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The impact of women's ownership of land resources in irrigation schemes: The case of Kilosa District in Tanzania

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List of Acronyms

ISS Institute of Social Studies

UNDP United Nations Development Programme

URT United Republic of Tanzania

UWAUMVU Umoja wa Wakulima wa Umwagiliaji Mvumi

MIS Mvumi Irrigation Schemes
DED District Executive Officer
WEO Ward Executive Officer
VEO Village Executive Officer
WID Women in Development
GAD Gender and Development
WAD Women and Development

Abstract

Climate change in African countries as Tanzanian influence negative impact on the agriculture sector due to the dependence of unreliable rain. To overcome such challenge cooperation of government and other private sectors consider construction of irrigations, so as to maintain and increase agricultural production as well as increase of employment. Gender analysis of the Mvumi irrigation project disclose that less women are involved in irrigations schemes, and this is caused by lack of land ownership in the schemes. Past research describe is not only on the cause limited access to land, but also the participation of women in irrigations agriculture is limited. To understand the constraints, influence access to land and low involvement in irrigations, the studies will examine the Land tenure policy, Gender, irrigation systems policy, decision making, land distributions policy customary, financial autonomy, Patriarchy, Traditional, cultural and norms

Relevance to Development Studies

Women's rights to access resources like land and water play a major role in women empowerment and women self-development. The development of women within the community will influence life improvement of the household as well as the living generation. The empowered women with access to land, involve in making changes within the household by being involved in important decisions, in policy making and all essential meetings regarding development. Consideration of gender nature in land allocation, policy making, in credit/loans provision/ and knowledge on their rights and laws and roles of the household influence women's access to land and owner-ship. Therefore, for the gender equality on resources allocation to be achieved, on all the projects designed for the development within the community the professional of the project should ensure gender inclusion. Further-more, before designing the project the expert should have the knowledge on the challenge and constraints women are facing and design the project

Keywords

Land tenure policy, Gender, Irrigation, schemes, customary law. Access, Myumi. Land

Chapter 1 Setting the Scene

Most developing countries' economies depend on agricultural production activities, and due to that, irrigation for agriculture has been given attention within the countries to ensure viable food security, which has been challenged by the climate change impact Kangalawe (2012). To maximise their production and improve their living standards, the community should have guaranteed farming where they can access water throughout the year. Tanzania has an area of 945,000 sq. km. The current population is 6 million. Most economic activities are agricultural, and Tanzania aims to increase food security. For example, according to the (*Integrated food security Phase Classification*) *IPC* (2022), between October 2022 and February 2023, 1.1 million people in Tanzania Mainland's experienced acute food insecurity, IPC Phase 3 or above as per IPC ranking, which is mainly "dry spells, price shocks and diseases" (IPC, 2023.p.1).

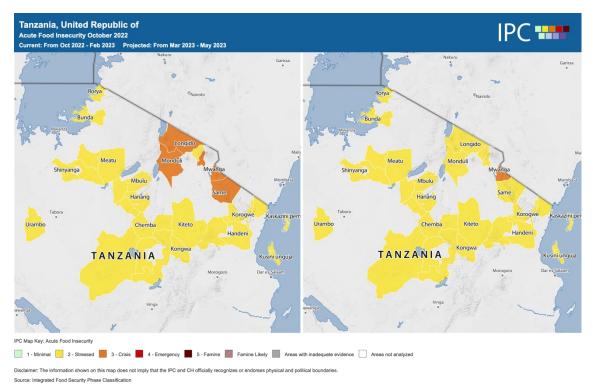


Figure 1 Tanzanian Food Insecurity Map

Source: IPC, 2023

To address this issue, the government of Tanzania invested in irrigation infrastructure to increase production and improve the farmer's standard of living (URT Ministry of Water and Irrigation, 2010. P. 2). Tanzania is determined to develop the irrigation sector in order to increase food security for its citizens, and as a result investment in modern irrigation systems will help raise the agricultural sector. a sector that has been challenged by unreliable rains that prevent the agricultural sector from growing, therefore, in order to fulfil the development plans in the irrigation department, it depends a lot on good and modern infrastructure, to increase the size of the areas that seem suitable for the construction of irrigation infrastructure, to

involve the private sector in order to increase the provision of these irrigation infrastructure services in order to be able to reach more farmers URT Ministry of Water and Irrigation, (2010. P. 2). These plans will cause the production of crops to increase, for many people to be able to use more irrigated agriculture and stop depending on rain and increase yields per acre and even have the ability to cultivate more than once a year. URT Ministry of Water and Irrigation, (2010. P. 2).

However, despite the awareness of the importance of having irrigation schemes, several factors still hinder the accessibility of land, large capital and farms. Unequal access to land and resources, such as irrigation schemes and water, applies to farmers as a social category (regardless of gender) is another primary reason. Different farmer groups experience these challenges and inequalities differently which result in the food shortage within the household and this mainly affects women and children (Kweka,1998). Two main factors intensify these challenges. First, Women's access to capital is limited in comparison to men. Second is the women's subordinate position in the Tanzanian society's social, political, and economic spheres, Whitehead (1979).

Kivaria (2020) explains how Tanzania has good legislation and regulations protecting women's land rights. Much of Tanzanian land is under customary occupancy arrangements, which vary depending on the structures and laws unique to each place and ethnic background. Additionally, a sizable portion of Tanzanian communities are under patrilineal systems, which define father lineage and indicate that family members belong to father lineage. This relates to property inheritance in patrilineal societies where males inherit property merely because they are seen to maintain familial wealth and women are not (Kivaria, 2020) This system discriminates against women in having property rights like land. Additionally, there is a claim among Tanzanian customary law practitioners that smallholder farmers are homogenous despite the increasing inequalities among farmers, especially those experienced by women.

Against this background, the thesis investigates factors that affect women's access to land and irrigation schemes and how these factors impact women's financial autonomy and decision-making in Tanzania land tenure policy.

1.1 Research Problem

In Africa, irrigation schemes and agriculture have received increased focus on raising living standards and providing food security (Kissawike, 2008). Several African countries show that women face unequal rights to access land. The only thing they see women relate to is being married and caring for the family and their husband; "they ignore the fact that women relate to land as a farmer and as a worker (Manji 1998. p. 651)". Additionally, women are not given the priority in access to land despite the policy of land ownership giving room for equality for both men and women in access to land, the land law protects property rights and ownership of land. Still, women are discriminated against due to traditional norms where women are expected to get married and have access to land to cultivate through their husbands (Yngstrom,2002:27). Women experience a lot of inequalities and misuse from their families as daughters, wives, and sisters. However, its unnoticed women having the equal right to access land as among the human rights (Englert, 2003. p. 3).

The customary law in Tanzania gives men more access to land than women, especially in a patrilineal system, which differs in places where the inheritance within a family of clan consider men as worthy and not women, and women can inherit land from their husband once they are married, or divorced (Dancer, 2017. p. 293). Additionally, customary laws are recognized in Tanzania, and they have set gender inequality, which is affecting agricultural production by

discriminating against women from having access to land. However, more solid land rights for women would influence poverty reduction since achieving food security for their household is more important for women than for males as women get to use what is earned for the family's well-being. This allows women to qualify for additional rights independently without questioning this position (Englert 2003.p.3).

However, gender-based inequalities in access to and control of productive means and financial resources inhibit their agricultural productivity and undermine their resilience and sustainability efforts, creating a substantial gender gap in productivity. Despite the policy of land ownership having room for equality for both men and women in access to land, women are discriminated against due to traditional norms where women are expected to marry and work on their husbands' farms even if they have good experience in production. Moreover, women have low contributions to decision-making within the household and society. They don't have a voice when making important decisions. This is caused by patriarchal systems, in which most families have been grooming up knowing that men can make decisions better than women, and when it comes to what and how much produce, women are not involved much. Also, women cannot decide to sell the land despite it being a family land as they don't have the last say over the family property. Consequently, such a power difference within the family and society accelerates food insecurity's impact at the household level since most men focus on producing cash crops to increase their income.

The studies aim to show the contribution of the women from the family level and how it can affect the larger community, when women are given priority to matter that influence development from the local level. Moreover, to see the constraints for women in accessibility to resources, from gender perspectives, social perspective and power perspective (laws and policy aligned on the gender accessing the resources from family level and from the community. This will influence provision of awareness to the government, policy maker, the local government and women's associations on the challenge women are facing and how they vary depend on the cultural, background, knowledge of the women and also how women manage to survive and practise their own agency

1.2 Gender and Land Tenure Policy in Tanzania

Customary law is a set of law which is influenced by the traditional customs or norms of a local community, is a law which is influenced by the needs of the public depending on what they face within their society (Tanner, 1966). Customary the law which compiles different opinions of different groups such politics, religious and public opinions. however, there is village council which protect the right of the property for the individual and family, and the village council disapprove the customary law which discriminate either a men or women on the customary right of occupancy the leads to the provision of the equally right for the property right Magawa & Hansungule (2018).

Customary laws have certain limitations. One of these is gender inequality. Tanzania has three components of court order which can be implemented when it comes to the matter of inheritance rights which are recognized by the government which are statutory law, Islamic law and customary law (Magawa & Hansungule,2018). Statutory law focuses on providing the equal in inheritance issues compared to Islamic and customary law which oppress the marginalised group by the influence of the tradition of the inheritance which is claimed to regard the gender and ethnicity which result in inequalities (Magawa & Hansungule, 2018). this goes far and create

dynamics that the family of the women disallow women to have the share of land inheritance because a woman is considering to get the share of land from the husband, however the other side of the men the family inheritance id for the bloodline the wife is not member of the bloodline this sort of culture and tradition discriminate women Magawa & Hansungule,2018). Both presence of bride price for the women and the religious law position women to be submissive to men, religious, cultural all this contribute to the existing of the inequality which result to the loss of right of be involved in decision making and women are not counted into the matter of inheritance of land as men and this take women's right Magawa & Hansungule, 2018). The security of women right to land influence development, reduction of poverty and maintain the wellbeing of the family (Englert 2003. P. 3).

Women experience unequal treatment in the home and community in terms of the division of labour, decision-making, access to education, opportunities for work, and rights to inheritance and ownership. While Tanzanian laws acknowledge women's rights and forbid customary laws that discriminate against women, (Massay 2020) shows that women still face barriers to land access and that wives feel alienated in their husbands' community since men own all the property.

