# GENDER RELATIONS AND DELIVERY OF EXTENSION SERVICES: A CASE OF EXTENSION WORKERS AT DOWA DISTRICT MALAWI

#### **EMMACULATE NTCHEMA**

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION OF SOKOINE UNIVERSITY OF AGRICULTURE. MOROGORO, TANZANIA.

#### ABSTRACT

The delivery of agriculture extension has not been achieved because agriculture extension strategies have failed to address gender related issues among extension workers in extension delivery. The study aimed at assessing gender relations among extension workers on delivery of extension services. The study adopted a cross-section design and was conducted in Dowa District Malawi. The overall objective of the study was to explore the role of gender relations in the delivery of extension services. The specific objectives of the study were to examine the access of resources, determine factors that shape gender relations among extension workers and identify challenges emanating from gender relations among extension workers in the delivery of agricultural extension service. The study area was selected based on the ecological characteristic including its potential for agricultural production. Data were collected using semi-structured questionnaire from 60 extension workers. The respondents were purposively selected from a pool of 74 extension workers working in the area. The data collection tools were Focus Group Discussion, Key Informant Interviews, and questionnaires for data collection. The study findings were analysed using content analysis and descriptive statistics. The research established that extension workers have knowledge of gender issues and mainstreaming because most of them have been trained on gender issues. It has also be noted that proper structures and policies promoting gender when delivering extension services exist. However, lack of resources, poor working conditions, and culture paralyze government efforts in addressing troubled gender relations at the area.

# **DECLARATION**

I, EMMACULATE NTCHEMA, do hereby declare to the Sen	nate of the Sokoine
University of Agriculture that this dissertation is my original work, do	one within the period
of registration and that it has neither been submitted nor been concurr	ently submitted for a
higher degree award in any other Institution.	
Emmaculate Ntchema	 Date
(MEE Candidate)	Dute
The declaration above is confirmed by;	
DR. R. M. Madaha	Date
(Supervisor)	

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#### ACKNOWLEDGMENTS

I am grateful to the Almighty God who through his mercies saw me through all the challenges which I had during my studies.

I am also grateful to my supervisor, Dr. Rasel Madaha, who went through work relentlessly with his professional and fatherly guidance without being tired throughout my studies. I cherish his constructive ideas, direction, advice, and comments. I would not have made it without his support.

I am also grateful to my friends and classmates for good cooperation with me which enhanced my academic progress. I also thank all academic staff of the Department of Agricultural Extension and Community Development of the Sokoine University of Agriculture for their contribution particularly during presentations and seminars, their observation and criticism were useful.

To my Husband Patrick Ching'ani, I lack words of appreciation; he has been there for me financially and for all the support I needed, may the Lord reward him more.

I also acknowledge the support of, Dowa District Commissioner, Selina Malaga, (DADO) for Dowa, The PS Mrs. Elica Maganga and Dr. Abraham John Simama for their financial support. Greatest appreciation goes to my mother Nancy Beya for taking the responsibilities of caring for my one year daughter whom I left with her and my four children Gift, Dalitso, Mwayi, and Chisomo.

# **DEDICATION**

I dedicate this dissertation to my Husband Patrick Ching'ani for his understanding and financial support and my mother Nancy Beya for taking the responsibility of the mother to my children during the period of my study.

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#### LIST IF ABREVIATIONS AND ACRONYMS

A.T Attitude

AEDC Agriculture Extension Development Coordinator

AEDO Agriculture Extension Development Officer

AIDS Acquired Immunodeficiency syndrome

B.I Behaviour Interaction

CAADP Comprehensive Africa Agriculture Development Program

DADO District agriculture Development Officer

EAS Extension Advisory Services

FAO Food and Agriculture Organization

GAD Gender and Development

GoM Government of Malawi

HIV Human Immunodeficiency Virus

IFAD International Fund for Agricultural Development

MGDS Malawi's National Growth and Development Strategies

NAIP National Agriculture Policy

NGO Non-Governmental Organization

P, W, E, B Perceived Economic Well-being

P.E.O. Perceived ease of Use

P.U Perceived Usefulness

S.I Social Influence

WID Women in Development

#### **CHAPTER ONE**

#### 1.0 INTRODUCTION

#### 1.1 Background

Agriculture is recognized as a fundamental driver of economic growth and poverty reduction for many developing countries. The majority of countries in the world have an economy that depends on agriculture. Malawi, like many countries, depends heavily on agriculture (Mendola and Sintomwe, 2013). The importance of agricultural extension services cannot be overstated. This is especially so because in many African countries, agriculture extension plays a big role in extension delivery. As a result, agricultural extension remains one of the important pillars in the attainment of development (Tagutanazvo, 2015b: Kshash, 2018).

Although agriculture extension plays a big role in extension delivery, other studies indicate that gender differences are also obvious in the staffing and conduct of research and extension, as the majority agricultural scientists and agents are male (Colverso and Akeredolu, 2017). For this reason, delivery of agriculture extension has not been achieved because agriculture extension strategies have failed to address gender-related issues among extension workers in extension delivery.

However, the effectiveness of extension services is highly dependent on the preparedness and professional competencies of extension agents (Jasmin *et al.*, 2013; Okoedo and Edobor, 2013; Hoffmann, 2014). There is substantial evidence that highlights the effectiveness of gender relations in extension delivery among extension workers. FAO (2011) acknowledges that women comprise, on average, 43% of the agricultural labour

force in developing countries, ranging from 20% in Latin America to 50% in Eastern Asia and Sub-Saharan Africa.

In Malawi, agricultural extension services are the responsibility of the government and The private sector. According to Sigman *et al.* (2014), the Department of Agriculture Extension Services (DAES) is the public extension advisory service provider and the only organization working nationwide and across all agricultural value chains, as well as other service areas, such as health and nutrition.

Agriculture extension is a professional communication intervention deployed by organizations to disseminate agricultural technologies to rural people (Issahaku, 2014). Agriculture extension and education play a significant role in improving farmers' capacity for innovation (Poncet *et al.*, 2010). The person who is responsible for delivering agricultural extension services is an extension worker (Kundhalande *et al.*, 2014). Extension workers are recruited and deployed to districts by the Department of agriculture extension services.

For several reasons, Patil *et al.* (2018) pointed out that agriculture extension services have been underperforming in many countries. One of the reasons for the poor performance is the gender relationship, particularly among extension workers in extension delivery in their working places. Some of the challenges that extension workers are facing are social norms restricting extension staff members who are predominantly men from interacting with women farmers (MEAS, 2012). Many of these gender-related constraints in extension service delivery are recognized by the Department of Agriculture extension services.

Due to gender relationship challenges, contact between extension agents and farmers is limited in many countries, especially among women farmers. Even when extension services are available, many are biased towards men and neglect the role of women as farmers (MEAS, 2012). This makes it harder to reach women farmers since women extensionists are better than men at reaching women farmers (Quisumbing and Pandofelli, 2010).

WHO (2011) pointed out that it is particularly important to address gender relations within agriculture extension delivery among extension workers. However, the reasons for the failure to understand gender relations among extension workers remain debatable.

Mudege *et al.* (2017) mentioned that gender relations that undervalue women's roles and contributions sometimes promote the perception that men have the right to make decisions over women's work, and their wellbeing in general without considering women's needs, preferences and desires. A clear example of this is a study in Malawi based on farmers which demonstrated that women who do not have support from their husbands to access extension services are less likely to do so than women who have their husband's support (Jafry *el al.*, 2014).

Chitsike *et al.* (2017) state that understanding the differences in gender roles and relations across different cultures is crucial for the analysis and implementation of different programs, projects, and policies, because gender roles and relations differ significantly across different cultures. Even more important is the understanding of historical perspectives because they influence the effectiveness of different gender transformative goals. Generally, gender relations place men in more powerful positions than women.

However, gender relations among extension workers in the delivery of extension services have not been fully explored. This study has attempted to fill the gap.

The study explores gender relations among extension workers in the delivery of extension services in Dowa District, Malawi. It begins with an overview of how agriculture extension attempted to mainstream gender and a brief definition of gender relationships in this study. Gender relations are reinforced by a social institution and are socially constructed among people. It also defines the way men and women extension workers interact with each other and is recognized as men and as women extension workers in delivering extension services.

There is a growing recognition that challenging gender inequality and investing in addressing the barriers that women face will increase agricultural efficiency and productivity, contributing to growth and poverty reduction (World Bank, FAO and IFAD, 2009; Christoplos, 2010). Further, there is a need to overhaul the existing systems to overcome gender bias and provide an equitable form of extension provision (Jonsson, 2011).

Aregu *et al.* (2011) report that gender roles and relationships influence the division of work, the use of resources, and the sharing of benefits of production between women and men. However, Manfre *et al.* (2013) argue that many countries have mandates to improve gender mainstreaming across government programs, including establishing ministries of gender or women, assigning gender focal points to various line ministries, and developing national gender policies. Yet, the policy and practice of gender mainstreaming have often been ineffective and reflect gender norms operating within institutions' programming and implementing policies. Furthermore, Peterman *et al.* (2011) point out that though there

have been policies and legislative reforms that seek to address the problem of gender inequality, several cases of troubled gender relations still exist.

The Government of Malawi, through the Ministry responsible for Gender, Children and Social Welfare, spearheaded the development of the first National Gender Policy from 1998 to 2000 through a wide consultative process that involved other government Ministries, Departments, Development Partners, Donors, civil society and NGOs.

The overall goal of the policy was to mainstream gender in the national development process, as well as to enhance the participation of men and women, for sustainable and equitable development for poverty eradication. Although gender relations and extension service delivery rely on the success of various policies highlighted above, they also depend on a good understanding of the roles of gender in communicating with the target beneficiaries of extension services (farmers) and effective extension delivery systems. Furthermore, success is dependent on policy implementation because it bridges the gap between government and extension workers. In this regard, there is a need to fully explore gender relations among extension workers in agriculture extension services (GoM, 2010).

#### 1.2 Statement of the Problem

The gender challenges include the distribution of resources like housing, transport, lack of training, and protective gear. The effectiveness of extension delivery is oftentimes challenged by gender relations among extension workers. According to Nyamwanji (2016), almost in all societies, men and women differ in the manner in which they perform their activities and undertake regarding access to and control of resources and participating in decision-making.

Other research revealed that the majority of the agriculture sector reforms seem to target farmers rather than extension workers (Quisimbing and Pondolfelli, 2010; Mudenge *et al.*, 2017). Jafry *et al.* (2014) mention that DAES is increasingly implementing gender-responsive participatory approaches to capture female needs and priorities as well as to empower women to express their needs and demands at the district level. Despite all the possible research conducted on gender relations in agriculture extension delivery in the Dowa District, there is still a lack of understanding of how gender relations have played a role among men and women extension workers. For this reason, this study aimed to further explore gender relations among extension workers in delivering extension services to advocate decision-makers in the department of agriculture extension services to improve gender relations in extension delivery.

#### 1.3 Justification

The knowledge obtained from the study will assist decision-makers in the department on how they can incorporate gender relations into extension workers' work to improve extension delivery.

The study will provide information on how gender relations influence the access of resources as well as factors that shape gender relations and challenges emanating from gender relations among extension workers in the delivery of extension services. This study was expanded information based on Agriculture Extension Development officers (AEDOs) extension workers, to help the Department to explore possible opportunities and challenges, in line with gender policy (Chinsinga, 2012) by improving the quality of extension services as well as improving the wellbeing of extension workers.

#### 1.4 Objectives

#### 1.4.1 The overall objectives of the study

The overall objective of the study was to explore the role of gender relations among men and women extension workers in the delivery of extension services.

#### 1.4.2 Specific objectives

- i. To examine the access of resources that influence gender relations among extension workers in the delivery of extension services.
- To examine the factors that shape gender relations among extension workers in the delivery of extension services.
- iii. To identify challenges emanating from gender relations among extension workers involved in the delivery of extension services.

#### 1.5 Research Questions

- i. What are the gender-related aspects influenced by access to resources among extension workers in the delivery of extension services?
- ii. What are the gender factors that shape gender relations among male and female extension workers in the delivery of extension services?
- iii. What are the challenges that emanate from gender relations among extension workers in the delivery of extension services?

