



ADDIS ABABA UNIVERSITY
COLLEGE OF DEVELOPMENT STUDIES
CENTER FOR GENDER STUDIES

FACTORS AFFECTING WOMEN'S PARTICIPATION IN
THE LEADERSHIP OF IRRIGATION WATER USERS
ASSOCIATION: THE CASE OF WOLMERA WOREDA OROMIA
REGION, ETHIOPIA

BY

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JUNE 2022
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ADDIS ABABA

Addis Ababa University
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Region, Ethiopia**

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Declaration

I, Soyome Alemayehu, hereby declare that the thesis entitled ‘Factors Affecting Women’s Participation in the Leadership of Irrigation Water Users Association: The Case of Wolmera Woreda Oromia Region, Ethiopia’, is my original work and it has not been presented for the award of any other degree, diploma, fellowship or other similar titles to any other university or institution.

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Abstract

In the study Woreda, women comprise 18% of the IWUA which worsened in the leadership positions. This study analyzes factors affecting women's participation in the IWUA leadership. Four IWUAs were selected purposively from Wolmera Woreda and data was collected through FGD and in-depth and key informant interviews and analyzed thematically. The study shows that on average there are about 11% of women on the committees but none of them are holding the leadership position which is defined in this study as chairperson, deputy chairperson, and secretary of the committees. The main hindering factors for this, as identified in the study, include the existing IWUA proclamation and regulation, which doesn't state women's representation in IWUA leadership, and the one person per household representation rule which left out married women in the male-headed households. In addition, women's workload, lack of access to information, and communities' perception of women's leadership were also identified as hindering factors. For not participating in IWUA leadership, women lack capacity building opportunities and the opportunity to learn from each other and share their concerns. Hence this study recommends addressing structural barriers by revising the existing IWUA regulation and developing implementation guidelines to deliberately engage women in the IWUA leadership with commitment. Addressing the root causes of inequality through promotion of gender transformative approaches to enhance women's access to and control over resources and decision-making power at all levels is also recommended. In addition, tailor-made support is required at all level to ensure participation in IWUA leadership.

Keywords: *IWUA, Women, Leadership, participation. irrigation*

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List of Abbreviations

FAO	Food and Agriculture Organization
FDRE	Federal Democratic Republic of Ethiopia
FGD	Focus Group Discussion
GDP	Gross Domestic Product
IWUA	Irrigation Water Users Association
JICA	Japan International Cooperation Agency
KII	Key Informant Interview
MoA	Ministry of Agriculture
OIDA	Oromia Irrigation Development Authority
PIDM	Participatory Irrigation Development and Management
SMIS	Small and Micro Irrigation Support
SSI	Small-Scale Irrigation
WoA	Woreda Office of Agriculture
WUA	Water User Association

Chapter One

1. Introduction

1.1. Background

In Ethiopia, there is a growing interest in investing in small-scale irrigation development projects to sustain food security and the livelihood of small-holder farmers (Mastewal, 2016). Despite concerns regarding the performance and management of small-scale irrigation, the government of Ethiopia plans to increase the current level of irrigation infrastructure considering it a primary engine of economic growth, (Tilahun, 2015). According to Mastewal (2013) to address the poor management of the irrigation infrastructure and enforce by-laws that regulate the use of irrigation water among users, irrigation scheme participation is very crucial. To ensure effective community participation in irrigation development the Federal and regional proclamations create a specific legal basis for the establishment of Irrigation Water Users' Associations (IWUAs) as a particular type of legal entity for the operation and management of irrigation and drainage systems (FDRE, 2014 and Oromia Regional Government, 2017). This also ensures the provision of all necessary irrigation services to members in an adequate, timely, equitable, and efficient manner (Lempériere, Fitsum, Lefore, Amare, and Langan, 2014)

Membership in the IWUA is compulsory for any person possessing land within the service or command area or using land located within the service area based on a lease agreement for more than three years (FDRE, 2014 and Oromia Regional Government, 2017). As responsible institutions, IWUAs have different structures and decision-making bodies. It has the general assembly, which is the supreme organ of the association, and three main decision-

making bodies: management, control and dispute resolution committees which are accountable to the general assembly (Lempériere et al., 2014).

Different studies show that although both men and women participated in irrigated agriculture activities at all production levels, irrigation is mostly categorized as a men's domain and women are not considered a direct stakeholders (Kalkidan, Yemiru and Ephrem, 2016). As a result of this, they are not equally represented and participate in the leadership of their IWUAs and are not taking part in decisions affecting their interests and concerns. Therefore, this research focuses on analyzing the factors affecting women, both female household heads and married women in male-headed households' participation and benefit in IWUAs leadership and come up with recommendations to ensure their participation and benefit from being leaders in IWUA.

1.2. Statement of the Problem

It is known that the Ethiopian economy is largely based on the agricultural sector. Ministry of Agriculture briefing report on 'Transforming Ethiopian Agriculture' for Agricultural Scholar Consultative Forum (as cited in Getachew, 2020, p.2), agriculture contributes 27.5 billion dollars or 34.1% of the GDP, employs some 79% of the population, accounts for 79% of foreign earnings, and is the major source of raw material and capital for investment and market. However, as this sector is mainly dependent on erratic and deficient rainfalls, the country is frequently exposed to drought and famine which enforce the government to enhance irrigation development.

The irrigation sector analysis of the Ethiopian Ministry of Water, Irrigation, and Energy (2020) indicated that the government has made significant progress in the sector over the past two decades, (the total area covered by irrigation, in 1982 was 176,105 hectares and in 2010

reached 1.2 million hectares), however, the pace of irrigation development has been very low and not accelerated to the expected level. Inadequate community involvement and consultation in scheme planning, construction, and implementation of irrigation development and problems of ownership of irrigation projects have characterized the management of irrigation schemes in the past decades (Mastewal, 2013 and Gebremedhin and Asfaw, 2015).

Sustainable development of farmer-managed irrigation systems requires the establishment of a legally recognized IWUA with capacities for sustainably managing, operating, and maintaining an irrigation scheme to the satisfaction of water users (Lempériere et al., 2014). Understanding this, the existing government's proclamations and regulations promoted equal active participation and benefit of both men and women who have a membership right in IWUAs as a member and a leader. Even though both men and women participated in smallholder agriculture, women provide the majority of human labor, and their labor on irrigated holding is increased since most of the time irrigation is undertaken on a small plot of land with intensive care, vegetables which are traditionally placed in women's domain (Kalkidan, 2016). But women are excluded from choice, decision making, and control of productive resources, and they are still benefiting little from irrigated agriculture at the individual, household, community, and national levels because of their own and other people's perceptions of their role as assistants to men farmers and the existing social and institutional arrangements (Kalkidan et al., 2016).

A report from the Oromia Bureau of Agriculture and Natural Resources shows that in the region there are about 7,624 IWUAs formed with a total of 246,919 members of which women are only 52,840 (21.4%) (Oromia Bureau of Agriculture, 2020, p.1). This is also the same for the targeted Woreda which has 11 IWUAs with 2,017 men and 443 women members (Oromia Bureau of Agriculture, 2020, p.1). The challenge of women's participation is worsened when it

comes to the leadership and decision-making level. Despite all efforts, gender inequality remains to be one of the big challenges to achieving overall growth in the sector.

Women farmers contribute equally to the agricultural activity, through labor and skills, however, these contributions are not fully acknowledged, and women appear not to be making or equally participating in decision-making processes (Ministry of Agriculture and Natural Resources, 2017). Though the IWUA proclamation gives equal opportunity for members to elect and to be elected as a committee in IWUA, as stated by Mastewal (2013), one can hardly find women on the IWUA committees. This shows how women are misrepresented in the decision-making processes of scheme development and management. The capacity assessment report of MoA (2011) indicated the involvement of women in small-scale irrigation schemes is one of the areas where gender equality can be assured but the issue doesn't get due consideration as required.

The assessment done by the Small and Micro Irrigation Support Project (2019, p13) on seven pilot schemes in Oromia, indicated that on average women constitute only 6% of IWUA committees and there are IWUA committees' with no women at all. Male dominance in IWUA membership and IWUA committees exclude women from negotiating in decision making on how to use an irrigation scheme, allocate watering turns, express their issues and concerns, and getting the required information to develop their knowledge and skill as well as information on irrigation technologies in the same ways as men (Mastewal 2013 and SMIS 2016). It also has an effect on having no say in decisions affecting their life such as using water for other domestic uses, watering their livestock, night shift watering, and construction of social structures like footbridges, washing basins, and cattle troughs. Ensuring women's inclusion in decision-

makings of the IWUA needs efforts beyond tokenism, which requires a study to identify the root cause for their low participation and representation.

Different studies have been undertaken on the challenges and opportunities of small-scale irrigation (SSI) (For example Gebremedhin et al., 2015; Abraham, Addis and Mesfin, 2015; Agerie, 2013; Mastewal, 2013; Mastewal, 2016 and Tilahun, 2014). But their study focus on the overall challenges and opportunities that are found in the scheme not related to the irrigation water users association or the men and women member and their role in the association. Besides, by focusing on these men-dominated IWUAs few studies on gender issues in the SSI were undertaken (Kalkidan et al., 2016; Belainew & Surafel, 2020 and Imburgia, 2019). These studies are undertaken on the gender dynamics in SSI agriculture among smallholder farmers, gendered aspects of SSI technologies, the impact of SSI technology on women's empowerment, and an integrative gender-analytical approach to water governance. But factors contributing to low representation and participation of women in IWUA leadership are not yet studied well.

Thus, this research focuses on analyzing factors that affect women's participation, both female-headed households and married women in male-headed households, in the IWUA leadership and its effect on the lives of women farmers in the IWUA. The study includes married women in male-headed households because in most cases they were left out in IWUAs since it is thought that they are represented by their husband who has control and decision-making power over the irrigated land (SMIS, 2016).

1.3. Research Objective

1.3.1. General Objective

The general objective of this research is to identify factors affecting women's participation in the leadership of IWUA.

1.3.2. Specific Objectives

- To examine the existing status of men and women in the leadership of IWUA
- To analyze major gender inequality issues and factors promoting and hindering women's participation in the leadership of IWUA
- To analyze the consequences of women members' participation in the IWUA leadership on the lives of women farmers and IWUA

1.4. Significance of the Study

Participation of men and women farmers in IWUA has a significant effect on the efficiency of the irrigation systems to increase production and productivity. In the IWUA the differential needs and preferences of men and women must be treated and addressed fairly. Thus, it is important to study the factors hindering women's participation in IWUA leadership. The findings of the study will help to develop the strategy to ensure women's full and effective participation and benefit in the small-scale irrigation development sector and ensure their equal opportunities in IWUA leadership.

It will also contribute by pinpointing policymakers to work in the area to develop strategies and implementation modalities to ensure gender equality for sustainable development and women's empowerment in line with the existing IWUA proclamation. In addition, it will

help to draw the attention of researchers and multi-disciplinary professionals interested in similar issues to challenge the existing inequalities. Moreover, the findings will give an opportunity for institutions (government, non-government and private) working on small-scale irrigation to revise their intervention strategies to be gender inclusive and responsive.

1.5. Scope of the Study

Geographically, the study was conducted in Wolmera Woreda, Oromia regional State. Bottlenecks that hinder women from participating in IWUA leadership are identified and analyzed by the study. The study was focused on modern small-scale irrigation schemes in the study area which did not reflect the condition of women farmers in the traditional irrigation schemes.

1.6. Operational Definitions

- *Small-Scale Irrigation*: SSI scheme is defined as an irrigation scheme commanding an area with a minimum size of 5 hectares and a maximum size of 200 hectares, although the minimum and maximum size may vary in each region.
- *IWUA Leadership*: The term leadership in this study is the position of chairperson, deputy chairperson, and Secretary in the three main committees of the IWUA – Management Committee, Control Committee, and Dispute Resolution Committee
- *Command Area*: The command area is defined as all arable/farmland that can be irrigated by the SSI scheme managed by the IWUA.
- *Participation*: The term in this study is used to refer to the provision of equal opportunity to women to take part in the leadership and management of the Irrigation Water Users Association.