1.2.1 The Role of State

The customary law and statutory law are itemised by the Tanzania government as a proper scheme in finding women justice on access to land as Chu (2011). The customary law hinders women's access to land simply because it abides by the outdated tradition that men can own land (Kivaria, 2020). To overcome issues associated with customary and traditional law, the government has made some improvements to ensure equal land tenure rights for both men and women. The implementation remains difficult at the family and household level (Kivaria, 2020). due to the customs and traditional patriarchy systems which are socially accepted and taken as normal by the society which allow men to dominate the family and the children and leads to inequality in gender relations.

Tanzania laws are there to provide equal rights to men and women, the *National Land policy* 1995 analyse how women rights should be protected, under *Village land Act* ensure citizen women have right to own land and to be allocated to land same ways as others have Magawa & Hansungule (2018). Moreover, Magawa & Hansungule (2018) describe on the village land act articulate the presumption for the spouse. First, the couples are capable of being registered as co-owner of the land; this can protect the right of the couple in case of situations like separation or death. Secondly, women 's right of land are well secured in case of complaint even without having evidence which is unlike the past where women were only get their right by having the evidence but for this case is only if the challenge is more complex. Third, the laws prevent women's land from being taken appropriately by ensuring in case of reallocation they should have their place to sign for their consent. The village act is against the discriminatory caused by the culture and tradition which leads to preventions of women land ownership Magawa & Hansungule (2018).

1.3 Justification and the Relevance of the Study

Women have a major role they perform within the household sustainability and reproduction, taking care of the family, and ensuring food availability within the family, according to (Agrawal 2015. 273), women have participated highly in producing food and they are an important individual in contributions of food availability. This is clearly because food has more importance to their family. Despite all, that women face constraints on property ownership from family and

communities. In Tanzania access to land is guided by customary law, statutory law and Islamic law, Kivaria (2020). However, in the rural areas customary law is most prevalent under this law, patterns don't give priority.

Women don't tend to receive land transfers through inheritance, neither as wives, nor daughters (doss et al pg:10, 2014). In some African countries, customary law covers the population which influences a large part of land to be under customary tenure, and controls the right for the land transaction (Chirayath et al., 2005, P, 3). Although some research has been conducted in Tanzania on the issue of gender and irrigation of them do not focus on the Kilosa district. Kilosa district is focused on land conflict between farmers and livestock, and household food security reasons. Most of the other studies on the topic do not focus on women's land ownership in the irrigation's schemes. This study aims to address this important and timely issue to examine why women lack land and irrigation schemes accessibility and what hinders women to have access to these. The research contributes to the knowledge about the reasons why women experience obstacles in gaining access to land and the roles of different actors such as the policy makers, customary law practitioners and the government.

1.4 The Study Area

For the citations from the district documents:

In the reference list: Kilosa District Council (2011), Construction and rehabilitation of Mvumi irrigation scheme,

The study focuses on one of the six districts of the Morogoro region. Kilosa district is situated 300 kilometres away from Dar es Salaam. The territory of Morogoro is around 14245 km2. As per Massay's (2021) report, "Kilosa land has five divisions of land: agricultural land (37.5%), natural pasture (33.5%), Mikumi national park (22.5%), forest reserve (5.5%), urban area water and swap (1%)." (Massay 2021). As food crops, Kilosa grows maize, rice, millet, cassava, beans, bananas, and cowpeas for the cash crops, farmers produce Tobacco, Sugarcane, Cotton, Sisal, Wheat, Cashew Nuts, and Wheat (Massay 2021). According to Massay (2021), 90% of Kilosa people are involved in small-scale farming on less than one acre, with the majority producing food and selling their harvests to support their way of life. (Saruni, et. al (2018). The conflict of Kilosa caused by so many factors, first competing for boundaries where farmers and livestock keepers fight, farmers claim for increase in the number of livestock and livestock keepers. Secondly, climate change, which lead to flood 2010 and destroy people farms moreover the increase of impact of climate change leads to sensitive diseases to animal and influence the migration to areas with less invasion of the tsetse fly and ticks and encountered to farmer farms the resulted to conflict Daudi, F. (2010). Moreover, the presence of green pasture attracts livestock keepers to migrate and establish a permanent residence in the area. Large part of the land in Kilosa was excluded for conservation purposes like Mikumi national while the other part of land facing flood, this led to scarcity of land which influenced the conflict between farmers over land and farmers and livestock in Kilosa district.

Another factor contributing to the land scarcity in the Mvumi village is the increased population and the presence of investors who own large parcels of land that they need to use.

¹ Some of these include the work of Mushi: Gender issues in irrigated agricultural in Tanzania: a case study of Lower Moshi schemes (2018); A gendered technography of irrigation development intervention in the Lower Moshi irrigation scheme in Tanzania by Kissawike (2008); and Jemimah Njuki et al.'s (2014) Qualitative assessment of Gender and Irrigations technology in Kenya and Tanzania,

This has many negative consequences including the need for a place for agricultural and farming activities.

Mvumi is one of the 37 ward four villages, which include Mvumi, Gongwe, Makwambe, and Mhowe. In 2014, Mvumi village was divided into two villages, Mvumi and Gongwe, causing tension during land distribution when a mother village (Mvumi) and a new village, Gongwe, argued over the boundaries of the land, which the president revoked Massay (2021). The Mvumi is known for the accessibility of water from the rivers, which never dries even after the rain season. The government has established irrigation schemes for Mvumi. The irrigation schemes started in 2000 and were registered in 2003 as Umoja Wa Wakulima wa Umwagiliaji Mvumi (UWAUMVU). The schemes were funded by the World Bank, and Tanzanian Government (Kilosa District Council 2011: 1).

The schemes cover about 760 hectares. Members of UWAUMVU are 316 and 213 males and 103 women are men, and there are 507 indirect beneficiaries. This place has a lot of people because of the river where water runs throughout the year. This influences cultivation throughout the year. Myumi ward extends along four villages Myumi, Gongwe, Makwambe, and Mhowe, and the river is located at the Myumi village Rivers. The scheme is divided into three parts:

- I. Agricultural crop production
- II. Forest reserve/grassland
- III. Villages and settlements

Mvumi village has different ethnic groups, Sukuma who are agro-pastoralist and Mang'ati pure pastoralist, Luguru and Kaguru, Sambaa. However, the Kaguru ethnic group occupies large parts of the region, followed by the rest of the tribes from different parts of the country, the villagers have immigrants from different party of the country like Mwanza, Shinyanga, Kilimanjaro, Dar-es- salaam, Kigoma. In the early years, the migration to the village was influenced by sisal production during the European colonialisms, fertile land and later years by the accessibility to water and the irrigation schemes.

1.5 Research Objectives and Questions

Access to water has the potential to boost production and to raise standards of living of farmers, since it gives farmers the assurance of planting and harvesting on time. To address the factors that influence and shape women's access to land and irrigation scheme in Mvumi village, this research has the following objectives:

- a. Constraints on women accessing Land in irrigation schemes
- b. Gender Equality on land distribution at family level
- c. how laws and land tenure policy influence women's access to land

Why do women have limited land ownership and participation in irrigation schemes?

And sub-questions:

- I. What factors hinder women's access to the land?
- II. What are the roles of the community leaders in land distribution?
- IV. What is the state's role in empowering women in irrigation schemes?

1.6 Research Methodology

The section covered the researcher's actions while conducting fieldwork, including positionality, sampling strategies, data collection methods, and study limitations. The research uses qualitative research methodology. This was chosen for its importance in addressing the topic of the study. The methods used are interviews as a means of data collection. These methods are selected for their relevance. Interviews helped to understand why women's land ownership and participation are limited in Mvumi village. The research uses both primary and secondary data sources. The study used the data collected through interviews as the primary data sources. As for the secondary sources, the research uses scholarly work, reports, and other publications from the Kilosa district.

1.6.1 Selection of Respondents

The total number of 31 respondents are interviewed where by 24 are females and 7 are males. All respondents are the beneficiaries Mvumi Association of farmer in Irrigation Scheme "Umoja wa Wakulima wa Umwagiliaji Mvumi" (UWAUMVU). The Chairman of UWAUMVU play a role of a gate keeper by which he directs me to the right respondent who is very potential for my study. Gatekeepers are people with the power and knowledge to grant or refuse access to researchers who want to interview groups of respondents (King, 2019:59). He suggests the former secretary who passed the most of knowledge regarding conventional irrigation and the beginning to the end of the government project on irrigation. Therefore, non-probability sampling was helpful and aligned with its goals. Additionally, responses grouped into a variety of groups, including owners, renters, and laborers, as well as farm supervisors, owners who inherit land from their parents, husbands (widowers) as well as owners who buy the land and those who receive it from the government. Women were more frequently selected in order to learn more about the reasons behind their limited access to land, how they manage to own their land, and their understanding of irrigation systems. These choices establish balance and lessen bias.

1.6.2 Ethics, Positionality, and limitation of the study

All ethical considerations took precedence during the data collection process at Mvumi village, and the researcher field study approval letters from ISS to the Kilosa DED where Mvumi ward is allocated. I had to wait until I was given the go-ahead to continue studying in the study area (Mvumi). I utilised a device to record talks during the interviews, and I always got permission to record and take pictures. Regardless there are limited COVID 19 cases in Tanzania still all protective measures were observed such as the one-metre distance, the no-hands-shaking, and the use of hand sanitizer during face-to-face interviews. Since public transportation is scarce in the remote Kilosa, especially in Mvumi ward where the study is being done, I opted to use a motorcycle in order to facilitate my mobility. Since Mvumi is a rural area most of the respondents are fluent Swahili speakers so I used Swahili as a major means of communication during the interview.

The fieldwork was held during the harvest period, which led to many respondents I was advised to interview with the gatekeeper not appearing at the interview area (UWAUMVU office). This led to change modality and use the snowball sampling whereby the individual interviewed direct

me to another respondent who is available and has enough information. Moreover, working at Mvumi as an extension agricultural officer brings some challenges where by most of the people when I asked to interview them, I should write what I know because I have a lot of knowledge and familiarity with everything so there is no need for them to provide their input. Furthermore, I decided to bring snacks and juice during the interview to foster communication however others demand cash which is not easy for me to give due to the limited budget. So, I explained to them the importance of the study and they agreed to proceed with the interview.