#### 1.6 Theoretical Framework

This study was guided by GAD (gender and development) theory. GAD is a feminist international development theory that emerged from the work of feminist civil societies, particularly those residing in and interested in developing countries. According to Madaha (2018), gender and development empower women and transform unequal relations

between men and women. The GAD approach maintains that men and women are socialized differently and often function in different spheres of the community, although there is interdependence.

Behrman *et al.* (2012) explains that women are affected differently from men by modernization, development, and social change. This approach aims to address power relations and gender dynamics that produce particular constructions of masculinity and feminism in different contexts by questioning the assumption of a singular, linear path to gender equity or development Behrman *et al.* (2012) and Riley and Varvus (2003). According to Connelly *et al.* (2000), GAD synthesizes issues of materialist political economy to showcase that men's and women's status in society is deeply affected by their material conditions of life and by their position in the national, regional, and global economies. That women and men are deeply affected by the nature of patriarchal power in their societies at the national, community, and household levels.

Moreover, women's material conditions and patriarchal authority are both defined and maintained by the accepted norms and values that define women's and men's roles and duties in a particular society. In this study, the GAD theory is in a better position to examine the context that gender relations create in access to resources, determine challenges emanating from gender relations, and examine the factors that shape gender relations among men and women extension workers in the delivery of extension services.

#### 1.7 Conceptual Framework

The section presents the conceptual framework for the study. The conceptual presented in this study shows the relationship between gender relations and agricultural extension workers. Extension delivery establishes the relationship between men and women extension workers and is influenced by economic factors. Extension delivery is conceptualized in terms of social activities of extension workers and gender relations. The roles and responsibilities of extension workers differ because of their gender in terms of housing of extension workers, transport and working gear. Gender relations are influenced by social-cultural factors like work experience, distribution of resources, attitudes of extension workers, work environment, a period in service, number of farmers per extension worker, and culture. While work experience, lack of training, poor working conditions, culture, and lack of resources were some of the social-cultural factors influencing extension service delivery. The study's social-cultural elements were built using the relationship between the dependent and the diagrammatic representation of variables. The socioeconomic characteristics (age, sex, education, and marital status).

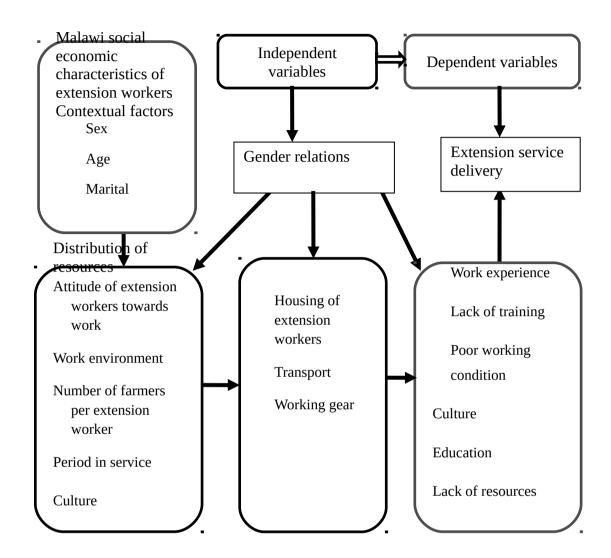


Figure 1: Conceptual framework showing the relationship between variables

## 1.8 Study Limitations

There were some limitations to the study. To begin with, the study makes no causal assumptions because it is primarily concerned with documenting the occurrence. Second, the research problem was not statistically tested in the study. As a result, future research can examine the association between gender relations and the delivery of agricultural extension services using rigorous statistical analysis (test).

#### **CHAPTER TWO**

#### 2.0 LITERATURE REVIEW

#### 2.1 **Definition of Key Terms**

#### 2.1.1 Gender

Gender is defined as socially constructed roles. In this study, gender defines men's and women's roles in extension delivery. This is not to be confused with biologically determining the sex of male or female extension workers. From the past, people have learned what is happening to a man and a woman. For example, what work a man can do or how to behave as a man in society. Gender in agriculture extension requires that women should be included in agriculture extension as extension 'clients' and as extension agents (Mangheni *et al.*, 2019). This is because of the role that women play as producers, decision makers, and economic agents in agriculture.

In addition to this, though extension workers socialise and play separate roles in society, consider work for men and women. This applies to extension worker's roles within the work place as well as the community when delivering extension services.

#### 2.1.2 Gender relations

Gender relations are defined as the ways in which a culture or society defines rights, responsibilities, and the identities of men and women in relation to one another (Bravo-Baumann, 2000). Gender relations imply interpersonal social interaction, and they are likely to differ. The roles and responsibilities are different because of the influence of gender among extension workers. In this study, gender relations is looking at (men and women) extension workers in relation to their roles in the delivery of extension services, rather than women and men's roles separately. From this perspective, in order to

understand factors that shape men and women's access to agricultural extension and training (Ragasa and Nui, 2017). Extension workers have different capabilities in extension delivery, access to resources, gender relations shaping them at work and challenges emanating among them in extension delivery. An example is the study of Wilde and Vainio. Moser (1993) mentioned that in Bhulan and Sri-Lanka, men and women help to do the same job. In Thailand and India, women collect wood and products such as herbs.

This study looks at gender relations by looking at the job descriptions for male and female extension workers accordingly. Although these extension workers were employed by one employer, which is the Ministry of Agriculture, and they share one job description, there is still a difference in how they deliver extension services to farmers. Specific responsibilities of each sex, access to resources such as transport (bikes/pushbikes), housing, gender training, lack of allowances, and protective gear. This has an influence on extension worker's everyday lives in their service, including their attitude towards work, work environment, distribution of resources, period of service, number of farmers per extension worker, and the initiative to promote gender at the workplace. Awareness of gender issues, structures and gender policy. Sex, which refers to universal biological characteristics that differentiate males and females,

#### 2.1.3 Extension workers

Agricultural extension is the professional communication intervention deployed by organisations to determine agricultural technology in rural communities, Issahaku (2014). Extension workers are valuable links between men and women farmers and policy makers at the district and national level with information that builds a better basis for planning. In this study, extension workers are the men and women who deliver extension services.

#### 2.1.4 Agriculture extension service

According to Ferder *et al.* (2011), agriculture extension services can be defined as the entire set of organizations that support and facilitate people engaged in agricultural production to solve problems, obtain information, and improve their livelihood and wellbeing.

# 2.2 Access to Resources and the Influence of Gender Relationships on Extension Delivery among Extension Workers

Hamago (2015) researched the interaction between gender relations among extension workers. He suggested ways and strategies that can be used to ensure extension services are gender-equitable and empowering for women. He found that underlying gender norms and cultural norms mediate access to information. He also said that men regard themselves as representatives of the household during the training. He concluded that gender norms related to household decision making have an impact on the ability of women to access training opportunities. Furthermore, he recommended that extensions should embed modules aimed at addressing social practice rather than disadvantaging some people.

However, Mudenge *et al.* (2015) researched how gender shapes men and women's participation in agriculture training by examining how men and women justify gender inequalities in access to information and knowledge. He found that the perception of men as household heads and women as helpers, who are also illiterate and ignorant, often has an implication that women are able to access resources. He also said that negative stereotypes and perceptions about women by their husbands and extension workers militate against women's access to training on gender-responsive, adult learning, and gender awareness to help them be more inclusive and sensitive to women's needs.

Tata and McNamara (2016) conducted research on social factors that influence the use of ICT in the relationship between challenges faced by extension agents on testing the farm book. He found that women reported facing more challenges compared to male colleagues. He also said that women reported lower accuracy in reporting of technical challenges to the use of farm books and ICT applications than did male colleagues. He concluded that social and economic conditions do have an impact on the proficiency of extension agents.

#### 2.3 Factors that Shape Gender Relations among Extension Workers

Hamago (2019) conducted a study on the role and impact of female extension workers' participation in export crop production in Guinea. The study found that female extension workers in different commodity crops experience different struggles. But they all have to cope with the male-dominated culture installed in the agricultural organization. The study recommends that agriculture extension studies should be encouraged to strengthen female extension programs by improving the status of female extension workers at the institution level.

However, Chimoita *et al.* (2017) conducted another study on the influence of agriculture extension on the uptake of improved sorghum technology in Embu, Kenya. The study revealed that 65% of the respondents were male and had acquired education up to tertiary level. The study also found that 73% of the agents disseminated technology through farm visits, demonstrations, and agricultural shows. The study concludes that the extension agent's gender, work demonstration techniques, and farm visits. The agriculture show method complemented agent work disseminating the improved sorghum technology.

Also, Umar *et al.* (2017) and Tagutanazvo (2015a) researched the role and Competency Dimension and Organizational support in climate change advisory, by assessing the factors influencing the job performance among extension workers, and sought to establish the role and relevant factors in effective performance. He revealed that extension workers with higher core and adaptation-specific competencies were experienced. The younger generation is expected to be more effective at work and to facilitate change in adoption among colleagues.

Gombe *et al.* (2018) researched the relationship between extension worker availability and self-help groups (SHG) member empowerment-Does gender moderate the relationship? He discusses the moderating effect of gender in the relationship between extension workers and availability and SHG member economic, social, and psychological empowerment in Nigeria. On the basic assumption of an increase in the empowering level of self-help group members, if there is an interaction between gender in the relationship between holistic empowerment of self-help group members and the availability of extension workers, he found that gender is not a moderator in the relationship between extension and self-help members. He concluded that the gender of self-help members or extension workers does not increase the level of economic, social, and psychological empowerment.

# 2.4 Challenges that Emanating from Gender Relation among Extension Workers

Hamusu *et al.* (2015) researched the relevance of the Sasakawa African Fund for Extension Education (SAFE) program competency on agriculture extension service delivery in North-Western Nigeria. The study revealed that job competencies identified were highly relevant to extension workers. He concluded that SAFE programs have positively influenced job competencies, and a lot of benefits are derived. He

recommended that there is a need for more women to be incorporated into the agricultural extension service's inclusiveness of SAFE programs curriculum across the University of Nigeria.

Yerma and Sinha (2017) conducted research on integrating economic wellbeing with technological acceptance. The case study of mobile-based AES in a rural contest based on the technology acceptance module identified the importance of factors influencing adoption. Structural equation modelling equation was employed to empirically test the complex causal relationship between perceived, (PU), perceived ease of use, (PEOU), social influence (SI), attitude (AT), and perceived economic well-being (P, W, E, B), and behaviour interaction (BI). The results show that social influence effects attitude, P, P, W, E, D, and PU, but not BI, (PEWB) mobile-based AES.

Rashid *et al.* (2017) conducted research on women's participation in agricultural extension services in Bangladesh. He found that women's participation in the agriculture sector is pervasive and women's remarkable participation in crop processing. He also said that despite several strategic changes aimed at improving agriculture extension and mainstreaming gender in agriculture, the bulk of women were secluded from agricultural services. He also mentioned that the major challenges in linking women with agriculture education are lack of capacity, lack of capacity, structure and policy of extension services, patriarchal social norms, limited access of women to production inputs, and lower education among women. Individual collective agencies are sufficient in recruiting women extension workers, skill development of extension workers, provision of integrated advice, and planning of gender-sensitive programs. He recommended revising the criteria to increase women's access to production inputs by motivating campaigns for

women's participation in agricultural production and educating women to develop confidence.

Kafraj and Mohammadi (2014) researched on the challenges of women's career advancement in the Iranian Agriculture Extension Organization with the purpose of identifying the challenges of women's career advancement in the Iranian Agricultural Organization. He found that giving key positions to men, offering routine and simple tasks to women, limiting the willingness of male colleagues toward women's career advancement, administrators' weak belief in female experts' competencies, and the limitation of visiting villages were recognized as the first five preventive variables by respondents. Also, concluded based on factor analysis, attitudinal aspects, maledominated organizational structure, time limitation, and adaptive factors. Under a collection of preventative challenges such as managerial discrimination, negative attitudes and norms regarding women's role and abilities, severe conflict between work and family duties and personal willing. He recommended that female experts have low empowering plans be focused on these areas.

