

**BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG
LILONGWE WATER BOARD WATER USERS' ASSOCIATIONS**

MSc IN TRANSFORMATIVE COMMUNITY DEVELOPMENT THESIS

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MZUZU UNIVERSITY

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**BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG
LILONGWE WATER BOARD WATER USERS' ASSOCIATION**

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A RESEARCH THESIS SUBMITTED TO FACULTY OF ENVIRONMENTAL
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DECLARATION

I declare that this thesis titled, “Barriers to women’s attainment of leadership among Lilongwe Water Board Water Users Associations”, is my original work. All citations, references and borrowed ideas have been duly acknowledged.

None of the work has been submitted previously for any degree or examination in any other University.

Emmanuel Chituzu Nyirenda

Student’s name

Date

CERTIFICATE OF APPROVAL

This Thesis ‘Barriers to women’s attainment of leadership among Lilongwe Water Board Water Users Associations by Emmanuel Chituzu Nyirenda is submitted with our approval as university supervisors for the MSc in Transformative Community Development.

Main Supervisor:

Date

Ulemu Mercy Msiska, PhD

DEDICATION

To my beloved son Kairos Chituzu Nyirenda (King Kairos) may your potential be maximised in your generation.

To my beloved late parents Arnold Chituzu Nyirenda and Jane Chituzu Nyirenda, thank you for the killer instinct.

To late Myles and Ruth Munroe, whose visionary leadership accomplishments inspired my own, you raised a champion.

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LIST OF ABBREVIATIONS AND ACRONYMS

MGDS	Malawi Growth and Development Strategy
CEDAW	Convention on the elimination of discrimination against women
UN	United Nations
SDGs	Sustainable Development Goals
SADC	Southern African Development Community
MoG	Ministry of Gender
LWB	Lilongwe Water Board
LWUA	Lilongwe Water Users Association
KMU	Kiosk Management Unit.
FGD	Focus Group Discussion
IRBs	Independent Review Boards

ABSTRACT

The paper arose from the background that both men and women are good leaders in organizations based on specific leadership traits that each of them may hold. Despite this fact, the study focused on examining barriers that women face in water management and why they remain underrepresented in many senior leadership positions in a case study of LWUAs. The study was imperative because it added to the body of literature on the causes of underrepresentation of women in LWUAs, understand the experiences of women in male dominated governance structure and proving the perceptions of stakeholders on the strategies to deal the inequitable participation of women in LWUAs. The study employed mixed method approach, qualitative data was collected through interviews and focus group discussions and quantitative data through questionnaire.

The study revealed that women remained underrepresented in both the Board of directors and Executive committee of WUAs in Lilongwe as they only constituted 23% and 24% respectively. This also implied that men constituted 74% and 73% respectively in the Board and Executive of WUAs in Lilongwe. The study further exposed that the factors caused this underrepresentation in leadership position in women included; religion, low confidence in women, low education levels in women and low capacity in women, culture and the perception that women are good leaders in domestic affairs than at office. Furthermore, the study found that few women in leadership positions experiences demonstrated that they are able to deliver duties in male dominated work place, involved in decision making and not experiencing any form of sexual harassment. Finally, the study looked at perceptions of stakeholders in establishing mechanism to reduce the disparity that existed between Women and Men in LWUAs: capacity building which could be done through sensitization or civic education or training in which women ought to be updated with developments of WUAs, Constitutional review towards advocating for 50 to 50

percentage of men and women respectively and effective leadership. The study concludes that women are underrepresented in LWUAs governance structure. Therefore, the study recommends that Constitutional Review to meet 50 to 50 percentage shares of the leadership positions.

Keywords: *Board of Directors, Executive Committee, Governance structure, Lilongwe, Leadership, Water Users Association and Water Management.*

CHAPTER 1: INTRODUCTION

This chapter presents the following sections: background of the study, problem statement, study objectives, research questions, and significance of the study.

1.1 Background

1.1.1 Women in water management

Women's leadership in water management is increasingly recognised as essential for achieving sustainable development and gender equality (UN Women 2018). The importance of women's participation in water governance is underscored by their direct involvement in water usage and management at the household and community levels, particularly in developing countries. Despite global and national efforts to promote gender equality, women remain significantly underrepresented in leadership roles within the water sector, including in Malawi with 28% (WFWP 2022). This disparity has far-reaching consequences, not only for gender equality but also for the effectiveness and sustainability of water management practices. In Malawi, water management is a critical issue, particularly in urban areas such as Lilongwe, where access to clean and reliable water remains a challenge for many communities. The Lilongwe Water Users Associations (LWUAs) play a central role in managing water resources at the local level, providing an essential service to residents and contributing to the broader goal of ensuring sustainable water management. LWUAs operate as community-based organisations that are responsible for overseeing the distribution, maintenance, and governance of water services. By engaging directly with local communities, the LWUAs aim to improve water service delivery, promote equitable access to water, and address issues related to water scarcity and infrastructure. Despite the important role played by the LWUAs in Lilongwe's water sector, leadership within these associations is predominantly male, reflecting the broader gender inequalities that characterise leadership roles in Malawi. While women are

often the primary users and managers of water at the household level, their participation in decision-making and leadership within water governance structures remains limited.

The LWAs were established as part of efforts to decentralise water management and improve service delivery in Lilongwe. WUAs are responsible for managing water kiosks, ensuring that water is distributed equitably, and maintaining water infrastructure. They also act as intermediaries between the Lilongwe Water Board and the communities they serve, representing the interests of local residents in discussions about water management policies and practices. However, the governance structures of these associations have traditionally been dominated by men, with women often relegated to subordinate roles, such as community mobilisers or secretaries, rather than decision-makers (Fisher & Naidoo 2016). The underrepresentation of women in leadership positions within the LWAs has significant implications for the effectiveness of water management. Studies have shown that when women are involved in water management decision-making, the outcomes are often more sustainable and equitable (UNESCO 2019). Women's leadership in this sector brings diverse perspectives and experiences to the table, particularly regarding the challenges faced by vulnerable groups, such as women and children, who are disproportionately affected by water scarcity and poor water quality. Furthermore, women leaders are more likely to prioritise issues related to health, sanitation and community welfare, which are critical components of sustainable water management. Despite the growing recognition of the importance of women's leadership in water management, the barriers preventing women from assuming leadership roles within the LWAs remain pervasive. These barriers include deeply entrenched gender norms, limited access to education and training, lack of support from male colleagues, and the perception that leadership in the water sector is a male domain. Additionally, women who do assume

leadership roles often face resistance and discrimination from both male colleagues and community members, which undermines their ability to lead effectively (Tripp 2015). These challenges are further compounded by structural inequalities, such as the gender wage gap and limited access to financial resources, which hinder women's ability to participate fully in leadership.

Research has demonstrated that women's involvement in water management leads to more inclusive and community-oriented approaches to governance, which are essential for achieving sustainable development goals (Mehta 2014). By understanding the impact of women's leadership on water management outcomes, this research provided insights into how gender equality can be promoted as a means of improving water service delivery and ensuring the long-term sustainability of water resources.

1.1.2 Importance of women leadership in management of WUAs

From the onset, it has been noted that involving women in leadership roles is important as it helps them to gain capacity on matters of national development and on issues vital to women workforce today. Specifically involving women in leadership positions of WUA is of great importance towards water quality management. This follows as many women are said to have a favourable overall opinion regarding most of the benefits of WUAs and that they are likely to contribute much in its management (Khandker, et al. 2020). It is further argued that involving women to work alongside men in water management helps in solving the technical challenges in water management. Additionally, it is argued that the involvement of women in WUAs is vital for balancing up of the gap of inequality between males and females. When women are involved, it helps in achieving gender equality in the development sector, particularly developmental projects. Notably, it is argued that having more women in leadership of women is crucial as evidence shows that more women are involved in use or fetching of water in developing nations of the world and subsequently,

they need to be part of management. In summing up it simply means that if more women are included along to be working men toward water management, more of them would attain social economic development (Khandker 2020)

1.1.3 Constraints to women leadership in water management

Malawi, like many other sub-Saharan African countries, faces significant challenges in water management due to climate change, population growth and limited infrastructure (World Bank 2020). Water Users Associations (WUAs) were established to ensure equitable distribution and management of water resources. However, leadership in these associations remains male-dominated, with women often relegated to subordinate roles (Chirwa 2019).

Malawi, as a sub-Saharan country, grapples with complex water management challenges exacerbated by climate change, population growth, and inadequate infrastructure. These issues are particularly pressing in urban areas like Lilongwe, where access to clean water remains critical for development (World Bank 2020). Water User Associations (WUAs) in Malawi were established as part of a decentralised approach aimed at enhancing community involvement in water management and ensuring equitable water distribution. These associations are essential in bridging gaps where the government and larger water utility companies fall short (Adams et al. 2018).

Lilongwe's WUAs were designed to empower local communities, allowing them to take an active role in the management and governance of their water resources. In theory, these associations are intended to foster inclusivity, promote local decision-making and ensure that marginalised groups, including women, have a voice in water governance (Meinzen-Dick 2007). Despite these objectives, evidence shows that leadership within these

associations is male-dominated, leaving women underrepresented in key decision-making roles (Adams et al. 2018).

The barriers to women's leadership within WUAs in Lilongwe reflect broader societal issues in Malawi. Cultural norms, patriarchal structures and socio-political dynamics continue to marginalise women, restricting their participation in leadership roles across various sectors, including water management. For instance, while WUAs were meant to democratise water governance, they often reinforce existing power structures that exclude women from meaningful participation (Adams et al. 2018).

Moreover, development issues in Lilongwe, such as urbanisation and increasing informal settlements, have compounded the complexity of water management. The rapid growth of the city has put enormous strain on the existing water infrastructure, further necessitating robust and inclusive water governance mechanisms (Jenkins 2023). Within this context, the role of WUAs becomes even more critical as they seek to manage scarce water resources efficiently and equitably. However, for these associations to truly succeed, it is essential to address the gender disparities that persist within their leadership structures (Njiru 2021). As stipulated in the National gender policy (2016) only 23% of women engage in decision-making. Moreover, women make up 23% of parliamentarians, 16.5% of councilors, 33% of judges, 40% of board members, and 40% of cabinet ministers (MoG 2016). All the above statistics and arguments demonstrate how underrepresented women are in various leadership position in the country. This leadership underrepresentation has not spared the composition of women in the WUAs in Malawi. The Kiosk Manager of Lilongwe water Board in the year 2022 estimated that females occupied about 21% in the Board and Executive Committee of the Water Users Associations.

1.1.4. Procedures taken to address the constraints in Malawi

Notwithstanding to all these barriers and challenges, Malawi has made a great initiative to promote women into leadership. From a legal perspective, Malawi has made substantial progress in enhancing gender equality. For instance, the Malawi's Constitution states that women enjoy the same rights as men. Malawi is also signatory to regional and international protocols promoting gender equality; such as the 2008 Southern African Development Community (SADC) protocol on Gender and Development, CEDAW and the Maputo Protocol. The Country has also enacted several roles aimed at building gender equality, most notably the Gender Equality Act of 2012, Currently the Gender Equality Act requires that all public bodies in Malawi should select men to women at the 60% to 40% representation in holding of the public appointments (Policy Brief 2021).

1.1.5. The status of Leadership in women in Malawi

Despite the existence of several measures to increase the representation of women in leadership, they remain underrepresented in positions of authority and decision-making (Matsa & Miller 2016). This stipulated that woman continued to experience difficulty climbing the corporate ladder. In October 2020, it was on record that the Women's Manifesto staged a protest against the underrepresentation of women in the statutory boards as only 10% of the positions were accorded to women and 90% were men. In the year 2021, 23% of women were reported to have occupied positions in Parliament and the implication was that 77% of Parliamentarians were men. 31% of Cabinet Ministers were women and that entails that 69% of them were men. In the same year the gross representation of women on record was only 15% across Malawi and that meant 85% of decision makers were men. It was further noted that only 14% women occupied the positions of Chairpersons against 86% men in the 28 District Councils Malawi. Worse

still, as reported by the Kiosk Manager of Lilongwe Water Board in 2022, it was estimated that on average, women occupied only 21% of the Board of directors and Executive committee positions against 79% that were given to their male counter-parts. This all resulted into an investigation on the factors that caused such disparity in leadership composition of WUAs, women experiences in the WUAs that are male-dominated inter-alia finding mechanism to rectify the same.

1.2 Problem Statement

Despite efforts to promote gender equality in leadership, women in Malawi remain significantly underrepresented in water management roles (FAO 2019). This research aimed to identify the barriers that prevent women from assuming leadership positions in the Lilongwe Water Users Association and suggest actionable solutions.

Regardless of global initiatives to promote gender equality, women remain significantly underrepresented in leadership roles within Water Users Associations (WUAs) in Lilongwe, Malawi. This underrepresentation persists despite the critical role women play in water collection and management at the household level. The specific barriers hindering women's advancement to leadership positions within these associations are not fully understood. Existing literature suggests that cultural norms, patriarchal structures, and socio-political dynamics may contribute to this marginalisation, restricting women's participation in leadership roles across various sectors, including water management (Adams & Ajibade 2018). However, the unique challenges faced by women in Lilongwe's WUAs have not been comprehensively studied.

While WUAs are designed to empower local communities and promote inclusive decision-making in water resource management (Meinzen-Dick 2007), evidence indicates that leadership within these associations remains male-dominated, leaving women

underrepresented in key decision-making roles (Adams et al. 2018). The absence of strategies to address the inequitable participation of women in these governance structures may hinder the effectiveness of water management. Notwithstanding the growing recognition of the importance of women's leadership in water management, the barriers preventing women from assuming leadership roles within the Lilongwe Water Users Associations remain pervasive (Tripp 2015).