1.6.3 Data Analysis

Data transcription was completed at the end of each day throughout the data collection phase; this practice allowed me to keep track of the data as the research progressed. A theme analysis came after the transcribing. Since qualitative data analysis is an ongoing process that necessitates a complete comprehension of the data, I kept reviewing the transcribed data while I developed codes and grouped them in accordance with the recurrent themes from the respondents. Finding connections between the ideas was made simpler by the recurrent themes. The linkages that were found provided guidance in selecting moving quotes that would adequately address the inquiry and its sub questions.

1.7 Outline of the study

The research is divided into six chapters. Chapter is an introduction and it has research methodology and ethics. The second chapter is about literature review. The third chapter is theoretical and analytical framework. The fourth chapter is land tenure and irrigation policies in Tanzania. The fifth chapter is the findings and analysis of the study. The sixth and the final chapter is the conclusions and recommendations.

Chapter 2 The Literature Review

2.1 Colonialism and Gender

Colonialism shapes the gender relations in east African countries, for instances Mbilinyi (2016. p. 118) explains that the colonial rule of Africa and the colonial rule of Europe has resulted in the existence of custom and traditional traditions that lead to patriarchal systems in marriage, divorce and even in property ownership, this gives men the opportunity to make more decisions than women. However, women are fighting to be able to get the right to own land on an equal footing with men in order to sustain in their livelihood, particularly in Tanzania, colonialism began with the introduction of missionaries who were both protestant and catholic and who eventually became more affected by European views. According to researchers, one of the main goals of protestant education was to promote social, economic, and political development. However, the methods used by Catholic missionaries to spread education created gender biases, teaching women to prioritise taking care of their husbands and families and excluding them from social, economic, and political advancement. Much later, Montgomery (2017) explains that despite their goals of educating the citizens and imposing their cultural norms upon them, Christian missionaries were employed as an alternative for the spread of colonial power in Tanganyika. German government persuaded the Christian missionaries to support the colonial purpose while they taught, providing they followed rules that suited their interests. It was easy to penetrate the colonialists' political and economic authority with a concentration on mind colonisation, as western knowledge and culture were pushed on African civilization with the goal of acquiring resources. Furthermore, because pagan lifestyles were thought to be difficult to colonise, they concentrate on altering societal conventions and habits. As it was during western colonialism, when a woman's responsibility was to be a mother, raise a family, and support her husband, colonisers had an impact on how people behaved and thought about gender roles. A woman was deprived of all fundamental rights, including the ability to vote, hold a formal job, own property, and even return to school. In addition, women were viewed as men's slaves and forced into the workforce. Even in the way that male and female pupils were educated, colonists established gender roles: males received a strong education in technology and agriculture, while women were taught housekeeping, weaving, and moral instruction. This resulted in a more patriarchal system where women were subservient to men.

2.2 Patriarchy and Capitalism

In terms of the problems of marginalisation of vulnerable populations, capitalism and patriarchy are interdependent systems. A system of domination of power and resources within the society that is supported by institutions and culture is known as patriarchy, whereas capitalism is defined by Bhargava (2022) as a "economic and political system in which means of production are controlled by a few private individuals or enterprises." Maintaining dominance in both social and economic spheres is the objective of the two systems. Women were dominated by men prior to the emergence of capitalism in the 18th century, which opened the door for capitalism to dominate the process of accumulating wealth by exploiting women as cheap labour for better pay. Because of the economic modernity brought about by capitalism, which led to the marginalisation of women in developing countries, the market accords women a meaningless worth. Furthermore, because they view increases in compensation as a loss to them rather than an increase in burden, capitalists exploit women, accumulate more, and

prevent them from exercising their right to self-determination. These drive women to slip into poverty because they lack the resources for safe and secure lifestyles, and when faced with a problem in life, they exhaust their own resources and energies to survive. However, Razavi (2003); Mbilinyi & Shechambo (2009) explains the transformative capitalist in developing countries as causative of inequality of women access to land and explain on how labour is most important output to the capitalist as their only concern is not about women access to land and increase of household production, poverty reduction but for the labour services availability which influence the growth and survive of the industry.

Capitalism and patriarchy shapes gender roles which influence gender inequality within the household. According to Bhargava (2022), as men keep on having power of money, women were obligated to depend on their men to take care of the family, as women were depending in on their men while dealing with domestic work, cleaning, cooking, taking care of the children and the husbands still women contributions are not seen and men are assumed to contribute more for the development that women's. Due to that assumptions women's find themselves of losing all of their important rights, the inequalities go up to the level of education and employment, whereby majority of the women do not get higher position as well as higher salary and when it comes to education majority of men are literate compare to women this keep on empowering men in important position in politics and in society. According to Mbilinyi & Shechambo (2009) "Small farmers are expected to stimulate the growth of the non-jobs in rural areas in order to attract labour to the industry", not only do capitalists contribute to inequality within households, but also inability of incorporating reproductive responsibilities into family functions have an impact on the division of labour, especially when it comes to ownership of and access to land.

2.3 Access to Resources and Women

Productive resources such as land, crops, water and livestock are crucial for the sustainability of rural life (Galiè 2015). However, a Worldwide scholar has written about women discriminated against on resources ownerships (Chu 2011). Men have been the ones who get many social and economic benefits which are influenced by the patriarchy system, having the ownership of the land give the rights to control, speaking of control making the decision on how to use the owned resources. Furthermore, having the ownership and control encourages investing more for the efficient utilisation of the resources, when an individual who has the legal ownership and control of the resources can be in a position of getting loans because of the value of the resources. However, women are fighting to be able to get the right to own land on an equal footing with men in order to sustain their livelihood. Despite women trying to earn income through different techniques, such as farming and non-farm work, to support their family the earning is not enough to have legal ownership of resources. This results from the disparities in access to resources, where those with money, knowledge, and power may easily register and title their land while women are supported by diversity but gender prejudice is still present. (Hidalgo 2013) Describe why it is crucial for a person to own private property because it allows for a growth of possession and self-awareness of their autonomy on what to do with their land, whether it is for renting, cultivating or selling. Moreover Hegel (2008), referenced by Hidalgo, claimed that the validity of ownership encourages the owners to invest more in such property because they have less fear of losing it or having it taken away from them. Having access to private property requires enough capital, along with having land titling and registration, which is completely cost-effective, will result in inequalities among farmers. Contrary to Marx's belief that having private property influences the land grabbing and discrimination of the majority and brings formation for the classes such as workers and bourgeoisie.

2.4 Gender and Land Grabbing

An increase in land grabbing results from growing populations' effects on the amount of land available for energy and agriculture. Because of the perception that the continent has a lot of land, Africa is also the one that is most commonly the target of land grabs. Large-scale land acquisition (LSLA), regardless of whether it was done by purchasing or renting, was nonetheless viewed as land grabbing (Lubira-Bagenda 2021). Land grabbing causes harm to women such as lack of food, poverty and lack of basic human rights such as getting loans, extension services and even the ability to make decisions in the family Mbilinyi (2016), Chu (2011). The increase of foreign countries investing in Africa goes along with land acquisition for the sake of development, which leaves the residents suffering landless and while those with financial power, authority can have access to land. Long-standing discrimination against women which leads to division of livelihood activities and influence lack of rights for women to own land which can be caused by several factors such: women's lower status in both official and unofficial markets, women often overlook the connection between labour and land tenure. The norms that men ought to be given access to and control over land regardless of their skills consideration while at the same time woman's lack of education causes her to own a small plot of land, keep her in poverty, and contribute to the ongoing unevenness in the division of labour in family as she performs informal labour for crop production. Toulmin (2009), thinks having a formal documentation brings interest to the ownership of the land to invest more, as most of the land have no documentation at the same time on land registration the exclude vulnerable communities while those who have power benefit themselves by accumulating more land titling and registration.

Legitimization of the property is one of freedom the owners require to have freedom on their property. The poor are marginalised to access land by different factors like the process of registration taking so long to its completion, and with high cost of registration for the people with unstable economy are excluded, with land registration bringing security to marginalised people such as women, tenants, migrants and pastoralists. Toulmin (2009), Mbilinyi & Shechambo (2009) think of women having higher positions to represent the matter of concern on behalf of the other women especially in the policy making process and in political matters. However, Camilla explains farmer thoughts that land registration even if it is doing well at the local government level cannot solve the problem of land accessibility simply because farmers consider customary law can provide more rights on land tenure compared to registration technology. In contrast to that Toulmin (2009), Chu (2011), Huyer (2016). Consider that the traditional system does not uphold justice equitably for those who are excluded, favouring instead those in positions of power or authority, additionally Changes in social, cultural, economic, and political factors have an impact on traditional land management. Despite the fact that customary law provides equal opportunities for both genders to have equal rights on land acquisition, women are still impacted via land ownership partly because of gendered labour division and early marriages where women are expected to submit to their husbands by helping them with all household chores for the family's survival. However, regarding the persist of the gender bias most of the women are even left behind to technology adoption, this sink women more into poverty due low production with cost fully inputs for instances Huyer (2016) explain on the impact of climate changes and negatively women area affected and the climate change adaptation to women will benefit them and will be able to involve in decision making, management and processing of the crop with the household, women farmers access to knowledge on how to deal with climate change impact, weather as well learning new agricultural techniques will influence them to survive in challenge and increase their production and having the autonomy on their produce. The majority of small farmers look for ways to

survive by getting food, medical care, and other essential necessities while not having a lot of wealth like investors do, according to Razavi (2003).

2.4 Women and Development

To make sense of this there have been a number of theories. One of which is Women in development (WID) and women and development (WAD). Feminist movements have been established so as to seek gender equality. However, Kabeer (1997) explain development (WID) emerge in 1970s', who sought out masculine dominance and authority in institutional contexts as well as in the domestic sphere of families and households, learn to appreciate the disparity that exists within families, where men hold positions of greater authority and power, and where policy makers view men as the head of the home and the primary provider, while policy makers ignore the rights of women and see them as housewives and mothers primarily in terms of their capacity. The goals of WID and gender and development (GAD) for women, according to Jaquette (2017), are to give them the freedom to choose the jobs they want, to value themselves, to exercise their self-agency, to give policymakers advice, and to work to create environments that are favourable for them to participate in the labour market, in decision-making, to own property, and to exercise any other human rights. Theoretically, women should also be guaranteed access to job possibilities, income increases, and more negotiating power. By placing a value on the care work that women perform, we can also ensure that their diverse skills, expertise, and responsibilities are fairly compensated. To empower women, which is how feminists see themselves as opposing neoliberalism, fundamental changes in the political system, society, and the workplace are necessary. The freedom and capacity of women to make choices about their lives and bodies will be impacted by these developments. Furthermore, as stated by Chant (2006), cited by Jaquette (2017), women who are empowered have the opportunity to possess both property rights and authority over their resources.