1.7. Organization of the Study

This study is organized into five chapters having different topics and sub-topics. The first chapter is the introduction section which comprises the background of the study, statement of the problem, research objectives, significance of the study, the scope of the study, and some operational definitions. The second chapter is a literature review that incorporates both theoretical and empirical literature related to the research. Chapter three deals with the research methodology including a description of the study area, description of sample kebeles, sampling method, source of data, instruments of data collection, data analysis, and ethical considerations. Forth chapter is a section with research findings and analysis followed by the fifth and final chapter which contains the conclusion and recommendation.

Chapter Two

2. Literature Review

2.1. Leadership

Power denotes the capability to control in such circumstances when other human beings must obey and do what the duty requires. According to Max Weber, power is the ability to impose one's will in social relations despite any resistance and without reference to the basis of this opportunity. Political power is a definite aspect of relations between large social groups (subjection, cooperation, and social partnership). The exercise of political power is related to needs, and interests that are conformed with and implemented in social groups. Power is used to describe the key interests of social groups, and citizen participation in state duties, and also to portray the main directions in the state operation (Murnieks, 2003).

According to Endale (2014), in any society, individuals play some roles, and one of such is the role of a leader who is the most responsible person with the power to direct people and deal with everything. Leadership can be defined organizationally and narrowly as the ability of an individual to influence, motivate, and enable others to contribute towards a sustainable positive change (Khabele and Victor, 2008).

Leadership is even used as a universal means to solve any social problem. It is a process in which one individual affects the rest of the group to achieve the defined aims of an organization or a group (Byers, 1997). An idealistic opinion of theoreticians on the phenomenon of leaders' argued leaders must be able to guide and paint the vision with confidence, and everyone must be ready to believe that this leader can achieve the aim (Kouzes and Posner, 1995). Leadership should not be assorted up with status. According to Gardner (1990), it is not quite like that status stands apart from a leader, however very often position brings along only

symbolic values and traditions which do not increase the role of a leader. Weber (1947) links authority with legitimacy.

Authority and leadership have developed from legitimacy and optional recognition, namely, if leadership loses its legitimacy, the ability to manage is lost as well (Endale, 2014). Kotter (1988) defines governance as planning, organizing, and controlling, while leadership includes the creation of a vision and the formation of relationships (Bolman and Terrence, 1997). Sometimes there is confusion between managers and leaders. However, managers endorse stability while leaders head for innovation, press for change, and find motivation in their employees to complete their tasks.

2.2. Factors affecting women's participation in Leadership

There is no single barrier that hinders women from being in leadership position; rather this is a cumulative effect of different factors. Based on different studies some of the factors will be discussed as follows.

2.2.1. Socio-Cultural Factors

Culture is that which surrounds us and plays a certain role in determining the way we behave at any given moment in time (Mbugua, 2007). It also serves as a tool to validate all manners of actions not, all of which may be acceptable to all concerned and are often intimately, connected to issues of identity. Cultural contexts might not always be accepted, because they might be exposed to manipulation and interpretation from different perspectives.

In most African cultures, including Ethiopia, social-cultural traditions incline us to accept that women's public roles are just additional activities to their primary roles. For example, in Ethiopia women engaged in productive and community work as well as are mothers, wives, and

breadwinners in their homes (Meron, 2003). Because of those multiple responsibilities women are being restricted to the domestic role with few opportunities and contact to decision making and leadership positions.

According to Bernaars (as cited in Mbugua, 2007) in any ethnic group in Africa, a typical woman has low status, particularly a lack of power to make decisions on things that might affect her life and her loved ones. This culturally determined expectation and attitude started at an early age. Girl child has less access to resources as compared to boys, and a boy always be considered as first than a girl. This gender-biased cultural supposition and the consequent differential treatment of boys and girls in a homestead not only weaken girls' access and performance in education but also tend to push girls to do the so-called feminine careers'.

Societal and the individual attitude toward women's ability in holding the responsibility of leadership and decision-making positions could also affect the participation of women in the area significantly. As stated by Hoare and Gell (2009), mistrust of women's ability to lead and the stereotypes and prejudices about their roles in society, and their lack of suitability for leadership roles and decision-making also challenge women, which are usually aggravated by cultural factors.

2.2.2. Organizational Culture Barriers

According to Phillips (as cited in Mbugua, 2007), organizational culture is defined as the realities, values, symbols, and rituals held in common by members of an institution which contribute to change in attitude. It defines conduct within an institution, determines what's and isn't valued, and how authority is asserted (Dessalegn, 2019). As McKenna (cited in Mbugua,

2007) the corresponding actions include working long hours and putting in face time (as agents for productivity), competitiveness, and cooperation to put work above all further.

According to Dessalegn (2019), the organizational and managerial values in some institutions tend to be characterized by stereotypical views of women's positions, attributes, preferences, and commitments which in turn influence verdicts about who's suitable for particular positions. When women find themselves assessed based on group membership rather than on their experience and capacities, they understand the existing gender inequality. Eagly & Johansson (as cited in Miller, 2006) said, leadership and management continue to be the sphere of men which is the result of communities' perception and the assigned gender role to men and women.

2.2.3. Gender Stereotype

Gender stereotypes can be described as the characteristics, attitudes, values, and behaviors that society specifies as appropriate for a particular gender. Mostly, men are characterized as aggressive, risk-taking, decisive, and autonomous, whereas women are characterized as kind, caring, relational, and humble (Collins & Singh, 2006 and Sikdar & Mitra, 2008). The differences may have arisen not just from biological differences but as a result of socialization during childhood and how men and women develop emotionally. Gender stereotypes have constantly confirmed that men are more managers and competent than women, while women are more expressive than men (Duhér and Bono; Sczesny and Stahlberg, as cited in Ginige, 2007).

As said by Birikti (2014), social norms promote general stereotypes of gender roles that have been cultured through the process of socialization. These social practices are perceived as

contradictory to those required in the higher levels of management. Women have different management styles which can be beneficial to the institution and according to Birikti (2014) and Collins & Singh (2006), they prefer institutional structures that enable consensual working rather than the traditional hierarchical structure that favors men.

As Hoobler, M.J. (2011) states, the ‘glass ceiling’ describes focuses on discrimination due to many, varied causes, such as sex-gender stereotyping where individuals tend to be men with leadership positions. Scholars have collected considerable empirical evidence on how successful leaders are stereotypically considered as male attributes such as independence, assertiveness, and decisiveness (Hoobler et al, 2011). Since the stereotypes of women in the workplace do not match with the male leadership prototype, women are not considered improper for the top jobs. Thus, as Cornelius (cited in Mbugua, 2007) stresses, stereotyping can influence how men and women are perceived in the workstation which is still prevalent and widely shared now.

2.3. Concept of Participation and Mechanisms for Participation

Cohen and Uphoff (1977), Korten (1980), Paul (1987), and Ghai and Hewit de Alacantara (1990) define participation as the concepts of contributing, persuading, allocating, or redistributing power and of control, resources, benefits, knowledge, and skills to be gained through involvement in making decisions. There are also different debates among experts and in the literature about whether participation is a means or an end, or both (World Bank 1992; Picciotto 1992). For this study, participation is defined as the provision of equal opportunity for women to take part in the leadership and management of the Irrigation Water Users Association. The essence of participation is exercising voice and choice (Saxena, 1998).

Brynard (1996) (as cited by Van, W B. et al., 2002) views participation as an activity undertaken by one or more individuals previously excluded from the decision-making process. Lisk (1985) in Karel, Andries & Belinda (2001) is of the view that participation is the active involvement of the people in the making and implementation of decisions in politics and socio-economic endeavors. According to Roodt (2001) participation is viewed as people involving themselves to a greater or lesser degree, in an organization indirectly or directly concerned with the decision-making and implementation of development.

Alexander (2006) defines participation as a process of taking part in different spheres of societal life; political, economic, social, cultural, and others. Whilst according to Chambers and Conway (1992), participation is meaningful in environments where community members communicate on their local matters. However, there are four different levels of community participation that are discussed as follows:

2.3.1. Instrumental participation

Brennan and Hamlin (1977) note that this level of participation implies one's need to participate for the best outcomes in terms of individual utility given the likelihood of great influence in processes. Thus, individuals become participants to change the existing situation. Fittingly, such opportunities for bargaining in participation exercises are portrayed in Integrated Development Planning in which individuals envisage better service delivery as the outcome (Swanepoel & De Beer, 1997).

2.3.2. Transformative participation

This is the transformation of dominant planning practices in the political and economic arenas which has reinforced the power of some actors at the cost of the invisibility and exclusion of a great bulk of the population (Hickey & Mohan, 2004).

2.3.3. Representative participation

Individuals exercise their role in planning indirectly through an elected representative who in turn advocates on behalf of a group of individuals. This type of participation comes from the ideology of democracy where one or more individuals are entrusted to represent a community or a group of individuals. According to Furstenburg (1993), representative participation is any arrangement under which individuals may be represented by someone they consider to know the issue better.

2.4. Characteristics of effective participation

Chambers and Conway (1992) stated that effective participation involves a good practice that adheres to the following principles according to principles to achieve change in a system that supports a climate of mutual learning and development among all those involved. According to Anlay (2022), confidence and transparency, encourage participants to be active, more committed and accountable, and inclusive based on the purpose of the exercise. Traditionally disadvantaged groups should be given special support and encouragement when their participation is important by providing incentives (Anley, 2022). According to Chambers and Conway (1992), participants could be excluded because of a lack of physical access to meeting places, timing, and appropriate support, for example, child care.

As stated by Brynard (as cited in Bekker, 2004), effective community participation can be defined as encouraging participants to provide and get information to and from communities, enhancing public decisions and their acceptance, protecting individual and minority group rights and interests and delaying or avoiding public decisions with a negative consequence.

2.5. Typologies of Public Participation

As Theron & Ceasar (2008) argue that besides the fact that public participation as a concept differs from scholar to scholar, it is also understood differently by different participatory stakeholders. This has encouraged researchers like Arnstein (1969) and Pretty (1994) to develop typologies of public participation. Pretty, Guijet, Scoones & Thomson (1995) identify and describe seven typologies that demonstrate the different conceptions of public participation.

- **Passive Participation** - People participate by being informed about what is going to be or has previously happened. Information being communicated belongs to outsiders and the community remains clueless, frustrated, and weak.
- **Participation by giving information** - The people participate by responding to questions provided in questionnaires or online/phone interviews or similar public engagement strategies. The public does not have the chance to impact or direct proceedings as the findings are neither communicated nor estimated for accuracy.
- **Participation by consultation** - People engaged by being consulted by experts. The experts define both challenges and solutions and may alter these based on the public's responses. This process does not include any share in decision-making by the public, nor are the experts under any obligation to consider the public's view.

- **Participation for material incentives** - People engage by resource sharing such as labor, in return for food and cash. This typology generally takes place in the rural context. For example, farmers provide their farm plots but are not engaged in the research or learning process. The people have no stake in extending the activities when the incentives end.
- **Functional participation** - People engage in a group environment to meet the planned objectives related to the program/project, which may involve the creation of externally initiated social organizations. This involvement tends not to happen at the early stages of project cycles or planning, but rather once the important decisions have already been made.
- **Interactive participation** - People engage in common analysis, the development of action plans, and capacity building. Participation is seen as a right, not just a means to achieve project objectives.
- **Self-mobilization.** - People engage by taking initiatives independent of external institutions to change systems. This bottom-up approach allows the public to develop contacts with external institutions for resources and the technical advice they need, but they retain control over resources used.

2.6. Theoretical Framework: Feminist Theories

Gender inequality has different forms and is mostly context-based, depending on the economic structure and social organization of a particular society and according to the culture of any group within that society (Pham Hoang Tu Linh, 2018). Understanding the existing women's oppression and gender inequalities in politics, social relationships, and the economy; feminists have developed different theories on how to overcome these challenges. The purpose of

feminism, as a political movement, is to make women and men more equal in law, society, and culture (Linh, 2018).

Contingent on the root cause of women's oppression, feminists analyzed gender inequality from different perspectives. As stated by Adawo, Gikonyo, Kudu, and Mutoro (2011), much of Feminist theories focus on analyzing gender inequality and the promotion of women's rights, interests, and issues through fighting against discrimination, stereotyping, objectification, oppression, and deconstruction of patriarchy.