#### **CHAPTER THREE**

#### 3.0 RESEARCH METHODOLOGY

#### 3.1 Description of the Study Area

The study was conducted in Dowa District. Which is one of Malawi's districts in the central region. The District has a total population of 212 720 people, whereby 102 067 are men and 110 644 women. The district has 21 rainy days a month in the wet season (November to April) and as little or no rain in the dry season (August to October). The area of study was selected due to its potential as it is considered one of the agricultural production districts in Malawi. Dowa residents are Chewa tribe members and depend on agriculture for income. It is an agricultural district which focuses on tobacco, maize, and groundnut farming. The main food crops produced in the area are maize, sweat potato, and pulses. The district is located at a latitude of 13°39'5.29 "S and a longitude of 33°56'9.51" E. The district covers 3 041km². In addition, the district is in the humid subtopic climate zone and the mean temperature is about 26 degrees Celsius.



Figure 2: Map of Dowa District

#### 3.2 Research Design

A research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine the research purpose with economy in procedure (Kothari, 2004). A cross-section research design was used in this study. This design allows data to be collected in a time-frame and can be used for descriptive studies as well as determination of relationships between variables. A cross-section is well suited to describing variables and patterns of their distribution (Babbie, 1990). The nature of the study objectives necessitated the use of the design in order to describe the situation of men and women extension workers in time, which data was corrected once by the respondents. The design allows data to be collected at a single point in time and can be used for descriptive studies as well as for determination of relationships between variables (Babbie and Mouton, 2005).

#### 3.3 Study Population and Sampling Technique

#### 3.3.1 Target population

Population is the aggregate of people or things that a researcher have to mind from which one can obtain information and draw conclusion, (Fraenkel and Wallen, 2000). Men and women extension workers from Dowa district were the targeted population for this study since the study focused on gender relation and delivery of extension services among extension workers.

#### 3.3.2 Sampling frame

The sampling frame was drowned from 74 agriculture extension workers who were working in the Dowa district. Although 74 extension workers were in Dowa district, only 60 were purposively selected in this study. The remaining 14 workers could not be reached due to unavoidable circumstances.

### 3.4 Sampling procedure /Sample Size

Purposive sampling was used to select respondents. According to Dolores and Tungco (2007), purposive sampling is a type of probability sampling that is most effective when there is a need to study a cultural domain with a knowledgeable expert within. According to Eltikan *et al.* (2010), Purposive sampling is typically used in qualitative research. The selection was purposeful because the study wanted to identify and select rich cases related to the study. Only extension workers from Dowa district were involved and selected in this study. Below was the procedure.

First, the respondents were identified in the Dowa district, as already mentioned above. The selection of the extension workers was done in collaboration with the Dowa council leaders. Second, 60 extension workers were purposively selected based on the researchers' knowledge. The 60 extension workers were divided into 6 groups of ten, including both men and women extension workers. Purposively, the qualitative data was gathered first before administering the questionnaires in order to refine the questionnaire and incorporate it into the local context. Key informants were selected purposively in the district.

Lastly, a pretesting exercise was done in Dowa District offices before administering the questionnaires to the respondents. Referring to (Appendix 1), sample size from the sampling formula provided by Kothari (2004) and Badstue *et al.* (2018), a sample of 30 respondents is the minimum for studies in which statistical data analysis is to be done. Indicates that, out of 74 potential respondents, a sample size of 60 respondents can be drawn. Therefore, 60 respondents from 74 men and women extension workers who were working in the Dowa District were reasonable for this study.

#### 3.5 Data Collection

### 3.5.1 Data collection instruments

A questionnaire with open and close-ended questions was used to collect primary data. A checklist was also used to collect relevant data from focus group discussions and interviews with key informants.

### 3.5.2 Data collection procedure

### 3.5.2.1 Pretesting of the questionnaire

A primary survey was done before the actual study to test the questionnaire for accuracy, allowing the researcher to be familiar with the study as well as to have enough time to prepare for it.

### 3.5.2.2 Primary data collection

Primary data was collected through a questionnaire administered to the respondents by the researcher. A questionnaire was used to collect qualitative data, while a check list was used during Focus Group Discussions (FGDs) with men and women extension workers, and the discussions were held separately with each group. Six focus group discussions were conducted on the 60 extension workers group. Each FGD is comprised of 10 participants. Direct observation was made to verify some of the information during interviews and FGD and Key Informants were also interviewed for the study. These key informants include District Agriculture Development Officers for Dowa Agriculture office, one participant from the community development office in Dowa, one participant from the Ministry of gender children's Ministry of Education.

### 3.5.3 Focus Group Discussion (FGD)

The study conducted 6 focus group discussions, each comprised of 10 respondents, both males and females. Each FGD was composed of a mix of men and women extension workers.

### 3.5.4 Key informants interviews

The study also used key informant interviews to get in-depth experience and knowledge from Agricultural Extension workers, DADO, community development officers, and Gender Coordinators. The key informant is an individual who is accessible, willing to talk, and has great in-depth information about the issue in question, Chinsinga (2008). The key informants of this study were not only members of the clientele but are mostly informed outsiders. The key informants of this study were District agriculture development officers (DADO), community development officers, and the director of programs at the District. They were interviewed using the checklist to get their professional views. Four key informants were interviewed.

### 3.5.5 Questionnaire

Data was collected using a structured questionnaire about the perception of gender relations in agriculture extension delivery in Dowa. Closed-ended questions were used to help get the views of the respondents. Open-ended questions were used where the respondents were asked to provide alternative answers. And this helped the researcher to get the required data for the study from men and women agriculture extension workers working in Dowa District. The questionnaire was filled out with the help of the researcher. The extension workers were trained to be familiar with the question before filling the questionnaire.

### 3.6 Data Analysis

### 3.6.1 Data processing

Data from extension workers was summarised and coded. Computer analysis was done using the statistical package for social sciences programme (SPSS) computer version 16.0. Descriptive statistics tables, graphs and percentages were computed. The qualitative data from the focus groups and key informants were manually summarized and analysed using content analysis. Qualitative data was analysed using a content analysis technique (Holsti, 1968).

### 3.6.2 Descriptive analysis

Descriptive analysis was employed and aimed to provide insight into the characteristics of men and women extension workers by detecting and describing differences between male and female extension workers. Percentages, graphs, and tables were used to analyse and describe data.

### **CHAPTER FOUR**

### 4.0 RESULTS AND DISCUSSION

### 4.1 Socio-Economic Characteristics of Respondents

### 4.1.1 Age of respondents

Table 1 shows that 63.3 percent of respondents were 36 years and above. About 20% were between the ages of 31 and 35, 15% were between the ages of 26 and 30, 20% were between the ages of 31 and 35, and 1.7 percent were between the ages of 21 and 25. The majority of agriculture extension officers were over the age of 36, according to the findings. According to Shabaz *et al.* (2019), age is one of the significant characteristics that have a favourable or negative impact on an individual's attitude and behaviour toward innovation adoption.

The study findings are in line with the study by Babbie and Mount (2005), who found that people aged 40–49 years provide the best performance in the delivery of extension services. He concluded that the effect of age on extension workers has recently been

reflected on the quality of extension. However, this age group had an influence on extension delivery Simpson *et al.* (2012) due to physical fitness and the ability to take risks. The age group is above the productive age, and they cannot work for a long time. Compared to extension workers below 30 years of age, age affects both experience in decision making and individual productivity when delivering extension services.

**Table 1:** *Demographic characteristics of respondents (n=60)* 

Explanatory Variables		Percentage
	21-25	1.7
	26-30	15.0
Age	31-35	20.0
	36 above	63.3
C	Male	48.3
Sex	Female	51.7
	Single	16.7
N. 1. 1. C.	Married	75.0
Marital Status	Divorced	5.0
	Widowed	3.3
	Certificate	18.3
Education	Diploma	78.3
	Degree	3.3

### 4.1.2 Sex of respondents

Results in Table 1 show that the majority were females (51.7%) compared to males (48.3%) based on the sample drawn for this study. The percentage of female extension workers was higher than that of Semwenda (2016), who found that 41.7% of workers were female and 58.3% were male. This could be for some reasons. In line with the findings of the study, Dixie *et al.* (2016) found that some investors were making efforts to promote women's participation in managerial roles through training, promotions, and even lowering the required GPA to obtain employment. He found that the quality of advice given by male and female plant doctors was different.

The study's explanation suggests the sex of extension workers had an effect on extension in the delivery of extension services. This is because, in our society, women are solely responsible for household responsibilities, whether they work or not. Working women are finding it increasingly difficult to manage both spheres, namely the home and the workplace, according to Shabaz *et al.* (2019).

### 4.1.3 Marital status of respondents

The results show that 3.3% of the respondents were widowed, 5.0% were divorced, 16.7% were single and 75.0% were married (Table 1). This indicates that the majority of extension workers are married. Mphande (2016) mentions that marital status has positive implications for social organization and economic activities such as agriculture and resource management. Furthermore, Married couples are settled and tend to take care of the family, hence they are more likely to work in extension services. However, during the focus group discussion, a female extension worker talked about the effect of marital status in extension service delivery.

To her, she said, "From my experience, marital status has a role to play as far as agriculture extension is concerned. Single extension officers are free to work with married extension officers.

The study agrees with Asadi *et al.* (2008), saying that a comparison of extension workers by some personal traits indicated that there was a significant difference between single and married extension workers on their level of job satisfaction. The trend of the results also agrees with Oladele and Mabe (2010), who said that 85% were married, more extension officers are married, do not live in their job area, and the number and distance to farmers covered increase. Married women devote more time to their families than to their jobs. This affects the farmers because information delivered to farmers was not provided timely. Female extension workers also have difficulties working with male extension workers, as shared

"...One day, I was assigned to work with an extension worker from the opposite sex. He was married. We found it extremely hard to work with men because we are women. For me, I didn't see any problems, as my colleague did, but for his spouse, this was an issue. He did accept that we would only work. As a result, we

ended up there and did the assignment alone (Source focus group discussion "(Female extension worker, Nachisaka EPA).

The study findings revealed that the district has more married extension workers. The reason behind this is that it is associated with the roles that they play in their families. In association with the roles that married extension workers play in their families, the results imply that most extension workers are married and have stable families. This may contribute to positive outcomes in extension service delivery, which may also lead to high performance. This could probably be one of the reasons why married extension workers are so numerous. This has an influence on women extension workers, mainly those with spouses who have businesses or work far from the working area.

Married women extension workers will choose to leave their jobs and follow their spouses (taking care of their families). For men, this cannot be a challenge because they will be followed by their spouses. But for male extension workers, this has no influence on their services because they can choose where to stay. Wives can follow them and stay in their working area.

### 4.1.4 Academic qualification of respondents

On academic qualifications, the study results showed that 3.3% of the extension workers had degree qualifications, 18.3% had a certificate in agriculture, while 78.3% were holders of diplomas. The results show that the majority of extension workers have diplomas. Similarly, Isahaku (2014) found that extension workers in Ghana have attained different levels of education, and diploma holders were the highest. He also mentioned that diploma certificates were the highest among the respondents because they were in Ghana.

Overall, the findings of the study highlight that the District has well trained and qualified extension workers to deliver extension services as required. The diploma certificate has been identified and still remains the qualification for recruiting extension workers in Malawi as of date. This could be because the majority were recruited based on the diploma which they obtained from Natural Resources College (NRC). The college is under Lilongwe University of Agriculture as the government recruitment qualification for extension workers. For those with degrees, they upgraded while serving as Agricultural Extension Development Officers (AEDO) in the government.

Few have a certificate because they did not upgrade their qualifications because they were recruited with certificates before the introduction of diplomas. Well trained and qualified extension workers are expected to deliver good services to farmers. Qualified extension workers are preferred because they have appropriate knowledge and skills, especially when their education is in line with their job qualification. The study further revealed that although the district has more qualified extension workers, there is a need for additional resources. Often times, male extension workers choose not to stay or work in the villages. They, instead, look for a better life in town. They may also look for a good job that suits their qualifications. The tendency creates vacancies in rural areas. For women extension workers, they can work in one place for a long time provided they have no problem with the working conditions.

### 4.1.5 Number of farmers per section

Results in Table 2 show that 5% of extension workers were working with a total number of farmers between 500 and 1 000, 15% had between 1 001 and 1 500 farmers, 45% of the extension workers had between 1501 and 2 000 farmers, and 35% had above 2 000 farmers. The results imply that the majority of the extension workers are working with

over 1 500 farmers per section, a large number of farmers to be handled by one extension worker. Even though the finding is contrary to the report of Mbukwa (2019), who found that the current ratio was 1-3000 instead of the recommended ration of 1-500.