Existing research has largely focused on generalised global gender inequalities in water governance and women leadership in the same but has nevertheless not provided an empirical analysis to the systematic and institutional barriers that are relevant to Lilongwe Water users associations (WUAs). This study therefore seeks to address this gap by investigating the specific obstacles that prevent women from assuming leadership positions in the context Lilongwe's WUAs, one of the largest water users association in Malawi. By identifying and understanding these barriers, the study aims to provide an objective insight in a localised context and provide actionable solutions. To systematically, structurally and institutionally enhance women's representation and leadership in urban water management, a critical area in transformative community development in Malawi.

1.3 Study Objectives

The main objective of the study was to investigate factors that affect participation of women in leadership positions in LWUAs.

1.3.1. Specific Objectives

1. To determine factors that hinder women's presence in the WUAs governance structure
2. To assess the experience of women in the governance structure
3. To examine the perceptions and attitudes of stakeholders towards women leadership in water management and governance

1.3.2. Research questions

In order to address the research objectives, this research study developed the following research questions;

1. What are the factors that hinder women's presence in the WUAs governance structure?
2. What experience do women have in the governance structure?
3. What are the prevailing attitudes towards gender equality and women's empowerment in leadership roles within water user's associations?

1.4 Justification

WUAs are essential for managing water resources (GoM 2023). Communities benefit greatly from the provision of potable water or safe drinking water and meeting sanitation needs (Xu et al. 2014). Women possess special leadership qualities, and these abilities are essential for managing WUAs. If the low degree of participation of women in WUA governance is not adequately controlled, the services provided by WUAs would steadily deteriorate. Women must be included because they have different viewpoints than males on a variety of topics including how to make wise judgments (Khandker et al.2020).

The Lilongwe Water Board (LWB) required information on the obvious causes of the low representation of women in the WUAs' governance structures (LWB). Therefore, it was crucial to identify the factors that contribute to the low participation of women in the association. Doing so will help the academic community gain new perspectives and provide the association's managers with more literature on how to handle problems. This also applies to the Kiosk Management Unit (KMU).

Furthermore, Women in male-dominated occupations face unique challenges and use distinctive coping means (Martin & Bernard 2013). Therefore, identification of the

experiences of women in WUAs is required to add insights on coping means. This study also contributed to the body of knowledge towards understanding how to integrate and retain women in male-dominated occupations (Martin & Bernard 2013).

Women's equal participation and leadership at every level and in every sector is essential to eliminating gender-based poverty (Horae & Gell 2009). Therefore, of stakeholders' perception on recommendations on how WUAs can address inequitable participation in decision-making remained very imperative. The study also contributed to the literature on perceptions of women's strategies to deal with inequitable participation in the governance structure of WUAs.

Finally, the Lilongwe Water Users Associations offered a unique context for exploring these issues, as they operate at the intersection of community-based governance and formal water service provision. The decentralised nature of the LWUAs allows for a closer examination of how leadership dynamics play out at the local level, where the direct impact of water management decisions on community members is most apparent. By focusing on this specific case, this research contributed to a deeper understanding of the factors that influence women's leadership in water management in Malawi and the broader implications for gender equality and sustainable development.

1.5. Ethical consideration

Ethical clearance was sought from the Mzuzu University Research Ethics Committee towards conducting the research. The researcher also used informed consent forms as one way of respecting the rights of the participants. The researcher had to ask the participants to sign informed consent forms as a way of getting their permission to participate in the research voluntarily. Research ethics was attained. Research volunteers were made aware of how secret the findings would be published confidentially, ensuring that their identities

remained anonymous including in reporting. Informed consent was obtained from all participants before conducting the research. Additionally, it was also emphasised that participation was optional and that participants were free to leave at any time.

1.6 Chapter Summary

Chapter 1 discussed the background of the study, problem statement, study objectives, research questions, and significance of the study. Chapter 2 presents literature review of the study.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The chapter reviews published related to the current study. It looks at theoretical framework, conceptual framework, factors that hinder women's presence in the LWUAs governance structure, the experience of women in a male-dominated governance structure, perceptions and attitudes of stakeholders towards women leadership in water management and governance.

2.1 Theoretical Background.

2.1.1 Feminist Theory.

For this research study, the feminist theory was used with a perspective of liberal feminism. Feminist theory attempts to describe women's oppression, explain its causes and consequences, and prescribe strategies for women's liberation (Tong 2009). Liberal feminism is derived from the liberal political philosophy of the enlightenment period and centres on the core ideas of autonomy, universal rights, equal citizenship, and democracy (Tong 2009). It is characterised by an individualistic emphasis on equality (Khattak 2011) motivated by or concerning the experience of women, especially in terms of their social, political, and economic inequalities (Adawo et al. 2011). Liberal feminists believe that women should have equal rights with men (Allini & West 2000). A liberal feminist believes that gender differences are not rooted in biology and that men and women are more similar than different. All people, therefore, should have equal status and the same opportunities. Therefore, liberal feminism remained very important to this study. Hence with the purpose of attaining the responses to research objectives, the theory was applied accordingly. As a result, the theory was fundamental towards promoting the achievement

of gender equality in the LWUAs governance structure in the executive committees and in the board of trustees.

2.2. Conceptual framework

On Conceptual framework, Multer (2017) defines it as a visual representation that helps to illustrate the expected relationships between cause and effect. The cause is regarded as the independent variable and the effect is the dependent variable. In the context of this study, the independent variables are the barriers to women's leadership, while the dependent variable is women's leadership attainment. The framework posits that certain factors and experiences of women in male-dominated occupations influence or not their ability to attain leadership positions, and it also considers stakeholders' perceptions on addressing women's underrepresentation in leadership roles.

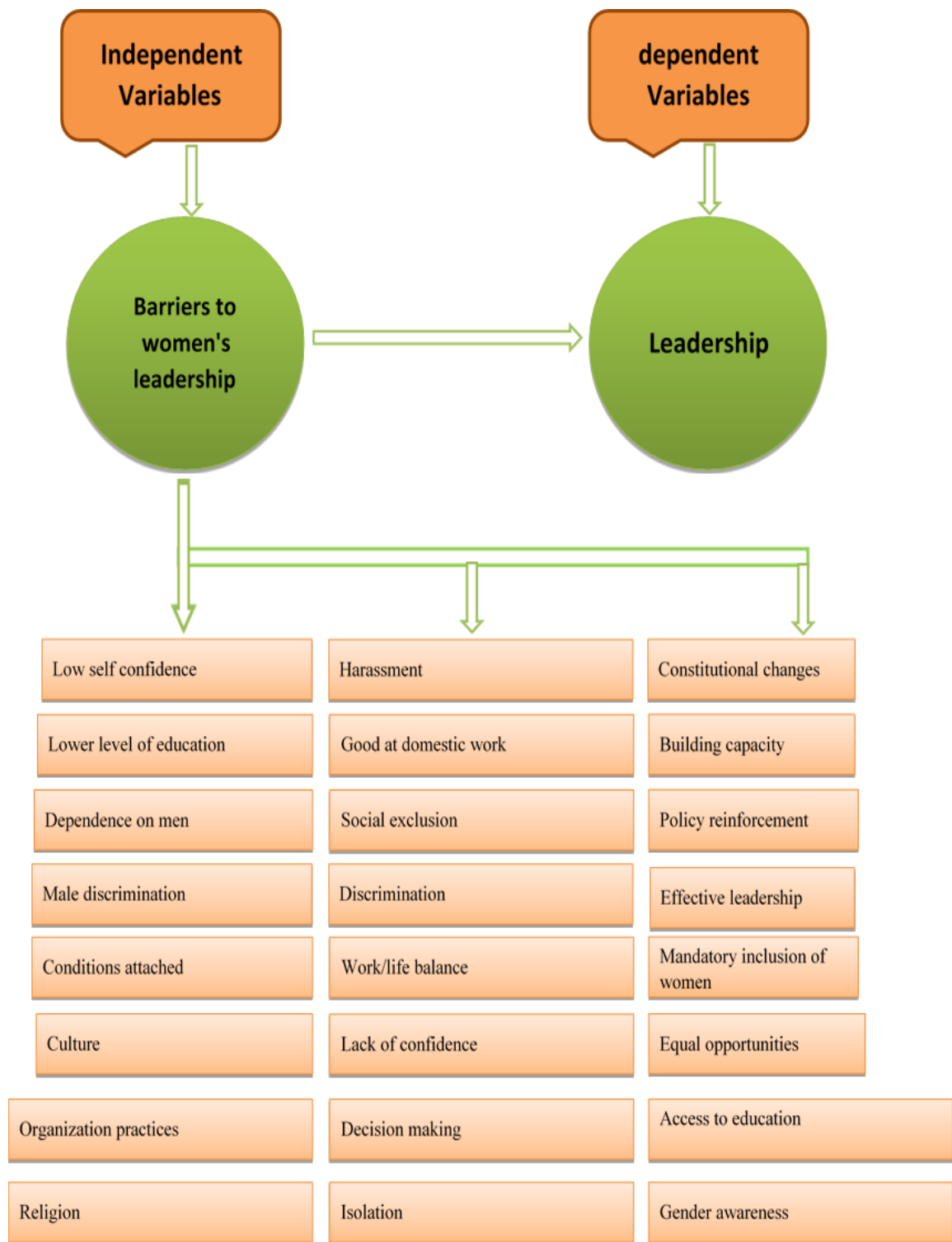


Figure 1: Conceptual Framework. Source (Chituzu 2025)

2.3 Empirical Background

2.3.1 Factors that hinder women's presence in the WUAs governance structure.

Numerous studies have shown that there are various elements that function as obstacles to women's leadership in the WUA's governance structure. According to research by (Imburgia et al.2020), there are few women in leadership positions of WUAs of communal irrigation systems in Ethiopia and Argentina. According to the study, the obstacles are legal considerations (rules of access), individual traits, technical aspects of irrigation management techniques, and power dynamics in social interactions.

Although all of these things encourage involvement, women face more obstacles than men do. In contrast, a study by (Gouws 2008) concluded that women's underrepresentation in governance is the cause of their emotional instability in high-level leadership roles. On the other hand, Caizhen's (2008) study found that women were not included in the WUAs in China specifically in Gansu Province in irrigation management because women have a lower level of education and knowledge, narrower experience, lower capacity, dependence on men, lack of self-confidence and male discrimination against women. Martin and Bernard's (2013) study agrees with Caizhen's (2008) study on some factors that hinder women's leadership. Martin & Bernard (2013) reveal that women face serious challenges that hinder them from being in leadership in male-dominated occupations because of gender discrimination, organisational practices, and women's unique physical, identity, and work balance needs.

Furthermore, a study conducted by Elias (2016) in South Africa revealed that the minimal presence and poor decision-making among women in WUAs is a result of low confidence levels in women, low levels of capacity, and cultural practices of people. (Khandar et al. 2020) agree Elias's (2016) study on some of the factors that affect women's leadership.

Chander's study conducted in India stipulated that the main reasons that hinder women from participating in WUAs are that only men participate and address meetings, and men make all decisions in water management, family tradition, and culture (Khander et al. 2020). In contrast, the study conducted in South Asia revealed that female participation is very minimal in WUAs because of the formal and informal membership criteria that exclude women in most of the positions (Dick & Zwarteveen 1998).

Adams et al. (2018) agreed that community-based governance does not have equitable participation of women and men in the governance structure of WUAs. The study revealed that low confidence in women affects women's leadership, agreeing with the study by Caizhen (2008). Adam et al.'s study further highlights that conditions attached to being included on the board are also a serious factor that hinders women's leadership.

There is still a substantial research gap regarding the conclusiveness of the factors preventing women from participating in governance structures, despite the numerous studies mentioned above. This is because, in countries such as China, South Africa, Tanzania, Argentina, and India, some studies agree on certain factors while others disagree. Therefore, the study was carried out in Malawi in Lilongwe city informal settlements to determine whether or not factors agree, and even better, to discover additional factors.

2.3.2 The experience of women in the governance structure

Women who work in male-dominated work face more challenges that differ from those who work in more gender-balanced and female-dominated work (Martin & Bernard 2013). Burton (1991), and Bierema and Opengart (2002) agree that equal access to the career advancement of women remains a problem. Therefore, this section reviewed the studies

conducted to clearly explain the experience of women in a male-dominated governance structure.

According to Qadir's (2019) study, women face challenges in male-dominated governance because men often believe that women cannot be good leaders or managers but rather excel at domestic work. On the contrary, (Bridges et al. 2021) highlighted that woman in male-dominated environments experience barriers to work such as social exclusion, harassment, marginalisation, and discrimination. This has a huge negative impact on their professional progress. Elias's (2016) study agrees with the study by Qadir (2019) where men are involved in productive and significant roles in WUAs, but women are given domestic roles.

Another study conducted by Martin in 2016 in South Africa emphasised that women in male-dominated work face different challenges in their workplace. The challenges revealed in the study were discrimination and bias, physical and health-related difficulties experienced and negative emotions resulting from male-dominated environments, and lack of real transformation and work/life balance. With a different view, Duyvejonck (2021) argued that women in male-dominated environments experience discrimination against sex, discounted, lack of confidence, and feeling isolated (Duyvejonck 2021). Duyvejonck's study agrees with the study of Bridges et al. (2021) on the experience of harassment of women in male-dominated governance. Therefore, this study had to assess if women in WUAs experience sexual harassment.

