lack coordination among themselves leading to inefficiencies and even conflicts. Clearer delineation of roles and enhanced inter-agency cooperation is important.

Established institutions lacks adequate data and information which affect planning, monitoring and decision-making processes. Investment in advanced technology for data collection, infrastructure development and capacity building is necessary.

The law<sup>51</sup> provides for pollution control. However, water quality monitoring and management still need to be strengthened. Industrial and agricultural pollution still pose a significant challenge in the protection of the water resources.

The law<sup>52</sup> encourages public awareness about water conservation and the importance of protecting water resources. This is limited particularly in remote areas. Increased effort in education and awareness campaigns is required to foster a culture of sustainable water use.

Although policies include climate adaptation measures, the actual integration of these measures into local practices is also limited. Greater emphasis on building climate resilience at the community level is necessary.

### 4.0 Weakness of Institutions Mandated to Protect Water Resources

Institutions responsible for protecting water sources and resources often face a range of challenges and weaknesses that can undermine their effectiveness. Some common issues relate to those of weakness include technical incapability, insufficient operational fund and lack of efficient data monitoring and evaluation, lack of coordination and inefficient enforcement as described hereunder:

<sup>45</sup> S. 24, Act no 5 of 2019

<sup>46</sup> <http://www.researchgate.net>

<sup>47</sup> Act no 5/2019

<sup>48</sup> S. 9 Act no 5/2019

<sup>49</sup> S. 32, Act no. 5/2019

<sup>50</sup> S. 42, Act no 5/2019

<sup>51</sup> S. 67, Act no. 5/2019

<sup>52</sup> S. 4(1) (b) Act no. 5/2019

#### 4.1 Insufficient Funding

Many water protection institutions operate with limited budgets, which restrict their ability to conduct comprehensive monitoring, enforce regulations, or implement necessary infrastructure improvements<sup>53</sup>.

#### 4.2 Inadequate Enforcement

Even with robust regulations in place, enforcement is still weak due to a lack of resources, insufficient training, or even political pressures. This leads to non-compliance and unchecked environmental damage<sup>54</sup>.

#### 4.3 Political and Economic Pressures

Institutions face pressure from political entities or economic interests that prioritize short-term gains over long-term sustainability. This results in policies that favor development or resource exploitation at the expense of conservation. Political and economic considerations are primary factors for decision on water resource<sup>55</sup>.

#### 4.4 Limited Public Awareness and Engagement

The public is not well-informed about water issues causing not engage with water management practices. This has resulted to lack of support for necessary policies or actions and reduced pressure on institutions to perform effectively.

#### 4.5 Technical and Scientific Limitations

Understanding and managing water resources requires advanced scientific knowledge and technology. Most institutions struggle with outdated technology and lack sufficient technical expertise required to address complex water issues.

#### 4.6 Corruption and Mismanagement

In some cases, corruption or mismanagement within institutions divert resources away from their intended purposes, leading to ineffective water protection efforts.

#### 4.7 Legal and Institutional Frameworks

We note that above weaknesses on existing legal frameworks hamper effective water management and protection. Water Basin office which is an institution established under the Water Resources Management Act<sup>56</sup>, need more robust and flexible laws to address emerging challenges and integrate new scientific findings.

#### 4.8 Lack of Data and Monitoring

Effective water management relies on accurate and comprehensive data. Insufficient monitoring and data collection hinder the ability to make informed decisions and respond to emerging issues<sup>57</sup>.

Addressing the above weaknesses typically requires a multi-faceted approach, including increased funding, better coordination, improved enforcement mechanisms, enhanced

public engagement, and up-to-date scientific and technical resources.

## 5. 1 Community Understanding and Participation

Community understanding and participation is crucial for the effective protection of water sources and resources in Tanzania<sup>58</sup>. Water Resources Management (Amendment), Act 2022<sup>59</sup> provide for involvement of local communities in water management ensures that the strategies and practices adopted are sustainable, contextually appropriate and have the support of those most directly affected by water resource issues. The following analysis covers the state of community understanding and participation in legal protection of the water resource.

### Legal and Policy Framework

Encourages community involvement in water management and emphasizes the importance of local participation. Promotes the establishment of Water User Associations<sup>60</sup> (WUAs) to facilitate community participation. Basin Water Boards involves representatives from local communities to ensure their interests consideration in water management decisions. Established Water User Associations involve local communities in the management and decision-making processes related to water resources. These associations play a key role in water allocation, maintenance of infrastructure and conflict resolution among water users. Some initiatives focus on building the capacity of Water User Associations through training programs that enhance their technical and managerial skills<sup>61</sup>. Various water management projects in Tanzania adopt a participatory approach, engaging communities in planning, implementation and monitoring activities. Government and non-governmental organizations (NGOs) run awareness campaigns to educate communities about water conservation, pollution prevention, and sustainable use practices. The country has also noticed the need to review national vision for prioritizing water resource<sup>62</sup>.