The finding is in line with Hadebe (2010), who found that it is impossible for an extension worker to serve more than 184 farmers with an average of 26 farming units. The study was conducted in Lejweleputswa district and focused on factors influencing the performance of extension delivery. The frequency of extension contact with farmers will not be easy. The study agrees with that by Elias *et al.* (2018), who reported that the frequency of extension contact is important for farmers' satisfaction, implying the need for frequent extension contact that enables farmers to develop trust.

The findings are explained by the fact that serving 1 501 to 2 000 farms with one extension worker is impractical, especially when complex programs are involved. Visiting all farmers on time during the planting season, for example, will be difficult for the extension. Even the extension service delivery would be of poor quality.

Table 2: Shows the extension officers and total number of farmers work per section (n=60)

Number of farmers per section	Percentage
500 - 1 000	5.0
$1\ 001 - 1\ 500$	15.0
1 501 - 2 000	45.0
Above 2 000	35.0

### 4.1.6 The effect of the working period on gender relations among extension workers

The results in Table 3 show that 15% of the extension workers have worked less than a year, 20% of them have worked between 1 to 5 years, 30% have worked between 5 to 10

years and 35% have worked for more than 10 years. The study indicates that the majority of the extension workers have worked more than 10 years. This could be because of some social reasons.

The study is in line with Chonde *et al.* (2017), who did a study on factors influencing the performance of agriculture extension officers. He mentioned extension workers with more experience, the more they are collected, but that does not prove high performance. The explanation for the findings is that the study revealed that the majority of extension workers had the necessary experience. The period of work has an influence on gender relations among extension workers. The reason being, they have been in extension delivery for more than ten years. Thus, if they were committed to their work, these extension workers could bring change and good results in extension delivery. This cannot affect extension delivery. Though it is not always easy for them to remain calm and accept changes in extension delivery.

Table 3: Showing of the period worked by the extension officers (n=60)

Period worked as extension worker	Percentage
Less than a year	15.0
1 – 5 years	20.0
6 – 10 years	30.0
More than 10 years	35.0

### 4.2 Access to Resources and the Influence of Gender Relationships among

#### **Extension Workers**

The study findings in Table 4 reveal that 75% of extension officers were able to access resources required for them to deliver their work effectively, while 25% were not able to access resources. During FGD with extension workers, it was reported that resources were

distributed to them. The resources were like working gear, transport, and allowances. Resources were not enough in favour of women extension workers.

Table 4: Shows percentage of extension workers that were able to access resources needed and distribution of gendered resources (n=60)

Access to resources	Women (%)	Men (%)	Total (%)
Yes	75.9	74.2	75.0
No	24.1	25.8	25.0

#### 4.3 Resources Needed and Gender Relation of Extension Workers

The study findings show that the agricultural department was entitled to the provision of resources like transport, housing, allowances, and working suits for extension. The resources were meant to help workers with the effective delivery of extension services. The study found that resources were budgeted for them, but some were not in favour of their gender. As such, resources were not fully accessed by the extension workers due to lack of funding. However, the study was aware that extension workers are employed by one employer. Men and women extension workers share the same job description and they get resources from the employer. But still, there is a difference in how the resources are managed to deliver extension services to farmers according to their gender.

Overall, the study findings show that the majority of extension workers are able to access resources required for them to deliver their work effectively. Extension workers were able to get enough resources for themselves without looking at their gender. This has no influence on extension workers in delivering extension services in accessing resources, and it cannot affect the quality of extension service delivery.

Table 5: Showing resources which extension officers lack when executing their duties (n=60)

Resources not accessed	Women (%)	Men (%)	Total (%)
Allowances	24.1	16.1	20.0
APE Equipment's	37.9	61.3	50.0
Motor Bikes for transport to the field	37.9	22.6	30.0

# 4.3.1 Housing and gender relations among extension workers (men and women) in extension delivery

Farmers live in rural areas, which are also the places where extension workers work too. Good housing is a challenge in rural areas. This is why the provision of housing for extension workers is paramount so that they can live close to their working areas. The department of Agriculture's priorities also include the building of houses in EPAs and the sections in which they work. According to the key informants, the study shows that few houses exist against the number of Extension workers working in the section and they are not in good condition. This means that the houses available could not accommodate all extension workers. One of the key informants pointed out that:

Housing is a very big issue. We have houses that are very old and need to be renovated. Houses in the section have no electricity. I prefer to work for the EPA rather than live in a house where I will not be comfortable. " (Key informant, AEDO Nachisaka)

The study established that the majority of the houses were in dire condition due to a lack of effort by the department to maintain them. In many cases, extension workers living in the houses were forced to do some maintenance. However, they hardly do that. The poor condition of the houses forces some extension workers to look for better housing elsewhere. Therefore, lack of housing and the poor condition of existing houses have forced the majority of the extension workers to live far from their working areas. This is

so because it is not easy to get good housing for rent in rural areas. As such, the extension workers prefer to live in the nearby township some kilometres away from their working area.

Through DADO of Dowa, the study also found that the majority of the extension workers occupying the houses are men. Married female extension workers left the houses to live with their husbands. Dado for Dowa pointed out that:

"Resources are provided equally regardless of gender because everyone is capable of delivering community development extension service. The DADO Dowa reacted that there is no difference as to how extension workers are supported by the office in terms of resources. The little that is available they share. Results from FDG reveal that agriculture extension values gender when it comes to program participation. Equal opportunities are given to us without looking at the gender of an extension worker. (Key informants, DADO at Dowa, May 6 2020).

# 4.3.2 Influence of motor bikes/transportation on gender relations among extension workers in extension delivery

Extension work demands traveling from one place to another. The long distance which they operate differs from one extension worker to another. Transportation restrictions block extension workers from travelling long distances to deliver extension services to farmers. The findings suggest that extension workers need the provision of transport to perform their duties effectively. Therefore, the provision of transport is a backbone for delivering extension services. Further, FGDs revealed that all of the Extension workers are provided with bicycles. One motorcycle was provided at each Extension Planning Area used by AEDCs. Although all extension workers received the bicycles, only 30%

had their bicycles functioning. Through FDGs, the study established that, once the bicycles were given, the Extension Workers became responsible for maintaining and repairing them. Some Extension workers find it difficult to service their bicycles due to financial problems. As such, once the bicycles developed faults, the extension workers preferred to stop using them.

The study through the FGDs revealed that bicycle cycling was easy for female extension workers when traveling on short distances to reach their targeted farmers. However, riding a bicycle was a challenge to extension workers working in mountainous areas, and during rainy seasons. Therefore, the majority of them hired motorbikes to use in their working sections. In summary, although the majority of the Extension workers were provided with bicycles for transportation, the use of bicycles limited their ability to effectively deliver extension services.

Moreover, women extension workers are disadvantaged since the sections are far from their houses, meaning that they cannot manage to travel long distances to work. The study also revealed that women extension workers prefer to take hired bicycles rather than cycle, which is different from male extension workers who are comfortable using bicycles. The study also revealed that the type of bicycles was not in favour of women extension workers. One of the key informants elaborated that:

"Women extension workers have equal access to resources with men extension workers. Mobility is our challenge because at EPA we have one motorbike which is used by AEDC and the rest find their own means of transport to go to work. Because of the long distances, they use kabaza, which is more expensive and they pay from their salary, because unless we are given an assignment from an NGO, we get allowances, but the government does not pay allowances. (Key informant, Nachisaka EPA).

# 4.3.3 Shortage of houses, transport problems, on gender relation among extension workers extension delivery

The study reveals that the majority of female extension workers live far away from their working areas due to housing shortages and the bad condition of their houses. This means that they travel long distances to their working areas. Bicycles, provided by the government, remain the main mode of transportation for the majority of the extension workers. As a result, some commute using bicycles and others hire motorcycles.

If they have no money to pay for transport, they abscond from their duties. Similarly, during rainy seasons, some fail to go for work as roads become unpassable for bicycles. As a result, female extension workers fail to meet their targeted number of meetings with their farmers' groups.

The study agrees with Ragasa (2014), who found that extension systems lack funding and lack mobility in terms of transportation. The finding suggests unreliable transportation affects the ability of extension workers to deliver extension services in their respective areas. Such circumstances reflect female extension workers as not hardworking when compared to their fellow male extension workers, due to the type of transport they use. This challenges various efforts by the department and other stakeholders in addressing gender relation issues in agriculture extension delivery.

### 4.3.4 The effect of a lack of protective clothing on gender among extension workers

The study established that extension workers lack protective working gear to use when doing their work. The working gear consists of a working suit and gam boots. Since the extension work is done in the field, working suits enable extension workers to cover their bodies when working, so that they do not get too much dirt, and the boots protect their

feet from sharp objects, snake bites, and insect bites. The study results through FGDs found that a lack of such resources creates uncertainty about safety for extension workers when working. The study also revealed that though they were given protective gear, the protective gear was not women-friendly, suitable for men only. The reason is that extension workers work in rural areas where most of the women do not wear trousers. It is considered immoral for women to put on trousers. As such, they cannot work comfortably.

On the other hand, the mode of transport and the nature of the work demand wearing trousers amongst female extension workers. The study findings show that work suits and uniforms are worn by all extension workers, regardless of their sex. Such that for female extension workers, wearing trousers is not allowed when working in the community. Therefore, they eliminate the immoral perception of trousers amongst communities towards female extension workers.

The lack of working suits forces female extension workers to buy their own clothes to use instead. Some of these clothes may not be relevant to their work. This demotivates female extension workers when working and this affects the delivery of their work. Lack of gumboots affects female extension workers negatively. FDG findings show that female extension workers avoid thorny and bushy fields when they do not own gumboots. Thus, they restricted their commitment to delivering their work, which may negatively affect the delivery of extension services.

### 4.3.5 Lack of allowances influences gender relations among extension workers

Extension workers hold meetings in their EPAs and many live far away from their centres. As such, they are entitled to receive traveling allowances to pay for motorcycle

transport or bicycles whenever they attend EPA meetings. The study through the FGDS found that the department fails to provide such support, and extension workers there by finding means to support themselves. Some of the extensions got such support only when NGOs organized similar meetings in EPAs. Therefore, some extension workers, when they have no money for transport, don't attend their EPA meetings. However, EPA meetings are paramount in developing and supporting further extension workers' skills.

Therefore, such frequent absences make it difficult for extension workers to be updated on new issues and better practices quickly, and it takes some time for them to become acquainted with new developments. The study showed that most of the female Extension workers ignored using the bicycles they were given for transport and preferred to use hired transport when traveling long distances, including when going to attend the EPA meeting. This means that female extension workers spend more money on paying for local transport when working. Paying transport forces the female extensions to cut much of their salary, and this can demotivate them. Not to enjoy their work. It also reduced their participation in their working activities.

The results agree with Apantaku *et al.* (2016) who found that inadequate extension equipment and facilities are a challenge to the effectiveness of agricultural extension delivery. The study findings are in line with the GAD theory, which posits that men's and women's status in society is deeply affected by their material condition and by their position in the national and global economy (Connelly *et al.*, 2000). The study suggested that access to gendered resources is one of the influences on gender relations among extension officers, since the provision of resources was not looking at the gender of the extension officers. Bicycles, housing, and protective gear were among the resources but failed to be used properly because of their gender relationship.

We receiving 2 500 kwacha as our monthly bicycle. That was almost eight to ten years ago. We don't know whether the DAES still remembers us in terms of allowances, and it's hard to maintain with our money. Our salary is very small. (AEDO, Nalunga section).

## 4.4 Factors that Shape Gender Relations among Extension Workers in the Delivery of Extension Services

The study findings through questionnaires show that lack of resources, culture, marital status, and sex of extension workers are some of the factors affecting gender relations amongst extension workers when working with colleagues of the opposite sex.

Table 6: Respondents distribution based on factors shaping gender relation among extension in the delivery of extension services (n=60)

<b>Factors affecting distribution access of resources</b>	Women	Male	Total
Distribution of resources	55.2	64.5	60.0
Culture	10.3	9.7	10.0
Marital Status	17.2	12.9	15.0
Sex	17.2	12.9	15.0

The study findings (Table 6) show that 60% of the extension workers were affected by the distribution of resources, 15% by marital status, 15% by sex, and 10% by culture. Access to resources is one of the major factors affecting female and male extension workers when working. Individual resource distribution also influences female extension workers to either fully participate in their work or not. Through FDGs, the study results show that in the presence of transportation and working suits, female extension workers work fully with their male colleagues in the field. In a situation where extension workers were working in pairs or teams, both provided similar efforts.