1. Chapter 3 The Theoretical and Analytical Framework

3.1 Introduction

This chapter outlines the theoretical frameworks of the study. The study uses feminist political economy theory to analyse women's struggle to access land ownership and irrigation schemes in Mvumi village in Kilasa District, Tanzania.

3.2 Feminist Political Ecology

The theory of Feminist political ecology (FPE) was initially edited by Dianne Rocheleau and managed to set up ways for FPE research and practice Elmhirst, R. (2015). The idea focuses on teaching gender awareness in regard to the natural environment and the resources that surround people's livelihoods. Elmhirst, R. (2015). Since the global economy, politics, and environment have a significant impact on both men and women's lives, the need to reconstruct economies, ecologies, cultures, and policies from the global to the rural area has influenced the emergence of feminist studies about gender relations to the environment (resources like land and water) and development. Rocheleau, et al (2013).

The FPE emerged as a subfield of political Ecology in the 1990s starting from gender and development. FPE describes power and politics of different scope but goes dipper in explaining gender power relation and ensures to work on gender challenge and equality Elmhirst (2015). The concept has been applied in a number of fields, including ecofeminists (which discuss how the patriarchal system affects women's relationships with nature), feminist environmentalists (who discuss how gendered livelihood is attentive in resources surrounding and friendly environment), social feminists (which discuss how gender is incorporated into politics while outlining men's and women's roles in the economy), and feminist poststructuralists (which describe how genders experience the environment as indicators of situated awareness that are shaped by many dimensions of one's self and variance, including race, socioeconomic status, gender, ethnicity and age Rocheleau, et al (2013, P. 3-4).

The two components of the theory that is relevant for my study are resources access and control and household and community gender relations, the first component is important for my study because of understanding the factors that constrains women on accessing land in irrigation schemes, how do women access land and to understand policy made on women right to land while the second component of household and community gender relations is relevant for this study by determining the inequality of property right within the family, patriarchy systems how it affect women.

Based on the above-mentioned component of feminist political ecology that ad-dresses the issue of inequality, access and control of resources by women, this theory is used to examine the issue of women's access to resources in Tanzania. Two specific resources that are investigated are land ownership and access to irrigation schemes. Women are responsible for the maintenance of the ecosystem and contribute to agricultural practices in rural areas through reproduction and production and yet the majority of women lack legal access to land Rocheleau (1995). The presence of inequalities on women allocation to resources influenced firstly by patriarchy land tenure systems as well as unavailability of labour, lack of access to market and capital Razavi (2003). Furthermore, the contributions of women in agricultural productions are essential, this make the argument on norms, customary practices, statutory instruments and laws affect their right in land ownership to be an interesting matter for the matter of increasing

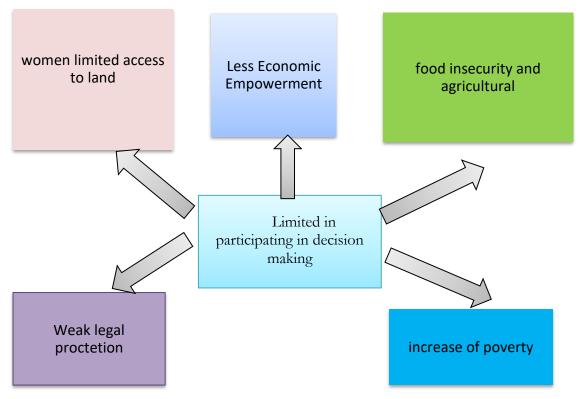
productions Razavi (2003). However, the land holding is guaranteed in differently, in most of rural area access to land is under the customary arrangement while other circumstances accessibility of land is granted by statutory law and other situations rely on religious law Razavi (2003). Furthermore, the weakness of the legal system described as the barrier of women's access to land, the given power of customary tenure by the legal system discriminates against women especially in the area of land ownership Massay (2020.

According to Razavi (2003) Explain of how access to land is socially embedded, and how the claims of control and ownership rights is socially limited within kinship groups and households while considering gender aspect of land access. Women access to land through marriage and the claims are granted by the kin group of the husband, also women claim on accessing the land from their own family relations, as gift or taking loans, as so their accessibility to land is by social relation and to women is more like their contribution to production is not valued. Consequently, the increase of land competitions and claims over land interest of both men and women influenced by new economic uses of land and leads to land scarcity Razavi (2003). due the economic changes number of women with access to land become low this is caused by lack of access to credit, capital, inputs and extension services Razavi (2003).

The theory related to: women's ownership of land resources in irrigation schemes. The theory is chosen for its relevance for this research which includes describing of challenging women encounter the accessing and control of resources, Gender inequalities affecting women's development, lack of opportunity in decision making, lack women knowledge in market negotiations, land dispossession and women inheritances constraints influence by customary law, describes how policies influence marginalisation of women in land accessing.

3.3 Analytical Framework

Figure 2 Analytical Framework



Source: Own, 2023

3.3.1 Land Access

According to Mbilinyi & Shechambo (2009), the Tanzanian government recognized the need for land reform and the need to resolve land disputes. In 1992, the presidential commission, led by Isa Shvji, focused on rural villagers who, for the most part, lacked property rights. However, the majority of the lands still belonged to men, and the survey revealed that women were not included in decisions regarding land tenure and ownership. He goes on to discuss how the creation of a new land enactment to accommodate large-scale investors' needs affected the creation of the National Land Forum (NALAF) within the HakiArdhi (Land Rights Research and Resources Centre) department, protecting women's rights on land ownership. With the Tanzania Women Lawyers Association (TAWLA), which was very active in 1996-1999, the activists kept on fighting for women for both men and women land rights but more sensitive for women still with all that community rights to land were ignored with their priorities of the public. As a result, the citizens had to sign for a popular petition which was collected to the parliaments in order to slow down the land reform process.

Additionally, because of discriminatory laws, cultural norms, and traditional practices, women frequently have limited access to land. These restrictions place restrictions on women and make it more difficult for them to acquire land. As an illustration, women are only seen to exist in rural areas as the wives of family leaders; their actions are seen as incidental or unimportant to the changes in landholding arrangements. The growth of landholding on the African continent, leads tenure insecurity experiences on women, not only as wives but also as sisters, daughters, and divorced or widowed family leaders, depends on gender. Evolutionary

theories and the policies that follow them make women's land claims and the types of tenure insecurity they experience invisible.

Land ownership offers prospects for revenue production, intrapreneurship, and unsecured loans or credits, and it is directly tied to economic empowerment. Women are denied these economic gains when they have restricted decision-making authority, which perpetuates gender-based economic inequities. For example, in marriage, women often find themselves unable to decide what to do with the family land they own because most women are connected to property through marriage rather than directly owning it. As a result, women lag behind because they have less control over the resources, and the husbands take control of the household.

3.3.2 Vulnerability to Poverty

Women in many communities are more susceptible to exploitation and poverty without safe land rights. Women are unable to change their marital status, get a divorce, or become widowed since they are dependent on their families for access to land. Due to their lack of power, women find it challenging to make choices that will safeguard their families' financial security. According to many researchers, the majority of women are more engaged in agricultural activities. Some of these women work as farm labourers and manage their farms for the family's sustainability, making access to land the primary factor in the family's ability to reduce poverty.

According to Meinzen-Dick et al. (2019), women with land rights can fix their own problems by improving their lifestyles, adopting new technologies such as enhanced varieties or fertiliser, and implementing agricultural intensification. Women rely on their spouses to make decisions about family matters. These are the indigenous practices and traditional laws established by African Colonial Chiefs and European Colonial Officers to maintain the patriarchy system Meinzen-Dick et al. (2019.

3.3.3 Agriculture and Food Security

Particularly in rural areas, women are essential to agriculture output and food security. Women contribute significantly to household production, planting, and harvesting, but males have complete control over decisions about when to sell and how to spend the proceeds. Their inability to make decisions, however, frequently prevents them from being able to take advantage of resources like an extension service's credit for agricultural inputs. This has an impact on their ability, competency, and capacity to contribute to economic growth and food security. (Mbilinyi 2016. p.116) asserts that "rural women are the central actors in sustaining this strategy at great cost to their health, income, and well-being". For instance, the majority of agricultural credits go to people who already own land, allowing them to use it for farming. Women cannot get credit without lands, yet married women must first determine whether the males, are ready to accept loans secured by their holdings. Women's capacity to advance economically is hampered by this.

3.3.4 The Legal Protection

For women to be legally protected, involvement in decision-making and land ownership are essential. Women are at a disadvantage in many nations due to discriminatory laws and practices, which makes it simpler for their rights to be infringed. Women can support legal changes and policies that safeguard their land rights and address gender inequality when they participate in the decision-making process. It's also critical to recognize the development in the recognition

of gender, despite land ownership and decision-making, through legislative changes, legal safeguards, and empowerment initiatives. There is still a long way to go to ensure that women have equal access to and control over property, despite the fact that efforts are being made to promote gender equality in this area.

2. Chapter 4 Tanzania Land Tenure and Irrigation Policies

4.1 Introduction

This chapter provides the contextual foundation of irrigation systems in Tanzania. The sections provide an introduction of the research area, a hist, as well as the structural and gender institutional environment within which agriculture with irrigation and land distribution in Tanzania operate. Moreover, to analyse the issues of ownership of the land in gender perspective and the contribution of irrigation schemes to the household in poverty reduction, economic empowerment of women and food security and agriculture.