Imburgia et al. (2020) argued that WUAs continue to be male-dominated at all levels and their study revealed that woman in male-dominated workforces experience more hindrances in establishing equal access to membership, participation, low representation in leadership roles, and decision-making in irrigation management. This study agrees with the study conducted by Yami (2013) that stipulated that WUAs committees are male-

dominated, and the views of women are hardly represented in decision-making. As a result, this research had to examine if women's decisions were incorporated in male dominated WUAs.

Based on the literature reviewed, it is evident that many countries have significant presence of male domination in key leadership positions. However, there is a lack of conclusive evidence regarding the consequences, impact and prospects of women's experiences in organisations or associations with male-dominated governing structures that are relevant and important to transformative community development. In order to explore this knowledge gap on the experience of women in male dominated governance structures, a detailed case study was conducted on the governance structure of LWUAs with a focus on obtaining a Malawian context.

2.3.4 Perceptions and attitudes of stakeholders towards women leadership in water management and governance.

The study by Adams et al. (2018) revealed that women do not participate in the decision-making of the WUAs governance structure. Therefore, the study proposed strategies that may be implemented to address the issues. Short term efforts included: making changes to constitutional stipulations to grant women greater access to decision making, leadership opportunities on WUA boards and executive committees through quota systems which have proven to be effective (Mandara et al. 2014). In the long run, institutional changes at the national level that aim to increase women's access to education at all levels of society are necessary. This agreed with the Constitution of Mlodza WUA which stipulates that all residents within the association are eligible for admission into the association's positions upon election. However, articles 3 and 4 of said constitution are without clear criteria on equal opportunities between males and females in the governance structure.

Leadership in this context is not only about occupying formal positions of power but also about the ability to influence decision-making processes, implement sustainable practices, and mobilise resources for the benefit of the community. Women in leadership roles within water management face unique challenges, such as overcoming societal expectations, gaining respect from male colleagues, and navigating complex power dynamics that are often skewed in favour of men (Harris 2016). This research adopts a more inclusive and participatory definition of leadership, emphasising qualities such as collaboration, empathy, and community engagement, which are often undervalued in traditional leadership models that prioritise hierarchical and authoritative approaches (Madsen 2019). Furthermore, Khandker et al.'s (2020) study revealed that in order to increase access to women in the WUA's decision-making in the governance structure through training programs and education related to water management, there should be mandatory inclusion of women in WUA executive committees. This study agrees with the study by Elias (2016) which discovered that gender should not be used in determining the roles of Integrated Water Resource Management (IWRM) in society, equal opportunities should be given to women, women's inclusion should be reflected, there should be gender mainstreaming policies, an increase access to education and building capacity to increase understanding of gender implications.

Another study conducted by Caizhen (2008) put emphasis on the ways that could be used to increase participation of women in gender-equitable decision-making in WUAs. The study specified the capacity building of women to participate in leadership roles, local villagers' gender awareness, and gender mainstreaming policies. Imburia (2020) adds the active participation of women through policy reinforcement in terms of equitable

opportunities Furthermore, the study argues that effective leadership is also the best strategy that could help women to take part in decision-making.

The literature reviewed suggest that strategies implemented to improve stakeholder attitudes and perceptions towards women leadership and to effectively address women's unequal involvement in key leadership positions have not yielded decisive and actionable results, that are especially applicable in the Malawian context. Therefore, a thorough investigation was required to explore the nature of perceptions and attitudes towards women in leadership and their effective participation in key transformative development sectors such as water management in Malawi. This investigation was carried out using Lilongwe Water Users Associations as a detailed case study to determine the efficacy of strategies aimed at improving stakeholder attitudes and perceptions towards women in leadership within male dominated governance structures and to identify innovative strategies for improvement.

2.4 Chapter Summary

Chapter 2 provided a comprehensive overview of the theoretical and conceptual frameworks underpinning the study, along with a review of related literature focused on the specific objectives. These objectives include the factors that hinder women's presence in the governance structures of LWUAs, exploring women's experiences within male dominated governance settings, and examining stakeholders' perceptions and attitudes toward women's leadership in water management and governance. Chapter 3 then details the methodology employed in the study.

CHAPTER 3 METHODOLOGY

3.0 Introduction

This chapter describes methods and procedures of the study. The methodology elements presented include; study area, research design, sampling methods, sample size, data collection methods and data analysis.

3.1. Study Area

As shown in figure 3, the study was conducted in the six informal urban settlements of Lilongwe; Mlodza, Kauma, Malili, Njewa, Kanengo, and Tsabango. These were selected being a central area with a good number of active WUAs.

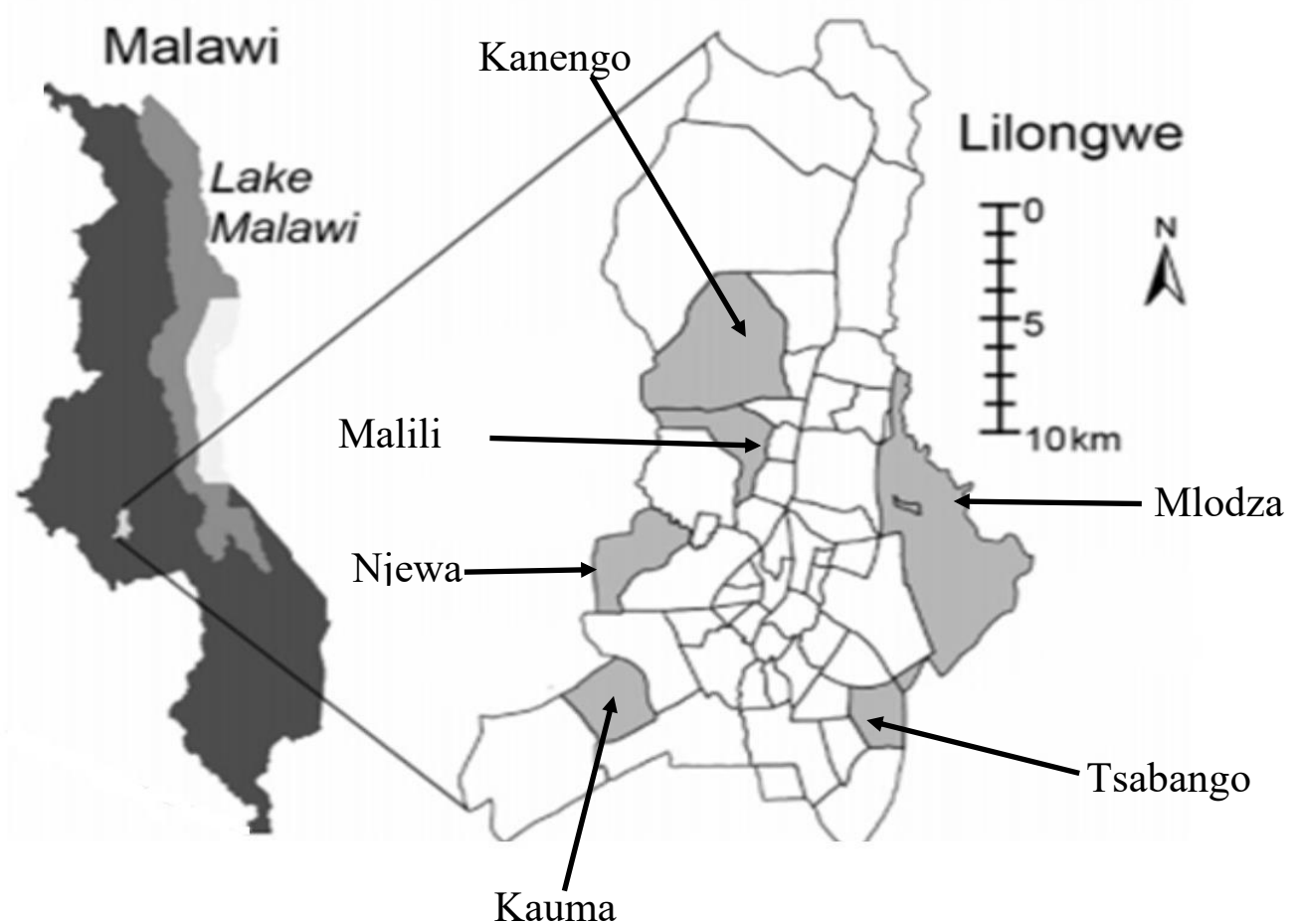


Figure 2. Map showing study sites in Lilongwe, Malawi

3.2. Research approach and design

The study adopted the mixed methods research approach, with the sampling technique covering both qualitative and quantitative aspects of the study. Mixed methods approach provides a more comprehensive understanding of a research problem as it draws on the strengths of both qualitative and quantitative approaches. The study was a case study design focusing on a single WUA for a detailed study.

3.3. Sampling framework and methods

This study employed a non-probability sampling technique, specifically purposive and snowball sampling methods. In purposive sampling, the researcher deliberately selected respondents who were deemed knowledgeable and relevant to the study objectives (Kombo & Tromp 2006). Through saturation monitoring, sampling continued until this saturation point was reached of a sample size of 156 participants. This sample size was drawn from current and former members of the board of directors, executive committees, contestants for executive committee positions who were not elected, and the secretariat. These individuals were selected to comprehensively address the research objectives and deliberately chosen to ensure comprehensive representation of all key stakeholders involved in leadership and governance within the Lilongwe Water Users Associations (LWUAs). The use of purposive sampling allowed the researcher to specifically target individuals who possess direct experience and knowledge relevant to the study's focus on barriers to women's leadership. By selecting current and former members of the board of directors, executive committees, unelected contestants, and secretariat members, the study captured diverse perspectives.

Snowball sampling was utilised to trace former executive committee and board members through referrals from existing participants, ensuring inclusion of key informants with

valuable insights. The inclusion of former members was critical to accessing historical insights and understanding changes over time, which might otherwise be inaccessible. This approach also mitigated the risk of missing key informants who are no longer in formal leadership positions but whose experiences remain valuable. The executive committee comprises 10 members, while each Water Users Association (WUA) contributes eight members to the board of directors, all of whom were interviewed. Additionally, focus group discussions were conducted with eight water users at each WUA to capture broader community perspectives. In total, the researcher targeted 48 board of trustees, 60 executive committee members of LWUAs, 14 former executive committee members, 14 former board members, 10 unelected executive committee contestants, and 10 secretariat members. This comprehensive sampling approach ensured diverse and relevant representation aligned with the study's objectives.

3.4. Data Collection Methods

The study collected primary data using both qualitative and quantitative approaches to comprehensively address the research objectives. The study used an interviewer guide, an audio recorder, Focus group discussions and structured questionnaire.

3.4.1 Qualitative Data

Qualitative data were gathered through interview guides and focus group discussions (see Appendix 2 and 3). Each interview was recorded using two methods concurrently: a voice recorder and manual notetaking. The use of a voice recorder allowed the researcher to capture the full conversation without the distraction of writing down every word, thereby enabling better engagement with participants. Manual notes complemented the recordings by capturing non-verbal cues and contextual details. Prior to data collection, participants

provided informed consent through a consent form outlining the study's parameters (see Appendix 1).

3.4.2 Quantitative Data

Quantitative data were collected using a structured questionnaire featuring a Likert scale (see Appendix 4) to measure participants' opinions. Respondents were asked to select the option that best reflected their feelings or attitudes toward each statement or question, allowing for quantifiable analysis of perceptions related to the study topic.

3.5. Data Analysis

3.5.1 Qualitative data

The qualitative data collected were transcribed verbatim and then systematically coded. Thematic analysis was employed to identify, analyse, and report key patterns and themes within the data. NVivo software was used to facilitate the organisation, coding, and retrieval of qualitative data, enhancing the rigor and efficiency of the analysis process.

3.5.2 Quantitative data

Quantitative data were analysed using Microsoft Excel to calculate the percentages representing participants' opinions. This descriptive analysis provided a clear summary of the distribution of responses across the Likert scale items, enabling straightforward interpretation of trends and attitudes.

3.6 Chapter Summary

Chapter 3 provided an overview of the research methodology that the study adopted. This chapter has outlined the study area, study design, sampling methods, sample size, data collection methods and data analysis. Chapter 4 presents the results of the study.

CHAPTER 4: RESULTS

4.0. Introduction

This chapter presents the findings on the study of women's participation in the governance structures of Water Users Associations (WUAs). The focus is on understanding the factors that limit women's involvement, their experiences within predominantly male leadership spaces, and the broader perceptions and attitudes towards women's leadership in water management and governance. Specifically, the chapter addresses three key objectives: (1) to determine the factors that hinder women's presence in WUA governance structures; (2) to assess the experience of women operating in male-dominated governance systems; and (3) to examine stakeholders' perceptions and attitudes towards women's leadership in water management and governance. The data presented combines both quantitative and qualitative insights, offering a comprehensive understanding of the challenges and opportunities for women in these critical roles.

4.2. Participants' Demographic Profiles

4.2.1. Age

Results presented in Table 1 are from various age groups of participants from the Lilongwe WUAs who were involved in this study. These participants were not only purposively selected to align with the research objectives, given their roles within the WUA governance structures, but their age and experience also ensured they were well-equipped to provide insightful and relevant data that contributed meaningfully to the research objectives.