However, in the case of transport problems, sometimes female extension workers were more absent since they have problems cycling long distances, leaving much of their work to male colleagues. This negatively portrays female extension workers as lazy. Therefore, some male extension workers prefer to work with their male counterparts. One of the key informants explained that:

"The department of extension provides equal opportunities and resources to all extension workers regardless of their gender, because everyone is capable of delivering agricultural extension services". (Key informant, Community Development Officer at Dowa 22-03-2020).

However, the study findings agree with Sulaiman and Davis (2012), that agricultural extension always occurs within a specific cultural setting. And as such, it is subjected to the same power dynamics that shape gender relations and often limit women's access to resources and support. The findings suggest that female extension workers are likely to be affected by the shortage of resources too and this can affect their commitment and effectiveness in the delivery of extension services. The study recommended that gender should be looked at when it comes to the issue of resource allocation and distribution to extension workers.

### 4.4.1 How marital status shapes gender relations among extension workers

According to the findings of the study, women extension workers are not comfortable working with colleagues of the opposite gender because they are married. Both extension workers (male and women) indicate that they distance themselves from those who are not married to avoid unnecessary misunderstandings with their spouses.

Although the study findings reveal that extension workers find it cheaper to share resources like transport when they are going to one destination, married extension workers find it difficult to engage in such arrangements. One explanation for the findings

is that marital status has negatively shaped gender relations among extension workers to the point where a married extension worker cannot go to work if she or he lacks transportation. For these reasons, extension delivery is also affected.

Mkubwa (2019) say that while marital status is highly valued in society, younger, unmarried males and females have a lower social status alongside widows. Because extension workers are married and settled in Dowa, their daily work will not be affected. Married extension workers also feel at work and interact with their fellow married extension workers there by creating a very conducive working environment.

### 4.4.2 How do gender relations among extension workers change as a result of culture?

The outcomes of the study (Table 6) reveal that culture has an impact on how extension workers interact with their opposite-sex coworkers. The way people think is influenced by their culture. Our perspectives are moulded by the environment in which we grew up. This has an impact on one's behaviour as well. According to Lwevo *et al.* (2014), in many nations, culture and religion play a significant role in preventing women from obtaining training. He claims that most agricultural extension agents and trainees are men who don't speak to women. In Muslim civilizations, this is a common occurrence.

According to the study, some female and male extension workers were raised in homes where men were viewed as capable, hardworking, and thus expected to succeed, but women were treated as second-class citizens. The results are explained by the fact that some female extension workers exhibit low self-esteem when working alongside their male counterparts. Other male extension workers, on the other hand, believe that women are incapable. This led them to question the contributions of their female co-workers

while they were working in groups or pairs. However, this frequently leads to a lack of cooperation and participation on the part of some members.

## 4.5 How Gender Issues Shapes Gender Relation Among Extension on Extension Services Delivery

# 4.5.1 Awareness of gender issues and gender relations shapes extension workers in the delivery of extension services

The study findings in Table 7 show that the majority of the extension workers were aware of gender issues that shaped gender rations among extension workers at their work. The questionnaire results indicated that 75% of extension workers reported being aware of gender issues shaping their work, while 25% of Agricultural Extension workers were ignorant of gender issues shaping their work.

Table 7: Showing the number of extension workers aware of gender relations and how gender relation is shaping their work (n=60)

Gender relations	Female	Male	Total
Yes	75.9	74.2	75.0
No	24.1	25.8	25.0

Extension workers' knowledge of gender relations, how gender relations shape extension workers, and how they relate to their work has been gained through gender mainstreaming training provided by the department. Dowa DADO, who emphasized the importance of,

"The agricultural department has an initiative which it implements about gender issues, which also includes capacity building of extension workers on gender issues and gender mainstream. The department provides training to extension officers to build their capacity for gender mainstreaming in the delivery of their work. Also, the department has a section of progress which deals with gender

issues, from the workplace to farmer/community development, recognizing that gender relations among extension workers and beyond that, gender issues are mainstreamed in all community programs/activities. (Key informant, DADO at Dowa, May 6, 2020)

The study agrees with Mafre *et al.* (2013), who found that addressing gender issues in agriculture extension helps in both business and development. He also concludes that addressing gender inequality in extension advisory not only reduces poverty and food security but also improves efficiency in EAS practice. The study is in line with Odebede (2012), who says that gender equality should be given more attention as it is fundamental for enhancing women's participation in the rural development process. This can enable the participation of women in rural and agricultural development. A Community Development Officer pointed out that:

"General norms have an influence on challenges when working with AEDOs from the opposite sex. Their participation in extension services is also affected by gender, because you cannot do as an extension worker when you are young and single, and because of our culture, it is not easy to work with couples, especially farmers from the opposite sex." (Key informant, Emmaculate, DADO at Dowa, 6 May 2020).

### 4.5.2 Awareness of structures and how it shapes gender relations among extension workers

The study findings in Figure 3 show that 90% of the respondents were aware of existing structures promoting gender in the delivery of extension services, while 10% were not aware of such structures. However, these structures concern the farmer communities and

not the AEDOs themselves. This means the structures relating to the AEDOs are not clear if they exist.

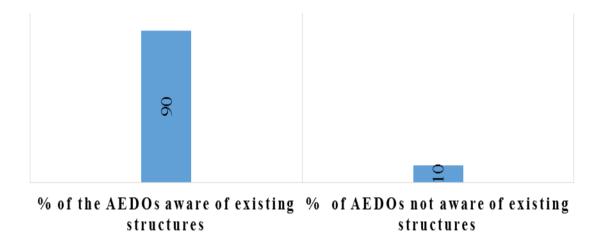


Figure 3: Shows the proportion of AEDOs aware of initiatives promoting gender at the workplace

## 4.5.3 Awareness of policies and how it shapes gender relations among extension workers

Figure 4 shows that 90% of the AEDOs are aware of policies that promote gender equality in their field of work, while 10% are not. This means that most extension workers will be able to apply existing policies designed to promote gender equality when working. This provides a backbone to support other structures to promote gender in the area. The study is in line with Ragasa *et al.* (2016), who mentioned that no unified and clear policy and mandate affect agriculture extension systems.

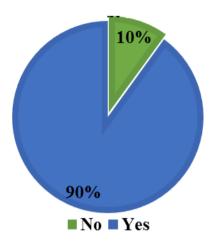


Figure 4: Shows the proportion of AEDOs aware of existing policies promoting gender when delivering extension services

# 4.5.4 Initiatives promoting gender and how gender relation shapes extension workers in delivering extension services

The respondents mentioned equal representation in committees, VAC groups, farming clubs, farming corporative, and farming demonstration groups as some of the structures used to promote gender. On initiatives promoting gender at the workplace, respondents eluded that 30% consider forming clubs, 25% consider agriculture demonstrations to be done by all men and women extension workers, 20% of village agriculture groups, 15% equal representation in committees, and 10% form cooperatives (Table 8). The majority mentioned forming clubs as one initiative to promote gender in the workplace. According to community development agriculture, which said that:

"Initiatives promoting gender at the workplace are there, recruitment of extension workers also looks at gender and apart from that we have branched our department which looks at gender issues, one of it is training for staff". (Key informant, DADO at Dowa, May 6, 2020)

This is in line with findings by Andre *et al.* (2013) who found that division of labour is one of the initiatives promoting gender at work. He also mentioned gender mainstreaming

in all extension and research activities. Explanation for the study's results since the majority indicated that they are aware of initiatives that promote gender equality in the workplace. This means that extension workers are aware of initiatives that promote gender equality in the work place. This has no effect on the delivery of extension services.

Table 8: Shows initiative promoting gender at the workplace (n=60)

Initiatives promoting gender at work place	Frequency	Percent
Agriculture Demonstrations done by all men and women	15	25.0
Equal representation in Committees	9	15.0
Forming Cooperatives	6	10.0
Forming Farm Clubs	18	30.0
VAC Groups	12	20.0

### 4.5.5 How training shapes gender relations among extension workers

The findings in Figure 5 show that 90% of the AEDOs have attended training concerning the integration of gender issues into the delivery of extension and 10% have never attended any training related to gender issues. This means that the majority of AEDOs know how to handle gender issues in those settings and, therefore, work effectively with their colleagues of the opposite sex. According to the DADO, who stated that:

"Under the household approach, one of the steps is to train extension workers who later identify facilitators per household from the rest of the groups, and in every household has proven to be the best approach in improving gender relations within the household as well as at the group level of our farmers." (DADO at Dowa, 6 May 2020)

While during an interview with a community development officer, he explained that:

"Community development officers do recognize gender relations among extension workers, and beyond that, they consider mainstreaming gender issues in all

community programs and activities." (Key informants, DADO at Dowa, May 6 2020).

Table 9: Proportion on whether challenges emanate from gender relations among extension workers (n=60)

Whether challenges emanated from gender	Female	Male (%)	Total
relations exist when working	(%)	Male (70)	(%)
Yes	82.8	87.1	85.0
No	17.2	12.9	15.0

# 4.6 Challenges Emanated from Gender Relations among Extension Workers in the Delivery of Extension Services

### 4.6.1 Challenges emanate from gender relation among extension workers

The study results in Table 9 show that challenges related to gender are amongst extension workers when doing their work. The study findings show that 85% of the extension workers reported that they were facing challenges related to gender when delivering extension services. 15% of the extension workers reported that there were no gender-related challenges when delivering extension services.

Table 10: Challenges Emanated from gender relation among extension workers when a working (n=60)

Challenges emanated	from	gender	relations	among	extension	Percentage
workers delivery						
Work experience						35.0
Sex						25.0
Lack of training						40.0

### 4.6.1.1 Challenges emanating from gender relations among extension

The study findings (Table 10) show that extension workers have challenges emanating from gender relations when delivering extension services. The study found that 35% of

the challenges emanated from gender relations because of work experience, 25% mentioned sex, and 40% mentioned lack of training as their challenges emanated from gender relations among extension workers.

### 4.6.1.2 Lack of training and gender relation among extension workers

Table 10 above shows that Extension workers lack training on new developments related to their work. They expressed that it takes time for their department to organize in-house training in responding to most of the new developments. Most of the time, such training is done by development partners/organizations. Through FDGs, the study shows that the extension workers work with other non-governmental organizations. NGOs are more advanced in knowledge and skills as compared to those under the government agriculture department, as they have frequent training to be up-to-date. The results are also in line with Little and Panelli (2003), who suggested that lack of training may in fact limit women's opportunities. Some men attending agricultural training still regard it as their duty and prerogative to learn on behalf of their wives and families. He also said that women who wish to challenge these gender role stereotypes do not always get the support they need from extension as they are largely overlooked in selection processes except for training considered fitting for women.

### 4.6.1.2 Experience and gender relations among extension worker

The study results in Table 10 show that working experience is one of the challenges emanating from gender relations among extension workers when delivering extension services. The study findings through FGDs show that work experience is a challenge emanating from gender relations among extension workers. Men and women with experience have a difference in how they deliver extension services in extension delivery.

The study agrees with Kafraj and Muhammed (2014), who found that women in extension have less experience than male extension workers in agriculture extension work. Plus limited interaction with male farmers and experts, thus having less knowledge than men. As a result of the study findings, male extension workers are more active than women. As a result, they gain more experience than female extension workers. Women extension workers have limited interaction with farmers. This affects a negative impact on women's professional and technical capabilities. As a result, this affects extension delivery.

### 4.6.1.3 Sex and gender relations among extension workers

The study through a questionnaire shows that sex contributes to the challenges emanating from gender relations among extension workers in the delivery of extension services. The perception of extension workers toward the opposite sex affects how they cooperate with their colleagues of the opposite sex. The study also reveals that there are differences between male and male extension workers in how they deliver extension services. Women extension workers don't have enough time to get to work like men extension workers due to the responsibilities that they have at home. The results agree with Suleiman and Davis (2012), who say that heavy workloads and childcare responsibilities make it problematic for many women to take time off to attend extension-related activities. Unlike women, who are usually bound to their households or neighbourhoods, In addition to these findings, Simiyu and Foeken (2014) found that women have a higher level of involvement as scheme managers and also have significant representation in strategic positions as decision-makers at different extension operations levels. The study also agrees with Tangutanazvo (2015b), who suggested that gender issues are still challenges affecting the delivery of extension services amongst workers, despite being the least mentioned.