4.2 The Land Tenure Systems in Tanzania

4.2.1 The Land Tenure Systems and Policies before colonialism

According to Nhantumbo et al. (2003), in precolonial times, there were different ways of accessing the land in Tanzania. The land was under chiefs' governance control and there was free land which an individual could claim by clearing the bushes. The chief and masters were recognized as the land's controllers who could distribute land to their community. Masters allocated the land to people with the same culture or tribe. Additionally, Nhantumbo et al (2003) indicate that the fertile land was allocated to the family members and the people of the same clan to exclude outsiders. Another way of land accessibility, as explained by Nhantumbo et al (2003) is through clearing the bushes of the free land which influence private land ownership. Land which is usually obtained by family members was given to close family and clan lineages Nhantumbo et al (2003). However, the flexibility of land accessibility in pre-colonial times created certain social statuses, thus making communities compete over resources and land accessibility. This has become a source of conflict among the communities in those times.

4.2.2 Land Tenure systems and Policies during colonialism.

During colonial rule, all traditional rules were changed. A new Land rule was approved in 1923 under British colonialism, which became a land tenure policy framework for Tanzanian mainlands (Havnevik 1995). Moreover, Havnevik (1995), explains that under the colonial administration, the governor controlled all land allocations and their uses by the locals. Furthermore, Coldham (1995), states that during colonialism, the colonial governors approved the right of occupancy. This meant that locals had "a right of occupancy" of specific areas of the land while other parts of the land were for the use of the colonial administration (Coldham 1995 p, 228). The "right of occupancy" was based on native and customary law (Havnevik 1995, p,269). The allocation of the land in the colonial period favoured the chiefs. It was based on customary laws. The reason for keeping customary law and the role of the chiefs were for the colonisers to avoid political challenges Nhantumbo et al. (2003).

The changes in the traditional rule on land ownership were intentionally in the favour of the settlers, aiming to access, control, and own the land and natural resources Nhantumbo et al. (2003). The settlers managed to manipulate the chiefs with garments and access to land Nhantumbo et al. (2003). After controlling land and natural resources, the settlers cleared the

forest and invested in cash crops, such as coffee, tea, tobacco, cotton, coconut, sisal, and cashew. The settlers also harvested the mahogany timbers Nhantumbo et al. (2003). On the other hand, colonial settlers continuously manipulated the chiefs so that they could exploit the natural resources of Tanzania Nhantumbo et al. (2003).

4.2.3 The land tenure system in post-colonial system

During the post-colonial period there have been some shifts in the land tenure system in Tanzania. According to Dunning, (1973), when Tanganyika gained its independence in 1961 from British colonialism, about one percent of the land was owned in freehold, while the other one percent was under condition of development controlled by the colonialists by the rule of 'right occupancy. The equilibrium of land allocation was under known customary law, which was correspondingly applicable to the 120 tribes within the countries Dunning, (1973). Tanzania Arusha Declaration in 1967 came up with two policies which were socialism '*Ujamaa*' and self-reliance. The concern of socialism was to prevent exploitation, avoid inequalities, to ensure all means of production such as land and natural resources are under public control as well as democracy to the citizen Dunning, (1973)." while the second policy was 'self-reliance' Self-reliance a symbol of local survivalism or a signal of national citizenship Lal, P. (2012).

Furthermore, in the Arusha Declaration of 1967, President Julius Nyerere declare 'villagisation' strategy, and the purpose of villagisation was to encourage individuals to live in the village, practise collective farming practices, and promote large-farming scale to prevent exploitation and inequalities and facilitate public of services to the villages Coldham (1995). Moreover, the villageisation was similar to land distribution simply because in places with congestion people with large land ownerships, their lands were occupied by the state and redistributed Coldham (1995). The reallocation of the individual to the village left them with land insecurity as the customary law was not powerful in dealing with land boundaries Havnevik (1995). Coldham (1995) notes that the reallocation of individuals from their original land, which was obtained under customary law, created a lot of challenges. People brought their claims to the courts, but there was no legal framework established to resolve the issue. However, the court leaders stated the main focus of Ujamaa was the interest of the majority and to create an equal society through villagisation and collective farming. The absence of a legal framework during villagisation influenced the occurrence of dynamics on land administration and ownership Coldham (1995). As explained above, the village aims for individuals to engage in collective farming to the allocated area specified by the government while they were forced to leave their original land that individual used to own under the custom for the sake of socialism and self-reliance Coldham (1995). The individual was left in dilemma on their rights over the village land that they farm collectively and those of specifically allocated, and questions over whether the land can be inherited and whether the customary law apply in those land they farm collectively Coldham (1995).

Furthermore, the weakness of the villagisation influences the collapse of land administration. However, during the struggle over Tanzanian land policies, in 1992 the presidential land commission suggested the diversification of the land ownership authority Havnevik (1995). The recommendation was that the village land be under the village assembly, which is not attached to any forces and authorities so that the decisions regarding the land can be made without any intervention as the village council is not democratically elected and receive order from the above on how to govern the council Havnevik (1995). The second recommendation was for the land to be under the authority of the board of land commission on behalf of the citizens. However, the proposed suggestion was rejected on 1 March 1995, and the national policies rejected those recommendations (ibid).

Additionally, the policy acknowledges the land as a fundamental category that requires careful decision-making, giving the president the ultimate power on land issues as he is the representative of his people Havnevik (1995). Despite the land authority vested in the president, the Presidential Land Commission oversaw challenges faced by women when accessing land. This was mainly due to the customary law that limited women's land access and ownership (ibid). According to Magawa & Hansungule (2018) Because a woman will marry and leave her clan; a woman is not permitted by custom to inherit land. But a guy can inherit the land since he will work it and continue to build the clan property even after getting married. Moreover, the widower and daughters' rights of inheritance are manipulated by the customs and norms, and the patriarchal system, which Favours men's domination in the family and all the important decision-making Havnevik(1995). The rejection of women's rights to land ownership contributes to their limited access and involvement in agricultural practices which hinders women's development.

4.3 Irrigation Systems In Tanzania

Tanzania like any other developing countries have two types of irrigation which are the traditional where farmers use the groundwater sources and canal to deliver water to their fields which is practice to date and also during pre-colonial and this varies depending on the tribes and location within Tanzania. Despite of the Arabs and German came up with cash crops and paddy farmers were still conducting irrigation for their sustenance according to Kimambo and Madoxx (2019) the awareness of agricultural and livestock keeper was known by the farmers for like 5000 years ago, where they develop their metal technology and enhance irrigation for production.

The large portion of the irrigation schemes in Tanzania is mage their farm under irrigation user associations and only a small party of irrigations are owned privately. The water users have their own Lear ships Furthermore, research suggests that women encounter barriers to land access, water distribution, and harvesting, all of which result in debt repayment. As such, women shouldn't be limited in their options for non-agricultural investments when it comes to credit assistance concerns. Women may be given the chance to choose and get training in the particular field they want to invest in in order to guarantee the success of their enterprise. and rules which help in managing the schemes development, the function of the association is to ensure distribution of water by shifts to the farmers, maintenance, operation and collection of water bills which also is under schemes. maintenance and development of the schemes, to stand up for the challenge farmer's facing within the scheme's farms (Kangile, 2015).

4.3.1 Importance of irrigation

Irrigation schemes seem to have a high contribution to farmers 'income recently, as large parts of Tanzania get little rain at an average of 750mm per year, which is not sufficient for food reproduction and from there the need of irrigation infrastructure becomes crucial so as to increase food production and income. According Zhang et al (2021), Tanzania most produced crop is maize followed by rice, and rice highly sold in the marketed as well as exported, however the government have increased the tax up to 75% for the importation this encourage farmer to produce market due the availability of good market within and out of the country. Zhang et al, (2021) describe how the irrigation have support farmers economically, farmers production has increased as well as their income generation, Regarding the employment, family have managed to employ them self in the farmer for those will large family size of adult become labour on

their own farmers and those who are not fully engage irrigation and have no adult in the family to work they hire labour. This shows the chance of employment coming from irrigation schemes. Moreover, as the farmers generate benefits from the production they divert their benefits, some decide to expand their income by investing in business, some build nice shelter for the family. The researchers demonstrate that small farmers who had access to irrigation infrastructure have been able to raise their standard of life in comparison to those who did not. These farmers have also been able to construct block houses, which are used as collateral when applying for loans. Notwithstanding the schemes' great success, farmers from various African nations continue to face common challenges in all irrigation projects. These challenges typically include unequal land distribution, water management, corruption, low levels of education, and resource constraints (Tafesse, 2003; Zhang et al., 2021).

4.4 Gender Perspectives in Land Ownership

Land is a resource that is very valuable for the world, and especially for developing countries in rural areas. A large percentage of Tanzania's citizens depend on agriculture for income and food, and this helps in reducing the cost of food in their households. However, women are still denied the right to land ownership. This is still influenced by laws and customs of the global south Galiè et al. (2015). The laws of Tanzania state preventing any validation of law which seems to have characters of oppressing the vulnerable group and for that reasons every individual have equal right on property ownership Magawa & Hansungule (2018).despite of the Tanzania to stand on Gender equality there is customary practices conducted at the family level consider men in a lineage with right of property ownership, and the married women is not included in family lineage and so she does not have right property ownership of the husband family Magawa & Hansungule (2018). Additionally, the custom is considered as the constraints to women's land access and as wives feel alienated in their husbands' community since men own all the property. Massay (2020) The failure of customary law is influenced by social, cultural, economic, and political change; this is consistent with the discrimination against women in terms of their access to resources, income, productive assets, information, and expertise Toulmin (2009). According to Magawa & Hansungule (2018, P.1) "Gender equity and women's resource ownership increases the efficiency of development interventions and promotes growth". Massay (2020) asserts that women's control over the family's property encourages them to preserve the property's health since they utilise their revenue to support their families by buying food and making sure their kids have access to an education. Because of this, women need equal treatment in the division of labour in order to engage in other activities, such as political and economic ones, which will impact their awareness of essential knowledge and their ability to participate in decision-making. Although all genders have the equal right to attend village meetings, Massay (2020) notes that women do not participate as much in these gatherings, which are predominantly attended by men. This has detrimental effects on women for instance the village may enact laws that favour males as long as most of the men stand up for what they want. In addition, women are typically left to handle household chores and other duties, which makes it difficult for them to stay committed to those meetings and other crucial duties Massay (2020, the customary law is not the only factor that contributes to the gender inequalities within the community; there is also a religious factor. Klingorová & Havlíček (2015) show that religion has an impact on gender disparity. In Christian religious institutions, for example, women's behaviour is influenced by hierarchical authority, which is patriarchal in nature. This is because speaking to religious leaders requires humility, obedience, and respect before speaking. Furthermore, women in Christian theological viewpoints receive instruction prior to marriage on appropriate behaviour toward their husbands and elders. "Wives submit yourselves to your own husband, as unto the Lord," states Ephesians 5:22 in the Holiness Bible. Cultural and traditional elements are consistent with religion. The least amount of inequity is caused by religion because it is aligned with culture and tradition. According to Seguino (2011), gender is deeply rooted in the cultural and role of motherhood, meaning that having children requires fertility, and that the best women are those who devote their entire time to raising their children, taking care of the home, and building a stable family.