## 5.2 Weakness and Challenges to Community Understanding and Participation

The Policy<sup>63</sup> and the primary legislation<sup>64</sup> advocate and encourage community engagement in the protection of water resources. Despite such legal back up we find some weaknesses

<sup>53</sup> <http://www.researchgate.net>

<sup>54</sup> *ibid*

<sup>55</sup> <http://www.fao.org>

<sup>56</sup> S. 22, Water Act no. 11/ 2009

<sup>57</sup> <http://www.researchgate.net>

<sup>58</sup> [Hhttp://www.suaire.sua.ac.tz](http://www.suaire.sua.ac.tz)

<sup>59</sup> Section 23, Act no 8/2022

<sup>60</sup> S. 80 Act no. 11/2009

<sup>61</sup> A Study on Water User Organization in Thailand, P.Chuenchum, 2024

<sup>62</sup> Revising National Development Vision 2025 priority on water, Daily News, March 21<sup>st</sup> 2024

<sup>63</sup> S. 4.1 of National Water Policy 2002

<sup>64</sup> S. 5 Water Resources Management Act 2009

### 5.2.1 Limited Awareness and Education (knowledge Gaps)

More than half community members residing around water resources lack comprehensive knowledge about water laws, their rights and responsibilities regarding water resource protection, conservation and management. This results to continued economic and human activities which have direct effect to the water resource.

### 5.2.2 Cultural Beliefs

Traditional practices and beliefs can conflict with modern water management practices. This situation by the inhabitants living near and or around the Lake Victoria shores which constitute major water resource in Mwanza has made it challenging to implement new initiatives.

### 5.2.3 Capacity and Resources (Resource Constraints)

Water User Associations<sup>65</sup> and other community groups often face financial and technical constraints. The situation largely limits their effectiveness in the protection and management of the water resource<sup>66</sup>.

### 5.2.4 Training Needs

There is a need for continuous training and capacity-building<sup>67</sup> efforts to empower communities with the skills needed for effective water management. These training can equip the local communities with knowledge and understanding in the resource protection.

### 5.2.5 Coordination and Communication (Coordination Issues)

There exists poor coordination between local communities, government agencies, and other stakeholders. This lead to fragmented and ineffective water management efforts towards water resource protection and management<sup>68</sup>.

### 5.2.6 Equitable Participation

Equitable participation and representation in Water User Associations and other water management bodies is not ensured and has remain a challenge.

## 5.3 Strategies to Enhance Community Understanding and Participation

Strategies are still necessary. These include, promoting community understanding by implementing comprehensive awareness campaigns to educate communities about the importance of water conservation, pollution control, and sustainable use practices. Integrating water education into school curricula to foster a culture of water stewardship from an early age. Conducting regular training workshops for water user associations and other community groups to enhance their technical and managerial skill<sup>69</sup>. Facilitating access to financial and technical resources to support community-led water management initiative. Creating support networks for

water user associations to share knowledge, experiences, and best practices. Strengthening the legal framework to provide more support and recognition to water user associations in water management. Establishing platforms for regular dialogue and coordination among all stakeholders, including communities, government agencies, and Non Government Organizations. Developing effective communication channels to ensure timely information sharing and feedback. Implementing policies and programs that promote the active involvement of women, youth, and marginalized groups in water management. Ensuring that water user associations and other decision-making bodies have equitable representation from all segments of the community. Involving communities in the monitoring and evaluation of water management projects to ensure accountability and transparency and establishing mechanisms for communities to provide feedback and suggestions for improving water management practices.

## 6.0 Conclusion

Existing policies and laws provide comprehensive legal framework in the protection of water resources. However, they face challenge of implementation and enforcement due to various factors. It is important to address these challenges for the laws to be effective as intended. On the other hand, community understanding of the legal obligation and participation are essential for the sustainable management and protection of water resources in Tanzania. This will lead to more effective, sustainable, and equitable management of the country's vital water resources.

<sup>65</sup> S. 80, Act no. 11/2009

<sup>66</sup> <http://www.researchgate.net>

<sup>67</sup> S. 31 Act no 11/2009

<sup>68</sup> <http://www.sciencedirect.com>

<sup>69</sup> <http://www.sciencedirect.com>