### 4.6.2 Gender challenges when working with extension workers of the opposite sex

The study results in Table 11 show that 40% of the extension workers reported that education was a challenge when working with colleagues of the opposite sex. While 35% reported work experience as a challenge, about a quarter of extension workers identified sex as their most difficult challenge in providing extension services.

The majority mentioned that education is the major challenge that extension workers are facing. The results agree with Kafraj and Muhammad (2014), who found that women in agriculture have less experience than male extension workers in agriculture, plus limited interaction with male farmers and experts, thus having less knowledge than men. He also said that this affects a negative impact on women's professional and technical capabilities. Since the majority reported that they have more work experience, this means that more extension workers are more experienced. This can contribute positively to extension delivery.

Table 11: Challenges emanated from gender relation when extension workers working with colleagues of the opposite sex (n=60)

Challenges emanated from gender relation when extension workers	Percentage
working with colleagues of the opposite sex	
Work experience	35.0
Sex	25.0
Education	40.0

### 4.6.3 Challenges emanated from gender relation when working women extension

### workers

Table 12 shows the results emanating from gender relations when working with women extension workers. The challenges include the culture of the area, lack of resources, and the working environment. The results showed that 20% mentioned working conditions,

30% of extension workers mentioned a lack of resources, 20% mentioned culture, and 30% mentioned all of the above.

The study showed that the majority mentioned resources as their biggest challenge. In line with this study (Gwary *et al.*, 2013; Apantaku *et al.*, 2016) found that inadequate extension equipment/facilities are a challenge to the effectiveness of extension delivery. The study's explanation is that, since the study revealed that the majority of women extension workers had working conditions and resources, this constrains extension workers' efforts in extension delivery and may have an impact on the quality of extension service delivery.

Table 12: Challenges emanated from gender relation when women extension workers are working (n=60)

Challenges emanated by gender relation	Women (%)	Male (%)	Total (%)
on women extension workers			
Culture	17.2	22.6	20.0
Resources	41.4	19.4	30.0
Working conditions	20.7	19.4	20.0
All of the above	20.7	39.7	30.0

### 4.6.3.1 Poor working conditions and lack of resources

Women extension workers reported that lack of transport, lack of training, and allowances were the challenges that they face when doing their work. The study findings show that such conditions demotivate female extension workers. Therefore, they fail to participate fully. This supports findings made by Ragasa *et al.* (2016) who found that no support from management and lack of coordination are challenges that affect extension services. The study suggests the need to promote agriculture extension through the creation or enabling of an environment conducive for working, e.g., extension workers should be supported financially, capacity-building, provision of transport, and working materials.

### 4.6.3.2 Culture of the working area

Culture is normally shaped by the environment in which we have raised them. For example, in the Dowa district, which is covered by the Chewa tribe and known for its "glue wamkulu or nyau", as their culture. Women in the area are not allowed to go out when "gule wamkulu or nyau" is out. As their traditional way of life, this means that extension workers are not allowed to go to work during this period. When there are village ceremonies, those who have not been initiated are not allowed to walk freely (they are denied the right to go out to work), and when "gule wamkulu or nyau" is performing, people should not move as a sign of respect to their culture. Only men who are initiated can watch and walk in the area. Therefore, extension workers fail to do their duties whenever *Gule wamkulu* is out performing this tradition. A female AEDO elaborated that:

"We are in an area where glue wamkulu is part of their culture. We women are forced to stay at home when there is a gule wamkulu ceremony. Even men who are not initiated into the gule wamkulu culture are forced not to work." (Female AEDO, Chibvala EPA 28-03 2020).

### Another participant pointed out that:

Most married farmers feel free to work with fellow female extension workers. (Male extension worker, Mponela, EPA 28.03 2020).

# 4.6.4 Challenges emanating from gender relations when extension workers are working with the community

Results in Table 13 show the challenges emanating from extension workers when working with the community. The results showed that 45% mentioned attitude towards their work, 30% mentioned sex, and 25% mentioned culture as some of the challenges emanating from gender relations when extension workers are working in the community. The

attitude of extension workers makes it difficult for women to interact with male extension workers.

Table 13: Challenges emanated from gender relation when extension workers are working with the community (n=60)

Challenges emanated by gender relation when	Women	Male (%)	Total
extension workers are working with community	(%)		(%)
Attitude	41.4	48.4	45.0
Culture	34.5	16.1	25.0
Sex	24.1	35.5	30.0

The study agrees with findings by Kafraj and Muhammad (2014), who found that attitude is one of the factors that limits females in agriculture extension delivery. Females are limited to visiting villages as they are given fewer or key positions than males on the issue of sex. Also, female participation is limited due to family responsibilities such as child care, handling home, husband and quest, which prevent families from participating in full-time training. According to one participant, who explained that?

"We are in an area where glue wamkulu is part of their culture. We women are forced to stay at home when there is a gule wamkulu ceremony. Even men who are not initiated into the gule wamkulu culture are forced to not work. (Female AEDO, Chibvala EPA).

### However, another participant said:

Most of the women farmers feel free to work with fellow women extension workers. (Male AEDO, Mponela EPA).

# 4.7 Challenges Eminate From Gender Relation When Extension Workers are Working with Supervisors

Table 14 shows results for the challenges emanated from extension workers when working with supervisors. The result shows that 35% mentioned the working environment as a challenge. 30 percent of education about 15% extended working experience, 10% mentioned sex. On sex, he found that female participation in extension delivery is limited because they mix up family responsibilities with their work as extension workers. Extension workers have a lower level of education than male extension workers. They have a low level of education, which results in a low level of technical capabilities and work experience. He discovered that women have less working experience in agriculture, as well as limited interaction with male farmers and an expert, resulting in less knowledge than men. This has an impact on the technical capabilities of female professionals.

Table 14: Challenges emanated from gender relation extension workers when working with supervisors (n=60)

Challenges	Women	Men	Total
Education	27.6	32.3	30.0
Sex	3.4	16.1	10.0
Work environment	41.4	29.0	35.0
Work experience	13.8	16.1	15.0
Others	13/8	6.5	10.0

#### **CHAPTER FIVE**

### 5.0 CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

### 5.2.1 Accessibility to resources and influence of gender relations among extension workers

Based on the findings, the study revealed that Department Agricultural Extension services strive to distribute resources to extension workers for the effective delivery of extension services. The resources which the department provides include housing, motorbikes for supervisors, and bicycles for extension workers, protective working gear, and allowances to cater to their expenses.

The study also found that there were an inadequate number of houses built to cater to extension workers, and the houses were not in good condition. The study also noted that the majority of the houses are fully occupied by male extension workers. The majority of extension workers work in rural areas where there are no good houses. This has forced most of the extension workers to look for good houses in trading centers far away from their working areas, where there is no access to electricity and other public services. Lack of good housing within their working areas demotivates female extension workers and reduces their commitment at work.

The study finds that all extension workers were provided with bicycles as a means of transport. Their supervisors were given motorbikes for transportation. The study also noted that though extension workers were given bicycles as a mode of transport, bicycles were not user friendly to extension workers working in hilly areas, or during the rainy season. The study also noted that women extension workers prefer to cycle bicycles short

distances or hire motorbikes or bicycles for long distances. Therefore, female extension workers struggle in their work due to the form of transport extension workers use when doing their work.

The study noted that all extension workers are provided with working suits and gumboots. It takes time for the extension workers to be provided again as it depends on funding accessibility by the department. Once they are worn out, extension workers work without protective working gear. The extension workers working in this area work in rural areas where people consider wearing trousers immoral. However, the transportation mode used by extension workers demands that female extension workers wear trousers. Therefore, lack of protective wear directly affects women's presentation when delivering their services. The majority of the extension workers, in the absence of working suits, use wrappers when doing their work instead to avoid a negative perception of the communities.

The study also found that extension workers were provided with transport allowances only when funds were available. Most of the time, extension workers fail to attend meetings as a result of transport. Some female extension workers do not attend when they don't have money, giving a false excuse as a reason to justify themselves. This can affect how female extension workers deliver their work. Therefore, the lack of provision for transport allowance amongst extension workers forces female extension workers to use their own income, and that affects their income.

### 5.2.2 Factors shaping gender relations among extension workers

The distribution of resources, marital status, culture, and sex of extension workers have shaped gender relations among extension workers on extension service delivery. Distribution of resources is the major factor. Lack of allowances, poor housing, and the use of bicycles restrict the commitment and participation of other extension workers. Few extension workers were not comfortable working with colleagues of the opposite sex. Married extension workers were not comfortable sharing resources like transport, to avoid the public thinking they had a love relationship. Therefore, cultural attitudes amongst extension workers affect their relationships when working with married colleagues of the opposite sex, thereby limiting team work productivity.

### 5.2.3 Challenges emanated from gender relation among extension workers

The study concludes that a poor working environment, lack of resources, lack of training, and culture are the main challenges emanating from gender relations among extension workers when delivering extension services.

It is noted that although most of the extension workers have worked for more than 35 years, others are still considered to have not done much to build up enough experience to deliver their work. This means that the number of years the extension workers have does not directly determine their work experience. Therefore, this means that even though the majority of the extension workers have been in the field for so long, their work experience does not tally with their years of work.

The majority of the extension workers have diploma qualifications, followed by those with certificates. It is noted that others have a desire to further their studies but lack funding. This means that access to scholarship or funding opportunities can be a

motivation factor amongst extension workers. It is noted that the training organized by the department occurs when funding is available and not when demanded because of new development. This means that although a need arises which requires the extension workers to be trained, the training will be done not depending much on the need but the availability of resources.

Lack of resources creates a poor, unfriendly environment for female extension workers. Extension workers were entitled to be given resources like motorbikes for transportation and allowances, Lack of these essential resources limits their contributions and their commitment when delivering their duties. Some extension workers fail to work in pairs or teamwork due to long distances affecting their work. Due to lack of transportation, female extension workers leave the left field early to have enough time to travel home. This also limits their participation when working with co-workers, including those of the opposite gender. Because at other times, fieldwork is done in pairs or teams.

### 5.2.4 Knowledge of gender issues amongst extension workers

The study shows that gender issues are not the main challenge affecting the delivery of extension services, but the relationship of men and women extension workers in the delivery of extension services. How these extension workers relate to each other when they are lacking resources and other factors/conditions affecting gender structures and policies in addressing the constraints.

### 5.2.5 Relationship between theory and findings

The study findings show that the majority of the extension workers lack resources when executing their work. This relates to the GAD theory, which shows that men's and women's status in society is deeply affected by their material condition and by their

position in the national and global economy (Connelly *et al.*, 2000). The study also establishes that less attention is paid to gender by extension services programs. When designing and implementing their programs, less attention is given to considering the needs of female extension workers, which leads to poor participation and interaction in delivering extension services and also affects the quality of extension delivery.

This is contrary to Moser (1993), who acknowledges that a focus on gender equally pays special attention to gender relations among men and women when designing the measures to help men and women in the development process. Both the DADO and community development officers confirmed that special attention is not given to the gender needs of women, such that both male and female extension workers are treated equally despite their gender disparities.

### 5.3 Recommendations

## 5.3.1 Access to resources and the influence of gender relations among extension workers in delivering services

- i. The study recommends that the department of agriculture extension should consider building more good houses and maintaining the houses in all sections so that extension workers can live close to their working areas.
- ii. The department of agriculture extension should consider providing solar or generators for electricity to extension workers in areas where there is no electricity.
- iii. The Department of Agriculture Extension Services should also consider buying motorcycles instead of push bikes for all extension workers for easy transportation, so that they can be able to deliver extension services to all farmers at a good time.

- iv. Extension workers should also be adequately resourced, according to the Department of Agriculture. So that should last a long time while waiting for the next provision.
- v. The department of Agriculture extension should consider giving allowances to all extension workers who are working in remote areas.
- vi. The department of agriculture extension should consider sending more female extension workers to work in areas where they will be able to travel short distances because it will be easy for them to cycle.

### 5.3.2 Factors shaping gender relations among extension workers

Gender relations among extension workers are shaped by a variety of factors.