Table 1. Age Ranges of Participants

Age Range	Frequency	Percentage
30-40	36	22.9
40-50	96	61
51-60	24	15.3
Total	156	100

4.2.2. Composition of board of directors and executive committee by gender in LWUAs

The results presented in Table 2, reveal a significant gender disparity in the composition of executive committees and boards of directors within the LWUAs. The findings indicate that males predominantly occupy these positions. Specifically, the executive committees consist of 71.67% males and 28.33% females, highlighting a considerable gender gap. Similarly, the board of directors is composed of 22.92% females and 77.08% males, further illustrating a significant difference in gender representation.

Table 2. Composition of board of directors and executive committee

Name of WUA	Executive (%)		Board (%)	
	Male	Female	Male	Female
Malili	60.00	40.00	87.50	12.50
Mlodza	60.00	40.00	62.50	37.50
Tsabango	70.00	30.00	87.50	12.50
Kanengo	90.00	10.00	87.50	87.50
Njewu	80.00	20.00	87.50	12.50
Area 50	70.00	30.00	50.00	50.00
Total	71.67	28.33	77.08	22.92
p-value	0.0023		0.0015	

4.3. Factors hindering women presence in governance structures of LWUAs

4.3.1. Factors hindering women participation

Results presented in Table 3, are the proportion of participants who approved or disapproved various factors as barriers to women's participation in LWUAs' governance structures. The results indicate that religion (84%), low confidence (62%), and domestic affairs (84%) were the most frequently cited barriers. In contrast, factors such as sexual harassment were unanimously rejected as barriers, while culture (38%), low education (38%), low capacity (46%), and discrimination (23%) had relatively lower levels of approval.

Table 3. Factors hindering women presence in governance structure of LWUAs

FACTOR	APPROVED (%)	DISAPPROVED (%)
Religion	84	16
Low confidence	62	38
Low capacity	46	54
Culture	38	62
Low education	38	62
Discrimination	23	77
Domestic affairs	84	16
Sexual harassment	0	100

4.3.2. Perspectives on barriers to women' participation

Results presented in Table 4, are thematic analysis of participant interviews, and these revealed several core themes, each accompanied by sub-themes and supporting narratives, as summarised in Table 4. The main themes that emerged from the analysis include: religion, low confidence, low capacity, culture, low education, discrimination, domestic affairs, and sexual harassment.

Table 4. Qualitative themes on factors hindering women presence in LWUA governance structure

Main Theme	Sub-Theme	Supporting Themes (Illustrative Quotes)
Religion	Male-dominated faith leadership	<i>“Religious teachings, especially in Islam and Christianity, limit women’s roles. Most faith leaders are men, so appointments to boards favour men.” (PK1)</i>
	Lack of trust in women’s leadership	<i>“When women campaign for positions, people don’t trust their manifestos because of religious biases.” (PK2)</i>
Low Confidence	Self-doubt in campaigning	<i>“Women fear contesting in elections, thinking they can’t convince communities to vote for them.” (PK3)</i>
	External discouragement	<i>“My friend didn’t run because her husband kept saying she couldn’t handle leadership.” (PK4)</i>
Low Capacity	Educational requirements	<i>“Formal requirements like MSCE or JCE discourage women without these papers, even if they are capable.” (PK6)</i>
	Disagreement on capacity barriers	<i>“I have the same capacity as men in the Board; capacity isn’t a barrier.” (PK5)</i>

Culture	Influence on board appointments	<i>“Chiefs are mostly men; so, in the traditional leaders’ sector for board appointments, men dominate.” (PK6)</i>
	Elections not restricted by culture	<i>“Anyone can contest in executive committees; culture doesn’t restrict women.” (PK7)</i>
Low Education	Educational attainment not a barrier	<i>“Women meet the minimum qualifications; some even have master’s degrees in relevant sectors.” (PK7)</i>
Discrimination	Perception of fairness	<i>“There’s no discrimination; women are elected just like men, and some sectors even require a woman representative.” (PK8)</i>
Domestic Affairs	Family responsibilities	<i>“Husbands expect women to stay home with children, so they discourage leadership involvement.” (PK9)</i>
Sexual Harassment	Not perceived as a barrier	<i>“Sexual harassment doesn’t happen in our LWUAs; I’ve never seen it.” (PK10)</i>

4.4. The experience of women in the male-dominated governance structure

4.4.1. Key dimensions of women leadership experience in governance

4.4.1.1. Women involvement in decision-making

Results presented in Figure 3, show 85% of women in the studied LWUAs reported being actively involved in decision-making processes within the Executive Committee and the Board of Directors, while 15% reported limited or no involvement in decision-making.

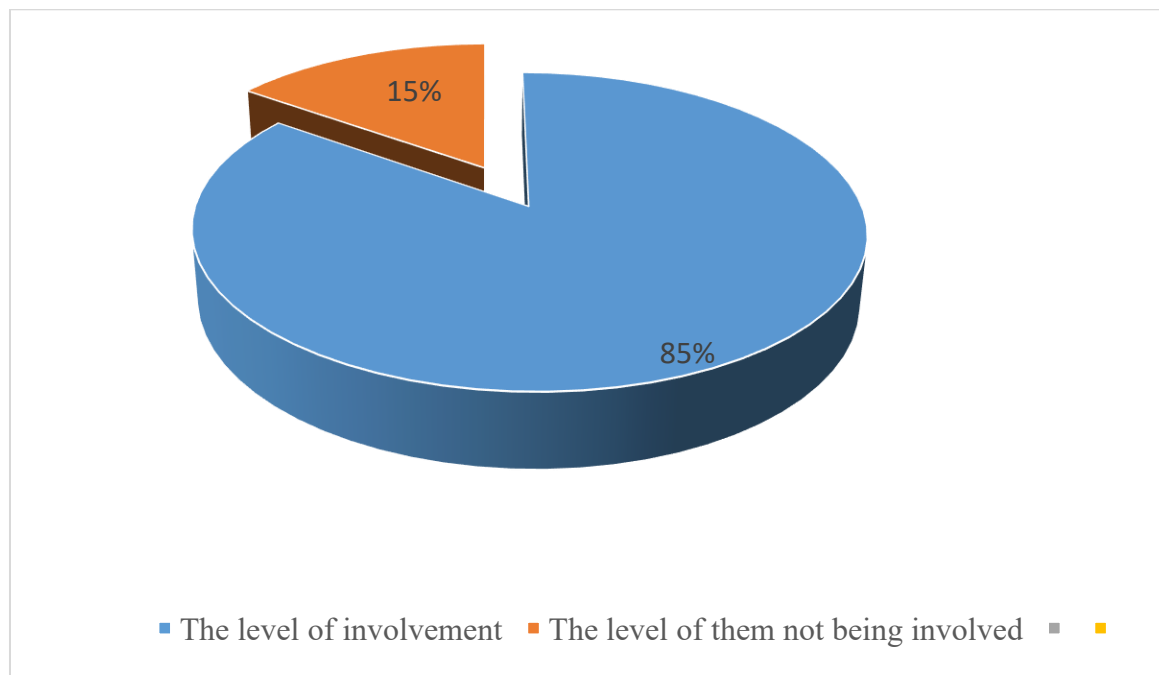


Figure 3. Women involvement in decision making

4.4.1.2. Sexual Harassment in Leadership positions

The results indicated that all women serving in leadership positions within the Executive Committees and Boards of Directors of the LWUAs reported that they had not experienced sexual harassment in the course of performing their leadership roles.

4.4.1.3 Confidence of Women in Leadership Roles

Findings presented in Figure 4 show 92% of women in leadership roles within the LWUAs expressed confidence in their ability to effectively perform their duties.

Conversely, 8% of women reported uncertainty about their capacity to lead.

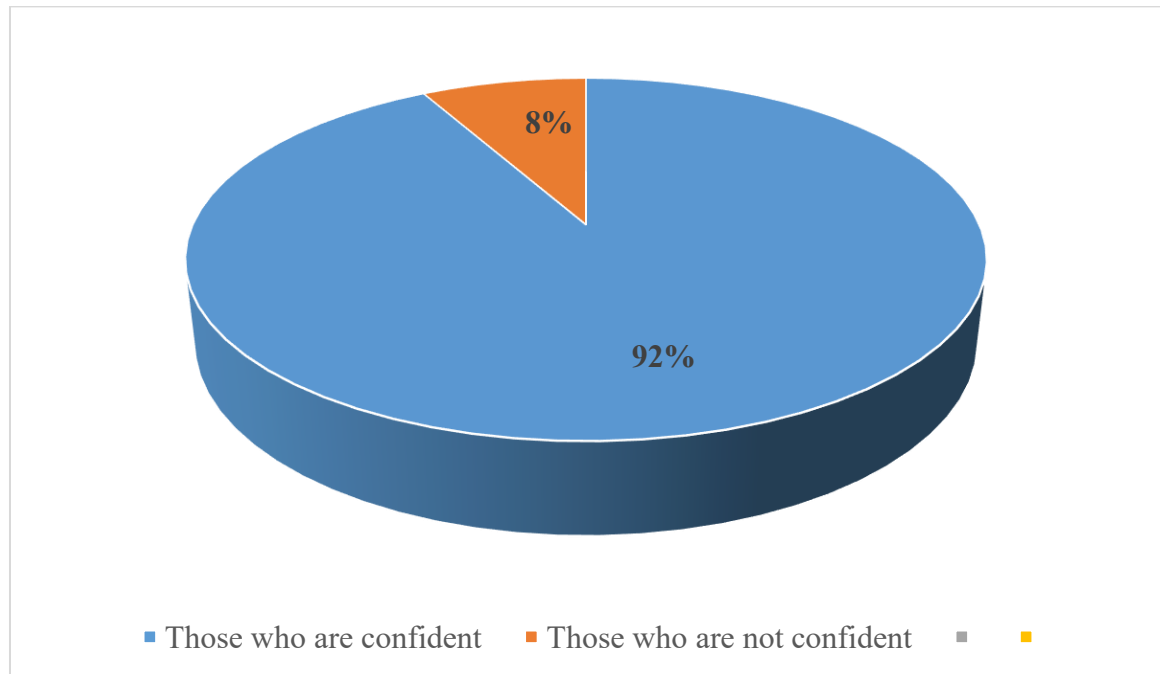


Figure 4. Confidence of women in leadership roles

4.4.2. Perceived Support, Confidence, and Skill Growth among Women in Leadership

The findings from thematic analysis indicated that women who have attained leadership positions often feel supported, respected, and empowered to grow both professionally and personally. Three key themes emerged from analysis which have been presented in Table 5.

Table 5. Perceived support, confidence and skills growth in women in leadership

Main Theme	Sub-Theme	Supporting Narratives (Quotes)
Involvement in Decision-Making Processes	Holding key positions	<i>“Once appointed, we can hold influential roles like Chair or Treasurer.” (PK11)</i>
	Equal participation in discussions	<i>“Our input is respected, and decisions often require our quorum.” (PK11)</i>
Respect and Support from Male Colleagues	No experiences of sexual harassment	<i>“Men working with us show high levels of integrity and respect.” (PK12)</i>
	No isolation or resistance	<i>“We are treated as equals, and our contributions are valued.” (PK12)</i>
Confidence and Skill Development	Confidence in leadership	<i>“We are confident because we learn key skills like Excel, QuickBooks, and HR strategies.” (PK13)</i>
	Learning through experience	<i>“Being part of the Board has helped me develop knowledge similar to formal education.” (PK13)</i>

4.5. The prevailing perception and attitudes towards gender equality and women's empowerment in leadership roles within WUAs

4.5.1. Stakeholders' Support for Proposed Interventions

4.5.1.1. Constitutional Review as a Strategy

The results presented in Figure 5 reveal that 75% of participants believe that a constitutional review would provide a viable pathway for increasing the representation of women in leadership positions within the LWUAs' Executive Committee and Board of Directors. In contrast, 25% of participants disagreed, indicating that a constitutional review may not be the most effective mechanism for promoting gender balance in leadership.

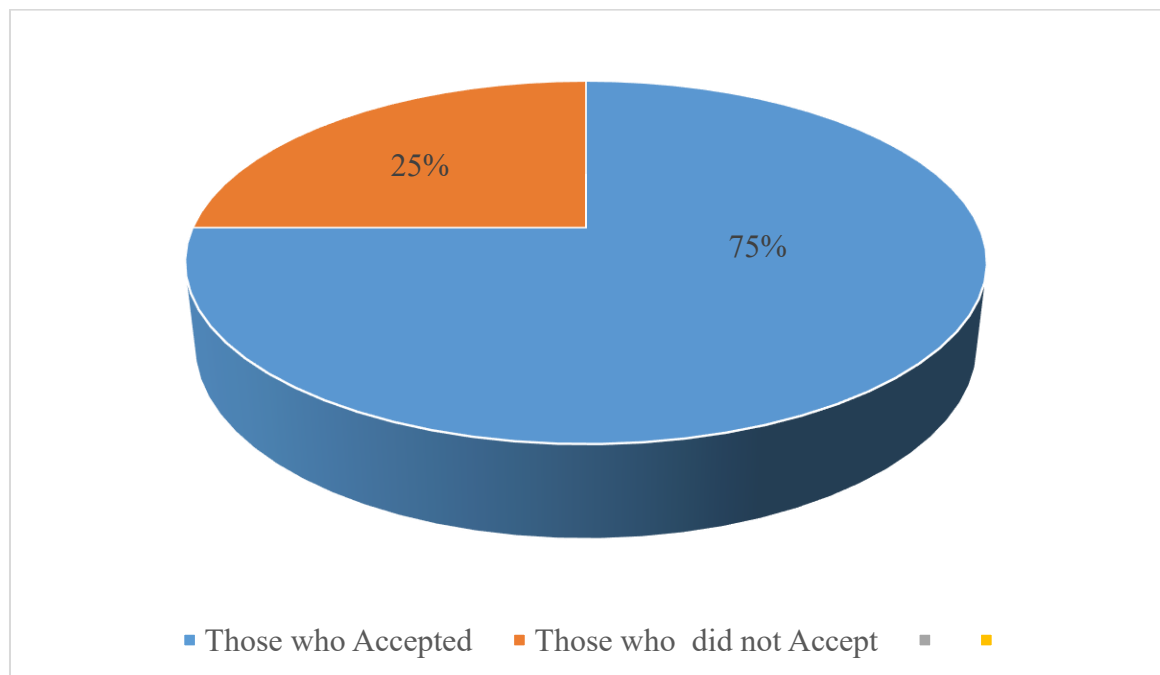


Figure 5. Constitutional Review as strategy

4.5.1.2. Role of Effective Leadership

Results presented in Figure 6 show that 67% of participants believe that effective leadership within the Water Users Association can play a crucial role in enabling more women to attain leadership positions. Conversely, 33% of participants disagreed, suggesting that while effective leadership is seen as important, it may not be sufficient on its own to increase women's representation in governance structures.