3. Chapter Findings and Data Analysis

5

5.1 Introduction

The data analyses and the field study findings are covered in this chapter. The different sections of this chapter cover the Mvumi irrigation schemes (MIS), measures of land allocation in MIS, how women can access land under the scheme, and the barriers that prevent more women from managing their land. The framework highlights the many barriers and procedures that prevent women from accessing land, including irrigated land, under the MIS plan, which was an excellent match for the study's objectives.

5.2 Factors Influencing Access to the Land

For the individual to be a member and benefit from the schemes, they must have access to land. The findings of the study show that there are beginners of the traditional schemes, who had access to land through clearing forests and bushes till the government came for the surveying for construction of the schemes, and for new beneficiary of scheme, the access to land on the area covered by schemes, is through purchase, or inherit from the family and through land distribution as well as have access to land as a labour. The land has become an expensive commodity due to the construction of modern irrigation canals and the competitions of lands between the migrants and the residence and all member who had the land before the construction of the schemes sold their lands this was because the formers farmers though after construction of the public schemes their farm will be taken by the government and came to do a decision of sell off so they can have something for themselves.

However, as a result of land reform in 2017, farmers were able to access land in schemes through land distribution practices of the local government. The lands allocation committee, a committee that is chosen within the ward, where by ward expert and other village members who were chosen in a village general village assembly cooperate to determine the land accessibility in the area. The committee comprises 10 members. Committee members all sex were appointed 7 Men and 3 women and some members were chosen in village assembly some were appointed from the ward-by-Ward Executive Officer (WEO) and other were appointed in village-by-Village Executive Officer (VEO), The committee work together to determines who qualifies to have access to land. hierarchy

Another finding is the nature of migration in the Kilosa district. People move in and out of the district for several reasons. First, people move to Mvumi village because of the irrigation schemes. Second, people from places like Gairo, Dumila, Mwanza, Shinyanga, Moshi, Dodoma, and Arusha Manyara move to the Mvumi village for different kinds of purposes, such as being labour (primarily women) or working as farm managers (mostly men). Some other groups also migrate for other purposes, such as purchasing land in the village because of its irrigation scheme and finding grazing land for their livestock.

The migration leads to increase of competition for land resources. The accessibility of land to buy, renting has become hard, because there is a limited area of land with access to water. Different people migrate to Mvumi because of the availability of labour from farms, fertile land and water availability. The migrations in the village leads to resources completions where by rural people sell their lands to migrants, the migrants compete with residents on purchasing

land, this has leads to the rapid rise of the land price from Tsh 300000 to Tsh 1200000 which is equivalent to 113.59 Euros to 453.68 Euros. As stated below by one of the respondents:

"I am not from this village but I migrated to this place after my retirement because I got 8 acres which I purchased during the surveying on the construction of the irrigation schemes. Because most farmers were scared that they would lose the land they had cleared and the government would take their land after the scheme's construction, they had to sell. So, they had to sell so that they don't lose the value of their land and this is how I managed to purchase the land in this place." Man. 66, 2-08-23.

"My spouse and I relocated here since, according to his acquaintances, there are plenty of fields, water, and simple living conditions, particularly with regard to food availability. Despite our lack of funds to own a farm, we decided to move here. My husband was hired by a friend of his to manage a farmer's property, and I was paid each day to work as a worker growing rice. Later, my husband rented our own farm, and during that time, we hired labourers to plough our land. Despite my husband's decision to divorce me and take a new wife. I continue to work as a labourer today. I have enough money to eat." Women 39, 5/08/2023.

5.2.1 Accessibility of Land Resources in MIS

Speaking of access to land, all genders have an equal right to have access to land since the village's main source of economic activity is agriculture and have fertile land and access to water. There are different ways that one can gain land in the village. This accessibility is determined by different factors. One of these factors is inheritance from family members. Most of the inheritance goes to the male family members because they are seen to have the ability to protect the family properties. This creates a paradox where women are discriminated against by inheritances. According to the one of the female interviewees:

'In my father's family, there are 6 children, three males and three of us females, my father used to own five acres, and since my father is very old, he decided to divide his land among his sons, one of whom lives at home, and he is married and has been given two acres to farm. Since that food feeds the whole family and other fields were given to our two brothers, it was me and my sisters who were not given it. I was married in a rural area. My life is farming, so I see the importance of farms, but my sister is in the city, so she never even asked about my father's farms." Women 35, 5/08/2023

Another one is by purchasing some land for farming activities.

Moreover, the majority of owners are men, and they directly own their plots. As for the women who were interviewed, about 35% own some land. There are two main ways in which women get access to the lands they own. The first group of women that were interviewed for this research acquired their lands through their husbands, while the second group got access to the lands, they owned from their family members.

"I studied human medicine, I was working in a human medicine shop and after my mother died, I returned here in 2019 because my siblings who were left behind were small and needed my supervision. renting a farm, I farmed twice that year, after getting money for the harvest I looked for a farm to buy and since I know many people it was not a problem to find a farm that I farm until now, this has helped me with the rental costs, I have spent it on cultivating modern agriculture and I have increased my income." women 36.5/08/2023

For instance, if the brother is not at the village, their land will be supervised by the sister, and they will not directly own the land.

Furthermore, it is only possible for women to access land with enough capital. For instance, for every 1 acre of land, women have to pay for Tsh 1200,000 here then say which is equivalent

to 453.68 Euros. This is challenging for most women because they depend on either their husbands or other family members for financial support. Because of these challenges, women depend on their husbands to get land. However, women seem to lack the right to inherit their matrimonial property as one of the women interviewed mentioned:

Few of those who have access to land react to how their lives have improved compared to those who don't have access to land.

This is why more men are benefiting from the schemes compared to women. Moreover, the findings show that many women still do not have access to land. To overcome this issue, women decide to work as labourers on farms that are owned by other farmers so that they can save some money to rent or buy land of their own one day. Therefore, despite their important role in agricultural production, are marginalised.

"I am from an area called Gairo, I came to do labour in people's fields because there are irrigation schemes, so there is a lot of work, but in doing labour, one of the owners of the land decided to give me a piece of quarter of an acre to cultivate for a while I help him to drive away the birds in his field and weed even though he pays me, I cultivate and plant myself in my farm, and money for seeds and medicines I earn from the labour I do in the fields, I know if I harvest the money I will get by selling my crops I will use it as initial capital I will rent a bigger farm". Women 22. 4/08/2023.

"I inherited this farm from my mom, but I couldn't work on it by myself. My husband makes all the necessary decisions on crop production, and he shows me the money he got even after selling it, and I trust him." Woman, 43. 4-08-2023.

5.3.2 Women's Land Accessibility

The data collected from the studies shows that 90% of women indicated the need to own their land as the sole owners. However, due to various factors, they struggle to be the sole owners of their, some women with capital start by renting a small farm, and after the harvest, they get the capital that enables them to cultivate one acre or even more. Other women engage in small business activities such as cooking food to sell at night on the side of the road, selling charcoal, and selling clothes on credit then later engage themselves in farming. Accessibility of land for women has had many ways to access land through their husbands, working as labourers, owned direct, renting or inheritance from the family, according to one of the interviewees narrate on matter accessibility to land.

"The land that I have, I got consent from my parents, they gave me 1.5 acres, they help me a lot in my development and to educate my children, because I am in a polygamous marriage, so the services from my husband are divided, so they are not enough and in order to educate my children, I have engaged in agriculture. My husband does not interfere in my fields and you don't hear about it, I cultivate and manage the harvest because he trades tithes with his fields." Women 43, 31/07/2023

The narration on accessibility of land

"Currently, my wife does not have a farm, but I own 5 acres, and she found these fields because this is my 3rd time to marry my first wife, we divorced and the second wife died and this is now the third wife. But I intend to buy a farm for my wife or give her a farm in the future because I know she should have her own farm, even though we work together to farm, we go to the farm together and if she wants money for her use, she tells me in advance that I will give it to her". Men 48.31/07/2023

However, those who have land of their own are still facing a lot of challenges in production. Some of the challenges include access to capital, the farming process, women less or not involved in decision-making, lack of financial autonomy and empowerment and unequal water distribution.

5.3.3 Women's Role in Decision Making

According to the cultural and normative norms of Tanzania, men are considered the head and the decision-maker of the family. Despite women playing significant roles every day by taking care of the family and generating income for the household, they are not involved in decision-making but they are informed on the decision made by their men, The data shows most women depend on men in their decision-making, this is caused by norms and cultural relations that influence women from a young age to wait and listen to their men. According to one of the interviewees, narrate matters of decision making.

"My husband shares with me about all the farm decisions he makes, and even the issue of selling crops he shares with me and the use of money he makes, I participate and I am satisfied because my husband knows what he is doing, first of all I must say that without my husband the farm matters would have defeated me because he knows all the schedules of the farm so I don't have a lot of problems even though I usually go to the farm to help him, especially when the farming season starts because there are few workers during that period, we share the responsibilities, my husband farms and I transplant." women 48, 4/08/2023.

Women continue to lag behind in development and lose their fundamental rights when they participate in decision-making either indirectly or not at all, which makes it worse for them to be unaware of the importance of agricultural knowledge and essential information. Based on the norms established by traditions and conventions, it is now considered normal for a woman to take care of the children while staying at home in a submissive role.

