

## **COLLEGE OF ARTS AND SOCIAL SCIENCES**

# MASTERS OF SOCIAL SCIENCES IN GENDER

# AND DEVELOPMENT

# WOMEN'S PARTICIPATION IN AGRICULTURAL EXTENSION SERVICES:

# A CASE STUDY OF KAMONYI DISTRICT, SOUTHERN PROVINCE OF RWANDA

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OCTOBER, 2020

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Date.....

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#### ACKNOWLEGDEMENT

I am thankful to the University of Rwanda (UR), with a special thanks to the Centre for Gender Studies (CGS) academic and administrative staff for the favorable environment, facilities, teaching efforts that shaped me with knowledge to accomplish the task.

I humbly acknowledge the great support by my Thesis Supervisor Dr. Mukabera Josephine who guided me with incredible advice to achieve the goal.

I recognize and appreciate the Field Work Leaders and respondents.

Thanks to my fellow students (Cohort 9) for the encouragement and support.

Thanks to my family and friends.

#### **ABBREVIATIONS**

- **AES**: Agriculture Extension Services
- **CEDAW:** Convention on the Elimination of all forms of Discrimination Against Women
- **FFS:** Farmer Field School
- GAD: Gender and Development
- **GDP**: Gross Domestic Product
- **GMO:** Gender Monitoring Office
- GoR: Government of Rwanda
- **ICF**: International Finance Corporation
- **MDGs:** Millennium Development Goals
- MINAGRI: Ministry of Agriculture and Animal Resources
- MINALOC: Ministry of Local Government
- **MOGEPROF:** Ministry of Gender and Family Promotion
- NAADS: National Agriculture Advisory Services
- **NGP:** National Gender Policy
- **OAF:** One Acre Fund
- RAB: Rwanda Agriculture and Animal Resources Development Board
- **UN:** United Nations
- **UNACTAD:** United Nations Conference on Trade and Development
- WAD: Women and Development
- WB: World Bank
- WID: Women in Development

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#### ABSTRACT

Agriculture remains to be the leading economic activity in Africa that totals for about 30% of sub-Saharan Africa's Gross Domestic Product (GDP) and Agriculture extension is a vehicle for modernizing agriculture in many Sub-Saharan African countries. In contrast with other regions, SSA's production levels for several food products are tremendously low and food production has not retained tread with the fast increasing population due to some of the challenges that face governments in the region of improving smallholder farmers access to agricultural services in SSA, the marginalization of women and the limited resource farmers (Mutimba, 2014). Women's participation in agricultural extension services is important to sustain agricultural production and development. With the aim of discovering the forecasts and challenges of women in agricultural extension services, the current research accessed secondary data sources from; articles published development reports and survey, agricultural statistics and primary data. The findings revealed that the level of women participation in AES is determined by key social-economic factors including literacy, leadership skills and having experience in farming. Main challenges encountered by women as was revealed from the findings, according to table number 6, the 70 percent of the respondents says that; lack of self - confidence, lack of incentives, family responsibilities, cultural norms, unsupportive and abusive husbands, lack of women rights and decision making to agriculture production, time constraints, lack of enough trainings, lack of access to information, illiterate and lack of confidence were key among other challenges. Therefore, this research recommends that the government of Rwanda entails to put much effort to transform the present situation of AES system through developing gender mainstreaming programs budgeting for women incentives, involving women in AE planning process, to empower women through reinforcement of gender and agriculture policies to increase women participation in AES for household and community advancement improved

Key words: Women participation, Agriculture Extension Services.

#### **CHAPTER ONE: GENERAL INTRODUCTION**

Agriculture in Rwanda generates over 30% of GDP and employs over 80% especially women, with 70% of export revenues and 90% of national food prerequisites. However, Rwanda agriculture remains at a substance level due to householders owning small plots of farms to sustain commercial production (MINAGRI, 2010).

Agricultural Extension Services (AES) refer to a service system that provide support, data, teachings and capacity building, modern technologies and inputs to agriculturalists to increase their agricultural production, social and economic development (McCormack, 2018).

National agricultural Extension systems globally have endured key modifications throughout the past two or more decades due to numerous aspects such as; the attainment of the Green revolution in increasing the worlds food supply, the commercial farm sector growth particularly in developed countries and trade liberalization that is contributing to rapidly developing global food system. (Swanson, 2008).

African farmers in previous era faced challenges for increasing their production however new initiatives derived to close the gap from traditional farming system to technological farming system through agriculture and extension services among others. The extension services came as a top down approach where field agronomists transfers technical skills and knowledge to trained farmer facilitators for technology knowledge transfer and adoption through experimental and participatory learning to the local community (Braun, 2006).

In 2014, Rwanda introduced a home grown solution and as a new national decentralized farmer to farmer's extension services model implemented by Rwanda Agriculture and Animal Resources Development Board (RAB) under the liability of the Ministry of Agriculture and Animal Resources (MINAGRI) and the Ministry of Local Government (MINALOC). The model is composed of two approaches; Farmer Promoters (FP) and Farmer Facilitators (FFs) who work as volunteers. It advanced the production sector through proximity access to extension support for rural farmers and embraced the extension market oriented and private sector oriented industry. The model also helps to ensure that farmers improve the efficiency in the management and delivery of extension services to maintain national food security, through improved productivity (MINAGRI, 2016). According to (NISR, 2019), shows that 8.5 percent of female headed agricultural households involved in Twigire Muhinzi model which is also known as agricultural extension services is twice lower compared to male headed agricultural households which is 14.7 percent.

#### **1.1. PROBLEM STATEMENT**

Women farmers in Rwanda are less active in agriculture development activities due to lack of decision making capacity, trainings, agriculture resources, financial support, family responsibilities, poverty, culture norms which results to low agriculture production (MINAGRI, 2018). The Government of Rwanda has expressed its continual commitment to promote gender equality in various development sectors including agriculture. However, despite the gender mainstreaming practices, the gender equality is still a challenge.

There are gender equity and equality related factors that contribute to reduced agriculture performance where most women who takes up agriculture activities out of 86% are poor with the lowest levels of education and the highest level of 23.3% literacy. (MINAGRI, 2010).

According to (MINAGRI, 2016) states that, Farmer facilitators (FFs) totals 2,300 and Farmer Promoter (FP) are 14,200. Gender participation stands as 72% of male as FFs and 28% of female as FFs, and 80% of male as FPs and 20% female as FPs.

GMO (2017) survey indicates how women have been unlucky than men where the total population involved in agriculture in Rwanda was 79.1% men and 54.4% of women and the access to Agriculture inputs such as seeds and fertilizers which are one of the factors that contributes to the increases of agriculture production in Rwanda. However, 70% of men have access to fertilizers and only 8% of women can access fertilizer.

Also selling of the agriculture produce male are responsible and also seed multiplication is 23% of men that are involved and 3% of women. In Rwanda, the agriculture work force is constituted by 66 percent of women and they occupy paid jobs at 19.7 percent while men occupy 25 percent, yet there are more women 42.1 percent and 40 percent men in paid non-farm employment (MINAGRI, 2018). According to the database from Kamonyi district showing the number of men and women involved in agricultural extension services, 30% are women and 70% are men involved in agriculture extension services. This motivated this study to find out the level of women participation in agriculture extension services in Kamonyi District.

#### **1.2. RESEARCH GENERAL OBJECTIVES**

#### 1.2.1. General objective

The purpose of the study is attempts to ascertain the gender inequality in agriculture extension services by reinforcing new extension policy which will empower women to fully participate for improved agriculture production and food security.

#### 1.2.2. Specific objectives

To assess the level of women's participation in agricultural extension services in Kamonyi District of Rwanda.

To determine the constraints faced by women participating in agricultural extension services in Kamonyi District of Rwanda.

To suggest potential recommendations that may increase women's participation in agricultural extension services in Kamonyi District of Rwanda.

#### 1. 3. RESEARCH QUESTIONS

- How do women participate in agricultural extension services of Kamonyi District in Rwanda?
- What are the constraints faced by women participating in agricultural extension services in Kamonyi District of Rwanda?
- What should be the recommendations that may increase women's participation in agricultural extension services in Kamonyi District of Rwanda?

#### **1.4. NEED AND JUSTIFICATION OF THE STUDY**

Rwanda is in a process of transforming agriculture from subsistence farming to modern farming through agriculture extension services as one of the strategy among others to ensure sustainable food production (MINAGRI, 2018). It was in this line that the government introduced the agriculture extension service system to ensure all farmers acquire knowledge and skills on modern agriculture techniques through various communication channels. Rwandan rural women issues in relation to technology, social and economic progress have been fair of recent.

#### **1.5. SIGNIFICANT OF THE STUDY**

The study is significant due to the fact that it will help realize challenges women face in contribution to agriculture extension services in Rwanda and the information that will be attained will;

- Help the researcher to accomplish the requirements for the Award of a Master's Degree in Social Sciences and Gender Development and deepen the researcher's skills, knowledge and capacity development in gender.
- Support the public mostly the Ministry of Agriculture and Animal Resources (MINAGRI) to understand the benefits of women contribution in agriculture extension and advisory services in Rwanda.
- Help students from various academic institutions who may need to carry out further research in the related field to be able to refer to this study.
- Reveal and increase the understanding to the Ministry of Agriculture and Animal Resources (MINAGRI) and the partners Institutions some of the challenges women face in agriculture extension and advisory services that affect the national agriculture productivity.
- Intend to give recommendations that will drive policy maker's intervention in looking for strategies to overcome the challenges faced by women in agriculture extension services for improved agriculture productivity in Rwanda.

#### **1.6. SCOPE OF THE STUDY**

The study was conducted at Kamonyi District. Out of 12 Sectors in the District, only 5 Sectors were selected namely; Gacurabwenge, Rugarika, Karama, Runda and Musambira due to extension services activities being carried out within the area, the gaps and challenges women face in extension services, easy accessibility and to ensure researcher's limited time would be well utilized. The researcher made sure that the selected areas possess certain characteristics.

#### **1.7. ORGANIZATION OF THE STUDY**

• The first chapter is an introduction to the research that describes the background and context in relation to women's contribution to agriculture extension services, the rationale, the objective of the assessment,

- The second chapter is the literature review that shows previous research carried out by different authors that are related to research topic through secondary data.
- The third chapter illustrates the methodological approaches. It includes the study design, target respondents, data collection methods and instruments, sampling technique and sample size, data analysis procedures and ethical standards and the study limitation.
- The fourth chapter puts more emphasis on findings, mainly the challenges identified towards women's contribution in agriculture extension services and the proposed solutions.
- The fifth chapter is the conclusions and recommendations of the study.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.0. Introduction

In the preceding chapter 1, provides literature on women's contribution in changing farmer's lives and the entire agriculture development at the international, regional, national levels to be agreed on and be applied in the sector level. This chapter will go through the literature allied with women contribution not only in agriculture sector but also in various development activities. Hence, different authors opinions will be revised and have diverse considerations on women contribution, development, empowerment.

#### 2.1. Definition of key concepts

Participation: (Simango, 2015) define participation as a "communal action where individuals share benefits, concern, work collectively in routine to successes that will enhance the poor's self-assurance to solve greatly more difficulties. Development scholars nonetheless, approve that participation is a "progression where individuals, mainly the underprivileged, inspire resolutions that impact them.

Women's Participation: Participation has to be intentional not enforced on people built on determination to participate. Participation can be well implicit in four ways; participation in sharing the benefits of development, execution of development projects and programs, in decision making, monitoring and evaluation an also the straight involvement of people (Sharma, 1982).

Agricultural Extension Services (AES) refer to a service system that provide support, data, teachings and capacity building, modern technologies and inputs to agriculturalists to increase their agricultural production, social and economic development (McCormack, 2018).

#### 2.2. Theoretical Framework

This is the structure of ideas that assists to clarify, change, view and know the world. The Framework directs people's thoughts, engagements and exploration in a way of scrutinizing societal concerns and propose endorsements for transformation (Connelly, 2000).

#### 2.2.1. Women in Development (WID)

In most developing countries, women still face challenges of less access over a range of useful means and opportunities such as, land, education, extension services, information and financial resources that hinders women's development. For few women that are able to run an enterprise, tend to be underexploited through less access to credit, machineries which cause women to fully participate in the development and contribute to a greater living standards of their families (World Bank, 2001).

Economists had several debates on the economic status and social wellbeing of different sets of people relating their earnings and returns financially, materials, and practically their discoveries showed that the minorities and women earn less than white men (Feiner, 1994). The main problem women face is the gender-based discrepancies in income that validates the involvement in the practice of setting the reasonable remuneration. Government of Uganda introduced favorable ways that gives women opportunities at all levels including education.

Many organizations in Uganda in 1990, thrived to work with women by dedicating much consideration to poverty and legal rights (Bantebya, 2003) and HIV & AIDS was a terrible catastrophe that affected women in a precise manner in Uganda despite the government rapid engagements. Most rural women stayed in small scale farming while women with upper status were involved in business matters. Advocacy was conferred through press defending women as complete participants of the world community. There is an extensive change for women participation in countries and social, political, economic factors are much dominant in determining their participation such as women participation in labour force inclined to be high in high income generation nations and low in low income generation nations. There is considerable improvement in Philippines but stayed stable in Malaysia, Cambodia, Sri-Lanka between 1090 and 2013 (Sian, 2018).