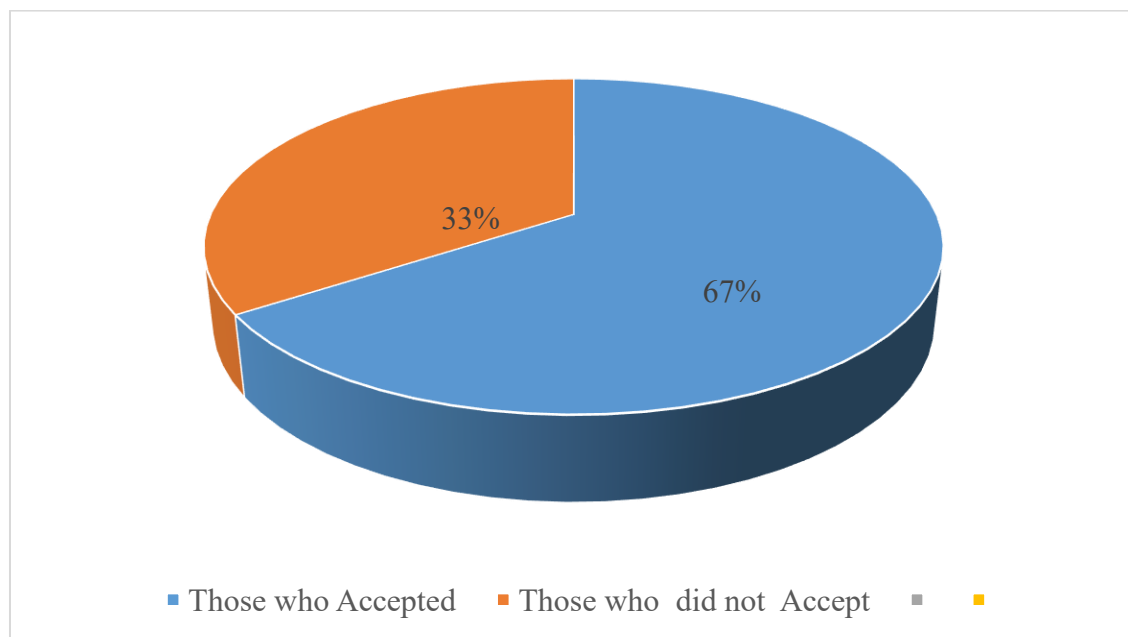


Figure 6. Role of effective Leadership

4.5.1.3. Capacity Building for Women

Results presented in Figure 6 show that 83% of participants agreed that capacity building among women is a powerful approach to increasing the number of women in leadership positions within the governance structures of the WUAs. On the other hand, 17% of participants did not support the idea, indicating that while the majority recognise the value of capacity building, there is a minority that remains sceptical of its effectiveness.

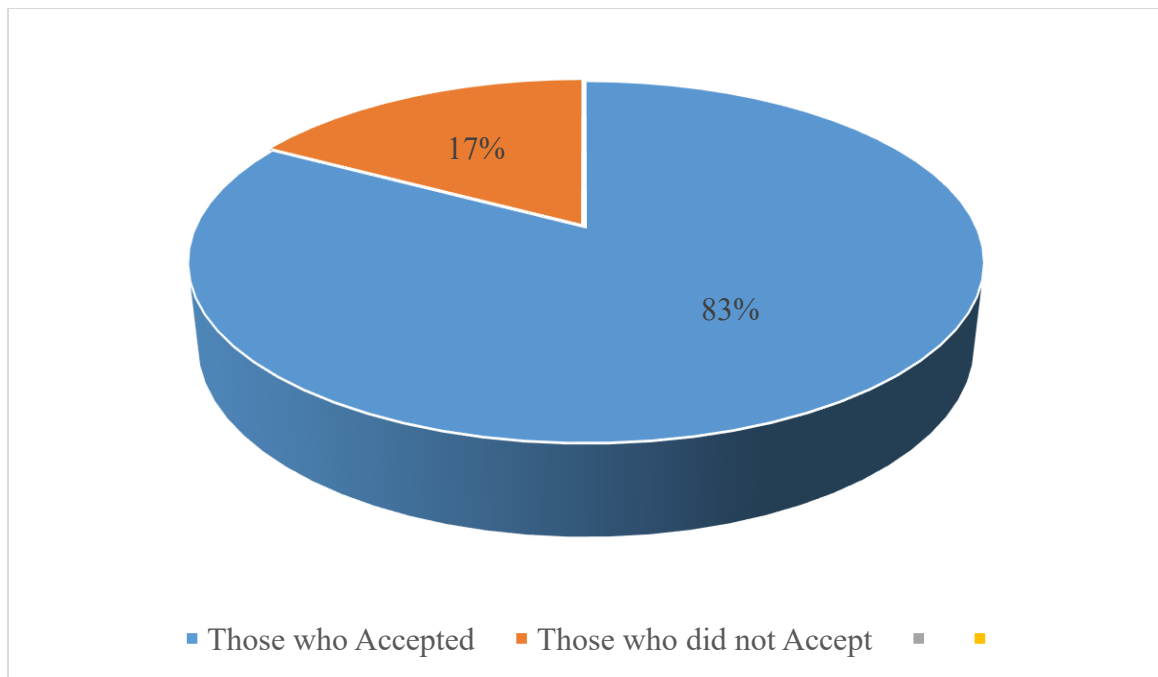


Figure 7. Capacity Building for women

4.5.1.4. Reconsidering Education Requirements

The findings presented in Figure 7 reveal a divided opinion regarding the role of education requirements in promoting women's leadership. 58% of participants agreed that improving or re-conceptualising education requirements would promote greater inclusion of women in leadership positions. However, 42% of participants disagreed, suggesting that while educational reforms are seen as a potential pathway, there is no overwhelming consensus on this approach.

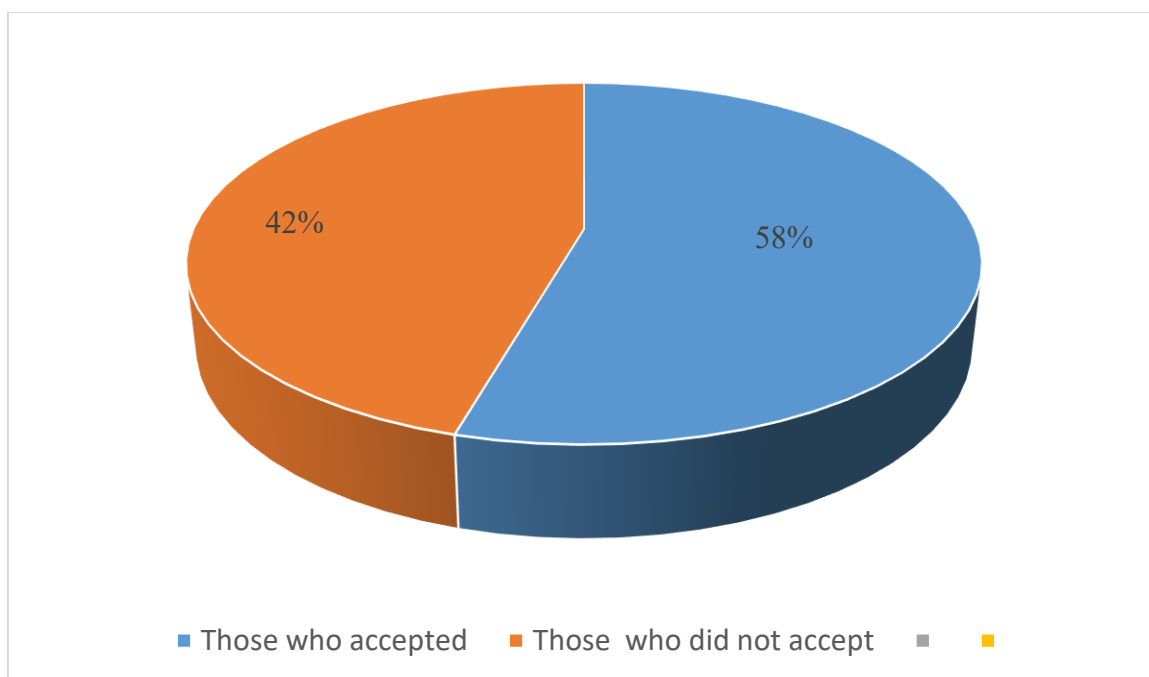


Figure 8 Reconsidering education requirements

4.5.1.5. *Impact of Fixed Allowances*

The findings indicated that all participants agreed that the provision of fixed allowances would promote women's participation and retention in leadership positions within the Executive Committees and Boards of Directors of the WUAs. This unanimous agreement underscored a strong perception that monetary incentives could play a significant role in encouraging women to assume and sustain leadership roles within WUA governance structures.

4.5.2. Stakeholders' Rationales and Illustrative Narratives

Results presented in Table 6 summarise key stakeholders' perspectives on strategic actions and structural adjustments needed to enhance women's participation in LWUAs. The analysis identified constitutional review for inclusion, leadership, capacity building, educational requirements, fixed allowances and capacity building as main themes.

Table 6. Stakeholders' rationale and illustrative narratives

Main Theme	Sub-Theme	Supporting Narratives (Quotes)
Constitutional Review for Inclusion	Need for gender quotas in constitutions	<i>“The constitution must clearly state the percentage of women and men, like 50-50, to ensure fairness.” (PK14)</i>
Leadership as an Enabler	Importance of effective leadership in promoting women	<i>“Effective leadership is key to ensuring women attain positions in the Board and Executive.”</i>
Capacity Building	Skills development fosters confidence	<i>“Capacity building helps women understand tasks and motivates them to seek leadership positions.” (PK15)</i>
Educational Requirements	Revisiting qualifications to include more women	<i>“Many women in the community don’t have formal education. We should revise requirements so they can participate.” (PK16)</i>
Fixed Allowances and Retention	Financial incentives for women in leadership	<i>“Fixed allowances will reduce women resigning from Boards to join the secretariat for salaried positions</i>
Capacity Building	Skills development fosters confidence	<i>“Capacity building helps women understand tasks and motivates them to seek leadership positions.” (PK15)</i>

4.6 Chapter Summary

Chapter 4 provided an overview of the results from the studied participants based on the specific objectives. This chapter has outlined the results based on specific objectives. Chapter 5 presents the discussion of the study.

CHAPTER 5: DISCUSSION

5.1. Introduction

This part discusses the findings. The discussion focused on the research objectives which included the factors that hinder women's presence in the WUAs governance structure, the experiences of women in the male-dominated governance structure and the perceptions and attitudes of stakeholders towards women leadership in water management and governance.

5.2. The factors that hinder women's presence in the WUAs governance structure.

Initially, it was observed that within the governance structures of the Water Users' Associations (WUAs), there were significantly fewer women than men in leadership roles, with only 26% representation on the Board and 27% in Executive positions. As a result, a considerable disparity persists in the attainment of leadership positions between males and females.

The first factor that hindered most women from attaining a leadership position was religion. In Table 3, the studied LWUAs showed that 84% of the participants agreed that religion is a hindering factor towards women taking positions. This finding, therefore, implied that religion caused the underrepresentation of women in leadership positions. Religion was a hindrance in the attainment of leadership in the Board of Directors of WUAs rather than in the Executive Committee. A certain quota of the Board of Directors' positions was allocated to faith leaders, either Christian or Islamic. This remained challenging as most leaders in either Christianity or Islam were men unlike women. Subsequently, it meant that most of the nominees for the Board of Directors were likely to be men and not women. This situation was more complex when it came to Islam as all leaders in Islam are Sheiks and are always men and not women.

It was also noted, however, that in one of the LWUAs, one of the appointed Board of Directors' members was a female based on her Christian faith and, in particular, from the Assemblies of God (Christian Church). This, however, did not substitute the fact that even if Christianity had the power to provide a criterion for endorsing women into the Board of Directors of WUAs, the number of women appointed to the Board by recruiting them from the Christian sector still remained minimal. The finding agrees with a study by Ogugua (2015), who stipulated that religion is a striking phenomenon in human life. Nobody can sincerely evade or ignore it. There is no other force or phenomenon that changes a person's life in society as religion does. Additionally, Ogugua (2015) argues that, to a great extent, like culture, religion has prevented women from being leaders and, to a great extent, has favoured men to be leaders. In addition, a study by Carbajal (2024) agrees that faith or religion significantly impacted women in leadership position. However, the finding from a study by Buccione et al. (2024) disagrees, and reported that religion can be a catalyst for shaping women led water conservation by Islamic leader messages in encouraging water saving practices.