However, the belief that women should have equal rights with men in having equal opportunity by removing collective and discriminatory barriers that prevent them from achieving their goals is a key concern for liberal feminists. According to Tong and Giddens (as cited in Eyayu Bimer and Getaneh Alemeneh, 2018) liberal feminists deals with female subordination and gender inequality that is rooted in a set of customary and legal constraints and created by lowering access for women and girls to civil rights and allocation of social resources that block women's entrance to success in the public sphere.

Liberal feminism is a feminism of equal rights (Camille, 2020), i.e. political equality which is the right for women to vote and stand for election, and generally the right to play an active role in society and to be treated in the same way as their male counterparts. At its core, liberal feminism believes in pragmatic reforms against gender discrimination through the promotion of equal rights by engaging and formulating laws and policies that will ensure equality (Ledwaba S, Nkomo TS, 2021).

Furthermore, liberal feminists refer to the number of men and women in different occupational roles as evidence of inequalities which is a result of gendered socialization and the

gendered division of labor, which favors men. Therefore, the liberal feminist theory will be used to analyze the difference in men's and women's positions in the IWUA leadership and the factors contributing to this difference. Moreover, the research findings will be related to the recommendations given by liberal feminists regarding examining the existing difference in the status of men and women in the leadership of IWUA and addressing the hindering factor for their equal participation and representation to ensure its applicability and bring about the intended change and gender equality.

2.7. Irrigation Water Users Association

To secure the functional sustainability of irrigation and drainage, the development and maintenance of infrastructure must be carried out timely and effectively (Gany, Sharma & Singh, 2018) to enhance effective water management. According to (Reddy & Reddy, 2005) sustainable water resource management is ineffective in the absence of decentralization and devolution of powers to the users by involving farmers and other stakeholders. It has been observed that institutional arrangements for irrigation and drainage development and management vary across countries, especially concerning the reforms in organizational arrangement, and approaches for successful participatory irrigation and drainage management (PIDM) (Frija, Speelman, Chebil, Buysse & Van Huylenbroeck, 2009).

Public investment in irrigation in Ethiopia has largely focused on infrastructural development, with very little attention given to operation and maintenance and long-term sustainability issues (Mastewal, 2013). However, irrigation systems are not stand-alone physical entities, but they require the active involvement of the community to sustainably meet their intended objectives to manage, maintain and operate the systems (Amare, Fitsum, Zeleke,

Ephrem, Hoekstra, and Langan, 2016). This can be realized through community-based Irrigation Water Management which focuses on the collective management of irrigation water to improve human well-being and poverty reduction by decentralizing the authority of irrigation water management to the local community (Sisay, 2011).

Sustainable development of farmer-managed irrigation systems involves the establishment of a legally recognized IWUA with capacities for sustainably managing, operating, and maintaining an irrigation scheme to the satisfaction of water users (Lempériere et al., 2014). Moreover, establishing water users' associations (WUAs) would enhance water management of irrigation schemes, particularly water distribution, water allocation, and scheduling (Mastewal, 2013 and Amare et al., 2016). However, according to JICA et al. (2014), many irrigation organizations also embrace other sets of activities: agricultural services (agricultural extension, possibly with research support); commercial services (input supplies, credit, and marketing); and basic infrastructure and social services (housing, roads, schools, health services, etc.).

Furthermore, as stated by Daniel (2019) they are charged with the optimal allocation and utilization of the water resource, generating local resources in cash or labor for maintenance and operations, preventing erosion, and ensuring the interests of the owners and users of the land plots and sanctioning violations of the rules. An Irrigation user association may be established as a self-governing, nonprofit legal entity that shall, in the public interest, manage a canal network, wholly or in part, to provide water to its members for agricultural purposes (JICA et al., 2014). The actual size of a WUA often depends on the irrigation system (Aarnoudse, Closas, and Lefore, 2018).

In Ethiopia, as studied by Amare et al., (2016), organizations for irrigation management existed in different forms; they were neither generally well recognized nor endorsed by the public sector or not properly functioning. Based on the existing problem of irrigation systems the Federal Irrigation Water Users' Association (IWUA) Proclamation No.841/2014 is promulgated (SMIS, 2016). According to Lempériere et al. (2014), the IWUA Proclamation creates a specific legal basis for the establishment of IWUAs as a particular type of legal entity for the operation and management of irrigation and drainage systems. As stated in the proclamation (FDRE, 2014) IWUA membership is compulsory and every person who, based on land rights, uses land located within the service area of an IWUA is a member of the IWUA. The main organ or functional bodies of the Water Users' Association (WUA) are the general assemblies, the management, dispute resolution, and the control committee. The General Assembly is the highest authority in a water users' association which is composed of all members of irrigation users (JICA et al., 2014).

2.8. Irrigation Water Governance

MoA, (2011) reported that modern irrigation in Ethiopia was first practiced in the 1950s when the imperial government of Ethiopia and Dutch companies together implemented the project in the upper Awash Basin for commercial crops. However, irrigation is affected by various challenges with the increasing lack of water management systems as one of the main factors (Mulubirhan K., Gebremicael T., Abadi G. & Tefari G., 2017). The Regional IWUA proclamation (No. 204/2017) creates a specific legal basis for the establishment of Irrigation Water Users' Associations (IWUAs) as a particular type of legal entity for the operation and management of irrigation and drainage systems.

Water governance is the range of political, institutional, and administrative rules, practices, and formal and informal processes through which decisions are taken and implemented, stakeholders can articulate their interests and have their concerns considered, and decision-makers are held accountable for water management (OECD, 2015, p.4).

In IWUAs, the General Assembly is the higher governing body of the association. The IWUA General Assembly is responsible for the election of members of governing bodies which are management, control, and dispute resolution committees, and the adoption and amendment of regulations that govern day to day activities of an IWUA. Water User Associations are considered the legally recognized body responsible for overall irrigation management activities by enforcing informal customary laws and formal bylaws as subsidiary regulations (Sisay, 2011). The day-to-day activities of IWUA operational rules related to water distribution, maintenance of irrigation infrastructures, type and level of sanctions for violation of the rules, and defaults of payment of the irrigation service fee (SMIS, 2016).

Poor water management hinders sustainable irrigation productivity development in rural areas, which is one of the major reasons for the underperformance of most irrigation schemes (Degol, F., Ritsema, C. J., Solomon, H., Froebrich, J., & Van Dam, J. C., 2017). The study undertaken in the Deder district of the Oromia region by Sisay (2011) indicated that local people, who live closer to irrigation sources, have more interest in their sustainable use and management than do governments and distant actors because they bear the consequences of mismanagement. This could be solved through clearly defining rules and regulations based on pre-existing by-laws.

According to Byrnes (1992), irrigation water management activities include three dimensions. These are control of the physical structures, allocation, and distribution of water and communication and conflict management. Conflict is a highly inevitable phenomenon in irrigated areas and conflict arising from water distribution is extensive within groups and between groups. Managing these conflicts as per the existing IWUA regulation is the responsibility of dispute resolution.

Even though there are many ways to approach water governance, some indeed better than others, efforts to determine some common rules and necessary building blocks of a good water governance system are undertaken. According to a study on Awash Basin by Kevin (2013) a powerful administrative organization of water management, legally embedded system of water management, systematic planning approach to water resource management problems and activities, adequate financing system, and participation of stakeholders are identified as the major building blocks of water governance.

2.9. Irrigation Water Users Association Governance and Regional IWUA Proclamation

The General Assembly: the general assembly is responsible for the IWUA annual work plan and budget. It can appoint and remove the members of the management body, control committee, dispute settlement committee, and members of other subcommittees. All the administrative regulations and internal regulations of the associations including payments, contributions, and penalties are approved and amended by the general assembly. It also approves the annual income and expenditure, property, and liability of the Associations; as well as the annual report of the executive body of the associations.

Executive Committee: the roles and responsibilities of the executive committees pass administrative decisions, prepare the work and budget plan of the association and implement it upon its approval and prepare meeting agendas. It also maintains the books of accounts and finance of the association legally.

Control Committee: the committee performs financial investigation and control of all activities of the IWUA. Where it finds wrong work practices it causes to be corrected by the executive committee immediately. It follows up that the executive committee performs its duties effectively and undertakes control of physical work and audit reports to the general assembly.

Dispute Resolution Committee: hear and determine disputes on water use and distribution between members of the association and deal with matters related to non-observance of watering schedule. Address disagreements related to the violation of the association's by-laws, or internal regulations as well as appeals lodged against the administrative decisions of the management committee.

2.10. Small Scale Irrigation Development

Increasing the productivity and profitability of small-scale irrigation systems in developing countries is critical to improving the food security and well-being of small-scale irrigators and their communities (Bjornlund, et al., 2019). In addition to providing greater availability and stability of food supplies during the dry season, irrigation can enable crop diversification, including greater availability and consumption of micronutrient-rich vegetables and fruits, and it enhances income generation, improved water supply, and women's empowerment (Dom`enech, 2015). Globally, irrigated agriculture accounts for approximately 20% of cropland but contributes to 40% of food production (WWAP, 2020: <https://www.worldbank.org/en/topic/water-in-agriculture>). As stated by You et al. (2018, p.770)

irrigated land in Africa as the proportion of cultivated land is only about 6% compared to 37% for Asia and 14% for Latin America.

Despite highly variable and in many cases insufficient rainfall and a high incidence of droughts, except for a few countries in northern Africa, Madagascar, and South Africa, the potential for irrigation development has not been effectively tapped in Africa (You et al., 2010 and Mekuria, 2003). Though eighty-five percent of Africa's poor live in rural areas and depend largely on agriculture for their livelihoods (You et al., 2010), only about 4% of land in Sub-Saharan Africa is irrigated due to the limited access to water during the dry season which rates among the lowest in the world (Dom`enech, 2015).

According to Kamwamba-Mtethiwa et al. (2016), small-scale irrigation (SSI) is considered one of the options for increasing agricultural productivity and supporting development in Sub-Saharan Africa, as an innovative farming systems adaptation to climate variability and change to achieve household food security and national developmental goals (Nelson et al., 2018).

Like many Sub-Saharan African countries, the major driving vehicle for economic growth and fighting poverty and hunger in Ethiopia is agriculture (Yodit, 2013). Ethiopia's agriculture is primarily dependent on rain-fed practices. The sector has been unable to advance as expected and faces frequent failures of production due to the erratic, deficient, and unreliable nature of rainfalls (Ministry of Water, 2020 and Abraham, Addis and, Mesfin, 2015). In recent years, irrigation development has been regarded as a viable strategy for rural poverty reduction and the Ethiopian government is therefore pursuing plans and programs to develop irrigation as

an effort to substantially reduce poverty and create an atmosphere for social change (Dereje et al., 2011 and Gebremedhin, 2015).

Though traditional irrigation in Ethiopia has a long history, modern irrigation systems were started in the 1960s to produce industrial crops in Awash Valley (Daginet & Adugnaw, 2019). According to Adugna (2014), irrigation is therefore taken as an essential component and strategy for food security, to increase agricultural output and crop diversification mainly focusing on the improvement and establishment of Small-scale irrigation schemes. According to Abraham et al. (2015), small-scale irrigation is a policy priority in Ethiopia for rural poverty alleviation and growth.

In Ethiopia, irrigation is commonly classified based on the size of the command area. According to Makombe, Regassa, Fitsum, Seleshi, Mekonnen, and Bossio (2011), Large scale irrigation system comprises a command area of greater than 3,000ha and a medium is from 200ha to 3,000ha. Since 1994 (Dereje et al. 2011), projects to expand small-scale irrigation schemes and to modernize or rehabilitate existing traditional irrigation schemes have been implemented, with a significant number of small-scale irrigation schemes being developed. Accordingly, 46% of proposed irrigation development is in the small-scale irrigation category which comprises <200ha of command area (Makombe et al., 2011).

An assessment report of the Ministry of Agriculture, Natural Resources Management Directorate (2011), indicated that irrigation development, particularly the smallholders have significant importance to raise production and productivity to achieve food self-sufficiency and ensure food security at the household level in particular and the country at large. In Ethiopia, though irrigation has long been in use, irrigated agriculture is far from satisfactory despite

substantial investment, public interest, and strategic support through government policy (Dereje et al. 2011).