Community grounded methods where people participate in various activities such as decision making and services delivery have been effective however inequality, poverty, lack of awareness about people's rights, unequal power to the community level hinders people's capability to contribute or to ensure their voices are publically heard. When collective action is openly fixed and constructed on present values of participation, it is more workable (Mcloughlin, 2014).

#### 2.2.2. Women and Development (WAD)

The WAD perspective focuses on the relationship between women and development processes rather than purely on strategies for the integration of women into development. WAD perspective also assumes that women position will improve if and when international structures become more equitable. The WAD perspectives also recognizes that Third World men who do not have elite status also have been adversely affected by the structure of the inequalities within the international system, however it gives little analytical attention to the social relations of gender within classes (Rathgeber, 1990). The distinctiveness of women's aims, duties, understanding and determination was thought of by WAD Modal where the paradigm acknowledges women's distinct characters and individualism they have continually played in development progression (Connelly, 2000).

#### 2.2.3. Gender and Development (GAD)

GAD was an approach that emerged from grass-root organizations and feminists from developing countries and recognized the effect of patriarchal power in their societies at national, community and household level also to increase women's control over their own conditions of work and transform the reproductive choices increase public responsibility for childcare. (Danielsson, 2008). GAD projects would not only examine the sexual division of labour but also the sexual division of responsibility and recognize that the burden carried by women is one not only of physical labour but also of psychological stress. (Rathgeber, 1990).

#### 2.2.4. Women's Empowerment and Economic Development

Women Empowerment refers to the procedure of individual and communal transformation taking place in excess of intertwined and equally strengthening emotional, politically aware, societal and economic fields where women independently and cooperatively increase influence, significance decisions and mechanism over their lives (Hunt, 2016).

Universally, the rising importance of gender equality has been acknowledged and believed where the normative agenda for human improvement is revealed in the comprehensive revelation adopted in the Millennium Development Goals (MDGs) where the global established set of time assured beset objectives for certifying gender and progressing opportunities in various sectors of the universal economy and also the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) adopted in 1979 by the UN General Assembly which shapes, women freedom from discrimination and egalitarianism under the law (Ejumudo, 2013).

The rural development in Africa will never be sustained without women participation and empowerment. Women carry many agriculture responsibilities to sustain their households and food security; however, women are less recognized and are not given full access to various opportunities for economic development. Therefore, women's roles have to be recognized and be able to access land, credit facilities, extension services, involvement in cooperatives and other rural benefits. Women need to be empowered by governments and international communities to achieve their goals for economic growth, agriculture development and food security (FAO, 2011). The requirements of achieving sustainable development and attaining gender equality and complete women's involvement stood noticeably recognized as a result of the United Nations conference on sustainable development that was embraced in 2012 (United Nations, 2014). Men and women are not treated the same way in developing countries which cause women to most of the time remaining behind in various fields of development such as women failing to take on political tasks, education, employments, and businesses among others.

Participation and Development has become a national objective for developing countries to eradication issues such as; unemployment, poverty and inequality and until citizens begin to get involved in various aspects of development process socially, politically and economically, the development goals will not be achieved. In order to understand people's participation, there is a need to look for possible techniques and institutions to confirm the fairness of opportunity allocation. The utmost problem for the third world countries is the attainment of political, social and economic development (Sharma, 1982).

In labour market opportunities women earn less than men for a similar work and are commonly in poverty than men. It is argued that empowerment can hasten development which can play a great role in reducing inequality among men and women by improving the ability of women to access development opportunities such as; education, health, political participation, legal right among others (Duflo, 2011).

Women have been underrated in agriculture development and argued that women are development beneficiaries other than key contributors (Quisumbing, 2003). Women were most of the time focused on by several Non-Governmental Organization (NGO) programs with the intension of not only rising agricultural productivity but also stimulating women's empowerment to have their personal earnings. Women's empowerment in informal sector has taken place where there is no security for labors from job loss, remunerations beneath poverty level without paybacks (Nancy, 2002). Study shows that, women are gradually focused on by governments and supporters as a means towards sustainable development in food security, climate change with the belief that women are contiguous to nature.

However, though it is a solution to environment challenges and to the community it causes chaos of establishing gender differences and stereotypes in society (United Nations, 2014). The study pointed out that the inadequate knowledge on gender mainstreaming, unequal opportunities for men and women to be involved in farming practices and assessment and the lack of women contribution in extension services are some of the challenges that women are not fully participation in most development practices in Rwanda (EAC SECRETARIAT, 2009). Women access to political power has also improved enormously and has been a universal collective revolution in current times, however women are unequal to men in their inspiration over and implementation of political power and the focus on women's empowerment is inevitably certain with the situation of disempowerment and states to the process by which those who have been denied the capacity to make choices attain such an ability (Jalalzai, 2016).

Rwanda has been a male dominated society that led to gender differences; however, the due to a solid political will, the government of Rwanda has established its obligation to equity and gender equality in all capacities through the incorporated policies for a sustainable development. In the post genocide era, Rwanda has encountered with tragedy of family relations among others that caused women to become headed households. MIGEPROF was put in place to stimulate gender equality and women empowerment. Women are empowered through various opportunities such as guarantee funds to enable them access loans, to be involved in different governmental programs, making decisions, access to education, credit funds to enable women to do business for income generation among others (USAID, 2011).

There is vast progression in empowering women and boosting gender equality in Rwanda where women are well represented in various domains such as; in lawmaker and in decision making positions like in parliament, judiciary, cabinet and in health sector, however, patriarchal attitudes and gender stereotypes are quiet extensive where women remain in poverty circle due to unpaid and housework (Verdiana, 2016).

Empowering women farmers with improved farming techniques assist them to increase production. Women access to other income generating activities will also support household nutritional and health status. As women are empowered, it is more likely that the new generation will follow mothers' footsteps (USAID, 2011). In 2010 the National Gender Policy (NGP) was revised aiming to permit the Rwandan people from gender judgement so that women and men together can fully and equally enjoy and participate in development process (Verdiana, 2016).

#### 2.3. Theories of Agriculture Extension Services (AES)

Perfect ground for women's rights to productive resources were clearly set by the international legal and policy mechanisms in the International covenant on economic, Social and Cultural Rights, article 3 appeal on States parties to "embark on to guarantee the equivalent rights of men and women to the gratification of all economic, social and cultural rights established forward in the current Convention" and outlaw's discrimination constructed on gender (United Nations, 2013). Research has revealed that women produce over half of the global food supply and constitute 66% of the labor force, yet they only earn 10% of the world's earnings and own 1 % of the property and the lower productive outputs for female farmers can be recognized to gender inequalities in their ability to access agriculture resources and opportunities (Deanna, 2012).

Extension services tend to be male dominated and not designed to respond to the practical needs of women due to different difficulties in their participation in Agriculture Extension Service (AES) activities where power dynamics at the household and community level tend to limit women access to various agricultural resources and opportunities (UNCTAD, 2015).

#### 2.3.1. Overview of Agriculture Extension and Advisory Systems

National agricultural extension and advisory systems worldwide have undergone major changes during the past two or more decades. These changes are due to several factors; including the success of the Green Revolution in increasing the worlds food supply; the growth of the commercial firm sector, particularly in developed countries; and trade liberalization, which is contributing to a rapidly developing global food system (Slavcherska, 2014).

The intension of the extension is to spread advice to farmers to fill the knowledge gap to yield gaps. Quality inputs and services are essential tools for needed productivity. Information is needed by farmers on prices, markets; produce quality determinants, postharvest management and handling however it is difficult to deliver extension services to farmers and the information needed differ substantially. Agents are often few and they may face challenges of motivation, competence, performance and accountability (Marco, 2012). Extension and advisory services (EAS) can be a powerful tool to help smallholders break the cycle of low productivity, vulnerability and poverty and it is comprised of upgraded farm technologies, to advance farm techniques and methods to efficiently increase production and improve the rural lifestyle (Okereke-Ejiogu, 2018).

By providing farmers with knowledge and tools about modern agricultural practices, linking them to new technology, and providing them greater access to finance and market solutions, Agriculture Extension Service (AES) can be a critical force for change. However, agricultural extension strategies in developing countries have been built on traditional, top-down approaches that rely on "transfer of technology" models, inflexible packages of recommended inputs and practices and learning methods that lack an understanding of how farmers learn and innovate. While these approaches may provide important technical support to some smallholders, they often lack a context-specific focus to solving problems that can only be addressed through empowerment, user participation, communication and demand-drive (Kristin, 2018).

There are almost 800,000 extension workers globally where 80% of the world's extension services are provided by civil servants and publicly funded and about 12% of extension services are provided by NGOs, Universities and independent public organizations (Anderson, 2003).

#### 2.3.2. The impact of Agriculture extension services

In the nineteenth and twentieth century, the Agriculture extension programs were developed as an approach of making famers access the outcome of agriculture research. In the United States and Europe, the demand for extension services developed as farmers reformed their new produces, to new environmental and city market (World Bank, 2009). One of the existing means to eradicate poverty and improve food security is agriculture extension services which are continual activities that offer basic education to farmers and contains orderly communication with farming communities for a sound perception into farming practices (Farooq, 2010).

The setups of extension in the past four decades could be the largest institutional evolution the world has acknowledged. Farmers have greatly benefited from extension services; technicians have been trained. However, there much to be done for more effective extension services required by famers in the world (Anderson, 2003). Improved agriculture inputs usage is crucial which involves easy access of knowledge, trainings, free subsidized inputs to predominantly women farmers who are not able to

obtain inputs with little earnings and the gendered nature of societal systems need to be considered in whichever information diffusion concerning agriculture inputs (Combaz, 2013).

#### 2.3.3. Extension and Food Security

Public and private sector extension agencies are expected to extend new technologies to farmers on an enormous measure to be accountable and be more significant on market viewpoint. However, extension agencies dispense outwardly inputs to farmers without putting into consideration their suitability to farming systems, markets, gender roles among others. Without well designed extension policies and programs, food security initiatives may not reach its goal (FAO, 2010). Some of the challenges that hinders women to fully participate in agriculture extension services are; women roles in private spheres hinders women to extension course, language barriers that makes it difficult for women to read and understand some of agriculture materials since most of the extension materials are not in local languages, they are few female extension agents and also cultural barriers hinders men to meet women in public spheres for trainings and meetings (Owolabi, 2011).

#### 2.3.4. Agriculture Extension Services (AES) in Africa

Most African household farmers have their source of income and food consumption from subsistence farming. African farmers in previous era faced challenges for increasing their production however new initiatives derived to close the gap from traditional farming system to technological farming system through agriculture and extension services among others. The extension services came as a top down approach where field agronomists transfers technical skills and knowledge to trained farmer facilitators for technology knowledge transfer and adoption through experimental and participatory learning to the local community (Braun, 2006).

In Burkina Faso, productivity on women plots is lower than that of men plots due to lesser distribution of inputs such as fertilizers to women plots and the output could be increased if inputs and resources are fairly distributed (Quisumbing, 2003). The lower productivity of female farmers compared to male farmers has often been attributed to women's constraints in accessing productive resources and opportunities. Women may have lower returns to physical inputs such as pesticides and fertilizers or lack knowledge about appropriate use and timing of application. Improving women's access to inputs may not be sufficient to close the gender gap if women are unable to attain the same opportunities as men from using the inputs (Slavcherska, 2014).

#### 2.3.5. Agriculture Extension Services (AES) in Rwanda

MINAGRI made an effort to increase effectiveness of crop production with a vibrant extension services system for the best technologies and best practices in crop production, pest and disease management, marketing among others through; decentralization for farmer organizations empowerment in providing extension services, privatization and commercialization of extension services (MINAGRI, 2010).

One of the home grown solutions for Rwanda development is the "Extension Advisory Services also known as "Twigire Muhinzi Extension Modal" which is a decentralized extension modal intended to provide the basic skills and knowledge to farmers in decision making that will lead to increased agriculture production in Rwanda. This modal involves Ministry of Agriculture and Animal Resources with its institutions, farmer organizations, local government, non-profit organizations, private sector, with the aim of reaching farmers with limited assets and financial stand, knowledge and skills through farmer's forum and trained community based facilitators to deliver rapid advisory services according to farmer needs.

#### 2.4. Gender and agriculture extension services

It is revealed that women can perform in refining the livelihoods of rural households, it is therefore important to have information on key issues to assess the extent that women are reached with appropriate programs though socio-cultural factors may affect whether female extension workers are willing to participate at the village level. Therefore, it is important that in order to reach rural women with useful extension programs to assess the percentage of female extension workers who are available at all system levels to take on the assigned duties (World Bank, 2010). There is a gender disparity to Farmer Field facilitators due to, among others, limited gender responsive mobilization and mobility that continue to hinder women's participation. Women's role in Agriculture Extension services (AES) is significant since they can collectively do other family responsibilities to cater for their family demands. Similarly, women's participation in Agriculture Extension services (AES) and their fellow farmers. Nonetheless there are few women involved in Agriculture Extension services (AES) and the few that participate are less noticed and empowered. Regardless of various accomplishments ensuing from the sound expressed policy atmosphere gender gaps still occurs where better ways and efforts are needed to solve and harmonize gender equality (Verdiana, 2016).