In view of the foregoing, it is also important to note that, despite religion hindering women from being appointed to the Board of Directors of the WUAs, it did not hinder individuals from taking positions in the Executive Committee of the WUAs. This followed the same pattern as in the Executive Committee, where individuals could attain positions based on elections, rather than appointment. As such, every individual member of either origin, and in fact, regardless of gender, is allowed to submit a form and campaign against competitors through the election proceedings, and in that context, religion cannot influence the outcome of one's membership on the Executive Committee. This implied that, according to the findings, the hindrance was the attainment of leadership positions in the Board,

rather than in the Executive. Nonetheless, religion remained one of the highest reasons why women failed to attain leadership positions in the LWUAs governing structures, as attested above.

The findings from the studied WUAs showed that 62% of the participants agreed that low confidence is a hindrance to women taking positions (Table 3). This implied that low confidence caused the underrepresentation of women in LWUAs. Men and women stipulated that confidence levels are essential for effective leadership, enabling the leader to influence their collaborators or followers to build task-specific self-confidence that can strengthen their job performance. Axelrod (2018) reported that confidence is essential for effective leadership, enabling the leader to influence their collaborators or followers, build specific tasks, and strengthen job performance through self-confidence. Thus, modern leadership researchers agree that one of the greatest leadership qualities is self-confidence (Axelrod 2018). According to Soderhjelm et al. (2018), confidence plays a crucial role in ensuring positive leadership outcomes. The findings of the study are in agreement with those of Galsanjigmed et al. (2023) and Adams et al. (2018), which report that low confidence, gender bias, and stereotypes harm women, causing them to doubt their skills, abilities, and potential. It is well constituted that what caused the disparity between men and women in this study, and in answering the question of what led to the 73%-27 % disparity in the composition among the Executive Members of the Board, is an issue of confidence. The implications of using elections meant that both males and females had an equal and fair opportunity to attain leadership positions in the Executive Committee, as observed by both men and women. Despite this fair playground, it was observed by both male and female participants that many women had low confidence levels with regard to campaigning towards attaining leadership positions. Putting all factors constant, including

religion mentioned above, it was well established that low confidence levels among women played a role in their not taking of leadership positions, including Executive Committees of the WUAs.

However, low confidence levels did not affect the attainment of positions in the Board of directors as the procedure used was appointments into leadership rather than elections as is in executive committees. Thus, on this criterion, most women who were appointed to the Board stated that as long as they had been appointed, they always felt a sense of motivation and high self-esteem, which enabled them to deliver accordingly. According to the findings, low self-esteem is regarded as having caused an asymmetrical distribution of leadership positions that resulted in men making up 73% and women only having the remaining 27% in all the Executive committee's leadership positions of the LWUAs. On the contrary, as discovered above, low self-esteem adversely affected the attainment of leadership among the executives.

The results of the study on low education, presented in Table 3, indicates that 62% of men and women agreed that low education is a hindrance to women taking positions. This finding therefore implied that women are underrepresented in leadership positions in the LWUAs, which was due to the election requirement in the leadership of the Executive Committee of having Malawi School Certificate of Education (MSCE). However, some women did not have an MSCE in order to compete into elections, which the end result was a reduction of their composition into the Executive Committee. Becoming a member of the Board of directors, the requirement was Junior Certificate of Education (JCE) and then MSCE. Most women had it, and as a result, most women could be appointed to the Board. The finding is in agreement with a study by Chin (2012) which stipulated that education differences between men and women are a great reason that lead to men dominating in

leadership of various institutions, and accordingly resulting in women being underrepresented in such institutions. Caizhen's (2008) study also agrees that women were not included in the WUAs in China, specifically in Gansu Province, in irrigation management because women have a lower level of education and knowledge.

Results on low capacity in women are presented in Table 3 from the studied participants, 54% of the participants disapproved that low capacity in women is a hindering factor towards women taking positions. Implying that low capacity did not have a significant impact on women's attainment of leadership positions in LWUAs. This followed as most of the participants argued that some women failed to contest in the Executive elections, considering that if they did not have an MSCE, they likely had a low capacity to contest in the elections. This finding is in agreement with Chin (2012), who argues that differences between men's and women's capacities are not one of the significant factors that hinder women from attaining leadership style. On the same note, this factor of low capacity was noted as not having affected the Board of Directors, as even individual women with a JCE could properly perform the tasks once appointed. However, Khander et al. (2020) disagrees, by reporting that formal and informal membership criteria hinder women in leadership positions than capacity.

Results on culture as a factor in hindering women are presented in Table 3, showing that 62% of the participants had disapproved. The finding implied that culture had a partial impact on women's attainment of leadership positions in the Board. The finding is in disagreement with a study by Chin (2012), suggesting that in most African countries, culture hinders more women from attaining leadership as more customs and traditions favour men. Furthermore, the study by Sebitosi (2022) agrees with Chin (2012) that

societies, especially in Africa, cultural norms often favour men in leadership roles. In addition, it agrees with a study by Mogoa et al. (2024) which stipulated that patriarchal systems prevalent in many African cultures, like Malawi, place men in dominant roles, further marginalising women from leadership opportunities. Just like religion, culture was established as a hindrance in the attainment of leadership in the Board of Directors of LWUAs rather than in the Executive Committee. This followed as it was required that some people who were supposed to occupy the Board of Directors and be nominated accordingly were to come from traditional leaders. So, based on this premise of the cultural trends in Malawi and based on customs, there are more Traditional leaders or chiefs who are men than women, and the end result was that in appointing individuals into the Board, men had more chances. On the same note, in the executive committee, the traditional leaders or chiefs were supposed to be part, but they were not appointed but rather they had to occupy the positions through elections in which both the female chiefs or male chiefs had equal opportunity to apply and thus, culture had no power to contribute to few women in the Executive Committee of WUAs.

The studied WUAs showed that 77% of the participants disapproved that discrimination against women is a hindering factor towards women taking positions as shown in Table 3. The finding implied that discrimination did not have a significant impact on women's attainment of leadership positions. Discrimination was also noted as one of the factors contributing to the underrepresentation of women on the Board of Directors. The finding is in disagreement with a study by Martin & Bernard (2013) which revealed that women face serious challenges that hinder them from attaining leadership positions in male-dominated occupations due to gender discrimination. In addition, UN Water (2019)

stipulated that women are discriminated against in water management and yet they are the primary users.

The results showed that 84% of participants agreed that domestic affairs hinder women from taking on leadership positions. This indicates a widespread perception that domestic duties hinder women's opportunities. The finding implied that domestic affairs hindered women from attaining leadership positions in LWUAs. On this point, the participants argued that sometimes individuals responsible for appointing individuals into the Board of directors and those voting for individuals into the Executive Committee do not vote for women on the perception that women are good at domestic work, such as cooking, or washing clothes at home, rather than office work. This also agrees with Chin (2012), who argued that most of the women's underrepresentation in leadership in the past has been due to the thinking that men are good at domestic work, but such a trend is now changing due to modernisation. The study is also in agreement with a study by Martin (2016), conducted in South Africa, which emphasised that women are good at domestic affairs.

The results on sexual harassment as a hindering factor to women attainment in leadership position presented in Table 3 showed that none of the participants approved that sexual harassment is a hindering factor towards limiting women taking positions and meant that 100% of the participants stated that sexual harassment did not contribute in hindering women attaining leadership positions. The finding implied that women did not experience any form of sexual harassment. The finding disagrees with a study by Bridges et al. (2021), which highlights that women in male-dominated environments experience barriers to work, such as sexual harassment. The study also agrees with a study by McLaughlin et al. (2012), which stipulated that sexual harassment is more common in male-dominated

workplaces, including governance structures, and women in these environments are more likely to experience harassment.

Further, it was noted that some women who were either appointed or elected to the Board or the Executive, respectively, could resign from their respective positions, as such positions only had allowances as a form of financial benefits rather than having fixed salary payments in a month. Put differently, this entails that these allowances were only paid during meetings or during other engagements of the Board of Directors or the Executive Committee. Thus, upon resigning, these women had to join the secretariat and mostly as sales ladies to sell water with fixed salary payments. This led to a reduction in the number of women on the Board of Directors or the Executive committee. For instance, in six of the WUAs association that were visited, it was noted that a total of five appointed and elected women in both Board of Directors and Executive Committee had resigned to join the secretariat which was a lower ranking position and in fact an employee-based position for the purposes of ensuring that they kept receiving the salaries.

5.3. The experiences of women in the governance structure.

In the LWUAs, 26 women held leadership positions out of 86 men in all WUAs' governance structures. Specifically, 12 women worked on the Board and 14 were part of the Executive Committee. Figure 3 showed that 85% of women were involved and consulted in decision-making in the Executive Committee and the Board of Directors in the Governance structures of WUAs. The results reflected and implied that the majority of women in the male-dominated governance structure were involved in the day-to-day activities of the WUAs.

The experiences also demonstrated that most of these women stated that they were actively involved in a number of sub-committees, both at the Board of directors and the Executive committee. It was noted that committees they were involved in included those handling

accounts or auditing sub-committees, as they are believed to have high accountability and transparency in handling finances. The other Committee that they were actively involved in was maintenance. Additionally, in certain WUAs (Area 49), both the Board of Directors and the Executive Committee were led by women as chairpersons. In all six WUAs, 3 of them led in the position of chairperson. Further, it was noted that some of the women, upon being appointed to the Board or being elected to the Executive committee, managed to get positions such as General Secretary or Treasurer accordingly. Thus, based on these experiences, it was well in record that despite the fact that there were few women in the Board of Directors or Executive Committee in the WUA leadership positions, these few women did not experience any resistance from men in leading or performing their work in the water user's association in Lilongwe city. The finding is in disagreement with a study by Martin & Bernard (2013), which stipulated that women who work in male-dominated work face more challenges that differ from those who work in more gender-balanced and female-dominated work.

Furthermore, the studies by Burton (1991), as well as Bierema & Opengart (2002) agree that women in male-dominated occupations face the problem of equal access to career advancement. In addition, Eaton et al. (2020) reported that in a male-dominated governance structure of water management, women often face restricted participation and limited decision-making power because of gendered social norms. Bridges et al. (2021) similarly highlighted that women in male-dominated environments experience barriers as they encounter social exclusion, harassment, marginalisation, The experiences also contradicted the findings of Qadir (2019) which stipulated that women face challenges in male-dominated governance because men always think women cannot be good leaders or managers but they believe they are good at domestic work.

Results from the experience of women concerning sexual harassment in Figure 4 indicate that 100% of women never experienced any form of sexual harassment as they worked in the Executive Committee and the Board of Directors of the WUAs governance structures dominated by men. The finding implied that few women working in male-dominated governance never experienced any form of sexual harassment. In addition, women explained that as they worked in these governance structures, they never encountered any sexual harassment from the leaders. This was an indicator of good and effective leadership in WUAs in Lilongwe, as this sexually free environment was good for the purposes of encouraging various women to keep fighting and contesting for elections of the Executive Committee or having a desire to be appointed to the Board of Directors. The results are in agreement with a study by Bridges et al. (2021), which highlighted that women in male-dominated environments experience barriers to work such as social exclusion, harassment, marginalisation, and discrimination. Further indicating that it has a huge negative impact on their professional progress. Elias (2016) & Qadir (2019) agree with Bridges et al., and the assertion that men are involved in productive and significant roles in WUAs and women are given domestic roles. However, this was beyond the scope of this research.

The results on confidence of women in leadership presented in Figure 5 showed 92% of women were very confident to deliver on the position of either the Executive Committee or the Board of Directors of the WUAs. The results implied that the few women in male-dominated governance were more confident as they were working. Additionally, the few women who were involved in the Board of Directors and Executive Committee also stated that whilst they kept working with confidence, they learnt a lot of things through formal means and informal means. The most common was accounting knowledge and skills. They also argued that they were courageous and confident to work with new tasks, and once

elected in the Executive Committee or appointed to the Board of Directors, they had a better work balance. This entails that they could manage tasks in the Executive Committee or as appointed to the Board of Directors while ably managing to take care of their family. The finding is in disagreement with a study by Martin (2016) in South Africa, which emphasised that women in male-dominated work environments face different challenges in their workplace. The challenges revealed in the study included a lack of confidence and negative emotions resulting from male-dominated environments, as well as a lack of real transformation and work-life balance. With a similar view, Duyvejonck (2021) reasoned that women in male-dominated environments lack confidence and feel isolated.

5.4. The perceptions of stakeholders towards women leadership in water management and governance.

Results presented in Figure 6 showed that 100% of participants believed having fixed allowances would promote women into leadership positions in the Executive Committee and the Board of Directors of WUAs. The finding implied that having fixed allowances would encourage women to be interested and remain in leadership positions. This followed as most work in the Board of Directors or the Executive Committee was voluntary, which had no fixed salary, and that only the allowances were payable during the meetings, which led to many women resigning from these positions to join the secretariat, where once individuals joined, they could be paid a monthly allowance. Some also stated that these allowances were insufficient to motivate many women to remain in leadership positions. Thus, the monetary appreciation could be of great measure to ensure that women attain and remain in leadership positions on the Board of Directors and the Executive Committee. The finding is in agreement with a study by Chawani (2024), which stipulated that allowances can serve as incentives to motivate women to participate more actively in

WUAs. Financial incentives can encourage women to take on leadership roles by compensating them for their time and effort. Furthermore, it also agrees with a study by Kumar (2024), which stipulated that in providing allowances, women may feel more financially empowered to engage in leadership activities and financial support helps alleviate some of the economic burdens that might otherwise discourage them from pursuing leadership positions. In addition, Mandara et al. (2014) reported that quota systems are proven to be effective in promoting women in leadership.