The existing irrigation development, as compared to the irrigation potential the country has, is not significant (MoA, 2011). Thus, irrigation has to play a significant contribution in mitigating food insecurity and hence poverty reduction (Gebremedhin et al., 2015). The potentially irrigable land of the country is estimated to be about 3.7 million hectares (and some studies reveal that it can reach up to 4.3 million hectares) but, as per the existing information, only about 10- 12% of the total potential is currently under production using traditional and modern irrigation schemes (MoA, 2011).

According to Hagos et al. (2009),(as cited in Gebremedhin et al., 2015) irrigation development in Ethiopia can be considered a cornerstone of food security and poverty reduction tool as it has the power to stimulate economic growth and rural transformation. However, Adugna (2014), citing different studies stated that most small-scale irrigation schemes in the country are performing below the intended standard due to several constraints. MoA capacity assessment (2011) confirmed this study and said, however, irrigation development is a key to sustainable and reliable agricultural development, and thus, for the overall economic development of the country as compared to the resources potential that the country has, is not significant and the irrigation sub-sector is not contributing its share accordingly

2.11. Women and Irrigation Development

In irrigation schemes, participation is crucial to use the irrigation infrastructure efficiently. But the way participatory approaches are used in development interventions and the lack of understanding of power dynamics among the actors challenge the effectiveness of the

approach in planning and implementing projects (Mastewal, 2013). Women, who are considered key actors for irrigation agriculture, constitute half of the rural farming community, contributing 49% of labor in overall agriculture and 70% of household food production, but are still benefiting little in the individual, household, community, and national levels (World Bank, 2010; MoANR, 2011 and Kalkidan et al., 2016). Moreover, irrigation farming has been categorized as men's work, and women are not perceived as primary stakeholders. However, women work in agriculture as farmers on their account, as unpaid workers on family farms, and as paid or unpaid laborers on other farms and agricultural enterprises (The SOFA Team and Chery Doss, 2011).

Women's access and participation in irrigation have a multiplier effect on improving household wellbeing since women mainly invest more in nutrition, health, and education of the household than men (Belainew, Belete, and Surafel, 2020). According to World Bank (2014), investments in women's access to agricultural inputs and agronomic practices can bring up to a 30% increase in production. Similarly, addressing gender inequality at the national level can contribute up to a 1.9% increase in GDP. Though women are major contributors to household and national food security, particularly in irrigated areas, their contribution in this sector often goes unrecognized and is not rewarded. This further reduces their bargaining power, and their ability to participate or gain access to resources and training which might enable them to improve their contribution (Kalkidan, 2016).

Numerous studies indicate that women are less likely than men to access both large-scale and small-scale irrigation infrastructure and technologies, however, still relatively less attention is given to the gender aspects of small-scale irrigation technologies (Theis, 2018). To ensure gender equality in the sector, gender parameters are not well captured in the development of

irrigation projects which made the role of women in decision-making processes at all stages of scheme development generally lacking (MoA, 2011).

The prevalent structural inequalities such as lack of owning productive capital, lower status in society, and other socio-cultural restrictions, coupled with the very time-consuming domestic tasks, let women have much less available time to participate in all activities related to irrigation management (Imburgia, 2019). Therefore, irrigation interventions must be carefully monitored to ensure irrigation provides significant benefits to rural women by enabling them to increase their cash incomes and diversify family nutrition and food sources by minimizing the potentially negative consequences, such as increasing the burden of labor on women, (Seleshi, 2019).

So far, actions have been taken by the Ethiopian government, including ratifying several national laws, to address gender inequality, and to encourage “gender-sensitive” public policies and interventions across government ministries including the agricultural sector. Engaging a gender perspective will ensure that women and men benefit equally from agricultural irrigation and tap into the potential of both for greater empowerment (SMIS, 2016).

2.12. Gender in the Existing IWUA Proclamation and Regulation

Some three years after the federal IWUA proclamation (IWUA Proclamation No. 841/1014), the Oromia regional IWUA proclamation (Proclamation No. 204/2017) is put in place to establish a system whereby the water resources of the region can be used efficiently for irrigation purpose by establishing an independent association. The proclamation gave the membership right to a person who has the land ownership right or acquire land in the command area or has land use right based on a lease contract. In a society where women have less

decision-making power and control over productive resources like land, it will be difficult for women to represent their household in the IWUA as per the proclamation, especially for married women whose husbands are making almost all decisions on their land. This calls upon thinking of approaches or modalities on how to give equal opportunity for women and men in male-headed households.

When looking at both the federal and regional IWUA proclamations, some of the issues in the federal and regional proclamations seem to talk about gender equality, though not directly. These points can be used as an entry point to work towards increasing women's participation in IWUA in general and in IWUA leadership in particular by all who are working on gender equality in IWUA. The summary of the gender review of the proclamations is shown in the following table.

Table 1: Review of Regional and Federal IWUA Proclamation

Issues	Federal	Regional
Objective of the Association	Provide water equitably to its members for agricultural purposes	Providing irrigation water distribution supply program in fair basis for members within the area.
<p>In both the federal and regional proclamations, different objectives of the associations are stated. Except for these sentences, the rest of the association’s objectives are gender neutral. Even in this objective, though gender equality and women’s participation is not clearly stated terms like ‘equity’ and ‘fairness’ are included in the sentences on water distribution. This could be used as an entry point to mainstream gender in the IWUA.</p>		
Guiding	<ul style="list-style-type: none"> • Fairness and equity in decision- 	<ul style="list-style-type: none"> • Making fairness in the allocation

<p>principles of Associations</p>	<p>making and allocation of irrigation water</p> <ul style="list-style-type: none"> • Non-discrimination among members of an association in the utilization of water based on ethnicity, gender, religion, or any other similar group • Applying transparency and participatory approach in decision making process 	<p>of irrigation water to members</p> <ul style="list-style-type: none"> • Applying a participatory, a transparency, and accountability in the decision-making process
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In the guiding principles of the proclamations, gender equality is not clearly stated in both proclamations. However, the federal proclamation suggests fairness and equity in decision-making and allocation of resource and the regional proclamation encourages participatory and transparent approaches and accountability. This is very subjective and could not be considered as if it is about gender equality. If experts are responsive they can use these guiding principles to explore opportunities for gender mainstreaming.

<p>Procedures for the formation of associations initiated by members</p>	<p>The founder’s committee shall be composed of persons representing different units of the proposed service area to ensure fair representation of potential members of the proposed association</p>	<p>The founder’s committee shall be composed of persons representing a different units of the proposed service scope to ensure fair representation of potential members of the proposed association</p>
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The founder’s committee is established during the formation of the associations. In both the

proclamations it says fair representation, but what is fair is not defined in this article. The committee is established only to facilitate the election of IWUA management, control, and dispute settlement committees and terminated. It has no role in the management of the irrigation, and drainage system of the IWUA.

<p>Supervising Body</p>	<p>A supervising body provides technical assistance and support to associations including on issues of water management, accounting, financial planning, irrigation techniques, and practices, maintenance and gender issues</p>	<p>Work for females, youth, and persons with disability of participation and utilization in irrigation development</p>
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The supervisory bodies at federal and Regional levels (that might be the Ministry of Agriculture and Bureau of Agriculture and Natural Resources) are given the responsibility to work to gender equality and diversity inclusion. But the study indicated that due to resource limitations and poor coordination among the concerned offices they could not use this opportunity as an entry point to work on gender equality and enhance women’s participation in IWUA leadership.

To implement Oromia Regional State’s Irrigation Water Users Associations Proc-lamation No: 204/2017, the existing IWUA regulation is issued by the regional Government (IWUA Regulation No. 204/2018). However, no gender-related issues are stated in the regulation to clarify some of the issues raised in the proclamation that seems about gender equality. Women’s representation in committees is clearly stated only in the founder's committee in the existing regional regulation. It says that at least 30% of the selected members of the

founder's committee shall be females. However, if it is clearly stated for the founder's committee why not stated for the other committees like management, control, and dispute resolution committees is a question to be asked. The absence of a clear directive and implementation modality for the existing proclamation/regulation has negatively affected the efforts made to increase women's participation in the IWUA leadership.

During the development of this proclamation and regulation, irrigation development and related issues were managed by Oromia Irrigation Development Authority (OIDA). However, in mid-2020, OIDA dissolved and merged with the Regional Bureau of Agriculture and Rural Development as a unit. The institutional instability, staff turnover, and mobility cause displacement of well-experienced experts and mismanagement of the scarce resource in restructuring the bureau time and again.

Chapter Three

3. Research Methodology

3.1. Description of the Study Area

Wolmera Woreda is one of the Woredas located in Oromia Special Zone Surrounding Finfinne. It is 47 kilometers away from Addis Ababa in the West direction on the main road to Ambo. Wolmera Woreda shares boundaries in the East with Burayu town, in the west with Ejere and Adea Berga Woreda, in the North with Sululta and Mulo Woreda, and in the south with Sabata Hawas Woreda.

The district is found at an altitude of 2400 meters above sea level in central high lands and is characterized as one of the irrigation potential areas in the region (Wolmera Woreda Office of Agriculture, 2021). The Woreda has rivers with irrigation potential all year round such as Holeta, Bobe, Kata, Chanco, Mintile, and Karsa. As a result of this, the district has a high potential for traditional and modern irrigation systems which help the farming community to produce year-round and enhance productivity (Wolmera Woreda Office of Agriculture, 2021).

According to the estimation made based on the 2007 census, Wolmera Woreda had 104,143 (Male 52,403 and Female 51,740) populations in the year 2021 of which about 96% are living in the rural area (Wolmera Woreda Office of Agriculture, 2021). The main livelihood of the rural people is agriculture both through rain fed and irrigation development. The Woreda has 23 kebeles (61% Dega¹ and 39% Woina Dega²) with a total of 58 irrigation schemes of which 11 are modern³ and 47 are traditional irrigation schemes⁴ (Wolmera Woreda Office of Agriculture,

¹ Dega – coldish, less than temperate zones with altitudes ranging between 2,600 and 3,200m

² Weyna Dega – is warm, wet, and lies below 2,600m

³ Irrigation system constructed on the bases of a formal study and design

⁴ Irrigation systems that is constructed by farmers using their own indigenous knowledge using locally available material

2021). The Woreda has a total of 37,411 ha of farmland of which modern irrigation schemes have covered only 930.5 ha of command area and have 2,017 men and 443 women IWUA members (Wolmera Woreda Office of Agriculture (WoA), 2021).

3.2. Description of Sample Kebeles

3.2.1. Bekeka Kore Odo Kebele

Lega Kocha Irrigation Water Users Association is a water user association established on Kocha Small Scale Irrigation scheme which is found in Bekeka Kore Odo kebele of Wolmera Woreda. The kebele is located 5 km from the Woreda capital to the north. The main livelihood of the community in the kebele is vegetable farming by irrigation, rain-fed agriculture (mostly cereals), dairy farm, poultry production, and fattening (Wolmera WoA, 2021).

The total population of the kebele is 1,775 of which 881 are women. The Kebele has covered about 1001 ha of land from which agricultural land is about 614 ha. From this agricultural land, Kocha scheme covers a command area of 64 ha. The main water source of the scheme is Kocha River. The IWUA has 120 members of which 14 are women (Wolmera WoA, 2021).

3.2.2. Telecho Gebriel Kebele

Melka Mintile Berganfetu Irrigation Water User Association is located in Telecho Gebriel kebele of Wolmera Woreda under Mintile scheme. The kebele is found at a distance of 10 km in the north direction of Holeta town. The kebele has a total population of 3,053 among them 1,577 are male and 1,476 are female (Wolmera WoA, 2021).

Talaco kebele has a total area of 1,662 ha of land of which about 85% of the land is farmland (Wolmera Woreda Office of Agriculture, 2021). From the farming land, 130 ha is a command area of Mintile scheme. The IWUA has a total of 186 members (135 men and 35

women). The IWUA members produce cereals and vegetables using irrigation water but currently, they started to experience wheat production in a cluster. The main water source of Mintile scheme is Mintile River (Wolmera WoA, 2021).