- Gender refresher courses should be held more frequently by the Department of Agriculture Extension to remind staff of best practices in gender mainstreaming in extension work.
- ii. The Department of Agriculture Extension should undertake training to help female extension workers develop positive thinking and self-esteem, as well as correct gender attitudes among all extension workers.
- iii. For ease of transportation, the Department of Agriculture Extension should supply motorcycles to extension personnel.
- iv. The Department of Agriculture Extension should explore building and maintaining additional good dwellings near workplaces.
- v. The department of Agriculture extension should be arranging more gender refresher workshops frequently to keep reminding them of best practices related to gender mainstreaming in extension work.

- vi. The department of Agriculture extension should implement training aimed at building positive thinking and high self-esteem among female extension workers, and wrong gender attitudes amongst all extension workers.
- vii. Motorbikes should be provided by the Department of Agriculture Extension to extension workers for ease of transportation.
- viii. The department of Agriculture extension should consider building more good houses and maintaining houses near working areas for more extension workers to access good accommodation.
  - ix. Motorbikes should be considered to be given to all extension workers to replace bicycles for transport efficiency.
  - x. The department of Agriculture extension should increase the number of work suits distributed to extension workers so that they should last a long time while waiting for the next provision.

#### REFERENCES

- Andre, C. T., Goldstein, M. and Rosas, N. (2013). Gender and Agriculture: Inefficiencies, Segregation, and Low Productivity. *Journal Article* 28(1): 79-103.
- Apantaku, S. O., Aromolaran, A. K., Shobowale, A. A. and Sijuwola, K. O. (2016). Farmers and extension personnel view of constraints to effective agricultural extension services delivery in Oyo State, Nigeria. *Journal of Agricultural Extension* 20(2): 202-214.
- Aregu, L., Puskur, R. and Sambrook, C. B. (2011). The role of gender in crop value chain in Ethiopia [https://cgspace.cgiar.org/html] site visited on 24/04/ 2020.
- Asadi, A., Fadakar, F., Hosseininia, G. M. and Nodifa, K. Z. (2008). Characters affecting agricultural extension workers job satisfaction. 45pp.
- Babbie, E. and Mouton, J. (2005). The practice of Social Research, Cape Town: Oxford University Press. pp179.
- Babbie, E. R. (1990). Survey Research Methods Wadsworth. Publishing Company,

  California. 395pp.
- Badstue, L., Petesch, P., Feldman, S., Prain, G., Elias, M. and Kantor, P. (2018).

  Qualitative, comparative, and collaborative research at large scale. *Journal of Gender, Agriculture and Food Security*, 3(1): 1-27.
- Behrman , J., Meinzen –Dick, R. and Quisumbing, A. (2012) The gender implications of large-scale land deals. *Journal for Peasant Studies* 39(1): 49-79.

- Bravo-Baumann, H. (2000). Capitalisation of experiences on the contribution of livestock projects to gender issues. Working Document. Bern, Swiss Agency for Development and Cooperation. 15pp.
- Chimoita, L, E., Onyango, M, C., Kimeju, W, J. and Gwenyi-Onyango. (2017). Influence of Agriculture extension to the take up of improved sorghum technology in Embo Kenya. *Universal Journal of Agricultural Research* 5(4): 219-225.
- Chinsinga, B. (2008). Ministries of Agriculture: Structures, Capacity and Coordination at District Level in Malawi Research Paper 013. [http://www.eldis.org/html] site visited on 112/10/2020.
- Chinsinga, B. (2012). "The Political Economy of Agricultural Policy Processes in Malawi: A Case Study of the Fertilizer Subsidy Programme." Working Paper 39, Future Agricultures Consortium, Brighton. [https://opendocs.ids.ac.uk/press.html] site visited on 10/09/2020.
- Chitsike, C., Kampanje-Phiri, J. and Sangole, N. (2017). A qualitative evaluation of gender aspects of agricultural intensification practices in central Malawi International Institute of Tropical Agriculture. 76pp.
- Chonde, C., Kakota, T. V., Mainje, M., Maonga, B. B. and Synnevag, B. (2017).

  Harmonization of extension massage on climate change smart Agriculture in Malawi. Do speak with one voice and to whom? *Journal for Agricultural and rural Development Article*, Vol. 9(11), pp. 255-261.
- Christoplos, I. (2010). Mobilizing the potential of rural and agricultural extension. Danish Institute for International Studies, Food and Agriculture Organization. Rome. 64pp.

- Colverso, K. and Akeredolu, M. (2017). Reducing the gender gap in agricultural extension and advisory services. pp. 53.
- Connelly, M. P., Li, T, M., MacDonald, M. and Parpart, J. L. (2000). Feminism and development. 159pp.
- Dixie, G., Giroud, A., Mirza, H., Okumura, A., Salguero Huaman, J. and Speller, W. (2016). The impact of larger-scale agricultural investments on local communities: Further voices from the field. Paper presented at the 2016 World Bank Conference on Land and Poverty: Washington, D.C., World Bank. pp. 41-67.
- Dolores, M. and Tongco, C. (2007). Purposive sampling as a tool of information.

  Ethonobotany research and application. 158pp.
- Elias, A., Yasunobu, K., Ishida, A. and Nohmi, M. (2018). Factors satisfaction with agriculture extension service and its affecting factors Case study of West Ethiopia. *Journal for Agricultural Science and Technology* 18(1): 39-53.
- Eltikan, I., Musa, S. A. and Alkasimu, R. A. (2010). Comparison of covariance and purposive sampling. *American Journal of Theioretic and Applied Stistics* 5(1): 1-4.
- FAO (2011). The Role of Women in Agriculture. Agricultural Development Economics

  Division-The Food and Agriculture Organization of the United Nations

  www.fao.org/economic/esa. ESA Working Paper No. 11-02. Female Farmers:

  Resources, Constraints, and Interventions. 48pp.

- Feder, G., Birner, R. and Anderson, J. (2011). The Private Sector's Role in Agricultural Extension Systems: Potential and Limitations. *Journal of Agribusiness in Developing and Emerging Economies* 1(1): 31–54.
- Fraenkel, J, R. and Wallen, N, E. (2000). How to design and evaluate research in Educcation. New York: Mac Graw. Hill higher Education. 102pp.
- GoM (Government of Malawi). (2010). The Agriculture Sector Wide Approach (ASWAp). Malawi's Prioritized and Harmonized Agricultural Development Agenda. Lilongwe: Ministry of Agriculture and Food Security. 158pp.
- Gombe, S. N., Saudi, B. T., Ismail, A. I. and Osma, Z. (2018). Relationship between extension worker availability and self-help groups (SHG) member empowerment-Does Gender moderate the relationships. *Journal for Education/Society and Behavioural Science* 26(2): 1-17.
- Gwary, M. M., Donye, A. O., Wakawa, R. C. and Shallangwa, M. D. (2013). Constraints to extension service delivery in the production, processing and marketing of gum Arabic in Magumeri Local Government Area of Boron State, Nigeria.

  Agricultural and Biology. *Journal of North America* 4(2): 126 131.
- Hamago, M. R. (2015). Role and impact of female extension workers in participating in export product in Ghana. 69pp.
- Hamago, M. N. (2019). Role on impact of female extension workers in participation in export crop in Guinea. 181pp.
- Hamusu, S., Umar, S., Olodosu, I. O. and Ayuma, G. (2015). Relevance of Sasakawa Africa Fund (SAFE) program competency on agriculture extension delivery in

- North Western Nigeria. *Asian Journal of Advanced Research and Report* 10(1): 48-59.
- Hoffmann, V. (2014). Governmental extension services, their generic problems and potential solutions. International conference proceeding: Innovations in extension and advisory services: 15-18. November. Nairobi, Kenya. 11pp.
- Hosti, O. R. (1968). Content analysis in Lindizey, G. and Aaronnson, E, (ED). The handbook of social psychology. *Reading, M, A; Addison-Wesley. Vol. 2*.
- Isahaku, A. (2014). Competencies of agriculture extension workers in extension services delivery in northern Ghana. *Journal for Perceptive from Developing Country Structures* 4(15): 1-9.
- Jafry, T., Moyo, B. and Mandaloma, L. (2014). Assessment of Extension and Advisory

  Methods and Approaches to Reach Rural Women: Examples from Malawi.

  [http://meas.illinois.edu/wpcontent/uploads/html] site visited on 07/08/2019.
- Jasmin A., Asmuni, A. and Ismail, A. (2013). Roles of extension agents towards agricultural practice in Malaysia. *International Journal on Advanced Science Engineering Information Technology* 3(1): 59-63.
- Jonsson, A. S. (2011). Virtue and vulnerability: Discourses on women, gender and climate change. *Global Environmental Change Journal* 21(2): 744-751.
- Kafraj, M. M. and Mohammadi, M. S. H. (2014). Challenges of women's career advancement in Iranian agricultural extension organization. *Journal of Agricultural Science and Technology* 16: 1267 1277.

- Kothari, C. R., (2004). *Research Methodology: Methods and Techniques* (2<sup>nd</sup> Ed.). Wishwa Prakashan, New Delhi. 418pp.
- Kshash, B. (2018). Training needs of agriculture extension agents in AL Diwaniya province *Journal for Agriculture Extension* 22(1): 125-135.
- Kundhlande, G., Franzel S., Simpson, B. and Gausi, E. (2014). Farmer-to-farmer Extension Approach in Malawi: A Survey of Organizations Using the Approach. ICRAF Working Paper No. 183. Nairobi: World Agroforestry Centre. 55pp.
- Little, J. and Panelli, R. (2003). Gender Research in Rural Geography. *Journal for Gender, Place and Culture* 10(3): 281–289.
- Lwevo, E., Onyago, C. A., Udoto, M. O. and Digo, C. A. (2014). Selected cultural factors influencing access of agriculture extension services among Pastoralists in Wajir country, Kenya. *Journal for International Academic Research for Multidisprinary* 2(5): 547-559.
- Madaha, R. (2018). Challenges and opportunities of Village Community Networks within the neoliberal context: a case study of women's networks in Africa, African Identities. pp92.
- Manfre, C., Rubin, D., Allen, A., Summerfield, G., Colverson, K. and Akeredolu, M. (2013). Reducing the Gender Gap in Agricultural Extension and Advisory Services: How to Find the Best Fit for Men and Women Farmers. MEAS Discussion Paper 2 April 2013. 43pp.

- Mangheni, M. N., Tufan, H. A., Nkengla, L., Aman, B. O. and Boonaboana, B. (2019).

  Gender Norms, Technology Access, and Women Farmers' Vulnerability to

  Climate Change in Sub-Saharan Africa. 728pp.
- Mbukwa, P, K. (2019) Report on analysis of capacity building and needs of agricultural broadcasters in Malawi. 18pp.
- MEAS. (2012). Strengthening Pluralistic Agricultural Extension in Malawi. East Lansing. 45pp.
- Mendola, M. and Simtowe, F. (2013). The Welfare Impact of Land Redistribution:

  Evidence from a Quasi-Experimental Initiative in Malawi. [28th IAAE

  Conference in Brazil and the Workshop on Land Tenure Reforms: Impacts on

  Poverty and Natural Resource Management/, Norway. [http://www.siecon.org/html] site visited on 21/02/2020.
- Moser, C. (1993). Gender planning and development: Theory, practice and training.

  London, UK: Rout ledge. 80pp.
- Mphande, F. A. (2016). *Infectious Diseases and Livelihoods: In Infectious Diseases and Rural Livelihood in Developing Countries*. Springer Science Business Media, Singapore.168pp.
- Mudege, N. N., Chevo, T., Nyekanyeka, T., Kapalasa, E. and Demo, P. (2015). "Gender Norms and Access to Extension Services and Training among Potato Farmers in Dedza and Ntcheu in Malawi. *Journal of Agricultural Education and Extension* 22(3): 291–305.

- Mudenge, N. N., Mdege, N., Abidin, P. E. and Bhatasara, S. (2017). The role of gender norms in access to agricultural training in Chikwawa and Phalombe, Malawi. *A Journal of Feminist Geography* 24(12): 1689–1710.
- Mujwahuzi, L. S. (2017). Gender Mainstreaming Strategies for Gender equality by local government authorities in Dodoma municipality and mpwapwa district, Tanzania. 139pp.
- Odebode, S. O. (2012). Gender issues in agricultural extension and rural development in Nigeria. 21pp.
- Okoedo, O. and Edobor, E. (2013). Identification of Communication Needs of Extension

  Agents in Ondo State Nigeria. *Journal of Agriculture and Veterinary Science*4(1): 1-6.
- Olodele, O. I. and Mabe, L. K. (2010). Social Determinant of Job Certification among extension workers in North West Province South Africa. 12pp.
- Patil, B. and Suresh Babus, V. (2018). Role of women in Agriculture. *International Journal of Applied Research* 4(12): 104-114.
- Peterman, A., Behrman, J. A. and Quisumbing, A. R. (2011). Gender in agriculture, reducing the Gender Gap in Agricultural Extension and Advisory services. 56pp.
- Poncet, J., Kuper, M. and Chiche, J. (2010). Wandering Off the Paths of Planned Innovation: The Role of Formal and Informal Intermediaries in a Large-scale Irrigation Scheme in Morocco. *Agricultural Systems* 103(4): 171–179.