#### 2.4.1. Gender in Agriculture Extension Services in Rwanda

The fact that men and women differ in biological, physiological and psychological makeup as well as in roles and responsibilities in society is widely understood. However, relatively less practical attention has been directed to the understanding of how these differences play themselves out in the work place (GMO, 2017). Changes and efforts by the international agents and national governments to improve women access to education and agriculture extension services since 1985 during the Forth Congress of Women held in Beijing. However, the existing stereotype anticipated that men were the decision makers to most phases of production practices.

Although this opinion brought advancement in taking into consideration women farmers as important players and stakeholders in Agriculture production (World Bank, 2009). Gender beliefs and attitudes; women's role in providing agriculture extension services has been not known and as an effect agriculture extension has been managed by men and knowledge seem to be conserved for men as women are missed out of extension services accomplishments. Men mostly face difficulties concerning women to understand the gender inequality issues and how they can find the solutions (FAO, 2017).

Poverty is the only possible way to bring out rural women in poverty through easy access to resources such as extension services, land, labor, which causes women generate low income. Women have less access to agriculture advisory services than men and when they are able to have access to information, technology, and other practices and how they are delivered, there more relevant and beneficial to men, it is gender biased information which results to women's low rate of return of agriculture advisory services (FAO, 2017). Research shows that, generally the level of women involvement and to be reachable in extension services is still lesser and where few women are present stimulates other fellow women to be involved.

The Gender Monitoring Office states that, the Government of Rwanda has made a strong political commitment to accelerating the promotion of gender equality. The elaboration of the agriculture gender strategy and its implementation demonstrates such commitment and the will to mainstream gender in all programs and strategic interventions within the agriculture sector (GMO, 2017).

However, it is indicated that women should be encouraged not only to be part of extension services but also to get involved in large scale farming due to the fact that most women farmers are in small scale farming and are hardly reached (Manfre, 2013). In the reflection of division of labour, most rural

women from poor households encounter specific issues such as reaching the market, access to finance, health care for their children, extension services and time they spend on family matters.

Most women farmers are willing to acquire new techniques of farming to advance their understanding and skills to create perfect agricultural decisions, to access improved agricultural inputs, and to access market to sell their product at a good price. It is said that women who needs extension services are land owners but still do not have access to an extension service benefits, do not attend trainings due to many household responsibilities, therefore missing opportunities to learn new farming techniques may decrease their work load (USAID, 2011).

#### 2.5. Decentralization of Extension Services

The system started in Latin America Governments and has been introduced in Africa with the aim of transferring the accountability to the local governments but holds the public distribution and public funding features of traditional centralized extension. The decentralized system was anticipated to advance extension agents by delivering better services to farmers and to obtain feedback from attended beneficiaries (Anderson, 2003). It is said that decentralized service systems works better than centralized services structures for different community necessities. However, it is argued that due to inequality in resources distribution and opportunities, such as feeble incentives to local community for better service delivery reduces the effectiveness of decentralized services delivery (Mcloughlin, 2014).

Like any other developing country, Ethiopia decided to provide services in massively decentralized structure in activities such as water, basic education, health care and agriculture extension services. The devalued groups such as women have fully participated in local supervision where resources are fairly distributed. Politically, there is an arrangement of decentralization of extension services to different local levels and structured agriculture institutions (World Bank, 2009). It is said that for agriculture extension services to be successful in developing countries, there is a need to be decentralized and famers be given authority over their political systems and development activities. The local and central government are supportive and well set which enables the decentralized agriculture extension services to be effectively carried out (Swanson, 2006).

#### 2.5.1. Decentralization of Extension services in Rwanda

The national decentralization policy emphasized on empowering Rwandans to define their destiny. The planned approach was the lowest level of a cell to guarantee that that the gender policy is commendably addressed in the course of planning cycle and the sense of community ownership is addressed and to raise better gratitude of gender equality as a critical factor in national development (MIGEPROF, 2010). The agriculture extension services system has transformed significantly since the colonial era before 1962 and the post –colonial era to 1980 where the system was a top down and farmers were to follow basic production practices as demarcated by the colonial regime and implemented by the field extension workers. The new system was strategized as a participatory, farmer driven, market oriented and focusing on farm households. Currently there are 30 districts, 416 sectors and 2148 cells attending to 14,876 villages (USAID, 2011). In earlier 2004, the Government of Rwanda (GoR) through Ministry of Local Government (MINALOC) decided to lawfully position a new extension strategy by decentralizing agriculture extension activities to be more participatory, farmer driven and focused on the specific needs of farm households in local level (USAID, 2011).

#### 2.5.2. Farmer Based Extension Organizations and Farmer Field Schools (FFS)

These organizations based on the country, work under different systems. Most of the time, it is revealed that commercial, large-scale farmers who are well structured with technical and leadership skills and economic influence mostly dominate these farmers controlled extension systems. Therefore, bringing the rural poor; the disadvantaged groups including women farmers into these systems in developing their systems will take more determination and time (World Bank, 2010).

The Farmer Field Schools (FFS) was initially aimed at presenting knowledge on Integrated Pest Management (IPM) to watered rice growers in Asia such as the Philippines and Indonesia and their IMP-FFS experience have been extended and stimulated to other countries and to other crops. Farmer Field Schools (FFS) is being practiced in developing countries although few implement the FFS on a national structure (Anderson, 2003). Farmer Field Schools (FFS) were established as a bottom- up method with the emphasis on trials, hands-on and insightful learning to expand farmers' ability in problem solving (Combaz, 2013) recommend that farmer Field schools could be one of the approaches that can be used to deliver agriculture extension services to deprived women farmers in Uganda. However, another study confines that, in such schools the execution of extension services has failed due to men ascendancy in debates and related activities.

#### 2.5.3. Training and Visits (TV) Extension

The TV extension modal was first stimulated by the World Bank as a national public extension system and was applied the 70 countries with the following structures; In house technical expertise; special commitment of information sharing; a seasonal workshop with research personnel; incentives for the staff including transport facilitation especially motorcycles and bicycles. However, some the features were not fully applied and real (Anderson, 2003). Training and Visit was also one of the extension services model in Bangladesh with the purpose of intensifying food production through information sharing for agriculture knowledge advancement with much effort in proper plant layout, farm preparations and control, developed seeds among others. However, farmer's involvement was not guaranteed and their necessities were overlooked (Mamun, 2017).

#### 2.6. Women in Agriculture

Women play an important role by getting involved in different steps of agriculture production as they provide to their families and the community, however women continue to face various challenges of gender inequality in access to agriculture benefits and opportunities namely; Right to the production, trainings, market accessibility, poverty, social and culture norms that affect food security (FAO, 2017).

The international women's movement has appealed to countries to form national specific institutions called national machineries assigned for gender mainstreaming and to promote the progression of women, put up associations, provide rules and direction. In 2004 national machineries were created in 165 countries and various debates have been conducted at regional and sub-regional to consider the role and reinforcement of the national machineries (World Bank, 2009).

Generally, women experiences in agriculture have been intensely disregarded among the wider farming practices and so women face various challenges that need to be resolved. For women to feel unvalued has caused them to feel uncomfortable in expressing their ideas related to agriculture and are also defined as second farm operators in contribution to a firm (Hyde, 2017). For a sustainable agriculture development, there is a need in addressing present gaps related to gender in agriculture through national, regional, global initiatives and the relocation of agriculture research agenda. Among the reasons the agriculture is beneath performance in developing countries is women's lack of opportunities to enable them become more productive (Patil, 2018). Gender gap in the agriculture sector decreases the success of social and economic development purposes and likewise gender equality promotion will reduce hunger and poverty. Women in agriculture program were initiated in 1990 to resolve gender issues. Women are important components of human being that greatly contribute in providing food to their homes, to the community and ensuring national food security. Nonetheless women face several challenges worldwide that hinders them to reach their potential (Petrics, 2016).

The lower participation of women in decision making on agricultural activities is mostly caused by the gap in power relations when it comes to agricultural income which can be a source of demotivation for women to be fully engaged in agriculture extension, cash crop production and other agriculture related activities (Ingabire, 2018).

The program facilitated in improvement of women farmers' access to credit, farm inputs and other opportunities however scarcities of extension women agents is still an issue (Manfre, 2013). Analysis on gender discrepancies in agriculture efficiency discovered that, there is no substantial dissimilarity between men and women when individual inputs and features are in order, even though there is an observation that women farmers are not as much proficient as men (Hazel, 2013). Women still take up responsibilities they used to take during pre-colonial era and female farming can also look like not moving in relation to nature of economic, social and culture change in life.

Women still work extended hours than men and have limited control over hereditary and affluence resources (Cornwall, 2005). In the past, women in agriculture have been held with the gender divisions of agriculture undertakings in access to agriculture opportunities and resources where the existence of small ruminants, the horticulture activities among others has been known as women sphere as part of home economics until they started to get involved in other developing activities (Cohen, 2011).

#### 2.6.1. Women and Agriculture in Sub-Saharan Africa

Agriculture is still prominent means of sustenance in Sub-Saharan Africa, gender equality still exists where women have not converted yet to a big part of industrialized labour force but relatively contribute in agriculture exports, over their unpaid labour in the household (Nancy, 2002). The primary responsibility for food security in Africa is carried by women however, development agencies dedicated little means to researching the impact of the agricultural policies and new techniques on the welfare of women farmers of Africa (Ogunilela, 2009). Women in Africa continue to face many challenges related to gender inequalities, although they play an important part in providing food for their families. Some of gender inequalities are; unequal access to resources, technologies, extension

services, education and social and cultural norms and values are also limiting women to participate in various agriculture activities and in community (FAO, 2017).

Empowering women and promoting gender equality in community and on household levels, results to agricultural increase, farm productivity and development. Current studies indicate that building self-respect, esteem and dignity among women and their skills is assumed received by them as the utmost significant outcome of contribution towards development. Agriculture is the main leading economy in Uganda and over 85 percent of the rural population relies on agriculture as their means of living. Ugandan men perception towards agriculture being a low earning activity led them to move to urban area which caused women to take over agriculture activities (Combaz, 2013).

One of the hindrances of women farmers in Uganda is methods used in enrolment of farmer's participation in agriculture activities such as agriculture extension services in projects like the national Agriculture Advisory Services (NAADS) where reach farmers are the ones given opportunities of authority and are given agriculture inputs, trainings and exclude those in need including women. Study shows that there was a great improvement to Kenyan women lives as they were involved in agriculture extension services which also resulted in increased agriculture productivity (Mamun, 2017).

At the center of global debates, agriculture is recognized as a fundamental driver of economic growth and poverty reduction for many developing countries and a priority area of investment. A characteristics of the renewal of the agriculture sector has been the recognition that past efforts have failed in past because they overlooked women's role in the sector and the role of gender inequalities in reducing agricultural productivity. (Manfre, 2013).

Women carry the primary responsibility for food security in Africa, yet development agencies have devoted minimal resources to researching the impact of their agricultural policies and new techniques on the wellbeing of Africa's women farmers. Women make significant contribution of food production and processing, but men seem to take more of the farm decisions and control the productive resources (Ogunlela, 2009). Beyond politics, the broad domains involving women of various classes are agriculture, urban workplace, the law and education. Women contribute tremendously to agricultural output but unfortunately they hardly, until recently benefited from agricultural incentives and innovation because of economic suppression and social and traditional practices which undermine the constitutional provisions on the equality of men and women (Ogunlela, 2009). Despite this fact, these farmers tend to be under-resourced and lacking access to improved inputs, rural services and markets,

leading to low productivity and a lack of opportunity to break the cycle of poverty. Smallholders in many developing countries remain disadvantaged when it comes to accessing quality extension and advisory services (EAS). Women smallholders face even greater challenges in accessing these services (Ogunlela, 2009).

#### 2.7. Challenges in Agriculture Extension Services (AES)

Women's access to productive resources is essentially related to debates around worldwide food security, the sustainability of economic development and the persistent battle against hindrances and responses to women discrimination. Some of the obstacles that hinders women usage, control and access to valuable resources frequently comprise insufficient lawful standards and fruitless execution at local and national levels and equitable cultural practices and attitudes at the institutional community level (United Nations, 2013).

In developing countries challenges in agriculture extension services began to be knowledgeable and experienced due to restructurings in agriculture sectors and changes in social economic aspects. Developing countries governments are defying existing challenges in extension services; where there is need for food provision to the inhabitants, to increase income generation to the rural citizens as well as poverty reduction, besides also natural resources management is required with different technologies changing overtime (Albore, 2018).

There are constraints of low performance of the agriculture extension services due to feeble concerned institutions in the transfer of modern faming technology to farmers. Failures and challenges in extension services are influenced by; No training opportunities for extension agents, lack of basic resources, relations between extension and research is weak which leads to the low production of major crops where the agriculture extension system is accountable for being unproductive and inaccessible (Khan, 2012).