3.2.3. Dawafi Lafto Kebele

Dawafi Lafto kebele is located to the southwest of Holota town at a distance of 12 km. in the kebele there are 1,633 people of which 892 are women. Two of the targeted Irrigation Water Users Association: Burka Tebele and Lega Holota IWUAs are found in this kebele. Lega Holota irrigation water users association is established on Lega Holota scheme which is named after the water source of the scheme Holota River. The association has 250 members of which 51 are women (Wolmera Woreda Office of Agriculture, 2021).

The main livelihood of the IWUA members is agriculture. They produce wheat and teff⁵ by rain fed mostly and different vegetables by irrigation. On the other hand, Burka Tebela irrigation water association is an association established on Tebela scheme in the same kebele. Burka Tebela IWUA has a total of 101 men and 18 women members. The main water source of the scheme is Tebela Spring. From the 1,087ha farmland found in the kebele, 150ha and 73ha of irrigation land are command areas of Lega Holota scheme and Burka Tebele scheme respectively (Wolmera WoA, 2021).

3.3. Sampling Method

Purposive sampling was used to select functional irrigation schemes with active IWUAs. Accordingly, from the eleven functional modern schemes in the targeted Woreda IWUA's four irrigation schemes are selected with concerned government stakeholders for the study. This

⁵ *Eragrostis abyssinica*

allowed the researcher to get women farmers on the IWUA committees. Both men and women IWUA members who can provide the required information were selected from the IWUAs. To have an opinion of married women, wives of targeted men (male-headed households) were also part of the study.

3.4. Source of Data

For this study, both primary and secondary data sources were used. The primary data was collected from IWUA men and women members and spouses of men IWUA members. In addition to women participants men IWUA members are targeted in order to study their perception of women's leadership and capture their suggestions on measures to be taken to enhance women's participation in IWUA leadership. Gender experts and IWUA promoters of concerned government offices and IWUA leaders were also targeted as a source of primary data.

Secondary data was obtained from relevant published and unpublished data sources including IWUA minutes, and reports of the Woreda Offices and targeted kebeles.

3.5. Instruments of Data Collection

For primary data collection, the following instruments are employed.

- **In-depth Interview:** in-depth interview employed for women irrigators who are in the IWUA leadership to have detailed information on factors affecting women's participation in IWUA leadership and its consequence. However, since there were no women were found in the IWUA leadership, four women in the IWUA committee (one from each targeted IWUA) as a member were interviewed. Except for one, the rest three are female household heads. For the in-depth interview, semi-structured interview guides were used. The interview was held in the areas that are more convenient for the interviewees. Accordingly two interviews

were made around the kebele office and the remaining two at the interviewees' home. The interview took a maximum of 60 minutes.

- **Key Informant Interview:** A semi-structured interview guide was developed for key informants from Woreda government offices and IWUAs to assess their perception of women and IWUA leadership. The key informants are one Woreda IWUA promoter (male), two gender experts (female and male), and four male IWUA chairpersons (one from each targeted IWUA).
- **Focus Group Discussion:** A total of eight FGDs with six participants each were organized. Four of the FGDs were with a total of 24 women of which 13 IWUA member female-headed household and 11 married women from male-headed household to identify the existing gender inequality issues and their effects on women's participation in IWUA leadership. Guiding questions were prepared and discussions were facilitated by the researcher. Another four FGD is also employed with 24 men IWUA members to describe their perception of women's participation in IWUA leadership and to capture their suggestions to enhance women's participation in IWUA leadership. The FGDS were held within the participants' respective kebeles.

These data collection tools are selected due to their flexibility, and they allow the research participants to express their ideas in their own words. For the interviews and the focus group discussions guiding questions were prepared in English and translated into the regional language (Afaan Oromo) for smooth communication and understanding. Accordingly, as the researcher is a native speaker of Afaan Oromo, all interviews and FGDs were carried out in the regional language to let all participants freely and comfortably discuss the issue.

To effectively capture all required information, field notes were taken during the interviews and discussions by the researcher. Whenever there was difficulty to take notes and catch up with the main points of the discussions, based on the consent of the participants, in addition to the field notes, the voice of the participants was recorded using a voice recorder.

3.6. Data Analysis

As a native Afaan Oromo speaker, the data from interviews and focus group discussion was collected in Afaan Oromo. Accordingly the data is transcribed and translated in to English. Then the data is categorized and divided into different sub-topics and analyzed qualitatively. Thematic analysis and content analysis are used to analyze research participants' experiences, views, and opinions. Content analysis is used to identify the frequency of the issues raised by participants to describe them quantitatively. Finally, conclusions are made based on the findings of the study, and recommendations are forwarded.

3.7. Ethical Considerations

To smoothen the data collection process; a support and go-ahead letter was provided to the researcher from the Center for Gender Studies to the Oromia Regional State Bureau of Agriculture. During the fieldwork before the commencement of the interview and focus group discussion, the researcher provided sufficient information to the research participants on the objective of the study to get their willingness to participate. Respondents participated only based informed consent with no pressure. The researcher never forced participants to answer the question to which they have a reservation. The participants had been asked for permission if it is possible to record their voices and for taking pictures.

Chapter Four

4. Research Findings and Analysis

4.1. Introduction

Different studies (World Bank, 2010; MoA, 2011, Kalkidan et al., 2016) reveal that women are actively participating in irrigated agriculture activities but are most often overlooked in participating in Irrigation Water Users Association leadership and decision making. Irrigation Water Users Association is an institution responsible to manage the farmer-managed irrigation system sustainably needs to equally represent men and women irrigators in its committees in general and in the leadership in particular. Accordingly, this study focused on finding the major gender inequality issues or barriers that hinder women's participation in IWUA leadership and the consequences of their low participation in IWUA leadership on their lives and on their IWUA and suggest measures to be taken.

In this chapter, key findings of the research are presented, interpreted, and discussed. Under the first topic, the status of women in IWUA leadership which helps to compare the representation of men and women in the leadership position in the studied IWUAs is addressed. Hindering factors for women to be in IWUA leadership are discussed under the second topic with different sub-topics. Some of the topics under this section include household representation, women's workload and lack of information, capacity and confidence, and perception of men and women on women in leadership. The third topic of the chapter focused on being an IWUA leader and its implication for women as well as for the IWUA. Finally, under the fourth topic suggested measures by the research participants to increase women's participation in IWUA leadership are discussed. During all sessions, the findings of the research are well presented, interpreted, and analyzed qualitatively.

4.2. Status of women in IWUA leadership

As stated in the IWUA establishment proclamation women and men have the right to elect or to be elected as an IWUA committee as well as a leader. To be elected to the IWUA committee or leadership, one has to be a member of the IWUA. However, in the researched IWUAs when compared to men there are very few women IWUA members. Generally in Wolmera Woreda, according to the data obtained from the Woreda Office of Agriculture, the 11 modern functional irrigation schemes have a total of 2,460 members of which women are 443(18%). These women are from female-headed households since the married women are represented by their husbands, thus one can hardly find them in the IWUA membership. These IWUA member female headed households are in most cases elderly and are not active in participating in the IWUA which made women representation more challenging.

In our IWUA women are only 35. All of these women are female headed households who are elderly and not interested to participate in IWUA meetings and leadership. There are energetic and educated married women in our locality but they are represented by their husband and are not our IWUA member. Unless the husband is willing to represent them we can't have them in our committees and at leadership position [MKIC-2, October 2021].

The number of women in the targeted IWUAs varies from 11.6% (Lega Kocha IWUA) to 20.4% (Lega Holota IWUA). Because the number of women in the IWUA is already small, their representation in different committees remains extremely disproportional. The information obtained from the Woreda Agriculture and Natural Resource Office indicated that women are less represented in the IWUA committees as a member and they are hardly found in leadership positions.

As per the data from the Woreda, in the 11 modern irrigation schemes, women hold only 16% of the three main committees of the IWUAs which are the management committee, control

committee, and dispute settlement committees. However, some IWUAs do not have any women on their committees.

The status of women’s representation in the researched IWUAs is illustrated in the table below.

Table 2: Women’s Representation in IWUA Committees and Leadership in Wolmera Woreda

No	Name of IWUA	Name of Irrigation Scheme	Number of Committee Members		Women’s representation in Leadership
			Women	Men	
1	Lega Kocha	Kocha Scheme	2	14	0
2	Melka Mintile Berganfetu	Mintile Scheme	2	14	0
3	Lega Holota	Lega Holota Scheme	0	16	0
4	Burka Tebela	Tabela Scheme	3	13	0
	Total		7	57	0

Source: Wolmera Woreda Office of Agriculture and Natural Resource, October 2021

Women’s representation in the IWUA management committee, control committee, and dispute settlement committees varies from scheme to scheme according to the data obtained from the sample IWUAs and the Woreda. As indicated in the above table, women’s representation in both Lega Kocha and Melka Mintile Berganfetu Irrigation Water Users Association is 12.5%. However, their representation in Burka Tebele IWUA is better than these two IWUAs which is 19%. On contrary, in Lega Holota IWUA women are not represented in the committee which means the IWUA committees of Lega Holota are 100% men. However, the research data indicated that, though the IWUAs have all three main committees, the management committee is the only functional committee that is actively engaging in the operation and management of the

irrigation schemes. This is stated as because of a lack of technical support from the Woreda experts and for not understanding of their role and responsibility in the irrigation scheme management. Accordingly, all management and decisions in the IWUA and the irrigation scheme are made by the management committees including conflict management over water distribution and water turn which used to be the responsibility of the dispute settlement committees.

Yet, as shown in the table below, not all IWUAs stating that they have women in the committees have women in the management committees, a committee that is actively responding to the scheme management

Table 3: Women’s Leadership Status in Different Committees in Wolmera Woreda

No	Name of IWUA	Management Committee			Control and Dispute Resolution Committee		
		Membership in the committee		Women in leadership position	Membership in the committee		Women In leadership
		Men	Women		Men	Women	
1	Lega Kocha	4	1	0	10	1	0
2	Melka Mintile Berganfetu	5	0	0	9	2	0
3	Lega Holota	5	0	0	11	0	0
4	Burka Tebela	4	1	0	9	2	0
	Total	18	2	0	39	5	0

Source: Wolmera Woreda Office of Agriculture and Natural Resource, October 2021

As illustrated in the table above, Lega Kocha and Lega Holota IWUAs have one woman representative in their management committees though the women are not in the leadership position. There is no woman at all in Melka Mintile Berganfetu and Burka Tebela IWUAs management committee leave alone in the leadership. But except Lega Holota IWUA all of them

have women in control and dispute settlement committees. Generally, concerning less representation of women in committees and IWUA leadership, liberal feminists argue that the qualitative representation of women compared to their male counterparts is an indication of the existing inequality as a result of gendered socialization which favors men.

The control committee, a committee that controls the overall performance of the IWUA both property and finance, and even follow up performance of the IWUA management committee as per the regional IWUA regulation, is not active. This indicates the existence of a poor accountability mechanism for the management committees in case there is wrongdoing or fraud which used to be the control committees' responsibility. However women who indicated as a committee member are in these non-functional committees.

There are only a few IWUAs who have women on their committees. Even this representation is not in the management committees, which are very active in the operation and management of the irrigation, but in the control committee and dispute settlement committees. We teach them to include women in the leadership but we can't force them if women are not voted for and appointed by the general assembly. [WKI-1, October 2021]

However, having women on committees doesn't mean that women are in the leadership position such as chairperson, deputy chairperson, and secretary positions of the IWUA. The research participants confirmed that women mostly hold a member position in committees and some cases they are assigned as a cashier. IWUA's prefer women to be a cashier over men with the discourse that women are efficient and they are good at saving. However, cashier and member positions are not actively taking part in decisions made in the IWUAs. Even in some cases, the IWUAs have no cash at all to be managed or handled by the cashier which made a cashier idle only holding the name. This shows that women are excluded from the higher decision-making

body of the IWUA and their differential needs and concerns are mostly overlooked because the leadership is only occupied by men. This under-representation of women in the IWUA leadership as stated by research participants is due to different hindering factors to be discussed in the following topics.

4.3. Hindering Factors for Women's Participation in IWUA Leadership

Some of the hindering factors for women's representation in the IWUA leadership that were mentioned during focus group discussions (FGD) and key informant interviews are IWUA household representation rule, women's workload, lack of access to adequate and timely information about IWUA's meeting and the existing perceptions towards women and their leadership in the society.