5.3.4 Financial Autonomy of women

Most of the women experience a lack of financial autonomy. This is a challenge for many reasons, precisely the case of Tanzanian women in Mvumi village. Some women own property, but they also choose to rent it out because they don't have enough money or because their initial investment has been exhausted by not growing enough crops or otherwise. The farmer uses his hands to manually scatter seeds across the field, which takes up space and yields little. High farming is primarily carried out by small farmers in the fields, and only a small number of people are able to use modern agriculture, which is expensive because it requires labourers and equipment. Additionally, some women work as labourers and rent the fields since they lack the financial resources to rent and even cultivate the land. While farmers are aware that the government offers loans, some have reported losses in the fields and are attempting to repay the loan because the government requires it. They are grateful that the loan has no interest because otherwise, it would be difficult for them to repay, and many would not consider taking out a loan because the repayment would bother them and others. He does not consider taking out a loan again, but the returns are troubling him. They are considering taking it and using the loan to do other business. Moreover, others claim that although several groups of women who are acquainted with one another apply for loans when the opportunity arises, not all of the groups are granted loans, leaving them to continue battling with the problem of raising money. Analysis shows that some women have access to land, yet managing all agricultural processes is challenging due to lack of finance. This is further contributed by women's limited access to credit for their farming activities. According to the one of the interviewees:

"I have two acres of paddy that my late husband and I got by clearing the bushes at those times. I farmed using traditional irrigation, and one of the acres I have given to my daughter. Still it is so expensive to practise Modern agricultural for higher production. However, I joined a women's group to have access to loans after I heard that the government had a budget for women and we had to pay after harvest. The good thing is that the loans don't have interest, and I farmed and the yield was few and until now I have not finished repaying the debt. If it was my own money, it would have been okay, but the government money is scary. I will not borrow it again when I finish paying this debt." Woman 56, 5/08/2023.

'I have rented 1.5 acres. My mom gave me the loan to get the land. I make sure that I work on my own so as to reduce the cost. It's clear that modern agriculture is productive but also very cost-effective to me. For now, I am working on my farm because I can't afford to put in labour; we also have to pay for the bills for water and fertiliser, which have now become more expensive than before, and the benefit is small. However, I will save what I'll get from the yield so I can afford to purchase land within the schemes and be able to plant twice a year." woman 29, 5/8/2023.

Women's ability to exercise their agency and manage is influenced by their financial independence and decision-making experience. There is government policy for women empowerment promoting particular groups, including women, the disabled, and children. Women who have a strong bond will decide to form groups on their own, taking into account their social connections. These women will then analyse the costs associated with beginning agricultural production, which range from 400 to 500 euros for each group. It is evident that groups can form, but not every organisation will receive credit. Having said that, it is unclear why not all organisations have access to funding. Being fellow residents with these women, I've observed how they use the money in a variety of ways instead of for its intended use. Some will divide it, some will use it for agricultural issues, some will use it for small enterprises like buying and selling clothes, some will expand their small food eating places, and some will use it entirely for agriculture, giving women a chance to exercise their own agency with the money they've acquired.

5.3.5 Legal Protection

Tanzania conducted legislative changes in the 1990s, to give disadvantaged groups legal protection over their property, establish communities as the hub of land management, stimulate investment, accelerate economic progress, and respect customs. Magawa & Hansungule (2018). However, with the good laws which emphasise on equality for both men and women in Tanzania still women are facing land insecurity. Moreover because of the respect of customs at the local level which hinder the implications of laws. There are other obstacles which prevent women right to land such as discrimination, African tradition which influence gender inequalities for instances when it come to the matter of inheritance of the family property the traditional understand men as the dominant and have the right of having family

Being working at the local government, one of my responsibilities has been to resolve family disputes. Instead of resolving issues, we typically leave room for discussion between the wife and the husband, which deprives women of their rights to property ownership, particularly when relationships end. Due to their early marriages and lack of education, the majority of women lack the courage to make decisions, which forces them to rely on men to take care of their children even when they leave them with little. The majority of men declare that I owned property before I got married or that I paid for it with my own money, with no help from the woman. Because traditions and customs in Tanzania place women's responsibility in the division of responsibilities and do not require payment, many women feel as though they have done nothing to address the issue of unpaid work (raising children, cooking, and cleaning) for

women, and even men do not understand them. Magawa & Hansungule (2018) describe that Tanzanian courts of appeal have passed that house work should be considered into monetary contribution within the household and still women are not there yet. This situation oppresses them and hinders their ability to develop economically. The studies show how women are still affected by the customary law.

5.3.6 Family Inheritance

Family inheritance is another major factor influencing women's land ownership and access. Women sometimes inherit property from their families and husbands. This happens when a family member or husband with a property passes away. However, women experience a lot of challenges during the inheritance because their rights are ignored, especially when the other family members refuse to give part of their inherited land to women's family members. Their rights are also denied when their husbands pass away. Because of some traditions, the deceased husband's property is taken by his family, not his wife or even children.

"My husband left me with 5 children, 6 acres, which were transferred to me. This was finalised at court. However, my husband family came after me and demanded my late husband's farm and house which we built together I had to seek legal help because I took a case to court to confiscate my late husband's property and my brother-in-law was the one who did not want me to keep my husband's property, claiming that it was their family's property and not mine, regardless of my husband leaving me the five children that are required to be educated and eat, my husband's family did not care about that and the court case continued for a long time, this caused me to suffer from depression, high pressure and finally I became paralyzed due to depression, while the case continues and after attending the court of Tanzania the justice was served. I got the land and the house back after the court judgement passed and took care of 5 children myself, which was also not easy. Further, I could not afford to farm all the acres. I was renting three, and the money I got I used to farm the rest of the farm". woman 43, 3/08/23."

According to the law of inheritance, women who marry have the opportunity to possess land; but, if the husband passes away before the wife, the husband's brothers will begin to fight for the property that the wife and husband have desired. Many women have experienced similar difficulties, and the majority of them are unaware of their legal rights. As a result, the husband's family has been able to seize the assets that the wives and their husbands possessed. This is one of the barriers preventing more women from becoming landowners and engaging in personal development. When a man passes away, the property has an impact on the wealth of several families due to the continuation of oppressive African customs against women and the belief that men are the only ones capable of heading the family and owning the land. In many cases, children in households where a male parent provides care experience difficulties in life, including not finishing school or attending school at all. Furthermore, a woman who is dependent on a guy lacks the experience necessary to make independent judgments, which subsequently makes it challenging for her to direct her own personal growth. Traditions and conventions that marginalise women and offer males the opportunity to dominate, own property, and even control the wife have a significant impact on this.

5.3.6 Matrimonial Conflicts/Separations

According to the Tanzania Marriage Act, properties within the family are owned by both men and women as well as the division of the property should equally. Magawa & Hansungule (2018). The court has full authority on property by either sale of or divorce to the spouse who has been married when it comes to the point of divorce. The laws ensure courts consider firstly factors that affect women such as customs in Africa which deny women equal right indivision of matrimonial property, Secondly, take into account the contributions of the spouse into the

matrimonial property. Magawa & Hansungule (2018). However, In family conflict, most of the time, women end up with little or nothing. However, Magawa & Hansungule (2018 describes how the law considers the division of matrimonial property where the understanding that women stay home and take care of the family, is what builds the relationship between two genders and influences the accumulation and preservation of the matrimonial property. Moreover, the laws protecting women rights include them not to be expelled from their matrimonial property.

However, studies show that women still do not get matrimonial property rights, men can decide to leave their wives and without getting property division of property like land, money. There is an analytical narrative of women below.

"I migrated from Shinyanga here with my husband and we came to settle here because of these schemes. My husband rented a plot while I and him were farming together. We managed to have a yield, which was like an initial for us to rent more plots. My husband decided to sell all the yield without my awareness. Later, he moved out of places, and I came to find out he had a relationship with another woman. Till then, I was working as a labourer all season of farming, and someone offered me 0.3 of an acre while I was working on his farm. That's what sustains me and my child, and he has never supported us since then". Women 39, 5/08/2023.

Women's rights are dictated by African cultures and conventions, which view women as mothers and primary caregivers for their husbands. Even though women make significant contributions to the family's well-being by caring for the home, cooking, cleaning, watching the kids, and working on family farms, society nevertheless oppresses them and views their labour as unimportant and inferior to that of males. Male-dominated societies that take advantage of the circumstances and exploit women for their own gain. If a woman farms with a male, she will still not have full control over the harvest money. Married women have the opportunity of access to land through working alongside their spouses during harvest and in the fields. Women who have their own money have acknowledged that they do not have the freedom of the money they get together.

This scenario presents an opportunity for a guy to obtain cash and have the last say over how the cash is used. Women are now unable to carry on and devote a great deal of effort to family farms without reaping the rewards. They have remained apart due to traditions and practices that demonstrate that a man is the only one who may possess property, money, and even his own judgments. However, the work and responsibilities that women have in African communities both in the house and in the fields have a societal impact on maintaining the labour force's reproductive capacity and boosting productivity for the benefit of the family.

Office of the High Commissioner for Human Rights, & Women, U. N. (2013), describe that women are unable to access resources due to insufficient legislative requirements, inefficient national and local execution of policies, and discriminatory cultural attitudes and behaviours at the institutional, community, and family levels.

5.3.6 Unequal Water Distribution

About 90% of interviewed participants complain of a shortage of water as a significant challenge they face more during the dry season, which lasts from May to October. The farmers' low capacity and knowledge of applying new technology in the irrigation schemes since the majority are small farmers who only focus on agricultural production for food viable and considering the level of education is a primary school, and some didn't attend school at all. This affects farmer improvement in agricultural production.

There are reasons why unequal water distribution happens in the Mvumi village. One of these reasons is poor policy from the government and the institution, as for the MIS that can govern

the water management and distribution and others are the law of water level in the river, unequal water distribution happens during the dry seasons which start at the end of June. majority of the farmers in irrigation schemes farm twice a year, during dry season there is high scarcity of water which influences the scheme's leaders UWAUMVU to arrange shifts for water distributions. This, however, makes the distribution of water competitive; large farmers receive water shifts and use them for an extended period of time. In addition, these farmers may occasionally bribe money to the leaders in charge of water distribution so that the shifts are sent to their fields even though they are not theirs. Small farmers are left without water in their fields for an extended length of time as a result of the circumstance, which lowers output. Rice production often requires watering at the right moment; therefore, crops get stunted when water is delayed. Furthermore, these changes in the way that water is distributed throughout the fields typically call for management, which forces the farmers to stay out there and water the fields until late at night in order to make sure that the entire area is covered with water before it is turned over to another person. Women have demonstrated that they are suffering from the circumstances, which makes it challenging to plough twice a year. Therefore, in order to wait for the next rainy season, landowners must rent their property to others this summer. As a result, this circumstance demonstrates how difficult irrigated farming is for small farmers. Gender equality with natural resources and the relationship between gender and water access are all studied under FPE.