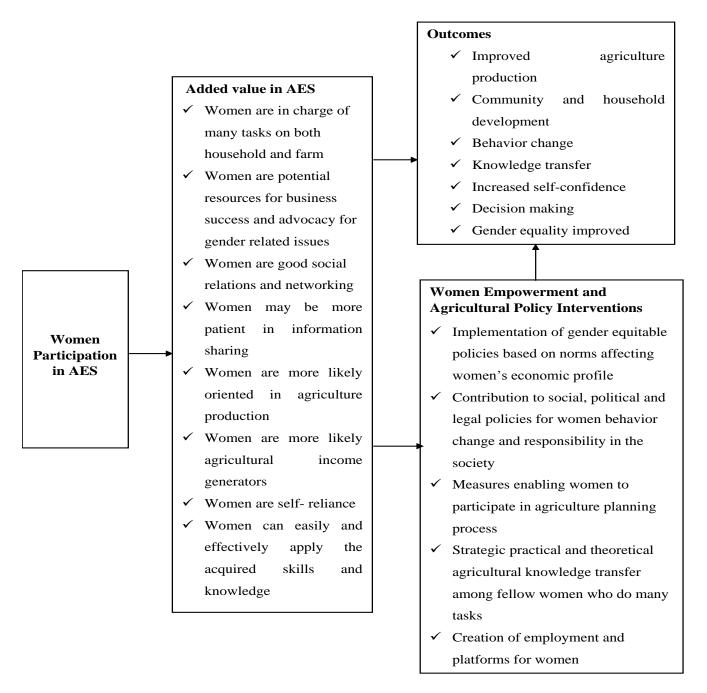
The social norms and attitudes concerning women are still patriarchal where women continue to uphold a submissive position all through which hinders women to have control and access to productive resources and opportunities as men (MINAGRI, 2010).

Gender norms affect women farmers in the fight to develop their agricultural productivity and participation. As a precise established encounter, women are designed on how to relate with others by gender norms, like women's constraint of time due to their reproductive gender roles limit them to work with their fellow farmers in various agriculture activities (Ingabire, 2018).

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There are still challenges that hinder women empowerment in Rwanda where there is still low number of women participation in economic activities due to many women involved more in unpaid work. Also cultural norms, low level of literacy and women are less represented in decision making levels. Also there are limited skills for gender to be mainstreamed into planning, budgeting processes, programs at both central and decentralized levels and inadequate sex disaggregated data to reliably notify policy, planning and decision making (MIGEPROF, 2010).

#### 2.8. Conceptual Framework of the study



Source: Adapted from Birner, et al., 2009.

Figure No 1. Conceptual framework

The study uses a modified Best-Fit Framework established by (Birner et al. 2009) for examining Agriculture Extension Service (AES). The framework questions how agricultural extension services can be guaranteed as a demand driven to meet requests of farmers. Also to confirm that marginalized farmer groups including women access Agriculture Extension Service (AES). The framework shows how the value chain of women participation in Agriculture Extension Service (AES) system. Women are able to easily disseminate agricultural information to their fellow farmers through social networking and are able to implement acquired modern farming practices that lead to increased production, increased income for family and community development, self – confidence and decision making. The dominance of social hierarchies and social exclusion impact the approaches needed to reach underprivileged individuals.

This offers women another opportunity to generate additional income to provide for household demand. However, women participation in Agriculture Extension Services (AES) is negligible with slight impact to the household and community economy. The availability of resource opportunities such as: access to agriculture inputs, incentives, trainings, time, modern agriculture techniques acquired from Agriculture Extension Services (AES) are significantly influencing the level of women participation in development of the community. Therefore, policy resolutions are to be in place to regulate the strategy of the system. Socially determined gender roles encourage the policies that need to be positioned to reach women farmers.

#### **CHAPTER THREE. RESEARCH METHODOLOGY**

#### **3.0. Introduction**

This chapter shows the process used to discover community views concerning women contribution in agriculture extension services. Due to nature of the study, the methodology also described the study approach and method of sampling, the research period, the geographical area of study, techniques and ethical procedures.

## 3.1 Description of the study area

The total numbers of farmers involved in extension services in Kamonyi District in the Southern part of Rwanda are around 300. It has 12 Sectors, 59 Cells and 317 Villages. And the study area was in 5 Sectors namely; Runda, Gacurabwenge, Musambira, Rugarika and Karama.

## 3.2. Research Design

Qualitative Data Approach. Qualitative data is data involving understandings of the complexity, detail and context of the research subject often consisting of texts such as interview transcripts and field notes or audio visuals materials (Hox, 2005). The antiquity of qualitative research discloses that disciplines of the present social sciences have taken the consideration of the patterned conduct and social procedures of society and the analysis as their mission. Therefore, qualitative indicates the importance on the qualities of things and on procedures and significances that are not experimentally studied which means that researchers hunt responses to problems that concerns how social knowledge is generated and given meaning (Denzin, 2005). Qualitative approach was applied and enabled both the researcher and the respondents share their opinions, understandings for actual results. The effectiveness of qualitative approach allowed recognizing imperceptible aspects like; gendering stereotypes, social customs, social-economic status, beliefs. Quantitative approach is expressed in numbers and graphs. It is used to test or confirm theories and assumptions. This type of research can be used to perform statistical analysis on the data and draw conclusions.

## 3.3. The population of the study

That study was conducted in Kamonyi District which is located in the Southern Part of Rwanda. It has the population of 340, 501 with area equivalent to 655,5sqm. The total population of Kamonyi

dwellers who are engaged in agriculture extension over 300 and the percentage of women engaged in agriculture extension are almost 30 percent.

## 3.4. Sampling methodology and sample size

The survey was conducted for two weeks in early March, 2020 and focused on farmer promoters (FP) and farmer facilitators (FF) (n=75) involved in extension services. The research also involved opinion leaders n=25 and there were; Socio-Economic Development Officers (15 SEDO's), Sector agronomists (4), District agronomist (1), Rwanda Agriculture and Animal Resources Development Board (RAB) representatives (2), Tubura which is also known as One Acre Fund representative (3), all involved in extension services.

## 3.4.1. Sampling method

Purposive Sampling refers to the choice of the sources of data or the participants to be used in the study grounded on their anticipated fruitfulness and significance of the information in relation to the research questions of the study (Gentles et al 2011). The purposive sampling was used to select the areas and sample population respectively for the study. Among the 12 Sectors in Kamonyi District, only 5 Sectors namely; Runda, Gacurabwenge, Musambira, Rugarika and Karama were selected purposively to their accessibility and little number of women involvement in agriculture extension services compared to men. Among the 5 Sectors, the researcher was able to meet 100 respondents. The crops that are commonly produced in Kamonyi District are; Rice, Banana, Beans, Vegetables, Maize, Cassava and Soybean.

#### 3.4.2. Sample size

Sample size was 100 respondents (n=25 for opinion leaders and n=75 for Farmer promoters (FP) and Farmer Facilitators (FF) from the five (5) sectors selected purposively for their gender consideration as well as accessibility. The key informants were those that are involved in AES and these are; District and Sector Agronomist, Agronomists from Rwanda Agriculture and Animal Resources Development Board (RAB) and TUBURA also known as One Acre Fund, and Socio-Economic Development Officers (SEDO's) from Gacurabwenge, Runda, Karama, Musambira and Rugarika Sectors were also

interviewed to get their views on women participation in Agriculture Extension Services (AES) activities.

## ✓ The roles of Farmer Facilitators (FFs) and Farmer Promoters (FPs).

Rwanda Agriculture and Animal Resources Development Board (RAB) staff build the capacity of Farmer Promoters to become frontline extension agents in the villages and Farmer Facilitators to become Farmer Field School (FFS) Master Trainers. Farmer Facilitator's (FFs) are competent facilitators who lead Farmer Promoters (FP) through hands-on learning processes and provide several practical trainings. Farmers are learning from the field whereby the plant is their teacher and from where Famer Facilitators (FFs) play a crucial role in capacity building of farmers & Farmer Promoters. The Farmer Facilitators visits the demonstration plots established by a Farmer Promoters as a part of the training to provide modern farming practices.

While Farmer Promoters (FPs) and Farmer Facilitators (FFs) do have distinctive roles, their mutually reinforcing roles also explain innovative agricultural practices, which have proven their relevancy and effectiveness in Farmers Facilitators (FFs) experimental plots also known as demonstration plots. This interaction allows for scaling out access to extension services by Farmer Promoters within in a relatively short time. On the other hand, Farmer Promoters (FPs) assist Farmer Facilitators (FFs) in establishing Farmer Field Groups.

They identify farmers who are interested, experienced, with integrity, who is able to transfer the acquired knowledge to their fellow farmers and who have leadership skills and committed to agriculture and other development activities, joint learning-by-doing on improving agricultural production for household and community development.

Therefore, purpose of the study attempts to ascertain the gender inequality in agriculture extension services (AES) by reinforcing new extension policy which will empower women to fully participate for improved agriculture production and food security.

#### 3.5. Data Collection

The study used both primary and secondary data.

#### 3.5.1. Primary Data

Primary data are collected data for the specific research problem at hand using procedures that fit the research problem best where new data are added to the existing store of social knowledge (Hox, 2005). The primary data collection was a sample survey questionnaire which combined structured open and closed ended questions. Also face to face questionnaire interviews were prepared by the researcher who read out the questions to individual extension agents (men and women) in the study sample and their responses were carefully recorded. Face to face interviewing was meant to give the researcher a chance to clarify questions that were not properly understood and make reviews where needed. It is in this perspective that the data used in this research were colleccted from the field in Kamonyi district.

#### 3.5.2. Secondary Data

These are materials created and by other researchers and are made available for reuse by the general research community (Hox, 2005). Documents were collected from Kamonyi District, the Institutional libraries, from the University of Rwanda (UR) library and were reviewed to establish and discover previous information that confirmed the collected data using other approaches. Data collection was based on articles and reports from ministry of agriculture, line institutions, development agencies and partners, related academic research and policy documents to understand different theories related to trends of women participation in various sectors including agriculture in Rwanda and women in Kamonyi District as a specific case.

## **3.6. Data Collection Tools**

The tool used in data collection was a sample survey questionnaire which combined structured open and closed ended questions.

#### **3.6.1. Data Collection Techniques**

Three methods were used during data collection: Face to face Interviews, Focus group discussion, and interviews with key informants.

#### 3.6.2. Face to Face Interviews

Face to face interviews is also known as a face to face interaction among two individuals where one who can be called an interviewer interrogates inquiries through a questionnaire while the other individual who is also called an interviewee responds to questions (De Leeuw, 2008). The interviews were conducted in a local language (Kinyarwanda) which was understandable by all. Semi-structured interviews were applied with randomly selected respondents to evaluate community perception, beliefs and expectations and practices of participation of women extension agents. Data collection was through taking notes which enabled the researcher to categorize key matters linked with the study.

#### **3.6.3.** Focus Group Discussion

Focus group discussion is a research methodology that participants of a small group a small meet to debate a particular matter or a problem to create data (Wong, 2008). Focus group discussions take the interactive benefits of an interview to the next level by bringing a carefully chosen group together for a moderated discussion on the subject of the survey. The focus group discussions were formed in order to be able to collect data from agriculture extension agents (both men and women) before the interviews. Informants were asked to feel comfortable to be able to give out their views on women participation as extension agents. It has given the researcher a chance to view both sides of the coin and build a balanced perspective on the matter. All issues that were raised by any informant have been noted and considered.

#### 3.6.4 Questionnaires

Qualitative data was motivated with a suitable structured questionnaire. Questionnaire is a manuscript comprising interrogations and additional forms of matters intended to ask data applicable to the study (Simango, 2015). Questionnaires, are stand-alone instruments of data collection that were administered to the sample subjects either through mail, phone or online. They have been the most tool of data collection in this study as gave the researcher an opportunity to carefully structure and formulate the data collection plan with precision. Respondents were of three categories: famer promoters (FPs) farmer facilitators (FFs), opinion leaders and representatives of key institutions operating in extension services (Rwanda Agriculture and Animal Resources Development Board (RAB) and One Acre Fund also known as TUBURA.

#### 3.7. Data Analysis

The data analysis's intention is to change data into a response to the original study inquiry (Simango, 2015). After the data collection, classification and categorization. The SPSS version 16 computer package was used as a statistical package where the recipients of data use a codebook that describes the variables in the data set, what values may reasonably be taken to their location in the raw data file. Information was used for coding, data entry and data analysis.

#### **3.8. Ethical Procedures**

Before the commencement of data collection, there is a need to apply ethical concerns to involve informants with maximum determined trustworthiness with no fear to be able to participate during the research. The question of privacy, confidentiality and consent were discussed between a researcher and the participants in a pleasant manner where the research informed about the dialogue subject, the purpose, the nature of the research and how the results will be used. It is informants right to either give consent or not or withdraw at any time they feel like. The official letter from the University of Rwanda Centre for Gender and Development Studies was introduced first to facilitate interaction with District and local level officials before the selection of informants starts. After being introduced by the local officials, the interviews commenced in a safe and suitable environment and confidentiality, values, respect, self-respect were applied.

## **3.9.** Limitation of the study

The study limitations were mostly the difficulty of farmer's availability whom were busy in cultivation period, the accessibility to the selected study areas since it was in the rainy season and financial constraints which could not enable the researcher to carry out the research to a bigger sample size. However, the researcher was able to conduct a study successful y from the selected area. Therefore, all the information in this chapter was applied and was so helpful to the researcher to be able to collect data and made the field interesting and successful.