4.3.1. IWUA Household Representation and its Effect on Women's Leadership

The result of the research finding indicated that to be a leader of the IWUA one has to be an IWUA member and elected as a committee member by the general assembly. Election of IWUA committees and assigning of leaders have their process. Committees are elected from the general assembly by voting and those who got the higher number of votes will be assigned as committee members of the respective IWUA. After the committee election, there are two ways of assigning leaders as per the Woreda IWUA expert. The first method is for those who are elected as a committee member will have a separate discussion to share responsibility and assign their leaders and inform the general assembly for approval. The second and the most often used method is IWUAs directly vote for their leaders during the general assembly meeting.

The research findings indicated that men have more access and opportunity to be in the IWUA leadership which is also confirmed by the Woreda experts. Women are even less

represented in IWUA as a member due to the one person per household representation rule as per the Woreda experts and IWUA leaders. Women IWUA members are only female-headed households which are very few. Research participants indicated that most of the female-headed households are elderly and are not able to actively participate in IWUA meetings to be elected as a committee or as a leader.

In a male-headed household, men are the ones who represent the household to be a member of the IWUA and mostly attends meetings and makes all the required decisions. There is no experience of men assigning their wives to represent their household even if they are elderly and weak to participate in IWUA meetings as per the research participants. But there are some exceptions, in a very rare situation, that married women represent the household and participate in IWUA when their husbands are not around.

It is not common for married women to participate in IWUA meetings because their husbands are responsible for this. In our IWUA I am the only married woman representing the household. This is because my husband is in another business and frequently travels to other areas. I am responsible for managing our farms and participating in all related activities as if I was head of the household. As a result, I am a member of our IWUA and also on the committee. [IDW-1, October 2021]

Married women during discussions even refer to the IWUA as ‘their [men’s] association’. They don’t consider they also have equal right to be an IWUA member representing their household. However, they sometimes went to IWUA meetings to pay a membership fee in the absence of their husbands. This is because there is a penalty for late payment.

According to the research participant women, all married women in the male-headed household, except one, are represented by their husbands in the IWUA, but female-headed

households represent their household. This shows that married women are not entitled to actively take part in the IWUA and have no right to elect or to be elected as a committee or a leader.

The one person per household representation rule doesn't consider married women in the male-headed household and the existing social norm and patriarchal system allowed representing the household to men. There is no room for dual membership to accommodate married women. As a result, married women are not familiar with what is going on in the IWUA and they don't consider this as if it is their concern and issue too. To address such kinds of challenges, liberal feminists promote the formulation of laws and policies that ensure equal participation and the benefit of women.

I have no information about the IWUA and what they are doing. This is not my business it is my husband's responsibility. I work all the time with my husband in the irrigation field but attending the meeting and paying membership fees is my husband's role. I never asked him to participate, because I know he will tell me it is enough if he participates. [WF-1, October 2021]

This is also confirmed by the male participants stating that women have lots of work at home and have no time for attending meetings. They said that if the men attend the meeting he represents the household as a head so there is no need of having two persons from one house. But in the case of FHH, there is no option unless they have an older son to represent them. However, as per the finding FHH are not regularly participate in IWUA meetings and even only a few of them have participated in committee and leaders election meetings too due to different factors to be discussed in the next sections.

4.3.2. Women's Workload

The main livelihood activities in the area are rain-fed mixed crop-livestock agricultural system (cereals), irrigation (vegetables), dairy, poultry, and cattle fattening but in some cases some women also engaged in petty trading like local alcohol selling and retailing and vending vegetables. In all livelihood activities, women have a vital role throughout the value chain. The research participants including the Woreda IWUA expert said this made women have no time for public gatherings in general and IWUA meetings, in particular, to be elected as leaders. Men are the ones who decided on whether to have women on the committee and which position they have to hold considering their triple role without consulting women members.

Most women participants agreed with the idea of women's workload as a bottleneck to their participation in IWUA leadership. In line with this, the research participants confirmed that they are responsible for the reproductive roles and also actively working with their husbands and families in the irrigation fields including channel cleaning and maintenance. However, there is no experience of sharing household roles by men to let women have spare time to participate in IWUA meetings and social gatherings.

Even in most cases, the lack of women in leadership is not considered a problem. It was indicated by most men as if it is one way of showing their respect for women by not keeping them busy in the IWUA management. They said men in the IWUA committees and leadership positions are busy day and night working on irrigation management which is difficult for women.

We don't have women in leadership. Women are busy with their domestic work and they are good at it. Why should they suffer with this big responsibility? We don't have women in our committees or leadership means we are taking care of them. Do you

think women can manage working during the night shift and also open and close the canal? No! [MF-2, October 2021]

This shows a lack of clear understanding of the role of committees and leaders in IWUA and a poor responsibility-sharing mechanism among all committees, committee members, and leaders as stated in the proclamation and regulation which is mainly coordination and management.

On the other hand, controversial ideas were also raised regarding women's workload as a bottleneck to their participation in IWUA leadership. Giving women an opportunity to be elected and encouraging them to participate is not commonly practiced. The discourse about women's triple role and shortage of time is always at the front head as an excuse for not having women in the committees and leadership of IWUA or any social structures in the community. However, women participants said that they can manage the workload in their household if they got the opportunity to be in the leadership which doesn't get due consideration by the IWUA leaders and in some cases by the Woreda experts. Women are not even invited to IWUA meetings and training to be capacitated and empowered and build their leadership skills.

In our IWUA we have 18 woman members. I am the only woman on the committee. I hold a membership position in the control committee. Though I agreed that women have a shortage of time due to their triple role, I don't agree that this prevents them from attending meetings and being in the IWUA leadership. I am a female household head but I manage my time properly. The problem is men are not supportive and do not encourage their wives to attend meetings. Woreda experts and IWUA leaders also don't emphasize women's participation. They simply invite men to the IWUA meetings and don't care if no women are there [IDW-2, October 2021]

Though there are different factors for women's low representation in IWUA leadership, the role of experts who take part in the meetings of committee election and IWUA establishment

and strengthening is very vital. Some experts are considerable and deliberately target women to be part of the IWUA leadership and invite women to meetings and ensure their participation. However, some experts do not give attention at all to including women either in the committee or in the leadership due to a lack of understanding of gender equality and inclusion.

In the case of the researched area, the experts stated that due to a lack of legal backstopping they are not able to challenge or persuade the IWUA members to have women in the committee as well as in the leadership. This requires capacity-building activities to let experts realize the benefit of having women in the IWUA committees and leadership. The benefit of women's participation in the IWUA leadership on the efficiency of IWUA, the livelihood of the family as well as on the women irrigators themselves has to be well defined and understood by all.

4.3.3. Lack of Information

There is no experience of men sharing meeting information with their wives. They thought attending meetings in general and IWUA's, in particular, is men's responsibility. During the research, it is realized that meeting information is not officially sent to participants but men informally shared the information any time they meet and in their social circles. They mostly got the meeting information from the chairperson of the IWUA or from friends and IWUA leaders or members who are in their neighborhood. As stated by female-headed households, they hardly get meeting information to participate in the IWUA meetings.

Due to their better access to information, men often attend IWUA meetings and participate in different public spheres. As per the data from the research participants women sometimes attend IWUA meetings to pay membership fees. Among the FGD participants women

89% of them said that they have never been to any committee election meetings. Participating in committee election meetings might have given women an opportunity to be elected for and also vote for someone they want to be their leader. However, women research participants confirmed that most of them attended at least one IWUA meeting which is mainly to pay membership fee or water service fee.

Though it was stated by the Woreda expert and IWUA chairpersons that there are women in the committee, most of the research participants' women rarely know that there are women in the committees. Even all women referred as a committee member and interviewed stated that they are not clear about their role in the committee and have done nothing so far.

I was elected to the general assembly meeting. They told me that I am a member of the control committee but I don't know my role and responsibility. We have never met as a committee. No one has informed me of meeting information but I know the men are meeting most of the time, even I can say they meet every day. I know this because my father is on the management committee. [IDW-4, October 2021]

This shows that being committee member doesn't mean that women are attending meetings and participating in decisions made by the committees. They are only holding the name but not participating in meetings and decisions at least as a committee member though they are not leaders. The committees have no formal or consistent meeting schedule. Male committee members discuss their issues informally and anytime convenient to them with short notice. Even if women might be willing to participate in the IWUA meetings on short notice they mostly don't get the information.

4.3.4. Communities' Perception/Women's and Men's Mindset

Lack of the required capacity and confidence are some of the perceptions indicated for low women's representation in IWUA leadership. Most of the participants perceive that women are not ready to be on a committee due to a lack of confidence and the required skill and knowledge to be a leader. It is considered by the participants that men are the one who manages the irrigation farm and who knows more about it. It is perceived as men know the ins and outs of irrigation water management. Women are also working in irrigation but they are considered more specialists in domestic activities. Men perceive lack of literacy and fear of facing the leadership challenge as a reason for the lack of women in the IWUA leadership.

However, some men and women participants argue against the idea of women lacking the capacity and strength to be a leader. Women said that there are women who are active and have shown experience by leading women's associations effectively for years. But when it comes to the IWUA, they don't get the opportunity to show their potential.

Being an IWUA leader doesn't require physical work. It can be done by anyone who has leadership qualities. Though education is important, some leaders are not literate. I am an example. I am a chairperson of our IWUA for a couple of years, but I can't even read and write. Lack of education is mostly taken as a reason for not having women in leadership. Though they are not literate, we know that there are women who are born to be a leader. The problem is there is no continuous effort by the Woreda experts as well as the IWUA to bring women into the leadership. [MKIC-1, October 2021]

On the other hand, women are discouraged from being part of public spheres which reduces their access to be elected as an IWUA leader due to different stereotypes like women's place is at home. In cases of the male-headed household since the women are represented by

their husbands, there is limited room for them to attend meetings. However, as a result of stereotypes coupled with other hindering factors, female-headed households are also not participating in IWUA meetings and are not getting an opportunity to be a leader. For those women who regularly participate in meetings and public spheres, different naming is given to them which made other women afraid of being in public.

I used to attend all meetings and learn lots of things since the time of the Military rule in Ethiopia (Derg regime). I also encourage other women to participate in meetings and public gatherings witnessing the benefit. My husband was also encouraging me to participate. But, now I am a female household head, when I invite women to meetings husbands of married women said that 'she has no one to control her, she will spoil our wives' and they developed a negative attitude towards me. Therefore I even stopped attending meetings afraid of their insult. [WF-1, October 2021]

There are also perceptions in society that the public sphere is men's domain and leading men's role. As a result, in cases where women got an opportunity to be elected as committee members no one will vote for them to be a leader. Men are always considered more knowledgeable and educated in all cases.

Liberal feminists argue about the community's perception and the false belief that women are, by nature, less intellectually and physically capable than men; they believe that female subordination is rooted in a set of customary and legal constraints that block women's entrance to and success in the public sphere and they argue the way out for gender equality is political and legal reform (Tong, 1992 and Wolff, 2007).

4.4. Effects of Participation and non-Participation of Women in IWUA Leadership

The research finding indicated that participation or non-participation of women in IWUA leadership has an effect on IWUA as well as on the women themselves. As per the information

obtained from the research participants, IWUAs are used as an entry point for the Woreda Office of Agriculture and other NGOs to work on irrigation development with the farming community. This includes the provision of capacity building activities, agricultural inputs, and extension services. IWUA leaders are capacitated with training and experience-sharing visits by the Woreda Offices most often to enhance their leadership skills and gain different new skills and knowledge.

On the other hand, whenever there are opportunities like input provision for irrigators, the leaders are the ones who got the first-hand information and even take part in the selection of who to be the target. Meanwhile, they are the first who benefit in cases of input shortage. The leaders' regular meeting also is one of the areas where men share their experiences and learn from each other.

As a leader, I benefited a lot. I received different trainings on crop selection, IWUA leadership, water management, and others which helped me to enhance my knowledge and skill. We [leaders] at least meet weekly to discuss different issues of our IWUA, which allows us to learn from each other. We solve problems related to the water schedule and any issues raised in the IWUA during our meetings. We are also respected by the community for being an IWUA leader. [MKIC-1, October 2021]

Women have more commitment and good inefficient resource utilization but they lack the opportunity to hold the leadership position. Ensuring women's equal participation and benefit requires joint efforts of all concerned as per the Woreda IWUA expert. It was also stated that having women in leadership will help women to get meeting information on a timely basis and vote for women leaders which will help them to share their concerns freely with the women leader than the men. The lack of this opportunity worsens the existing gender gap in agricultural production and productivity.