- Quisumbing, A. R. and Pandolfelli, L. (2010). "Promising Approaches to Address the Needs of Poor Female Farmers: Resources, Constraints and Interventions. *World Development* 38(4): 581–592.
- Quisumbing, R., Meinzen-Dick, T. and Raney, L. (2014). A. Croppenstedt, J. A. Behrman, and A. Peterman. Gender in Agriculture Closing the Knowledge Gap. pp145–186.
- Ragasa, C. and Nui, C. (2017). The State of Agricultural Extension and Advisory Services

  Provision on Malawi: Insights from Household and Community Surveys.

  Malawi Strategy Support Program. Technical Report. IFPRI.

  [http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/131093] sited on 23/12/2021.
- Ragasa, C., Ulimwengu, J., Randriamamonjy, J. and Badibanga, T. (2016). Factors

  Affecting Performance of Agricultural Extension: Evidence from Democratic

  Republic of Congo. *Journal of Agricultural Education and Extension* 22(2):

  113-143.
- Rashid, U. M., Kamruzzaman, M. and Mustafa, E. (2017). Women Participation in Agriculture extension in Bangladesh: Current status, prospects and challenges.

  Bangladesh. *Journal of Extension and Education* 2(1&2): 93-107.
- Semwenda, A. J. (2016). Challanges facing Agriculture institution in current Institution

  Context; Tha case study of Hai District Kilimanjaro Region. Dissertation for

  Award of MSc Degree at Sokoine University of Agriculture. Morogoro.

  Tanzania. 82pp.

- Shabaz, M., Yasmeen, S. W. and Shree, B. (2019). A review on sentimental classification using Mixed -Gram model. 79pp.
- Sigman, S., Rhoe, V., Peters, J., Banda, T. and Malindi, G. (2014). Assessment of Agricultural Extension, Nutrition, Education, and Integrated Agriculture-nutrition Extension Services in the Feed the Future Focus Districts in Malawi. MEAS. 132pp.
- Simiyu, R., and Foeken, D. (2014). Gendered Divisions of Labour in Urban Crop

  Cultivation in a Kenyan Town: Implications for Livelihood Outcomes. *Journal for Gender, Place and Culture* 21(6): 768–784.
- Simpson, B., Heinrich, G. and Malindi, G. (2012). *Strengthening Pluralistic Agricultural Extension in Malawi*. Urbana, University of Illinois: Modernizing Extension and Advisory Services (MEAS). 44pp.
- Sulaiman, R. V. and Davis, K. (2012). The New Extensionists: Role, Strategies and Capacities to Strengthen Extension and Advisory Services. Global Forum for Rural Advisory Services (GFRAS). 24pp.
- Tagutanazvo, E. M. (2015a). Gender Norms, Technology Access, and Women Farmers'

  Vulnerability to Climate Change in Sub-Saharan Africa, *Journal of Agricultural Education and Extension* 22(3): 291–305.
- Tagutanazvo, E. M. (2015b). Gender and Agricultural Extension Services in Ntcheu

  District of Malawi, Research Report Submitted to the Dry lands Systems

  Program and IWMI-Pretoria. 44pp.
- Tata, J. S. and McNamara, P. E. (2016). Social Factors That Influence Use of ICT in Agricultural Extension in Southern Africa. *Agriculture* 6(2): 1-15.

- Umar, S., Man, N., Shuaibu, H. and Saleh, J. M. (2017). The Role of Competency

  Dimension and Organizational Support in Climate Change in Advisory

  Service. *International Journal of Social Sciences* 6(3): 1-8.
- WHO (2011). In: Organisation, W.H. (Ed.), Gender Mainstreaming for Health Managers: a practical approach. 146pp.
- World Bank, FAO and IFAD. (2009). Gender in Agriculture-Source Book, Agriculture and Rural Development Series, World Bank e-library, World Bank publications. 792pp.
- Yerma, P. and Sinha, N. (2017). Factors influencing adoption of mobile base AES in rural contest based on the technology acceptance module. 98 pp.

### **APPENDICES**

# Appendix 1: Questionnaire for extension workers and checklist for key informants SOKOINE UNIVERSITY OF AGRICULTURE COLLEGE OF AGRICULTURE

### DEPARTMENT OF AGRICULTURAL EXTENSION AND COMMUNITY DEVELOPMENT

### **QUESTIONNARE**

By

### **Emmaculate Ntchema, MSc student**

### **INTRODUCTION**

Emmaculate Ntchema is a postgraduate student at Sokoine University of Agriculture, currently, she is undertaking a study on the **Understanding Gender Relations on the Delivery of Extension Services: The case study of Extension workers in Dowa district. The** research attempts to respond to three specific objectives:

- 1 .To examine the access of resources and influence of gender relations among extension workers in the delivery of extension services.
  - 2. To examine factors that shape gender relations among extension workers
- 3 .To determine challenges emanating from gender relations in the delivery of extension services

You are therefore requested to offer your cooperation in responding to this questionnaire.

Your responses are strictly confidential. They will only be used for the stated purpose and not otherwise.

## Questionnaire for Agricultural Extension Development Officers collecting data on gender relation on delivery of extension services .AEDOs)

Questionnaire Number
Date of interview
Interviewer name phone number
Section A: GENERAL INFORMATION
2. Age of the respondent
3. Department
4. Position held
5.RDP
6. Sex (Please tick (√): 1. Male [ ] 2. Female [ ]
7. Marital status
1. Single
2. Divorced [ ]
3. Married
4. Separated
5. Widowed
5. What is your highest educational qualification? (Please tick ( $$ )
1. Diploma
2. Degree [ ]
3. Masters
4. Others, specify 5
8. Total number of households in your section
9. How long have you been working with department of agriculture extension?
1. Less than a year
2. 1-5 years [ ]

3. 6-10 years	
4. More than ten years	
10. Area of specialization (Please tick ( $$ )	
1. Crop Production	
2. Livestock Production [ ]	
3. Nutrition	
4. Others, please specify	
SECTION B: Objective 1. To examine the access of resources and gender relations	
among extension workers for the delivery of extension services	
11. Do you have access to all resources and gender relation among extension worker	rs
delivery of extension services?	
1. Yes [ ]	
2. No	
12. Also If no outlines some of the resources which are needed but you can't access?	
1.	
2.	
3.	
13. Also if yes please list some of the resources you can access?	
1.	
2.	
14. Mention some of the factors affecting access of resources required for the delivery of	of
extension services.	
1. Marital status	
2. Culture [ ]	
3. Availability of the resources	

4. Others
15. Do female AEDOs have equal access of resources in the delivery of agriculture
services?
1. Yes [ ]
2. No
16. Are you aware of the initiatives in the delivery of agricultural extension that promotes
equal access of resources for all?
1. Yes
2. No
17. Do you see any difference in extension service delivery between men and women
extension worker?
1. Yes [ ]
2. No
18. If yes what are your attitude towards gender relations at your work as extension
workers? {Explain}
19. Do you have any idea of improving gender relations in agriculture extension services?
1. Yes
2. No [ ]
20. If yes explain
21. What is your advice to the government to improve gender issues in agriculture
extension delivery?
1
2

## SECTION C: Objective no 2: To examine factors that shapes gender relation among extension workers

22. When did you join agriculture extension services?
1. six months ago
2. Year ago
3. Years ago
4. Other specify
23. How do you understand the term gender/gender relations in agriculture extension?
24. What influences you to join agriculture extension services?
1. Sex
2. Salary
3. Culture
4. Other specify
25. Do you know factors which shapes gender relation among extension workers?
1. Yes
2. No
26. If yes, what are this factors?
1. Age
2. Education
3. Work experience
4. Other specify
27. Have you ever attended any gender training since you joined agriculture extension
services?
1. Yes

2. No [

28. If yes have you ever integrated gender relations in your work place?
1. Yes [ ]
2. No
29. Are the implementations planned unknowingly consider gender relations
1. Yes [ ]
2. No
30. If you did unknowingly, have you ever thought of planning to integrated gender
relations in your training activities?
1. Yes [ ]
2. No
31. Is there any structure promoting gender at your working area?
1. Yes [ ]
2. No
32. If yes list initiatives that were put in place to promote gender at your work place? List
1.
2.
3.
33. Do you know any policy that promotes gender in agriculture extension services?
1. Yes
2. No [ ]
34. Have you ever attended any training on how you integrate gender /gender relation in
agriculture extension services?
1. Yes [ ]
2. No
35. If yes when the training conducted

1. One month ago

2. Six months
3. A year ago [ ]
4. Five years ago
36. Who organized the training?
37. How long was the training?
Section Objective no 3: To determine challenges emanated from gender relation
among extension workers in the delivery of extension services
38. Do you have challenges because of your gender, when working as AEDOs in the
delivery of agricultural extension service delivery system?
1. Yes [ ]
2. No
40. If yes what are this challenges? (Tick all that apply)
1. Culture
2. Resources [ ]
3. Working condition
4. Others (please specify)
41. What are challenges you are facing when working with colleagues of opposite se
because of your gender? (Please list them)
1. Work experience
2. Sex
3. Education
42. What are challenges you are facing when working with your community because of
your Gender (tick all that apply)
1. Culture
2 Sex [ ]

3. Altitude
4. Others (please specify)
43. Do you have any challenge when working with your supervisors because of your
gender?
1. Yes [ ]
2. No
44. If yes what are this challenges? (Tick all that apply)
1 .Sex
2 .Education [ ]
3. Work experience
4. Working environment
5. Others (please specify)
45. What are the working conditions that are affecting your gender [list?]
1
2
3
46. What are conditions that create the Challenges? (Tick all that apply)
1. Sex
2. Age [ ]
3. Work experience
4. Working environment
5. Others (please specify)
47. Do female AEDOs have equal challenges in the delivery of agriculture services?
1. Yes [ ]
2. No

48. Are you aware of the initiatives in the delivery of agricultural extension that promotes					
equal access of resources for all?					
1. Yes [ ]					
2. No					
49If yes how often					
1. Every six months [ ]					
2. Once a year					
3. Once in every five years					
4. Others (please specify)					
49. Do you see any Challenge in extension service delivery between men and women					
extension worker?					
1. Yes [ ]					
2. No					
50. If yes what are your attitude towards this challenges on gender relations at your work					
as extension workers? {Explain}					
51. Do you have any idea of solving this challenges which gender relations is facing in					
agriculture extension services?					
1. Yes					
2. No [ ]					
52. If yes explain					
53. What is your advice to the government to solve challenges in gender issues in					
agriculture extension delivery?					

2	 	 
<b>ર</b>		

54. Choose from the suggested list below your level of agreement or disagreement, how each of the following factors influence you as an Agricultural Extension Development Officer. (Please tick ( $\sqrt{}$ ) from 5 = strongly Agree to

1=strongly Dis Agree

	Factors	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
38.1	Nature of work					
38.2	Promotion					
38.3	Working condition					
38.4	Appreciation for work					
38.5	Salary					
38.7	Education					
38.8	Work experience					
38.9	Motivation competences					
38.10	Working environment					
38.11	Incentives					
38.12	Mentoring programs					
38.13	Job stress					
38.14	Linkage of actors in passing agriculture skills					
38.15	Awareness of their roles according to marital status					

### THANK YOU

### **Appendix 2: Checklist for key informant who will be selected purposively**

Dear sir/madam am here for the research purpose on the **Gender Relations and Delivery**Services of Extension Services, the case study of Extension workers in Dowa District,

- 1. How many extension workers working in Dowa district?
- 2. Does agriculture extension recognize gender relations among extension workers?
- 3. Do you see any difference between male and female AEDOs when delivering extension services?
- 4. In terms of resources do you provide working materials according to their gender?