## **CHAPTER FOUR: RESULTS AND DISCUSSION**

## 4.0. Introduction

In Rwanda the majority of farmers are smallholder farmers whose households rely on an average land size of 0.6 ha for food production and income for an average number of 5 household members. This leads to the high population pressure on arable land and the need for agricultural intensification in order to improve food security, increase surplus production and hence generate more income for farmers and local processors. From these insights, the management of agricultural extension system must go beyond farmer as beneficiaries but make them real partners in agricultural development. The agricultural extension service is a 'home-grown solution' that has been developed and implemented by Rwanda Agricultural and Animal Resources Development Board (RAB), under the responsibility of the Ministry of Agriculture and Animal Resources (MINAGRI), in close collaboration with Districts and Sectors, which are under supervision of the Ministry of Local Government (MINALOC). It is a decentralized extension model which gives a key role to farmer extension agents as volunteers known as Farmer Facilitators (FFs) and Farmer Promoters (FPs).

## **4.1. Profile of the Respondents**

| Variables              | Variable level       | Frequency | Percent |
|------------------------|----------------------|-----------|---------|
| Age of                 | 20-30                | 2         | 2.7     |
| respondents            | 31-40                | 12        | 16      |
|                        | 41-50                | 26        | 34.7    |
|                        | 50-above             | 35        | 46.7    |
| Sex of                 | Male                 | 48        | 64      |
| respondents            |                      |           |         |
|                        | Female               | 27        | 36      |
|                        | Primary education    | 60        | 80      |
| <b>Education level</b> | Vocational education | 14        | 18.7    |
|                        | University           | 1         | 1.3     |
|                        | Single               | 2         | 2.7     |
| Marital status         | Married              | 61        | 81.3    |
|                        | Widower              | 12        | 16      |
|                        | Small (1-4 members)  | 23        | 30.7    |
|                        | Medium (5-9          |           |         |
| Family size            | members)             | 52        | 69.3    |
| -                      | Large (above 9)      | 0         | 0       |

Table No 1. Profile of the respondents

Source: Field data

The respondents of the study are described by age, gender, marital status and education level, and family size according to table number 1. The age range of the respondents showed that, 2.7 percent of the respondents are between 20-30 age groups which shows that this mentioned age group has few Agriculture Extension Service (AES) members and seem to be of young men and women that are energetic and able to fully participate in Agriculture Extension Service (AES) and bring positive impact to Agriculture Extension Service (AES) program by benefiting farmers mostly women.

Also 16 percent of the respondents said that there are between 31-40 age groups which is also composed of energetic farmers that can still carry out Agriculture Extension Service (AES) activities as planned because of being still somehow at younger age. Also 34.7 percent of respondents said that there are between 41-50 age groups that are getting old and also seem to be somehow big number compared to the younger age group. Also 46.7 percent of respondents said that there are above 50 age group which seem to be the majority of farmers that are involved in Agriculture Extension Service (AES) which gives an indicator that there is no sustainability of Agriculture Extension Services (AES) guaranteed since the majority of members are of an old age.

This requires the Agriculture Extension Service (AES) program to review and see how they can look possible strategies to encourage young people mostly women to join the program and participate and this will give assurance to the program that there is sustainability of the program but the findings reveal again that Agriculture Extension Service (AES) has no guarantee of existing for more years to come if there is not any planned strategy to change the situation for better. The dominant categories of age among the respondents were within the range from 31 years old and this implies that the cumulative age from 31 and above showed the majority (81%) of the respondents at their highest productive and reproductive age group. This indicates that they practice high work-load to participate in agricultural practices as Farmer Promoters (FPs)) / Farmer Facilitators (FFs).

The challenge here was revealed that no young men and women are involved in Agriculture Extension Services (AES) and there is no plan of involving them to contribute to the household and community development through increased agriculture production. The challenge of not involving young men and women indicates the unsustainability of Agriculture Extension Services (AES). In the case of women, if young women are to be encouraged, empowered and motivated by the concerned entities or authorities, be it the Ministry of Agriculture and Animal Resources (MINAGRI), the attached institutions such as Rwanda Agriculture and Animal Resources Development Board (RAB) and partners such as One Acre Fund (OAF) also known as TUBURA to participate in Agriculture

Extension Services (AES) there would be a guarantee of agriculture sustainability, as well as household and community development.

The gender of respondents was found at the range of 36 percent of female and 64 percent of male involved in Agriculture Extension Services (AES). The gender balance is not so good and there is need for gender mainstreaming on individual, institutional and community levels to implement gender policy as well as evaluate and monitor the outcome. However, it was not the case as it was revealed in this study; that female present during the survey were taken purposively with more interest to maximize data from them. Women involved in Agriculture Extension Services (AES) contribute a lot through information sharing with their fellow farmers, improve themselves through networking and socializing with other farmers and are more knowledgeable to modern agricultural techniques as well as implementation.

On education, the study revealed that 80 percent of respondents were at primary education level where they are able to read and write. Education is not only vital to human development, but also in raising the status of potentialities for improving family welfare. The highest percentage of respondents in this study which is 80 percent would have an implication towards less family income and increased poverty limited receptivity to change associated with poverty conditions. This level of education is simply reading and writing which is one of the selection criteria that followed in choosing Farmer Promoters (FP) and Farmer Facilitators (FF).

Also only 20 percent have post-primary education. Education is key to enable women to participate in various development sectors including agriculture and so having more educated women in a community would be an added advantage to develop on household and community level and also to be selected to join Agriculture Extension Services (AES). Also to the findings of marital status, it shows that 81.3 percent of married couple are involved in Agriculture Extension Service (AES) and 2.7 percent are the singles that are involved in Agriculture Extension Service (AES).

The single farmers need to be encouraged and motivated to be part of Agriculture Extension Service (AES) and participate for improved production, poverty eradication, social networking, information sharing to fellow farmers, modern farming techniques, improved knowledge related to Agriculture Extension Service (AES) and many other opportunities packaged in Agriculture Extension Service (AES) as well as household and community development. Lastly the researcher also looked at the family size and it was revealed that 69.3 percent said that the family size which was described as

medium has the family size that ranges between from 5-9 family members and another category has the range between 1-4 family members with 30.7 Percent.

This indicates that, families that has a big number of family members are the ones involved in Agriculture Extension Service (AES) than families that have few family members which were described as small and has family members of 1-4 and still this shows that according to the benefits that are in participating in Agriculture Extension Service (AES) the member will not participate fully since he/she will need to look for other benefits or activities that will sustain his or her family.

And this will put gap in Agriculture Extension Service (AES) program which may not be easily recognized by the program so that the problem is catered for and be covered and end up not benefiting the program as well as the member.

The Agriculture Extension Service (AES) program should be able to notice all the existing issues that does not benefit the program and find ways to solve the for the betterment of the Agriculture Extension Service (AES) program.

## 4.2. Level of women participation in Agriculture Extension Services (AES)

The respondents of the study were of two categories: Farmers Promoters (FPs) and Farmers Facilitators (FFs) and opinion leaders and these are the district and sector level agronomists and the Socio-Economic Development Officers (SEDO's), in order to connect their knowledge about objectives of Agriculture Extension Services (AES) system they are part of. Therefore, the selection criteria used in Agriculture Extension Services (AES) system is known by both sides so that transparency would be possible. And below there is a detailed explanation of the selection criteria based on for farmers to become Farmers Promoters (FPs) and Farmers Facilitators (FFs).

#### **4.3.** The criteria eligibility of Farmer Facilitators (FF) / Farmer Promoters (FP)

During the study, the researcher had no secondary data that indicates the eligibility criteria of the Farmer Facilitators (FF) and Farmer Promoters (FP) to participate in Agriculture Extension Services (AES) and also general information about Agriculture Extension Services (AES) which was also a challenge. Instead, this was revealed as a common knowledge from both the respondents the Farmer Facilitators (FF), Farmer Promoters (FP) and the opinion leaders as follows: According to respondents, women are capable as men in Agriculture Extension Services (AES) actually women are more

efficient in applying agriculture techniques and skills and information sharing than men which means that if they are empowered and overcome the hindrances they encounter in Agriculture Extension Services (AES) their participation would be incredibly countless.

Exemplary farmer: These are farmers who are passionate to farming, practicing modern farming techniques than other fellow farmers in the community by using agriculture inputs (improved seeds and fertilizers), post-harvest management and handling, pest and disease control, who applied land consolidation and who can share their expertise with other farmers in a community. These farmers are like role model in the community with integrity and positive mind set. It was revealed that they are very few women as role models in farming in the community due to combining farming with other household responsibilities yet being exemplary is one of the criteria's to be selected to join Agriculture Extension Services (AES), therefore if women can be supported in housework duties by their counterpart, they can be able to have more time for farming activities to become role models as men and develop their families and communities and be many in Agriculture Extension Services (AES) participation.

Literacy: These are farmers who can read and write and have the capacity to transfer knowledge to their fellow farmers. Having more educated women in a community would be an advantage to be selected to join agriculture extension and develop confidence as men. During the study, it was discovered that most women that participate in Agriculture Extension Services (AES) at least have primary level of education. Education being one of the key selection criteria for women to participate in Agriculture Extension Services (AES) and it is one of the reasons that hold women back from participating in a good number as men and develop themselves, household as well as community.

Women that are in Agriculture Extension Services (AES) are competent as men in sharing information, knowledge transfer practically and theoretically to fellow farmers, and contribute greatly in Agriculture Extension Services (AES). Where it was said that women can be even more practical than men in sharing information through social connections with their fellow women where they usually meet like when they meet while fetching water, collecting firewood, gathering as women in a community they easily share and tryout easily what they have learnt or heard.

Leadership skills: These are farmers who are honest, active, with positive mindset, who can lead and guide and teach other fellow farmers and who can volunteer for other farmers. Women are also hindered by leadership skills due to not being able to be in public spheres as men which limit them to be part of decision makers and leaders in the community, therefore, if women are empowered by concerned organs mostly the local government which work hand in hand with farmers, it can enable women to benefit from public opportunities and develop confidence and leadership skills as men and fulfils the required criteria to join Agriculture Extension Services, connect with other farmers, share constructive ideas that contributes to agriculture development.

During survey, the Farmer facilitators and Farmer promoters and the opinion leaders, have acknowledged that they know well the selection criteria to become a Farmer Facilitator (FF) or Farmer Promoter (FP) for extension services which are one of the limitations for women's participation AES since most women do not fulfils the required selection criteria and competences. The following are the responses from respondents which are the Farmer Facilitators (FFs) and Farmer Promoters (FPs) and opinion leaders to the objectives of the Agriculture Extension Services (AES) are as follows;

- ✓ Increased quality and quantity agricultural production, income generation, poverty eradication
- ✓ Modern farming techniques, sustainable production, use of agriculture inputs, information sharing, pest and disease control
- ✓ Community and household development, fighting malnutrition, social networking, selfreliance.

**Table No 2.** If Farmer Promoters (FP) and Farmer facilitators (FF) Comparison for working in Cooperatives

| FP/FF working in cooperatives |           | Opinion leaders acknowledgement |                        |           |         |
|-------------------------------|-----------|---------------------------------|------------------------|-----------|---------|
| Answer                        | Frequency | Percent                         | Answer                 | Frequency | Percent |
| Not<br>working in             |           |                                 | Not<br>working in      |           |         |
| cooperative                   | 13        | 59.1                            | cooperative            | 57        | 76      |
| Working in cooperative        | 9         | 40.9                            | working in cooperative | 18        | 24      |
| Total                         | 22        | 100                             | Total                  | 75        | 100     |

## Source: Field data

And according to table number 2, shows the responses by Farmer Promoters (FP) and Farmer facilitators (FF) and opinion leaders about working in cooperatives or not. The 59.1 percent of Farmer Promoters (FPs) and Farmer Facilitators (FFs) say that they are not working in cooperatives while 40.9 percent of Farmer Promoters (FPs) and Farmer Facilitators (FFs) say that they work in cooperatives. On the other hand, the 76 percent of the opinion leaders say that, Farmer Promoters (FPs) and Farmer Facilitators (FFs) do not work in cooperatives and also the 24 percent of the opinion leaders say that the Farmer Promoters (FPs) and Farmer Facilitators (FFs) work in cooperatives.

The respondents said that in the beginning Farmer Promoters (FPs) and Farmer Facilitators (FFs) were requested to work in cooperative as it was promoted by the Government through the Ministry of Agriculture and Animal Resources (MINAGRI) in collaboration with Rwanda Agriculture and Animal Resources Development Board (RAB), the Ministry of Local Government (MINALOC) and the Rwanda Cooperative Agency (RCA) and it was implemented. But as time goes on cooperatives started to fail due to poor organization by the leaders where there exist personal interests and led to complete failure. The analysis therefore shows that the big percentage of Farmer Promoters (FPs) and Farmer Facilitators (FFs) do not work in cooperatives.

The Government of Rwanda (GoR) has been promoting citizens from different sectors including agriculture sector as well as private sector to work in cooperatives as an easy way of accessing financial and other resources from the government of financial institutions. It was from this indication that the researcher was interested to know if Farmer Promoters (FPs) and Farmer facilitators (FFs) work under cooperatives.