If there are women in IWUA leadership it will ease communication for women members. Women understand women's problems more. They will raise women's concerns in IWUA leaders' meetings and work to address them. Female household heads have lots of problems like night shift watering. But, If a woman is in leadership, she knows how watering at night is challenging for women. So she will work on water scheduling at times conducive for female household heads. [WF-4, October 2021]

A study undertaken by SMIS (2018) in Tigray also indicated that female household heads rent out their irrigable land at a small price, due to lack of labor and to avoid night shift watering. However, if there are women in the IWUA, it also benefits the IWUA to understand and equally address the needs and concerns of men and women members to efficiently and effectively utilize the scheme. Moreover, having women in the IWUA leadership as role models will help the IWUA to motivate other women members to actively participate and raise their issues to be addressed and to use their voice properly.

4.5. Research Participants Suggested Measures to Increase Women's Participation in IWUA Leadership

Multi-Stakeholder Engagement and Joint Efforts

It was agreed that women's participation in IWUA leadership is important. As per the Woreda office of agriculture, the IWUA promoter [expert] who is responsible for IWUA formation and strengthening which includes facilitating and supporting IWUAs in assigning their leaders, and the gender expert who is responsible to ensure gender equality and women's empowerment are not working together towards gender equality in IWUA leadership. They had never been to the field together or shared information on how to empower women and increase their participation in the IWUA committee in general and in the IWUA leadership in particular.

However, this requires different approaches and engagement of all stakeholders towards women's empowerment since there are multi-faced problems that prevent women's participation.

Giving Opportunity and Deliberately Targeting Women

Having women in IWUA leadership requires a deliberate inclusion of women which requires experts' effort and commitment. Due to different community perceptions towards women and their leadership skills, IWUA members might not vote for women in IWUA meetings. The Woreda experts need to take the initiative to work on women's inclusion in IWUA committees in general and leadership in particular.

Gender Budgeting and Planning

There is no gender budget to work on gender equality and women's empowerment and there is no experience of joint planning by the experts to mainstream gender in their respective works. The gender focal person or gender expert has no defined job description on how to work with other experts of mainstream gender. This requires leaders' commitment and a system-level change in assigning a responsible expert to the gender expert position and the required budget. Co-designing and co-working among thematic experts and gender experts and/or gender focal persons are vital to mainstream gender and to ensure gender equality and women's empowerment. It was also suggested that teaching and convincing IWUA members, mainly men bring their wives to the IWUA meeting and allow them to participate in leadership by replacing their husbands in cases of active married women.

Capacity Building

Women need to be capable and their confidence needs to be built through training and experience by sharing events with active women leaders to enhance their leadership skills. To change the communities perception of women in leadership, continuous education is required which calls up on Woreda and local officials' political will. The capacity building is also required to men IWUA leaders and members on the importance of having women leaders and to include increasing women's participation in IWUA leadership in their plans.

So far increasing women's participation in IWUA leadership was not on our agenda. This shows that we don't understand the importance of having them in leadership position. No one vote for them during the election we even decide on their behalf not to be a leader mentioning that they have a triple role, without knowing their interest. This requires a continuous education on equality and the importance of having women leaders in IWUA. [MKIC-4, October 2021]

Besides, thematic experts in the Woreda office of agriculture including the IWUA experts and the farming community had no gender or any gender-related training so far. This created a limited understanding of how gender mainstreaming is important in agriculture which resulted in less attention and effort on working towards increasing women's participation in IWUA in general and in IWUA leadership in particular.

The cultural bias we saw in the community favoring men to be leaders are also observed in the offices and by the leaders because they are the product of this community. No one gives attention to gender equality. There is no strong working relationship between gender focal persons and other thematic experts. We have to work closely. Training needs to be given to experts to understand the importance of gender mainstreaming for development. Some women can be good leaders but the community does not give them an opportunity and women themselves are afraid of taking responsibility. They have to be trained, capacitated, and become assertive. [WKI-2, October 2021]

Provision of Timely Information and Creating Conducive Environment

To ensure women's participation in IWUA meetings, to elect and be elected, having pre-hand and right information about meeting day and time is important. This also requires creating a conducive environment for women regarding time and place of meeting. Meeting information needs to be sent formally and the experts have to make sure that women are well informed.

Couple participation and representation

Encouraging couple participation in IWUA meetings and training is one of the suggestions by the research participants to increase women's participation in IWUA leadership. During times of voting, it was suggested that they will have one vote and might use their voice by discussion. It will be good to encourage men to represent their spouses. Particularly for elderly men who have active spouses, it is suggested to convince and persuade them to represent their spouse to be an IWUA member representing their household. This might allow them to be in the leadership of IWUA.

Modeling active women leaders to speak in public

Women learn more from women by looking at their life experiences. Having active women leaders who have experience in speaking in public to share their experience with women IWUA members might motivate women to be in leadership. This will also convince men IWUA members' to vote for women to be a leader.

Chapter Five

5. Conclusion and Recommendation

5.1. Conclusion

This research is aimed to analyze the main barriers that prevent women from participating in Irrigation Water Users Associations Leadership. IWUA is an independent association established based on the federal and regional IWUA establishment proclamations to set up a system for efficient utilization of water for irrigation purposes. Unlike the federal IWUA establishment proclamation, fairness and equity in decision-making are not stated in the regional proclamation to be used as an entry point by experts to increase women's participation in the IWUA leadership.

IWUA leadership is defined in this paper as the positions of chairperson, deputy chairperson, and secretary in the IWUA committees. These leadership positions are positions that can affect the decisions made in IWUAs and their application. This shows that being on the committee doesn't mean that a person is in a leadership position. The study demonstrated that women are mostly holding a member or a cashier position in IWUA committees even in some cases there might be no cash to be handled.

One of the main factors is how the households are represented in IWUAs, which is one person per household rule. This left out married women automatically from being IWUA members since the men representing the household were a member of the male-headed households. If someone is not a member of IWUA, the person cannot be either on the IWUA committee or in a leadership position. This requires the development of an inclusive strategy to target households instead of one person per household or promote a couple's approach in which

both husband and wife take part in IWUA meetings and events representing their household having one joint voting.

Enhancing women's participation and representation in IWUA leadership has a positive impact on the lives of the women and the efficiency of irrigation utilization and management, also contributing to addressing the gender gap at all levels. In the IWUA women can voice their issues at all levels with their words and can influence its applicability if they are represented in the leadership. They might also speak for other women's rights on accessing services and fair allocation of irrigation water at their convenience. Having a representative in the IWUA leadership might motivate women members to attend meetings of IWUA and be active members.

Since IWUA is used as an entry point for different governmental and non-governmental organizations working in the irrigation sector, women might lack this opportunity not be represented in the IWUA leadership. IWUA leaders are those who get the first-hand information and services before it goes to other members including training and other capacity-building services. Even not being in the IWUA leaders' meeting made women lack the opportunity to learn from each other, expand their social network and express their and other women's concerns and needs.

The existing regional IWUA regulation gives accountability, to facilitate capacity building for women and other disadvantaged groups like persons with disability and youth, to the regional responsible bureau. However, the research finding shows that there is poor joint effort and collaboration among experts and the gender responsible person in working together and there is poor leaders' commitment to allocate the required resource. This requires a deliberate and collaborative effort of all concerned. The Woreda experts need to give due attention during

the IWUA committee and leaders election and IWUA strengthening to be inclusive and ensure gender equality. The IWUA promoter and gender experts have to work hand-in-hand and the required training needs to be given to these experts on how to mainstream gender in the IWUA establishment. Leaders' commitment and political will in allocating resources and ensuring their efficient utilization are also important.

Lack of access to meeting information is one of the barriers to women's participation in IWUA to get the opportunity to be elected and vote for someone who they need to represent. However, meeting information is not formally sent to members but came through males' social circle which mostly is not accessible by women members. To address this problem, accessible means of communication need to be known and adopted to ensure both men and women have equal access to meeting information.

Changing communities' perception of women and leadership requires continuous education and awareness-raising events. Being in public and leading is mostly perceived as men's domain. IWUA members and leaders have to understand the importance of having women in the leadership for the efficiency of irrigation scheme operation and management. There is also a perception that women lack confidence and the required capacity or literacy level. Modeling of women leaders is important to motivate women and teach the community about the capacity of women to lead if they are provided with the opportunity.

In general, enhancing women's participation and representation in IWUA leadership is contributing to addressing the gender gap at all levels. This also affects the efficient utilization of irrigation resources because women's issues and concerns are treated productively. However, it

will be good if the opportunities and challenges of IWUA leaders are further researched to capture why men and women irrigators are interested or not interested to be IWUA leaders.

5.2. Recommendation

Making all IWUA decisions inclusive and gender-sensitive, requires a gender-balanced decision-making structure. Based on the finding and conclusion drawn, the following recommendations are made.

Addressing structural barriers

- Women's representation in committees and leadership needs to be clearly stated in the regulation. In the meantime, to ensure its applicability following the existing IWUA regulation; gender-responsive IWUA establishment and strengthening guidance and implementation modality need to be in place. This will help the experts to have the legal base to ensure women's participation in the IWUA leadership.
- Revision of the existing IWUA regulations, on the one person per household, or develop strategy on how to give equal opportunity for women and men in the married households to take part in IWUA as a member as well as a leader.

Addressing the root causes of inequality

- Changing the existing gender relation by introducing and promoting approaches to ensure gender equality to increase women's access to and control over resources and decision-making power at the household and community level.

Tailor-made support

- The gender experts have to explore opportunities how to enhance women's participation by allocating the required resource. They have to work closely with IWUA promoters from planning through evaluation and reporting. Their roles in IWUA formation and strengthening of IWUA and how to mainstream gender have to be clearly defined and means of accountability have to be set.
- Responsible offices have to plan and budget for gender mainstreaming and equip experts with the required gender equality-related skill and knowledge.
- Build women's confidence and enhance their leadership skills. The training may include but is not limited to assertiveness and leadership skills. Continuous public awareness and training to change the discourses that consider the public sphere and being a leader as men's domain. Men have to be part of the solution, not the problem.
- Promotion of approaches like the establishment of women-sub committees will empower women to ask for their rights and make decisions on their own. The women sub-committee is a women-only committee that comprises both female household heads and married women in the male-headed household and represented in the IWUA by their husbands. This sub-committee will exclusively discuss women's issues in the irrigation operation and management and share their needs and concerns with the IWUA management committees. This will also give women the opportunity to practice leadership and share ideas.
- The experts have a great role during the election and in assigning leaders for the IWUA. They have to deliberately target women in the leadership and educate IWUA members on the importance of having women in the leadership and gender equality.