Some individuals were able to state that water could reach their fields more quickly than it does currently if they were to level them.

Obstacles such as these force women to engage in other occupations in order to make ends meet, such as street vending of vegetables, clothing, and food during the evening. The advantages of these items are modest and their capital requirements are low, they are nonetheless enough for their everyday needs. Women make their own decisions in order to survive as the alternative to the challenge they face in farming.

The study's findings show that most women, about 16 of them, complain about the distribution inequality and how others are given more chances of irrigating their fame compared to others. Below is the narration of the findings of water distributions.

"In the schemes, we have water shifts for irrigation, but the leaders twist these shifts, and they tend to give more opportunities to those who have many acres who take more and longer time, even 24 hours, to irrigate their farm, and for most of us, we have either to wait or to irrigate our farm at night, missing the right to irrigate our crops, which impacts our production. This keeps happening daily, and we all pay the water fees, but others get to pay extra, like corruption." Woman, 47. 03/08/2023

5.3.7 Bribes

Most interviewees, particularly women, have voiced complaints regarding the issue of equality of water access for irrigating crops. Water distribution typically occurs in shifts, and divergence may occur during those shifts for some reasons some people shift ate given to other and no one can move the shift because he has been granted cooperation with the irrigation management. Men with more money are also available to bribe to obtain water more rapidly. People with limited means and abilities lose crops and money because their farms do not get enough appropriate water. These injustices even severely impact women. Women are more likely to experience harassment and sexual exploitation when accessing water for their farms.

"We face numerous obstacles in our irrigation plans, such as the current administration's preference for allocating water and the problem of Maasai livestock invading our fields. We are unable to drive them out because they can cut us with their knives, so we always inform the ward offices and villages so they can assist us, even though this circumstance greatly distressed both men and women. However, there is a significant problem of

bribery of money and bribery of sex when we meet ladies where, even if it is your water turn, you may not get it. Still, if you pay or you may submit to their sexual demands who distribute water, then you get it and water it on time". Woman 47. 31/07/2023.

5.3.8 Level of Education

Generally speaking, education is one of the most important factors in one's self-development and the development of society. According to Acharya et al. (2010), women who are well educated and actively involved in decision-making are seen as more valuable than women who are illiterate or have low levels of education. Education can also help women escape poverty by giving them knowledge that boosts their awareness and self-confidence. It can also help women make decisions about family issues and land matters, such as whether to sell or buy. Although it is important for women to be educated, Acharya et al. (2010) argue that education alone cannot address the issue of gender disparity in society. Women who receive formal education can find jobs easily. Despite the fact that Losindilo et al. (2010) found that women contributed significantly to GDP development due to their participation in both official and informal jobs, it is still evident that women are underrepresented in positions requiring difficult decisions. While it's important for women to be educated, as Acharya et al. (2010) showed, "education alone cannot solve gender inequality within the society." The majority of women work in informal jobs like street cooking, running salons, sex workers that sell clothing on credit in order to provide for their families' basic needs. Age, marital status, education, place of residence, and religion can all either empower or oppress women, according to studies by Losindilo et al. (2010) and Acharya et al. (2010). Additionally, may discredit or strengthen women participating in economic, social, and political issues.

The table below shows the different levels of education of 31 participants: 24 women respondents,7 men respondents

Level of education Women % Men % 9.6 % Primary school from 0-5 48% level Primary school from 22% 9.6% level Secondary level 3.2% 0 3.2 % College / university 3.2 %

Table 1 Level of Education of Women Interviewees

Source, Own Field data, 2023

The majority of the respondents selected were women to influence the accessibility of information; the table shows a majority of the women respondents have a lower level of education. The number interviewed respondents were 31, 24 women and 7 men, the large number of women were selected purposely to influence the accessibility of more information on the challenge women facing on access land in irrigation schemes. The data above describe the level of education women in percentage. women with Primary school from 0-5 level were 48%. women with primary school from 0-7 level were 22%, and secondary and college level

were 3.2%, with such a large percent of women having a low level of education. This impacts their accessibility to land in irrigation schemes, lack of knowledge is the constraints for women to defend legal rights on access to land and also in making important decisions. Below is a narration of two women on the level of education.

"I didn't have the chance to study much, I ended up in the fifth grade, don't you know back in the day when parents gave priority to male children, so I stayed at home to help the parents, and at that time they didn't have the ability to teach or buy notebooks for two children, and we didn't have free education like now." Women 40, 5/08/2023

"I haven't gone to school at all as I remember my parents moved to Kilosa from Kigoma to work in the sisal fields and we used to stay in workers' houses and even there were no schools in the nearby areas, no child could study at that time in our areas." women 54 3/08/2023.

4. Chapter Conclusions and Recommendations

6

6.1 Conclusions

The studies were conducted in Tanzania in the Kilosa district, one of nine districts in the Morogoro Region. The researcher's objective was to observe low ownership of land in Mvumi irrigation schemes. These factors prevent women from accessing land, and what should be done for women to access land in irrigation schemes? The study aims to find factors that influence accessing land in MIS, how to gain access to land in the irrigation schemes, and what limits women accessing land in the schemes. At the same time, the study tries to tackle the central question: what causes the low number of women owning land in irrigation schemes? In answering such a question, various factors came to mind: the power of women in decision-making, financial autonomy, and legal protection. However, the findings demonstrate that some women inherit land, some purchase, and other have access to land due to the land reforms which was practised at Mvumi village in 2017, though a small party of the distributed land was a party of the schemes and a large party of the allocated land depend on seasons rainfed.

Moreover, women who have land access cannot afford to manage farming due to their financial situation, and they must depend on their men to dominate. Women work as labourers on their husbands' farms, so they must work as labourers. Furthermore, the studies also show that some women depend on their men's decisions, like selling the yield, how to spend the money, what to farm, and when to start farming. Also, the findings demonstrate how cultural and traditional discrimination against women when it comes to matrimonial property inheritance and family separation leaves women in extreme poverty and powerlessness. Furthermore, the findings show that when it comes to financial matters, still few women can access loans, and yet some have found themselves in debt due to the low yields caused by so many factors in the field; knowledge of access to credits and essential information that will provide knowledge on of reduce vulnerable shock, unequal water distribution and the level of education which influence women marginalised in socioeconomic and political participation. Most of the female respondents interviewed about the distribution of water are among the challenges they face, as their shift gets given to others, and they also get asked for corruption in terms of money and sexuality; this makes most of the women to depend on their men. Tradition and customs influence women having access to land as is not important in society as being a wife with a husband. Moreover, the issue of legal protection in marital property inheritance and Matrimonial property distribution and how legal sectors have been clear on equality distribution of the property of the spouses and yet the customary law still impacts when it comes to women's access to property ownership of the family.

The expectation was seeing that women were totally excluded from having access to land by previous leaders in land distribution before the construction of the schemes. However, the finding shows that from the beginning there was no land distribution. Whoever were in position to clear the bushes will manage to have access to land and also, I expect to hear the government construct the irrigation schemes first but the findings shows that the schemes conduction find citizens already own their land. Moreover, women get to access credits but they get to practise their agency and not invest in agriculture as it is easy for them to get benefits which I didn't expect. Women have found ways of adopting their barriers that exist in irrigation schemes.

Finally, most women need to have their own land and depend on themselves, despite the constraints they face with the schemes. The government and local authorities should consider

women within the scheme service because women produce for the sake of family sustainability, and they should be provided with equal rights in the scheme. For that, there should be promotion of women's leadership so they can easily listen to their problems within the schemes; women should be involved in training to provide them with farming knowledge so they can have awareness on how to manage their own farm; and moreover, water supply techniques should be improved and affordable so women should not struggle to irrigate their farm in time. Women's discrimination should be addressed when accessing and controlling resources for their own economic development.

6.2 Recommendations

Having witnessed firsthand how challenging it is for women to retain their financial security and autonomy for both their families and personal growth in my role as an extension officer in a rural community. Apart from agriculture, women are involved in several economic endeavours. Examples include founding bars and tiny cosmetics enterprises, selling street food, tailoring, and creating puffs to resell to other retailers for a profit. The research findings also helped me understand the difficulties women face and offer guidance to law enforcement and local government officials on gender inequality and women's empowerment. How to plan for women's full involvement in development in order to ensure that women's rights are legally protected, it is also important to improve women's knowledge by allowing them to select the subjects they need to study and, in the event that they need assistance, which perspective to take. This is especially important when it comes to individual property ownership and marriage or other family institutions. Women must have the chance to voice their thoughts and ask for the information they need, since it is clear that they are extremely informed about a variety of subjects. In order to effectively address women's concerns, the government must collaborate with other parties that have the means to support women in their efforts for growth.

Furthermore, research suggests that women encounter barriers to land access, water distribution, and harvesting, all of which result in debt repayment. As such, women shouldn't be limited in their options for non-agricultural investments when it comes to credit assistance concerns. Women may be given the chance to choose and get training in the particular field they want to invest in in order to guarantee the success of their enterprise.

Appendices

Appendix 1 Mvumi Irrigation Scheme, Main canal

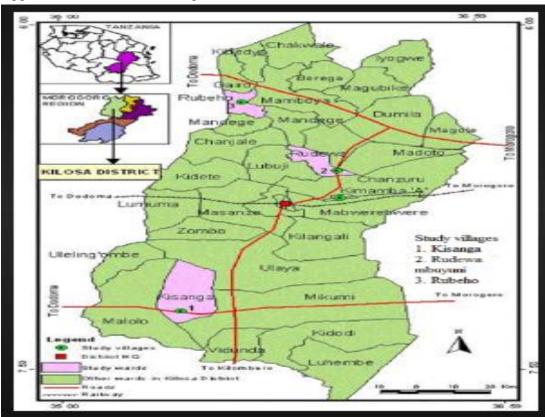


Source, Own Field Photo, 2023



Source, Own Field Photo, 2023

Appendix 2 Kilosa District Map



Source: DDDDD, YEAR: YYYY

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