## 4.4. Mostly selected between men and women as FFs / FP.

**Table No 3.** Mostly selected between men and women as Farmer Promoters (FP) / Farmer Facilitators (FF).

| Respondents | Frequency | Percent |
|-------------|-----------|---------|
| Male        | 52        | 69.3    |
| Female      | 23        | 30.7    |
| Total       | 75        | 100     |

Source: Field data

The gender balance was acknowledged by respondents stating that the gender was taken into consideration in selection of Farmer Facilitators (FFs) / Farmer Promoters (FPs). According to table number 3, it was found that 69.3 percent of men respondents confirmed that men are mostly selected than women and 30.7 percent of women respondents say that women are mostly selected. However, the researcher found that the gender aspect during selection is still theoretical and not applied and respected due to gender mainstreaming and also due to illiteracy which is one of the criteria's considered and this affects the participation of women in AES.

#### 4.5. Women motivation to participate as FPs / FFs.

Both Farmer Facilitators (FF) and Farmer Promoters (FP) initially operated on a voluntary basis and are both rewarded for their services, either through result-based lump sum payments or in-kind incentives and commission. In both cases incentives are mainly paid for by donors such as One Acre Fund (OAF) also known as TUBURA who present a risk for the future sustainability of the extension services. The study revealed that Farmer Promoters (FPs) / Farmer Facilitators (FFs) are given the following facilities and tools; Trainings, material for measurement (meters), Training materials, phone devices, airtime, T-shirts farm inputs (fertilizer, seeds), and some incentives such as; perdierm,

bicycles, and boots. The fact that men and women differ in biological, physiological and psychological makeup as well as in roles and responsibilities in society, such as caretakers of family, decision maker, matters in particular in rural areas. This statement was justified by the majority of respondents whereby they said women are heart of the family and so they are occupied with various family responsibilities. The study then wanted to know that Farmer Facilitators (FFs) /Farmer Promoters (FPs) are able to deliver extension services by which means. The extension services came as a top down approach where field agronomists transfer technical skills and knowledge to trained farmer facilitators for technology transfer and adoption through experimental and participatory learning to the local community (Larsen, 2014).

#### 4.6. Gender consideration for replacement of non-active members

| FF/FP (n=75)  |           | Opinion Leaders (n=25) |                 |           |         |
|---------------|-----------|------------------------|-----------------|-----------|---------|
| Answer        | Frequency | Percent                | Answer          | Frequency | Percent |
| Mostly by Men | 23        | 30.7                   | Mostly by Men   | 18        | 81.8    |
| Mostly by     |           |                        |                 |           |         |
| Women         | 9         | 12                     | Mostly by Women | 0         | 0       |
| Both equally  | 43        | 57.3                   | Both equally    | 4         | 18.2    |

Table No 4. Gender consideration for replacement of non-active members

Source: Field data

From the table number 4, the findings revealed that 81.8 percent of the respondents from opinion leaders (n=25) said that men are mostly take the replacement due to their availability and fulfills the selection criteria than women, while 18.2 percent of opinion leaders said that both men and women are considered equally as long as they fulfill the selection criteria. The perception from Farmer Promoters (FP) / Farmer facilitators (FF) (n=75) however was that men and women have the same chance for selection when there is need for replacement at 57.3 percent and 30.7 percent of Farmer Promoters (FP) / Farmer facilitators (FF) (n=75) respondents said that men are preferred while 12 percent said that women mostly replace those that have left the extension service activities for different reasons. Reason being, men accept easily to be nominated to replace others that are less active or have left

while women when they are proposed or nominated to replace they hesitate and very few accept mostly due to more family responsibilities where they feel they might not fulfill the responsibilities fully but also lack confidence to be part of the group. Another reason that was raised by women was that fellow farmers (men and women) on household and community levels are not supportive in encouraging women to be involved and participate in extension services, reason being that men in general they expect women to stay home and take care of family responsibilities and also husbands think that when their wives become extension agents they will be in touch with other men and might have some affairs which will lead to family conflicts. And this implies that the less women are empowered the less self- esteem and certainly no family and community development.

## 4.7. Consideration of women views and opinions in (AES)

The role of women in agriculture extension services is increasingly recognized through awareness of women farmers to be fully involved in development programs. The opinion leaders (n=25) which were the district and sector level agronomists and the Socio-Economic Development Officers (SEDO's), have shown that women's views and opinions are valued and considered when they are raised.

| Responses                     | Frequency | Percent |
|-------------------------------|-----------|---------|
| Views/opinions considered     | 17        | 68      |
| Views/opinions not considered | 8         | 32      |
| Total                         | 25        | 100     |

Table No 5. Consideration of women views and opinions in Agriculture Extension Services (AES)

Source: Field data

From the table number 5, the 68 percent of respondents said that women views and opinions are considered to in order to respect gender equality. While 32 percent of respondents said that women's views and opinions are less considered due to cultural norms where women are not supposed to speak out or share their views where there are men and in public. This means that women are being empowered by giving them the platform to share their ideas and opinions which boosts their self-esteem and to feel they are part of the system through, making decisions and be able to participate in various activities for family and community development.

# 4.8. Constraints women face in Agriculture Extension Services (AES)

During the study, the respondents (n=100) described several constraints women face in Agriculture Extension Services (AES). These are in the table below as follows:

|                  | Men       |            |                    | Women     |         |
|------------------|-----------|------------|--------------------|-----------|---------|
| Constraints      | Frequency | Percentage | Constraints        | Frequency | Percent |
| Lack of self-    |           |            | Cultural Norms     |           |         |
| confidence       | 67        | 89.3       |                    | 73        | 97.3    |
|                  |           |            | No rights and      |           |         |
|                  |           |            | decision making to |           |         |
| Family           |           |            | agricultural       |           |         |
| responsibilities | 60        | 80         | production         | 68        | 90.7    |
| Cultural Norms   | 57        | 76         | Lack of incentives | 66        | 88      |
| Lack of          |           |            | Family             |           |         |
| incentives       | 41        | 54.7       | responsibilities   | 61        | 81.3    |
| Time             |           |            | Lack of self-      |           |         |
| constraints      | 40        | 53.3       | confidence         | 57        | 76      |
| No rights and    |           |            | Unsupportive and   |           |         |
| decision making  |           |            | abusive            |           |         |
| to agricultural  |           |            |                    |           |         |
| production       | 39        | 52         |                    | 52        | 69.3    |
| Long distances   | 37        | 49.3       | Long distances     | 49        | 65.3    |
| Lack of enough   |           |            | Lack of enough     |           |         |
| trainings        | 35        | 46.7       | training           | 54        | 60      |
| Unsupportive     | 31        | 41.3       | Time constraints   | 43        | 57.3    |

Table No 6. Constraints faced by women participating in Agriculture Extension Services (AES)

| and abusive    |    |      |                |    |      |
|----------------|----|------|----------------|----|------|
| husbands       |    |      |                |    |      |
|                |    |      |                |    |      |
| Lack of access |    |      | Lack of enough |    |      |
| to information | 19 | 25.3 | information    | 38 | 50.7 |
|                |    |      |                |    |      |

Source: Field data

The analysis for table number 6 is explained as follows;

Cultural Norms: According to the respondents, 76 percent of men says that, gender stereo types as well as hierarchical behaviors where men are decision makers and are meant to be in public spheres while women are meant to be in private spheres for family activities, hinders women in many ways to participate in economic development including Agriculture Extension Services (AES) as men. Also 97.3 percent of women says that the issue of cultural norms is a big challenge to women in extension services which seem to be even difficult to overcome since its part of their everyday life in a family as well as in a community. Among the many challenges, cultural norms are utmost where the rest are also attached.

No rights and decision making to family agricultural production: According to 52 percent of men said that; actually women farmers are more active in farming activities but they have no rights to the production where men being the heads of families, they either give women some of the produce or money or not. Also the 90.7 percent of women said that, husbands are decision makers on how the agriculture production is supposed to be sold and are in charge of whatever income earned yet women also support and fully participate during the planting process till the harvest or even participate to a bigger percentage than men whey men have gone for other activities. This discourages women to feel less motivated by the husband for not having equal rights on the agriculture production.

Lack of confidence: According 89.3 percent of men responded that women have inferiority complex to be heard by fellow farmers especially men when they try to give out their ideas. This results from culture norms as well where women are not supposed to be in public spheres or even talk. However, 76 percent of women responded that hindrance is mostly caused by lack of opportunities to be in public as men since most of their time is spent in private spheres which limit their capacities to share, learn and benefit from various opportunities to contribute to the society as men. They continued saying that in the community they are many opportunities and benefits where women miss out due to being in private and also lack of information and yet because men are able to move and be in public, it becomes easier to access information about te opportunities around them and they easily go for them and other related benefits which is not the case of women.

Lack of incentives: The 54.7 percent of men says that, due to women having lots of family responsibilities they lack some incentives when they participate in Agriculture Extension Services (AES) to compensate the time spent in extension services which they find it difficult and discouragement to fully participate in Agriculture Extension Services (AES). The 88 percent of women responded as men by giving an example of transport facility to assist them attend Agriculture Extension Services (AES) activities where mostly the trainings take place in long distances where they use their own transport and when they fail to get transport they do not attend the trainings or other meetings concerning extension services.

Family responsibilities: The 80 percent of men responds that, women are often taken by family obligations as care takers and mostly during pregnancies and breastfeeding, caring about children, livestock and agriculture activities. However, much men are aware of the issue, still they do not bather to assist women in family responsibilities so that women are able to participate in other activities such as in extension services. Inevitably, this prevents women from concentrating on participation in Agriculture Extension Services (EAS). Also 81.3 percent of women said that they are overloaded by household activities which hinders them to fully participate in Agriculture Extension Services (AES) as men.

Time constraints: The 53.3 percent of men responded that due to many duties assigned concerning Extension Services (ES), women find it more difficult to combine them with family activities and end up not fulfilling the assigned tasks. Men continue to say that agriculture extension services have got a lot of activities and most of them are conducted far from their homes where women find it difficult to attend all activities such as trainings, and other related meetings when they have left children at home most of them young without any responsible person to stay with them and decide to either not to attend or spend few hours or do not concentrate on the training. Again 57.3 percent of women responded that, women work many hours a day compared to men due to various family and other social activities in addition to extension services which are continuous and time consuming. This hinders women to be dedicated to extension services as required.

Unsupportive and abusive husbands: According to the 41.3 percent of men responded that, most men have not understood the advantage of letting a woman / wife participate in public activities such as extension services, instead men expect women to take care of family responsibilities. Also 69.3 percent of women said that instead of being supported and encouraged by their husbands to participate in public activities including extension services, and benefit from public opportunities they are being abused and tortured by men thinking that they have gone to meet other men mostly when they come back home late due to long distances and also husbands think that women are being given some incentives such as (money) and do not give it to their husbands and becomes a big problem.

Long distances: According to the respondents, 49.3 percent of men said that, women are mostly challenged during pregnancy or breast feeding and this most of the time this affect women attendance such as; miss out most activities concerning extension services or if they attend they do not concentrate like men and also leave earlier as expected. And 65.3 percent of women said that apart from pregnancy and breast feeding periods, they are not safe to go back home late and most of the time be victimized by the husbands for coming back late and also continue with other household duties which limit and affect's women fully participation as men and also lacking knowledge and skills to be able to share with their famers or even practice in their farms.

Lack of enough trainings: According to men, 46.7 percent explained that due to un consideration of women's little time as men due to other family activities, women miss out some trainings which are very important to increase their knowledge and understanding about extension service techniques which make them less equipped with knowledge concerning extension services and less sharing since they know less compared to men while men are able to attend most of all the planned trainings and become more knowledgeable and equipped and are able to easily share the acquired knowledge to the fellow farmers that women. Also 50.7 percent of women responded that due to the training schedules that are less conducive for them they are unable to attend all the planned trainings and lack the expertise to be able to share and implement which limit their development as well as the community.