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Annexes

Annex 1: List of Research Participants

	Name of Participant	Sex	Marital Status	Age	Name of IWUA/Organization
Focus Group Discussion					
1	WF1-1	Female	FHH	70	Lega Holota
2	WF1-2	Female	FHH	55	Lega Holota
3	WF1-3	Female	Married	40	Lega Holota
4	WF1-4	Female	Married	42	Lega Holota
5	WF1-5	Female	Married	35	Lega Holota
6	WF1-6	Female	FHH	60	Lega Holota
7	WF2-7	Female	Married	40	Melka Mintile Berganfetu
9	WF2-8	Female	Married	37	Melka Mintile Berganfetu
10	WF2-9	Female	FHH	55	Melka Mintile Berganfetu
11	WF2-10	Female	FHH	59	Melka Mintile Berganfetu
12	WF2-11	Female	FHH	57	Melka Mintile Berganfetu
13	WF2-12	Female	Married	32	Melka Mintile Berganfetu

14	WF3-13	Female	Married	50	Lege Kocha
15	WF3-14	Female	FHH	63	Lege Kocha
16	WF3-15	Female	Married	26	Lege Kocha
17	WF3-16	Female	Married	37	Lege Kocha
18	WF3-17	Female	FHH	66	Lege Kocha
19	WF3-18	Female	FHH	50	Lege Kocha
20	WF4-19	Female	Marries	35	Burka Tebela
21	WF4-20	Female	FHH	60	Burka Tebela
22	WF4-21	Female	FHH	69	Burka Tebela
23	WF4-22	Female	Married	41	Burka Tebela
24	WF4-23	Female	FHH	56	Burka Tebela
25	WF4-24	Female	FHH	50	Burka Tebela
26	MF1-25	Male	Married	54	Lege Kocha
27	MF1-26	Male	Married	46	Lege Kocha
28	MF1-27	Male	Married	66	Lege Kocha
29	MF1-28	Male	Married	38	Lege Kocha
30	MF1-29	Male	Married	58	Lege Kocha
31	MF1-30	Male	Married	36	Lege Kocha
32	MF1-31	Male	Married	66	Lega Holota
33	MF2-32	Male	Married	50	Lega Holota

34	MF2-33	Male	Married	35	Lega Holota
35	MF2-34	Male	Married	60	Lega Holota
36	MF2-35	Male	Married	69	Lega Holota
37	MF2-36	Male	Married	41	Lega Holota
38	MF2-37	Male	Married	56	Melka Mintile B.
39	MF3-38	Male	Married	50	Melka Mintile B.
40	MF3-39	Male	Married	54	Melka Mintile B.
41	MF3-40	Male	Married	46	Melka Mintile B.
42	MF3-41	Male	Married	66	Melka Mintile B.
43	MF3-42	Male	Married	37	Melka Mintile B.
44	MF3-43	Male	Married	55	Burka Tebela
45	MF4-44	Male	Married	59	Burka Tebela
46	MF4-45	Male	Married	57	Burka Tebela
47	MF4-46	Male	Married	32	Burka Tebela
48	MF4-47	Male	Married	39	Burka Tebela
	MF4-48	Male	Married	54	Burka Tebela

Key Informant

	Name	Sex	Address	Position	Organization/IWUA
49	WKI-1	M	Wolmera	Expert	Wolmera Woreda Office of Agriculture
50	WKI-2	F	Wolmera	Expert	Wolmera Woreda Office of

					Agriculture
51	WKI-3	M	Wolmera	Expert	Womera Women Affairs Office
52	MKIC-1	M	Bekekana Koro Odo	IWUA Chairperson	Lega Kocha
53	MKIC-2	M	Telecho Gebriel	IWUA Chairperson	Melka Mintile Berganfetu
54	MKIC-3	M	Dawafi Lafto	IWUA Chairperson	Lega Holota
55	MKIC-4	M	Dawafi Lafto	IWUA Chairperson	Burka Tebela
In-Depth Interview					
56	IDW-1	F	Bekeka fi Koro Odo	IWUA Committee	Lega Kocha
57	IDW-2	F	Dawafi Lafto	IWUA Committee	Lega Holota
58	IDW-3	F	Dawafi Lafto	IWUA Committee	Burka Tebela
59	IDW-4	F	Telecho Gebriel	IWUA Committee	Melka Mintile Berganfetu

Annex 2: Sample Pictures



Annex 3: Focus Group Discussion guide for women and men IWUA members

No	Name of Participants	Age	Marital Status	Family size	IWUA Membership Status	Remark

General

- Name of Kebele _____ Name of IWUA _____
- What are the common means of livelihood in your locality (the main five)? What is the role of women in these livelihood activities?
- For how long you lived in this locality? When do you become member of this IWUA? What are the criteria to be IWUA member?
- Does your IWUA have committees? Have you been participated in the election process? How do they elect members? Do you know any women voted to be committee?
- After being elected as an IWUA committee, how are leaders assigned? Are there criteria for holding a leadership position? If yes what? Are they giving equal opportunity both for women and men? How?
- Who has more access/opportunity to be member of IWUA’s leadership position? Why?
- Which position do women mostly hold in IWUA committees? Why?
- As a member of IWUA, what is your right and responsibility to be a committee member? How do you know them?
- What is the rule on household representation for IWUA membership? Why?
- Are there women in the IWUA committees? If no why? If yes which position?

- Do you know of any women in the leadership position? If yes what is her responsibility? If no, Why?
- Do you think that it is possible to have an equal representation of men and women in the IWUA leadership? If no, please provide reasons. If yes, how?
- Do you believe that women are ready to become leader of IWUA?
 - If yes, what makes you say yes?
 - If your answer is no, can you suggest steps that are necessary to prepare women for leadership position.
- Does being an IWUA committee leader have benefits?
 - What do you think are the consequences for women in leadership position of IWUA committees?
- How does having more women in leadership impact/affect IWUAs?
- How do you rate your IWUA and IWUA leaders in showing interest to increase the number of women in IWUA leadership position? Why?
- Do you know of any effort made to increase number of women leaders in IWUA committees?
 - What and by whom?
 - Was it the interest of the IWUAs too?
 - What was the outcome?
- What interventions do you recommend to achieve gender equity within IWUA's leadership?

Is there anything you would like to add?

Annex 4: KII Interview Guide for Wolmera Woreda Office of Agriculture IWUA Promoter

- Name _____ Position _____
- For how long have you been on this position?
- What service does your organization/unit provide to IWUAs?
- What steps do you follow when forming IWUA committees?
 - a. Who assign leaders in committees? How?
 - b. What qualities are required?
 - c. Do the criteria favor men and women equally?
 - d. Which position do women mostly hold? Why?
- How do you understand gender inclusion in IWUA?
- Is there a national policy or regulatory frameworks state about gender inclusion and household representation in IWUA?
 - a. What do they state?
 - b. What are the opportunities for women to participate in IWUA leadership from these policies/frameworks?
 - c. Is there any affirmative action? What?
 - d. Are women using this opportunity to be in the IWUA leadership? Why?
- How many IWUAs do you have in your Woreda? How many men and women are members in committees and which ones are in leadership position (Men, FHH and Married women)?
 - Do women and men equally represented in the leadership? If no, why?

- What are the main challenges that you face in implementing the gender quotas set by IWUA establishment proclamation? Which do you think are easy to overcome and the most difficult to change?
- Do you think that it is possible to have an equal representation of women and men in the IWUA leadership? If yes how? If no why not?
- Does being an IWUA committee leader have benefits?
 - a. What do you think are the consequences for women in leadership position of IWUA committees?
- How does having more women in leadership impact/affect IWUAs?
- How do you rate your office and leaders/officials in your office in showing interest to increase number of women leaders in IWUA committees?
 - a. Why?
 - b. What efforts had been made so far? (ex. Do you have a plan, budget . . .) With whom?
 - c. What was the outcome?
- How can women be empowered to ensure that their voices are effectively represented in the IWUA leadership?
 - a. What special interventions do you recommend to achieve gender equity within IWUA's leadership?

Is there anything you would like to add?

Annex 5: KII Interview Guide for Office of Agriculture Gender Expert

- Name _____ Position_____ For how long have you been on this position?
- What service does your organization/unit provide to IWUAs with regard to gender equality and women's empowerment?
- How do you understand gender and gender inclusion in IWUA?
- What is the role of gender expert in IWUA establishment?
- What are the criteria required to be IWUA's leader?
 - a. Who set the criteria?
 - b. Are the criteria favored women and men equally? How?
- Which position do women mostly hold in committees? Why?
- What is the proportion of men and women in IWUA committees and in leadership position?
- What do you think are the main reasons for the unequal representation of women and men in IWUA leadership?
- Which do you think are easy to overcome and the most difficult to change?
- Is there a national policy or regulatory frameworks state about gender inclusion in IWUA?
 - a. And what do they state?
 - b. What are the opportunities for women to participate in IWUA leadership according to these policies/frameworks?
 - c. Is there any affirmative action? What is it?
- Are women using this opportunity to be in the IWUA committee leadership? Why?

- What are the challenges that you face in implementing the gender quotas set by IWUA establishment proclamation?
- Do you think that it is possible to have an equal representation of women and men in the IWUA leadership? If yes how? If no why?
- Does being an IWUA committee leader have benefits?
 - a. What do you think are the consequences for women in leadership position of IWUA committees?
- How does having more women in leadership impact/affect IWUAs?
- How do you rate your office and leaders/officials in your office in showing interest to increase number of women leaders in IWUA committees?
 - a. Why?
 - b. What efforts had been made so far? (ex. Do you have a plan, budget . . .) With whom?
 - c. What was the outcome?
- How do you rate the coordination your section/unit has with different sections/units to ensure gender equality in IWUA?
- How can women be empowered to ensure that their voices are effectively represented in the IWUA leadership?
 - a. What special interventions do you recommend to achieve gender equity within IWUA's leadership?

Is there anything you would like to add?

Annex 6: KII Interview Guide for Office of Women, Children and Youth Expert

- Name _____ Position _____
- For how long have you been on this position?
- What service does your organization/unit provide to gender equality and women's empowerment in leadership positions at community level?
- How do you understand gender and gender inclusion in a collective action groups? IWUA?
- What are the common leadership qualities required to be a leader in collective action groups like IWUA? Do you think women have these leadership qualities? Which one? Why?
- Which position do women mostly hold in collective action groups' leadership? Why?
- Do you think women are equally represented in collective action groups like IWUA leadership? Why?
- Is there a national policy or regulatory frameworks state about gender inclusion in collective action groups?
 - a. What do they state?
 - b. What are the opportunities for women to participate in the leadership positions from these policies/frameworks?
 - c. Is there any affirmative action? What?
- Are women using this opportunity to be in the leadership? Why?
- Do you think that it is possible to have an equal representation of women and men in the collective action groups' leadership? If yes how? If no why?
- Does being a collective action group committee leader have benefits?

- a. What do you think are the consequences for women in leadership position of collective action group committees?
- How does having more women in leadership impact/affect collective action groups?
- How do you rate your office and leaders in your office in showing interest to increase number of women leaders in collective action groups?
 - a. Why?
 - b. What efforts had been made so far? (ex. Do you have a plan, budget . . .)
 - c. With whom?
 - d. What was the outcome?
- How do you rate the coordination your office/unit has with office of Agriculture and Natural Resource to ensure gender equality in IWUA? Why?
- What measures are in place for women to hold leadership positions in IWUA?
- How can women be empowered to ensure that their voices are effectively represented in the collective action groups' leadership?
 - a. What special interventions do you recommend to achieve gender equity within these groups' leadership and removing gender biases and perceptions in your society with regard to women and leadership?

Is there anything you would like to add?

Annex 7: In-depth Interview Guide for Chairpersons and women committee members of IWUAs

- Name _____ Age _____ Kebele _____ Marital Status _____
family size _____ IWUA's name _____ Position _____ Command area _____
Year of establishment _____
- When were you elected as a chairperson/committee member?
 - a. What was the process?
 - b. How did you get the opportunity?
- Who have more access/opportunity to be member of IWUA leader?
 - a. What is the main reason for this?
- How many men and women members do you have?
- What is the rule in household representation in your IWUA? Why?
- How many women are members of IWUA committees and what positions do they hold?
(FHH and Married women)
- Do you think that it is possible to have an equal representation of men and women in the IWUA leadership?
 - a. If yes how?
 - b. If no, what do you think are the main reasons that constrain IWUAs from equal representation and implementing the gender quotas set by regulation of IWUAs?
- Which do you think are easy to overcome and the most difficult to change?
- How do you rate your IWUA leaders in showing interest to increase number of women leaders? Why?
- What are the opportunities for women to participate in IWUA leadership?

- a. Is there any affirmative action which encourages women's participation in IWUA leadership (internal bylaw, capacity building, and couple training e.t.c.)?
 - b. Are women using this opportunity to be in the IWUA leadership? Why?
- Do you believe that women are ready to become leader of IWUAs?
 - a. If your answer is no, suggest steps that are necessary to prepare women for these leadership position.
 - b. If yes, how?
- Does being an IWUA committee leader have benefits?
 - a. What do you think are the consequences for women in leadership position of IWUA committees?
- How does having more women in leadership impact/affect IWUAs?
- Do you know of any effort made to increase number of women leaders in IWUA committees?
 - a. What and by whom?
 - b. Was it the interest of the IWUAs too?
 - c. What was the outcome?
- What interventions do you recommend to achieve gender equity within IWUA's leadership?

Is there anything you would like to add?