Results of the constitutional review in Figure 7 from the studied participants showed that 75% had a view that the Constitutional review would assist in providing a pathway to accommodating more women in the Executive Committee and the Board of Directors of the LWUAs. The finding concerning the attainment of leadership positions. Participants stated the WUAs in Lilongwe had the same Constitutional structure. Thus, these participants agreed entirely that their constitution allowed or accommodated women's election to the Board or Executive position. For instance, many participants stated that the constitution allowed various categories of individuals to be elected into either the Board of Directors or the Executive Committee, mostly from sectors such as Religion, Business, Non-Governmental Organisations, and Traditional leaders. Thus, many participants stated that from the above sectors, both men and women could have the opportunity to be appointed to the Board and to be elected into the Executive Committee of the water Users' Associations. Thus, this established the point that both constitutions of WUAs had nothing to hinder women from getting into the governance structures.

Further, it was argued that the constitution also provided for the position of the women representative in the Constitution, and that was a deliberate legal framework in allowing more women to join the Governance structures. However, despite the Constitution of

WUAs provides for the liberty of both men and women to be appointed to the Board of Directors, it still noted that women constituted 27% of the Executive Committee and 26% of the Board of Directors, respectively. The counterargument to this is that men dominated the Executive Committee and the Board of Directors by 73% and 74%, respectively. Thus, some participants argued that to resolve the disparity in leadership positions between men and women in the Board of Directors and Executive Committee, the governance structures of the water users' association, there was a need for a constitutional review. Among this call for constitutional review, it was argued that there was a need to have the law explaining the 50 -50 composition between men and women in the Board of Directors and Executive Committee of LWUAs.

Additionally, most participants suggested that the constitutional review could have been done in the form of quota inclusion of both men and women through category sharing. This would be achieved as both the Board of directors and the Executive committee of the LWUAs appointed or elected individuals from the sectors of religion, traditional leaders, business people, civil servants and non-governmental organisations. Thus, it suggested that it was important that, for just illustration's purpose, the constitution would otherwise stipulate that the business and non-governmental sector should only use women to select or appoint women, whereas religion and civil servants could be left to men and that traditional leaders could be left to both men and women. The finding agrees with a study by Adams et al. (2018) that one way to increase women's participation in WUAs includes changes in constitutional stipulations to grant women greater access to decision-making. The study of Adams et al. (2018) also agree with the constitution of Mlodza WUA, which stipulates that all residents within the association are eligible for admission into the association's positions upon election; however, articles 3 and 4 are without clear criteria

on equal opportunities between males and females in the governance structure. Furthermore, a study by Mandara et al. (2014) is in agreement and stipulates that in order to increase women's participation in the WUAs, one of the strategies is to include the use of quotas in which a particular proportion must be properly established for women and men in the leadership composition. UN Women (2024) agrees, stipulating that achieving sustainable water management, through gender-responsive legal and policy reforms, is paramount.

Figure 8 showed 83% of the participants had a view that capacity building among women had the power to promote many women in acquiring leadership positions in the Executive Committee and the Board of Directors within the governance structures of the Water Users Association. The results implied that capacity building could promote women to acquire leadership positions. Participants stipulated that capacity building was a good criterion for including many women to work in the leadership positions of LWUAs. It was further argued that some women do not participate in the elections of WUAs because they are not exposed to the process and are not encouraged to participate and campaign actively to win elections, thereby preventing them from being part of the elected leadership. The finding is in agreement with a study by Elias (2016), which discovered that capacity building and determining the roles of Integrated Water Resource Management (IWRM), increases understanding of gender implications. UN Women (2024) agrees and stipulates that building the capacity of women helps them attain leadership positions in managing water group committees. Further argues that building the capacity of women encourages women to take part in water management projects and, in the long run, ensures water security and sustainability (Imarana 2014).

Results on improvement of education presented in Figure 9 showed that 58% of participants had a view that improving or re-conceptualising educational requirements would improve more and promote women into leadership in the Executive Committee and Board of Directors of WUAs. The findings of this study implied that reviewing educational requirements would promote the attainment of women in leadership positions. Participants involved in this research study also reiterated that since educational requirements were some of the reasons that deterred women from contesting for the Executive Committee, there was a need to review the same. These sentiments were made because the attainment of a leadership position in the Executive Committee, which was supposed to require an MSCE disadvantaged many women who did not have one. Thus, the participants in this research study stated that in order to allow more women to get access to the Executive Committee, they are supposed to be given the opportunity to contest with JCE, and this will allow those who have no MSCE to also be considered for leadership. The finding agrees with Khandker et al. (2020), who revealed that in order to increase access to women in the WUA's decision-making in the governance structure, through training programs and education related to water management, mandatory inclusion of women in WUAs Executive Committees is necessary. This study agrees with the study by Elias (2016) which discovered that gender should not be used in determining the roles of Integrated Water Resource Management (IWRM) in society, equal opportunities should be given to women; women's inclusion should be reflected; gender mainstreaming policies; there should be an increase access to education and building capacity to increase understand gender implications. Furthermore, Buechler (2005) adds that there is a need to build and improve the capacity of women. Another study conducted by Caizhen (2008) emphasised the ways that could be used to increase the participation of women in gender-equitable decision-making in WUAs. The study focused on capacity building for women to participate in

leadership roles, enhancing local villagers' gender awareness, and implementing gender mainstreaming policies. Imburia (2020) disagrees that active participation of women is promoted through policy reinforcement, thereby providing equitable opportunities. Furthermore, the study argues that effective leadership is also the best strategy for helping women participate in decision-making.

Results on effective leadership in promoting women to attain position presented in Figure 10 showed 67% of the participants had a view that effective leadership in the Waters Users Association would help to accommodate more women attaining positions in the Executive Committee and the Board of Directors of the Water Users. The finding implied that effective leadership promotes women to attain leadership positions in WUAs. It was further argued that prevailing effective leadership in WUAs would motivate more to have the desire to join and get appointed into Governance structures. The finding is in agreement with a study by Imburia (2020), which stipulated that effective leadership is also the best strategy that could help women to take part in decision-making. In addition, Imarana (2014) reported that effective leadership enhances women's roles in water management. Mandara et al. (2017) agree that successful leadership roles in water management encourage women to take part in the local governance structure.

5.5 Chapter summary

The chapter focused on discussion on the research objectives which included the factors that hinder women's presence in the WUAs governance structure, the experiences of women in the male-dominated governance structure and the perceptions and attitudes of stakeholders towards women leadership in water management and governance. Chapter 6 presents the conclusion and recommendations of the study.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusions that address the objectives: to determine factors hindering women's presence in Water Users Associations' (WUAs) governance structures, to assess women's experiences within male-dominated governance, and to examine stakeholders' perceptions and attitudes toward women's leadership in water management.

6.1. Conclusions

On the factors that hinder women's presence in the LWUAs governance structure, the findings revealed that women's underrepresentation is primarily influenced by religious and low confidence factors, which act as significant barriers to their participation. Contrary to some expectations, sexual harassment, domestic affairs, and discrimination were not found to be major hindrances in this context of the executive committee and the board of directors.

On the experiences of women in the governance structure of LWUAs, the study revealed that women who do attain leadership positions in the Executive Committee and the Board of Directors tend to actively engage in decision-making and lead key sub-committees, benefiting from male support that enhances their confidence and productivity. Women felt more confident working alongside men in a male-dominated governance structure.

The perceptions of stakeholders towards women leadership in water management and governance the results showed that stakeholders perceive that promoting women's leadership in the executive committee and board of directors requires structural interventions such as fixed allowances, constitutional reforms, and capacity-building initiatives in the LWUAs. This reflects a widely recognised need for institutional reforms, mentoring, and empowerment strategies to overcome systemic barriers and enhance women's meaningful participation and leadership in water management.

6.2. Recommendations

Based on the presented results, discussion and conclusion, several issues need to be addressed to improve the attainment of women in leadership positions in LWUAs, the following are actionable recommendations.

a.The Constitution of LWUAs should be reviewed to ensure they are inclusive and supportive of gender equality in the executive committee and board of directors of the LWUAs.

b.Continued supportive work environments that encourage male leaders and members to actively support and mentor women leaders, promoting a culture of respect and collaboration.

c.fixed allowances and other incentives could be introduced to encourage women to attain and maintain leadership positions in the executive committee and board of directors in the LWUAs.

6.4 Areas of further study

Further studies should focus on investigating how increased women's leadership in water committees and governance structures influences access to, maintenance of, and sustainability of water resources, as well as community well-being.

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APPENDICES

Appendix a: Mzuzu University Research Ethics Committee Informed Consent Form (English)



Mzuzu University Research Ethics Committee (MZUNIREC)

Informed Consent Form for Research in Transformative Community Development

Introduction

I am **EMMANUEL CHITUZU NYIRENDA** from the Department of Agri-Sciences in the Faculty of Environmental Sciences at Mzuzu University. We are doing research on the **BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG LILONGWE WATER BOARD WATER USERS ASSOCIATION**. The consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them from me or another researcher.

Purpose of the research

This research aims to assess the **BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG LILONGWE WATER BOARD WATER USERS' ASSOCIATION**.

Type of Research Intervention

This research will involve your participation in answering an individual interview.

Participant Selection

You are being invited to take part in this research because of your capacity.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate nothing will change. You may skip any question and move on to the next question.

Duration

The research takes place from the month of April 2023 to February 2024.

Risks

You do not have to answer any question or take part in the discussion/interview/survey if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

Reimbursements

You will not be provided any incentive to take part in the research.

Sharing the Results

The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. Following, we will publish the results so that other interested people may learn from the research.

Who to Contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact: Dr. Ulemu Msiska (supervisor), Mzuzu University, Private Bag 201, Luwingu, Mzuzu 2. Phone: +265 999 495 4025, Email:

ulemumsiska2004@yahoo.com; or you can also contact Dr. Ulemu Msiska (postgraduate coordinator), Department of Agri-Sciences, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2. Phone: 0994954025, Email: ulemumsiska2004@yahoo.com;

This proposal has been reviewed and approved by Mzuzu University Research Ethics Committee (MZUNIREC) which is a committee whose task is to make sure that research participants are protected from harm. If you wish to find about more about the Committee, contact Mr. Gift Mbwele, Mzuzu University Research Ethics (MZUNIREC) Administrator, Mzuzu University, P/Bag 201, Luwinga, Mzuzu 2, Phone: 0999404008/0888641486

Do you have any questions?

Part II: Certificate of Consent

I have been invited to participate in research about BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG LILONGWE WATER BOARD WATER USERS' ASSOCIATION

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant _____

Signature of Participant _____

Date _____

Day/month/year

If illiterate¹

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness _____

Thumb print of participant



Signature of witness _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability. I have made sure that the participant understands the research project. I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Signature of Researcher /person taking the consent _____

¹ A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the research team). Participants who are illiterate should include their thumb print as well.

Date _____

Day/month/year

Appendix b: Mzuzu University Research Ethics Committee Informed Consent Form (Chichewa)



Mzuzu University Research Ethics Committee (MZUNIREC)

Informed Consent Form for Research in Transformative Community Development

Mau oyamba

Ine ndine **Emmanuel Chituzu Nyirenda** kuchokera ku gawo la maphunziro la Agri-Sciences mu nthambi ya Environmental Sciences ku Mzuzu University. Tikuchita kafukufuku pa *Zotchinga azimai kukhala mumaundindo amakomiti oyendetsa mipopi ya madzi m'boma la Lilongwe, mdziko la Malawi*. Kalata ya chilolezoyi itha kukhala ndi mau oti simukutha kuwavetsa bwino. Chonde muzindiuza kuti ndiime ndifotokozele pamene tikuchita kafukufukuyu. Ngati muli ndi mafunso ena, funsanu ineyo kapena amnzanga omwe ndikuchita nawo kafukufukuyu.

Cholinga cha kafukufuku

Kafukufukuyu akufuna kuunika *Zotchinga azimai kukhala mumaundindo amakomiti oyendetsa mipopi ya madzi m'boma la Lilongwe, mdziko la Malawi*.

Mtundu wa kafukufuku

Kafukufukuyu akudalila kutengapo gawo kwanu poyankha mafuso amene ndikufunseni mkucheza kwathu.

Mchifukwa chani mwasankhidwa?

Mwasankhidwa kuti muchite nawo kafukufukuyu potengela udindo wanu komaso kudziwa kwanu.

Kutengapo gawo pa kafukufuku mosakakamiza

Kutengapo gawo kwanu pa kafukufukuyu mkosakakamiza. Muli ndi ufulu kutengapo gawo kapena ayi. Mukasankha kusachita nawo kafukufukuyu palibe icho chisinthe. Muli ndi ufulu kusiya mafunso ena osayankha mkuyankhako ena.

Kafukufukuyu atenga nthawi yotalika bwanji?

Kafukufukuyu atenga miyezi ingapo kuchokela mwezi wa Epulayelo chaka chino mpakana febuluwale chaka chammawa.

Zodzetsa Nkhawa

Simukuyenera kuyankha mafunso kapena kutengapo mbali ngati mukuona kuti mafunso ena salibwino kapena simunasangalare nawo.

Cholowa/Kulipidwa

Kutenga nawo gawo pa kafukufukuyu ndi kwa ulere ndipo simudzalandira kalikonse.