Lack of access to information. According to the findings, the 25.3 percent of men said that due to women inconsistent on attending different meetings and activities related to extension services, women often miss out important information that would benefit them as men where some of them do not have telephones where can get some information instead they are being owned by their husbands. Also 60 percent of women said that they lack access to information related to extension service activities since they most of the time miss out meetings and other related gatherings where they can

get information and ends up missing out many opportunities that would benefit themselves, the household and the community.

| Challenges   | Proposed solutions   |
|--|--|
|  | It has often been noted that women Farmer Promoters (FP)/Farmer              |
|  | Facilitators (FFS) can be more effective than men in information sharing     |
|  | with farmers concerning extension services. However, it becomes a            |
|  | challenge for most women as Farmer Promoters (FP)/Farmer Facilitators        |
|  | (FFS) to lack confidence due to cultural norms for instance fearing to speak |
|  | in public sharing their ideas and this limit them to fully participate in    |
|  | extension services. Campaigns for gender equality and equity therefore       |
|  | should be in place to empower women to participate in various economic       |
|  | and social development activities including Agriculture Extension Services   |
|  | which will increase the number of women involved in agriculture extension    |
| Carlterand   | services as well as individual, household and community development.         |
| Cultural   | Which will also create mutual understanding between men and women on         |
| Norms  | how they need each ones support for development?                             |
|  | Gender equality promotion is needed on household and community levels        |
|  | for equal rights between men and women on agricultural production and        |
| other farmer's resources which will motivate women to pa |  |
|  | Agriculture Extension Services (AES) and other activities where men will     |
|  | understand how important it is to have equal rights in a home to bring       |
|  | development. Because women are the heart of the family if they are given     |
| No rights and  | equal rights so that they are able to sale some of the production, women are |
| decision   | good at planning on how to use properly the money and are even willing to    |
| making to  | consult their husbands to plan together which is contrary to husbands where  |
| agricultural   | they do not consult wives on how the production can be used and that         |
| production   | affects family and community development.                                    |
| Lack of self-  | Agriculture Extension Services (AES) system need to come up with various     |
| confidence   | programs and campaigns to empower women to participate in public             |
|  |  |

| Table No 7. Proposed solutions to the constraints faced by women in Extension Services | (ES). |
|--|-------|
|--|-------|

|                  | activities including Agriculture Extension Services (AES) which will boost  |
|------------------|---|
|                  | and increase their confidence. If the system can recognize women            |
|                  | challenges and think on how these challenges can be catered for by          |
|                  | encouraging women to be part of various activities in the system, it will   |
|                  | motivate women of feel recognized and empowered by the system and           |
|                  | increase their participation.   |
|                  |   |
|                  | Agriculture Extension Services (AES) system should plan for facilitation    |
|                  | such as; means of transport or perdiem to enable women fully participate in |
|                  | Agriculture Extension Services (AES) and also involving women in            |
|                  | planning process to be able to raise their challenges to be considered and  |
|                  | planned for. This will encourage women to feel they are part of the system  |
| Lack of          | motivate them to increase their participation as well as improve on         |
| incentives       | Agriculture Extension Services (AES) reach its mission easily.              |
|                  | Gender equality promotion and campaigns are needed on community and         |
|                  |   |
|                  | household levels to inspire men and women for mutual support in a home      |
|                  | and in community which will not only increase women's participation in      |
|                  | Agriculture Extension Services (AES) but also increase household and        |
|                  | community development. Also to the part of men they will understand the     |
| Family           | significance of both taking family responsibilities and helping each other  |
| responsibilities | for the development of the family as well as the community.                 |
|                  | When Agriculture Extension Services (AES) activities are planned, women     |
|                  | should be involved to air out their challenges including limited time and   |
|                  |   |
|                  | women constraints should be considered and worked on through setting        |
|                  | favorable period and time for meetings, trainings and other Agriculture     |
|                  | Extension Services (AES) activities to facilitate women to comfortably and  |
|                  | fully participate and benefit from Agriculture Extension Services (AES) as  |
| Time             | men and be able to transfer the acquired to their homes and to the          |
| constraints      | community.  |
| Unsupportive     | There is need for gender relations campaigns in families and communities    |
| and abusive      | that carry messages to husbands how they should be supportive to their      |
|                  |   |

| husbands       | wives instead of mistreating them which is to disempowering them instead      |
|----------------|---|
| nusbanus       |   |
|                | of encouraging and empowering women to reveal their potential through         |
|                | participation in various public activities including Agriculture Extension    |
|                | Services (AES) activities to household and community development.             |
|                | Because husbands are always in public spheres, they can easily access         |
|                | opportunities and benefits than women and so another way of supporting        |
|                | women is to connect them or involve them in different opportunities           |
|                | because they are able to compete and fulfils the assigned duties as men or    |
|                | even better.  |
|                |   |
|                | While Agriculture Extension Services (AES) systems plan for activities it     |
|                | should involve women to be able to unveil their issues such as long           |
|                | distance among others. The plan should also consider gender relations and     |
|                | women empowerment campaigns and dialogues in families and in the              |
|                | communities on how women are facilitated to be able to participate in an      |
|                | advantageous way be it conducting Agriculture Extension Services (AES)        |
|                | activities in nearby places or to provide means for women to easily attend    |
|                | Agriculture Extension Services (AES) activities. Because it was said that     |
|                | due to long distances women mostly decide not to attend and miss out          |
|                | different activities which does not benefit either women themselves, family   |
|                | or even the community and no development.                                     |
| Long distances |   |
|                | Women need to be involved in planning process to raise their concerns         |
|                | such as; to be considered and plan special and enough trainings for them to   |
|                | fully attend and acquire same knowledge and skills as men and be able to      |
|                | implement in their homes and to share the acquired knowledge to the           |
|                | community. Trainings are key to enable Agriculture Extension Services         |
|                | (AES) members be equipped with modern agriculture techniques, the use of      |
| Lack of        | agriculture inputs (improved seeds and fertilizer), pest and disease control, |
| enough         | post-harvest and handling, knowledge transfer to fellow farmers,              |
| trainings      | knowledge application through demonstration plots, social aspect and many     |

|                | others. Therefore enough trainings are required for women to fully transfer   |
|----------------|---|
|                | knowledge concerning Agriculture Extension Services (AES).                    |
|                |   |
|                | Easy access to information by women is needed through various channels        |
|                | such as; radios, leaflets, posters, in community gatherings, on phones to be  |
|                | updated about Agriculture Extension Services (AES) and be able to share       |
|                | information with others. Lack of information is a big issue that can hinder   |
|                | women to feel part of the system. When women are not informed about           |
|                | what is taking place in Agriculture Extension Services (AES) system then      |
|                | they are not able to participate and share to their fellow farmers. More to   |
|                | that, women being in private sphere also is another reason for lacking        |
|                | access to information because there are more chances of access to             |
|                | information when in public places than in private places. So facilitating and |
|                | allowing women to be in public places with enable them to easily have         |
|                | access to information through networking, socializing with others and this    |
|                | will enable then to share confidently with other fellow farmers and will      |
|                | lead to personal, household and community development.                        |
| Lack of access |   |
| to information |   |
|                |   |

Source: Field data

# 4.9. Reporting Agriculture Extension Services (AES) activities

In Agriculture Extension Services (AES) system there is what they call diaries and checklist used to give report on the daily activities done by Farmer Promoters (FPs) and Farmer Facilitators (FFs). According to the findings, respondents from both sides these are; Farmer Promoters (FPs), Farmer Facilitators (FFs) and opinion leaders said that reporting daily activities done by Farmer Promoters (FPs) and Farmer Facilitators (FFs) through filling the checklists is done on an individual basis. Every member (men and women) reports his or her daily activities.

#### 4.10. Best performers among men and women in Agriculture Extension Services (AES)

During the study, it was revealed that however much women in Agriculture Extension Services (AES) are few in numbers compared to men, their performance bits that of men. Women are more responsible, organized, follow instructions and can easily implement and share the acquired knowledge to fellow farmers than men. Respondents said that, when men are being trained about Agriculture Extension Services (AES) due to other activities or other destinations they go to they tend not to give it a priority to share the knowledge acquired to fellow farmers. But the challenge remains the few women in Agriculture Extension Services (AES) and the respondents continued saying that if women can be empowered and motivated to join Agriculture Extension Services (AES) in big numbers than now, the results from Agriculture Extension Services (AES) would be amazing and this raises an importance and need of gender mainstreaming in agriculture extension services (AES) system as a way of empowering women since they have revealed their competence that they are able and their contribution is inevitable in Agriculture Extension Services (AES) system to achieve its mission.

## 4.11. Rights to land ownership

The Government of Rwanda has made strong political commitment to accelerating the promotion of gender equality as per laws among others: The Law Governing Land in Rwanda guarantees equal rights on land access, ownership and utilization for both male and female.

| Responses |       |    | Frequency | Percent |
|-----------|-------|----|-----------|---------|
| 100%      | owned | by | 8         | 10.7    |
| men       |       |    |           |         |
| 50%       | owned | by | 67        | 89.3    |
| men       |       |    |           |         |
| Total     |       |    | 75        | 100     |

Table No 8. Right to land ownership

Source: Field data

According to table number 8, it shows that 89.3 percent of respondents said that land is owned by both men and women at 50% rights and 10.7 percent respondents said that men own land rights at 100 percent owned by men. Respondents gave reasons that, it is also lack of information on laws that permit equal rights to land ownership between men and women and said that there should be ways on

how farmers mostly (women) can easily have knowledge about the laws to be able to enjoy their rights and also the promotion of gender equality in families and in communities for mutual understanding to both men and women about their rights and how it can empower women to feel valued and accountable to family resources. This increase household and community development.

## 4.12. Agricultural Production differences between women and men in (AES)

 Table No 9. Agricultural Production differences between women and men in Agriculture Extension

 Services (AES)

| Respondents                                      | Frequency | Percent |
|--|-----------|---------|
| Farmer Facilitators (FF) / Farmer Promoters (FP) | 52        | 69.3    |
| Opinion leaders                                  | 23        | 30.7    |
| Total  | 75        | 100     |

Source: Field data

Basically, women engaged in farming do access within a household production unit, and their activities are not usually separable from those of the household as a whole. By this study, male-headed households, female-headed households (single, widowers, divorced) were found out. The productive resources such as land, inputs, technology, education and financial opportunities are a critical determinant of agricultural productivity. Some of women are less privileged to access the above mentioned productive resources and other opportunities as men are easily get them. According to the respondents which are Farmer Facilitators (FF) / Farmer Promoters (FP) 69.3 percent of men have high production than women because of having easy access to various resources than women and due to women challenges of having a lot of responsibilities than men. Also according to opinion leaders, 30.7 percent of both men and women's production is not separated that this production is for men or for women. Respondents (Farmer Facilitators (FF) / Farmer Promoters (FP) said that, improving women access to productive resources as men such as; agriculture inputs (seeds and fertilizers), access to finances, land, modern farming techniques, trainings, access to agriculture information can enable women participate effectively and confidently in agriculture sector as well as in Agriculture Extension Services (AES) and close the gender gap related to agriculture production to the household level.

## 4.13. The level of attendance between men and women to Agriculture Extension Services.

According to the study, it was revealed that men are known to attend meetings, trainings, field days, season launch and other gatherings than women. The mobility limitations are still challenges for women of family responsibilities as confirmed by respondents.

**Table No 10.** The level of attendance between men and women to Agriculture Extension Services (AES) activities.

| Responses                         | Frequency | Percent |  |  |
|-----------------------------------|-----------|---------|--|--|
| Opinion Leaders                   | 45        | 60      |  |  |
| Farmer Facilitators (FF) / Farmer | 30        | 40      |  |  |
| Promoters (FP)                    |           |         |  |  |
| Total                             | 75        | 100     |  |  |

Source: Field data

According to the opinion leaders, 60 percent of the respondents shows the level of men attendance to Agriculture Extension Services (AES) activities. Respondents gave reasons of why men attendance is higher than women because men are not so much occupied with other responsibilities and workloads like women and it is easier for men to attend various activities of Agriculture Extension Services (AES) and benefit more than women. The respondents added that however much women attendance is low compared to men, the few that are able to attend are practical than men through time keeping, being attentive, willing to know and easily share the acquired knowledge to fellow farmers and effortlessly implement what they have learned to their firms easily than men.

On the other hand, men however much they attend in good numbers, they do not straightforwardly share information to their wives due to other destinations they go such as in bars and reach home when they are drunk or even forget when they have heard some family conflicts and no information will be shared. According to Farmer Facilitators (FF) / Farmer Promoters (FP) response, 40 percent of women attend Agriculture Extension Service (AES) activities reason being that due to a lot of other family responsibilities, women are not able to attend to the same level as men and this is a big challenge to women that they are not benefiting from Agriculture Extension Services (AES) as men due to missing

out important sessions that makes them be equipped with knowledge and skills to be able to transfer the skills to their families and also share with their fellow farmers.

# 4.14. Conflicts of interest related to gender in Agriculture Extension Services (AES)

| Responses                | Frequency | Percent |
|--------------------------|-----------|---------|
| Conflicts of interest    | 45        | 60      |
| No conflicts of interest | 30        | 40      |
| Total                    | 75        | 100     |

Table No 11. Conflicts of interest related to gender in Agriculture Extension Services (AES)

Source: Field data

The 60 percent % of respondents confirmed that conflicts are there but are minor related to selfcenteredness to some incentives offered to Farmer Promoters (FPs) / Farmer Facilitators (FFs) members like transport allowances, training incentives and in-kind support resulting from extension services. The gender is concerned as far as women are known to their limited access to such benefits and they are not usually informed when there are such opportunities and benefits. Other conflicts are family conflicts where women take such given incentives like money and their husbands use them and if women decide not to give the given incentives (money to their husbands) then that create more conflicts. And 40 percent of respondents said that, there are no conflicts of interest in Agriculture Extension Services (AES) related to gender, there is fairness and just in Agriculture Extension Services (AES) system which encourages women to feel equal with men.

# 4.15. Women participation in resolving conflicts in Agriculture Extension Services (AES)

Table No 12. Women participation in resolving conflicts in Agriculture Extension Services (AES)

| Responses              | Frequency | Percent |
|------------------------|-----------|---------|
| Women participate less | 39        | 52      |
| Women Participate      | 36        | 48      |
| Total                  | 75        | 100     |

Sources: Field data

According to table number 12, the study went further to hear the role of women in conflicts management in Agriculture Extension Services (AES). The 52 percent of respondents said that, women participate less in conflict solving compared to men reason being cultural norms where women are not allowed to speak and express their advice in public. This has caused women to continue to be under men's control and men take decisions the way they feel.

Women need to be empowered by letting them give out their views and opinions because they are also reasonable and by empowering them women will feel confident and fully participate in conflict resolution for the betterment of the Agriculture Extension Services (AES). Also 48 percent of respondents said that women participate in conflict solving through community meetings such as; (Umuganda, Akagoroba k'Ababyeyi) and the few that are able to participate in conflict resolutions, they are unbiased and are believed and trusted more by the majority of the people present than they trust men's ideas.