Kugawana zotsatila za Kafukufuku

Zotsatila za kafukufukuyu zidzagawidwa kwa inu amene mutengepo mbali ndi anthu a mdela lanu zisanagawidwe ku mtundu wonse wa aMalawi. Zotsatila za kafukufukuyu zidasindikizidwa mu m’buku kuti anthu onse ofuna kumva zambiri za kafukufukuyu athe kutero.

Oti mungathe kulumikizana nawo

Ngati muli ndi mafunso, mutha kufusa panopa kapena nthawi ina. Ngati mukufuna kudzapusa nthawi ina chonde alembeleni kalata a Dr. Ulemu Msiska (supervisor) omwe ndi aphuzitsi ku Mzuzu University pa adilesi iyi: Mzuzu University, Private Bag 201, Luwingu, Mzuzu 2. kapena aimbileni foni pa: 0994954025, Mutha kutumizanso kalata ku imelo adilesi iyi: ulemumsiska2004@yahoo.com; kapenanso mutha kulembelanso Dr. Ulemu Msiska (Postgraduate Coordinator), Department of Agri-Sciences, Mzuzu University, Private Bag 201, Luwingu, Mzuzu 2. foni: 0994954025, Imelo adilesi:

ulemumsiska2004@yahoo.com;

Kafukufukuyu waunikidwa ndi kuvomerezedwa ndi a Mzuzu University Research Ethics Committee (MZUNIREC) yomwe ndi komiti yoonetsetsa kuti ochita nawo kafukufuku ndi otetezedwa mu njira ina iliyose. Ngati mukufuna kumva zambiri za komitiyi lumikizanani ndi a Gift Mbwele pa adilesi iyi: Mzuzu University Research Ethics (MZUNIREC) Administrator, Mzuzu University, P/Bag 201, Luwinga, Mzuzu 2, Ma nambala awo a foni: 0999404008/0888641486

Muli ndi fuso Liri lonse?

Gawo lachiwiri: Kalata yovomereza

Ndaitanidwa kuti ndichite nawo kafukufuku pa zotchinga azimai kukhala mumaudindo amakomiti oyendetsa mipopi ya madzi m'boma la Lilongwe, mdziko la Malawi

Ndawelenga komaso andiwelengera zonse zoyenera pa kafukufukuyu. Ndinapatsidwa mwayi oti ndifunse mafuso pa kafukufukuyu ndipo mafunso onse ndinafusa andiyankha mogwira mtima. Ndikuvomereza kuchita nawo kafukufuyu mwakufuna kwanga.

Dzina la ochita nawo kafukufuku _____

Signature _____

Tsiku _____

Tsiku/Mwezi/Chaka

Ngati ali osatha kulemba ndi Kuwelenga²

Ndaonelela kuwerenga kolondola kwa kalata ya chivomerezo kwa otenga nawo mbali pa kafukufukuku. Ndipo otenga nawo mbaliyu anapatsidwa mwayi ofunsa mafunso. Ndikutsimikizira kuti otenga nawo mbaliyu wavomereza yekha kutenga nawo mbali pa kafukufukuyu.

Dzina la mboni _____ Otenga nawo mbali adinde ndi chala apa

Signature ya mboni _____

Tsiku _____

Tsiku/Mwezi/Chaka

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability and I have made sure that the participant understands the research project. I confirm that the participant was given an opportunity to ask questions about the study, all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Signature of Researcher /person taking the consent _____

Date _____

²Mboni yodziwa kulemba imusainile uyu ochita nawo kafukufukuku (ngati mkotheke mboniyi isankhindwe ndi uyu ochita nawo kafukufukuku osati awo ochititsa kafukufukuku). Ochita nawo kafukufukuku omwe sadziwa kulemba adindeso ndi chala.

Appendix c: Interviewer Guide for Board of Trustees and Executive Members



BARRIERS TO WOMEN'S ATTAINMENT OF LEADERSHIP AMONG LILONGWE WATER BOARD WATER USERS' ASSOCIATION.

SECTION A: SOCIO-DEMOGRAPHIC PROFILE

SECTION A: Background Information

Name: (Optional):

Age Range:.....

Marital Status:.....

Educational Level:.....

Location of WUA:.....

SECTION B: (WUA AND ASPECTS OF LEADERSHIP).

1. Have you ever been involved in any leadership position in WUA Governance? Explain
(If yes, the respondent must be able to explain the leadership position occupied and if not,
the respondent can also explain why not)

2. Do you think there are few Women in WUA Governance Structures? If yes what do
think are reasons behind?

3. Do you think low levels of education hinder women's leadership in WUA governance?
Explain:)

4. Do you think low confidence levels hinder women's leadership in WUA governance?
Explain:)
5. Do you think discrimination hinders women's leadership in WUA governance?
Explain:)
6. Do you think levels of capacity hinder women's leadership in WUA? Explain
7. Do you think culture hinder women's leadership in WUA governance? Explain)
8. Do you think religion hinders women's leadership in WUA governance? Explain)
9. Are women regarded only good at domestic in WUA governance? Explain
10. Do women face any harassment in the WUA governance? Explain
12. Are you involved in decision-making as you are in WUA governance?
13. Do women face lack of confidence in the WUA governance? Explain
14. Do you think effective leadership can improve women's participation in decision making?
15. Do you think fixed allowances can improve women's participation in decision making?
16. Does your constitution accommodate women in WUA governance? Explain.
17. Do you think changing the constitution will help in involving women in WUA governance? Explain.
18. Does capacity building help increase decision-making in women in WUA governance?
Explain.
19. Do you think effective leadership can improve women's participation in decision making? Explain
20. Do you think access to education can improve women's participation in decision making? Explain
21. What are the factors that you think hinder women's participation in the WUA Governance structure? Explain.

22. What are the benefits that you meet when you are in WUA governance?
23. What other challenges do you face when you are in WUA governance?
24. What are any other solutions that can be done to help the participation of women in the WUA governance structure?

Appendix d: Interviewer guide (for focus group interviews-for the water users)

- 1.** Do you agree that in the Water Users Governance structures they are few Women. If yes, suggest the reason why that is being the case. (Discussion)
- 2.** Do you think few women working in water Users Association Governance structures are capable in delivering their job, taking into account that they are working in a male dominated arena of leadership. (Discussion)
- 3.** Suggest what need to be done in order to ensure that more women get the upfront power in leading and gaining leadership position in LWUs Governance structures. (Discussion).

Questions	Agree	Disagree	Strongly Agree	Strongly Disagree
Do you think low levels of education hinder women's leadership in WUA governance?				
Do you think low confidence levels hinder women's leadership in WUA governance?				
Do you think discrimination hinders women's leadership in WUA governance?				
Do you think levels of capacity hinder women's leadership in WUA?				
Do you think culture hinder women's leadership in WUA governance?				
Do you think religion hinders women's leadership in WUA governance?				
Are women regarded only good at domestic in WUA governance?				
Do women face any sexual harassment in the WUA governance?				
Are you involved in decision-making as you are in WUA governance?				
Do women face lack of confidence in the WUA governance?				
Do you think effective leadership can improve women's participation in decision making?				

Do you think changing the constitution will help in involving women in WUA governance?				
Does capacity building help increase decision-making in women in WUA governance?				
Do you think effective leadership can improve women's participation in decision making?				
Do you think access to education can improve women's participation in decision making?				
Do you think fixed allowances can improve women's participation in decision making?				

Appendix f: Mafunso akafukufuku oyenera kufunsa mitu ya mabanja a mmidzi



ZOTCHINGA AZIMAI KUKHALA MUMAUNDINDO AMAKOMITI OYENDETSA MIPOPI YA MADZI M'BOMA LA LILONGWE, MDZIKO LA MALAWI.

SECTION A: SOCIO-DEMOGRAPHIC PROFILE

SECTION A: Background Information

Dzina: (Silokakamiza):

Zaka:

Muli pa banja :

Sukulu munafika nayo pati:

Dela lomwe kuli WUA:

SECTION B: (WUA AND ASPECTS OF LEADERSHIP).

1. Munakhalako pa udindo yoyendetsa komiti yoyang'anila mipopi ya madzi?. fotokozani
(ngati eya, nenani udindo wake ngati ayi fotokozani zifukwa)
2. Mukuganiza azimai ndi wochepa kumaudindo oyendetsa komiti yoyang'anila mipopi
ya madzi. Ngati eya, fotokozani zifukwa zake?
3. Mukuganiza maphuzilo ochepa amapangitsa azimai asakhale mumaudindo mu komiti?
(Fotokozani)
4. Mukuganiza kuzione pasi kumapangitsa azimai asakhale mumaudindo mu komiti?
(Fotokozani)

5. Mukuganiza kusolidwa kumapangitsa azimai asakhale mumaudindo mu komiti?
(fotokozani)
6. Mukuganiza kuti kuthekela komwe alinako azimai kumawapangitsa asakhale mumaudindo mu komiti? (fotokozani)
7. Mukuganiza zikhululupilo zazikhalidwe zimapangitsa azimai asakhale mumaudindo mu komiti? (fotokozani)
8. Mukuganiza chipembedzo chimapangitsa azimai asakhale mumaudindo mu komiti?
(fotokozani)
9. Mukuganiza zomuyeneleza munthu kukhala mu komiti zimapangitsa azimai asakhale mumaudindo mu komiti? (fotokozani)
10. Azimai amatengedwa kuti amachita bwino pogwila ntchito zapakhoma koma osati zaku komiti? (Fotokozani)
11. Kodi azimai amakumana ndi kuzunza kwinakulikose pogwila ntchito mukomiti?
(Fotokozani)
12. Kodi azimai amasalidwa pogwila ntchito mukomiti? (Fotokozani)
13. Kodi azimai amapanga nawo zisankho pogwila ntchito mukomiti? (Fotokozani)
14. Kodi azimai amaziwonela pasi pogwila ntchito mukomiti?
15. Kodi azimai amakumana ndikutsutsidwa kwinakulikose pogwila ntchito mukomiti?
(Fotokozani kutsutsidwa kwake)
16. Kodi azimai amakumana ndi vuto logwila ntchito mukomiti ndi zovuta zina zamumoyou? (Fotokozani)
17. Kodi ulamulilo wabwino mumakomiti utha kupangitsa azimai ambili ayambe kugwira ntchito mumakomiti? (Fotokozani)
18. Kodi malamulo akomiti amathandizila azimai kugwila ntchito mukomiti? (Fotokozani)

14. Kodi kusintha malamulo amukomiti zitha kuthandiza kulimbikitsa azimai kugwira ntchito mumakomiti? (Fotokozani)
15. Kodi kuchulukitsa kuthekela kwa azimai kungathandize kupangitsa azimai kutengapo gawo popanga zisankho poyendatsa komiti? (Fotokozani)
16. Kodi ulamulilo wabwino wa komiti ungathandize azimai kumatengapo gawo muzochitika mukomiti? (Fotokozani)
17. Kodi maphuzilo angathandize aziامي kumatengapo gawo muzochitika mukomiti? (Fotokozani)
18. Kodi zotchinga azimai zosiyanasiyana kumatengapo gawo muzochitika mukomiti ndi chani? (Fotokozani).
19. Kodi ubwino omatengapo gawo azima muzochitika mukomiti ndi chani? (Fotokozani)
20. Kodi zovuta zosiinasiina zoti aziامي azitengapo gawo muzochitika mukomiti ndi chani? (Fotokozani)
21. Kodi pangachitike chani kuti aziامي azitengapo gawo muzochitika mukomiti? (Fotokozani)

Appendix g: Mfundo zoyenera kuunikidwa mozama pokucheza ndi gulu logula madzi mumipopi.

1. Kodi mukugwilizana nazo kuti mumakoti mumaudindo azimai ndiwochepa? Ngati eya, fotokozani zifukwa zake (kambilanani)

.....

.....

.....

2. Mukuganiza azimai ochopepa akugwila ntchito mukomiti alindikuthekela kugwira ntchito bwino? Potengera azibambo nde ambili. (kambilalanani)

.....
.....
.....

3. Maganizo ano ndi otani kuti zimene zingachitike ndi chani kuti azimai ambirsi akhale mumaudindo poyendetsa ma makomiti kuti anthu apitilize kupeza madzi abwino mumipopi. (kambilanani).

.....
.....
.....

Appendix h:



MZUZU UNIVERSITY

DIRECTORATE OF RESEARCH

Mzuzu University
Private Bag 201
Luwinga
Mzuzu 2
MALAWI
TEL: 01 320 722
FAX: 01 320 648

MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

Ref No: MZUNIREC/DOR/24/34

07/03/2025

Emmanuel Nyirenda, Mzuzu University, P/Bag 201, Luwinga, Mzuzu 2.

Email: Emmanuelchituzu@gmail.com

Dear Emmanuel,

**RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR
PROTOCOL REF NO. MZUNIREC/DOR/24/34: BARRIERS TO WOMEN'S
ATTAINMENT OF LEADERSHIP AMONG LILONGWE WATER BOARD
WATER USERS' ASSOCIATION.**

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is finalised, you are required to furnish the Committee with a final report of the study.

The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Wishing you a successful implementation of your study.

Yours Sincerely,

Faith Mwangonde

Ethics Administrator

FOR: MZUNIREC
CHAIRPERSON



Mzuzu University Research Ethics Committee

Directorate of Research

Mzuzu University

P/Bag 201

Luwingu

Mzuzu 2

Email: mzunirec@mzuni.ac.mw

Cell: +265 (0) 99 8384804/