#### **CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

## 5.1. DISCUSSION OF THE FINDINGS

The present study findings were presented and interpreted in relative to the objectives of the study and literature review. The proceeding chapters dealt theoretically and scientifically with the women participation in AES in Kamonyi District precisely. The data that presented the findings of the study were collected from 100 respondents from the (5) five sectors in Kamonyi District and these were; Gacurabwenge, Runda, Musambira, Karama and Gacurabwenge. The findings were analyzed using the Statistical Package for Social Science (SPSS). For that reason, the following objectives have been achieved as it is discussed in the findings below.

#### 5.1.1. Level of Women Participation in Agriculture Extension Services (AES)

According to the findings, the level of women participation in Agriculture Extension Services (AES) depends on the fulfillment of the required skills through selection criteria to allow women or even men participate in Agriculture Extension Services (AES) such as; Literacy, Experience, Leadership skills, Integrity, role model in the community among others. Due to the mentioned required criteria's, respondents says that women are less selected compare to men for not fulfilling the required criteria's. This shows how women are not empowered so that they fulfill the required criteria's and be able to participate in Agriculture Extension services (AES) as men. Women need to be empowered to be part of the household and community development since women are key in sustaining the family however much women are disregarded as key players in development. The finding is compatible with the study of (Kaisa, 2003) that says women are less empowered compared to men yet they are primary part of the economy as feminist theories disapproving the efficiency approach and other modernization based theories for wanting to assimilate women into economic improvement and not identifying that women are already fundamental part of the economy rather than conform women into development and society. Ignoring women as integral part of development creates an assumption that women are an under - utilized resource, where in actually women are time and again an over utilized resources. Women also need to be part of planning process where they can share their challenges and the support they require to be able to participate in Agriculture Extension Services (AES). On my point of view as a researcher, women have occupied men's role due to women's family responsibilities where they are able to obtain basic needs as men. And that's why women need to be empowered and motivated to

benefit from different opportunities through participating in economic, political and social development including Agriculture Extension Services (AES) as men.

## 5.1.2. Constraints faced by women participation in Agriculture Extension Services (AES)

According to the study findings in table number 6, it indicates several constraints that hinders women to participate in Agriculture Extension Services (AES) such as; family responsibilities, lack of right and decision making to agriculture production, lack of incentives, cultural norms, lack of self-confidence, unsupportive husbands, lack of access to information, lack of enough trainings, where it was revealed that in Agriculture Extension system there is no specific planned strategy to solve the existing challenges women face or support to facilitate women to participate in Agriculture Extension Services (AES) without difficulties and this will boost their confidence. Gender equality promotions and campaigns on household and community levels are needed and also involving women in planning processes where their challenges can be noticed and considered. This finding suits with (Sida, 2015) that the economic empowerment of women requires participation with men and challenging established gender stereotypes for accumulative women's participation to solve the paired weight of paid work and care giving by women.

## **5.1.3.** Solutions to the challenges faced by women in Agriculture Extension Services (AES)

The study found the importance of various modifications and strategies needed to be done on government, institutional, community and on an individual level to empower women to peacefully and fully participate in Agriculture Extension Services (AES) as Farmer Promoters (FP) and Farmer Facilitators (FF).

Suggested solutions to overcome challenges women face are referring to table 7, some of the possible solutions acknowledged are; to involve women in planning process and in coordination which will enable women to express their challenges to be valued and considered. Extension Service System should improve on facilitating and empowering women through promoting gender equality, equity, and gender relations on a family and community levels which will encourage and motivate them to be involved in public spheres, make decisions, share ideas, develop confidence, access and share information, earn some income, move out of poverty hence economic development. This is suits with the study of (Hunt, 2016) which states that women's capacity to progress and attain cautiously and the control to create and participate on economic choices is fundamental to the consideration of a numeral

of development organizations which needs modifications contained by individual understanding and competence in societies and in the broader and governmental and lawful atmosphere.

#### **5.2. CONCLUSION**

In conclusion, I reflect on the key findings in relation to the study objectives. I consider how the study contributes to existing practical and theoretical knowledge and the suggested implications for women participation in Agriculture Extension Services in Kamonyi District and finally suggest some topics for further research.

The study is significant due to the fact that it will help realize challenges women face in participation in agriculture extension services (AES) and also to give recommendations that will drive policy maker's intervention in looking for strategies to overcome the challenges faced by women in agriculture extension services (AES) for improved agriculture productivity as well as economic development in Rwanda. Despite several strategic changes for improving agricultural extension and mainstreaming gender in agriculture, a bulk of women until recent years remain quiet from agricultural extension services (AES).

According the study findings, it was found that some of key challenges that women face in Agriculture Extension Services (AES) are; gender norms and access to information as also specified by other writers (McCormack, 2018) that, gender title role define the accepted conducts, characters and activities of men and women and are hence serious in commanding their usage and access to in Agriculture Extension Services (AES) participation and also how services are being planned and provided. This has caused direct consequences such as; income generation, increased poverty wellbeing of women, the household and community as well as agricultural production, food security and economic development.

Also the study revealed that, women in Agriculture Extension Services (AES) are hindered by family responsibilities where daily workloads do not usually allow women to be absent from home to attend various Agriculture Extension Services (AES) activities such as; trainings, practical trainings through on farm demonstrations, attending meetings becomes a problem which goes in line with other scholar's such as; (BahadurGhartiMagar, 2011) who said that, women are ever busy all day in different roles of in farm and household activities.

Other challenges faced by women in agricultural extension are lack of capacity, structure, laws and policy of the extension service system, illiteracy among women and where also the level of women participation in Agriculture Extension Services (AES) was found to be passive for they hardly took part in planning process.

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Despite the challenges, women in this study were relatively food secure. Agriculture Extension Services (AES) enhanced women's livelihoods and their capacities. This indicated that improving women's participation in Agriculture Extension Services (AES) would not only boost agricultural production but also the reduction of household food insecurity and poverty. The full inclusion of women in development process would strengthen not only their social and economic position but also bring meaningful development to women as individuals, household and community. (Simango, 2015). In conclusion, this study showed that women are a force to be reckoned with in the pursuit of development.

Efforts at the global and national levels to raise awareness on gender inequalities and women's role in development have led to the inclusion of policy directives related to gender mainstreaming in government policies, ministries and development plans.

To increase the number of women to participate fully and freely, Agriculture Extension Services (AES) system will need the promotion of lower cost through the use of machines in farm activities. Also Agriculture Extension Services (AES) system should consider favorable schedule for women to participate in various Agriculture Extension Services (AES) activities such as trainings and meetings and taking trainings to individual plots to reduce travelling to long distances.

Initiatives necessary for including women in agricultural extension services are: recruiting sufficient number of female extension workers; skill development of extension workers in handling female and male equally, providing integrated advice, and planning gender sensitive extension programs; revising criteria for selection of extension agents; persuasive motivational campaign on the importance of women participation in agricultural extension; increasing women access to productive resources such as; agriculture in puts (Improves seeds and fertilizers), skills of pests and disease control, modern farming techniques, knowledge transfer and information sharing, and educating women to develop self-confidence to be able to participate in various agriculture activities including Agriculture Extension Services (AES).

It is important for women to participate in Agriculture Extension Services (AES) due to the fact that it will help them utilize their full potential to improve their economic status, decision making in both farm and family related matters, improving productivity, have control to agricultural production and

increase their confidence through participation in planning process, standing for their rights which will have a tremendous impact on household and community levels.

I therefore claim that, any movement concerning gender norms issue will need a lot of efforts to fairly harmonize where Agriculture Extension Services (AES) system could meet women requirements and lead to possible opportunities and benefits for increased agriculture production as well as gender equitability.

As women's participation in the agricultural extension program is influenced by a number of factors from inside and outside of the legitimate functions of agricultural extension service system, all efforts from family, community, and national level is indispensable along with the development of the capacity, structure, and policy of extension services.

## Areas for further research

- The nature of this study could also be done in other parts of the country.
- To evaluate men's contribution to women empowerment in agriculture sector
- To analyze women opportunities in Agriculture Extension Services (AES) participation.
- To assess the impact of trainings to women in Agriculture Extension Services (AES)
- To assess the usefulness of women participation in Agriculture Extension Services (AES)
- To evaluate the experience of NGO's in reaching women in Agriculture Extension Services (AES)
- To assess how NGOs addresses women needs in Agriculture Extension Services (AES)

## **5.3. RECOMMENDATIONS**

- District, Sector agronomists and Local Leaders need to establish specific programmes, meetings and trainings that promotes gender equality for equal opportunities in Agriculture Extension Services (AES) that would help women benefit from agriculture resources and opportunities as men such as; having rights and decision to farm inputs, agricultural production and other resources.
- Policy maker's collaboration where the Ministry of Agriculture and Animal Resources (MINAGRI), the Ministry of Gender and Family Promotion (MIGEPROF) and the Ministry of Local Government (MINALOC) to organize gender relations campaigns and promotions to the household and on community levels and be reinforced and monitored by local leaders for women to gain support from their husbands as well as the community to be able to participate in social and economic development activities including Agriculture Extension Services (AES).
- Rwanda Agriculture and Animal Resources Development Board (RAB) as the Agriculture Extension Services (AES) coordinator to ensure that women are empowered through participation in planning process, content development, staffing, recruitment, monitoring and evaluation, which will allow women to speak out challenges they face to be heard and considered which will motivate and encourage women to feel they are part of the system as well as development process.
- District and Sector Agronomists and Local Leaders to plan for special arrangements and schedules that favor women from time constraints and long distances they make to participate in Agriculture Extension Services (AES) where they mostly miss out a lot that would benefit them as men to about Agriculture Extension Services (AES).
- Local Leaders to take proactive measures to ensure that rural women are able to meaningfully participate in various development activities by building their capacities, increase their knowledge and making decision-making to gain self-confidence.
- Rwanda Agriculture and Animal Resources Development Board (RAB) and concerned actors such as; NGO's such as One Acre Fund also known as TUBURA to prepare budget specifically for incentives and compensations (Transport, communication facility) for time spent in agriculture extension activities which will motivate and encourage extension agents

including women to fully participate and commit their time knowing that they will at the end take home something that will facilitate them in one way or another.

- The policy makers such as; the Ministry of Agriculture and Animal Resources (MINAGRI) and Ministry of Local Government (MINALOC) to empower extensionists and local authorities such as planners, agronomists, Monitoring and Evaluation Officers and other key actors in the sector about gender equality and gender mainstreaming to be well implemented and respected on institutional and local levels which will reduce most challenges faced by women in participation in Agriculture Extension Services (AES).
- Policy makers to set rules and regulations that are significant through each sphere of women's economic empowerment to offer women with same economic opportunities as men which will contribute to social and economic development including agriculture production through participation in Agriculture Extension Services (AES).
- Policy makers such as; Ministry of Agriculture and Animal Resources (MINAGRI), the Ministry of Gender and Family Promotion (MIGEPROF) and the Ministry of Local Government (MINALOC) should bring together multiple actors such as; government, private, NGO's and gender experts to create a favorable environment that empower and supports women to fully participate in Agriculture Extension Services (AES) such as projects, associations, cooperatives that will enable women meet with fellow women and even men to create network, exchange ideas and opinions on women can develop themselves, families and the community as a whole.

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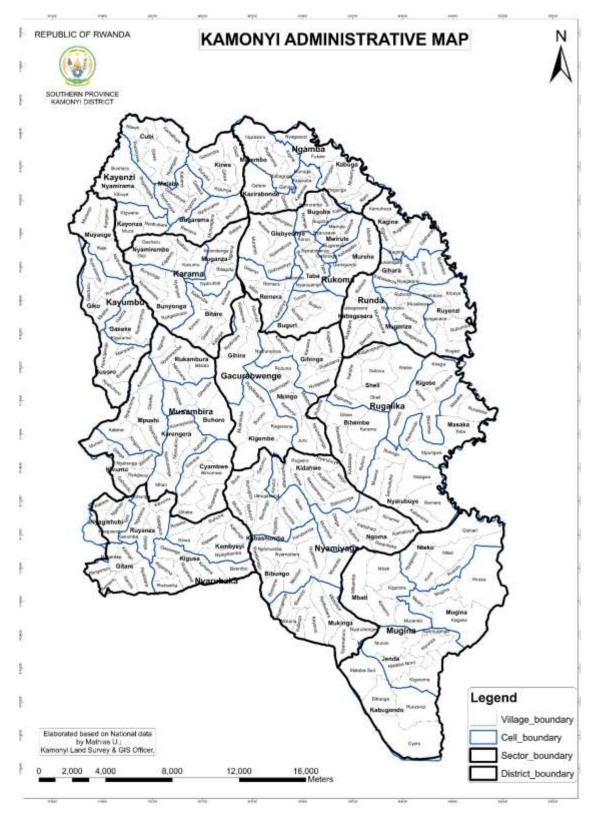
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## **APPENDICES**





## **QUESTIONNAIRE FOR FARMER FF/FP**

| Names:           |          | • |
|------------------|----------|---|
| Address: Village | Cell     |   |
| Sector           | District |   |
| Telephone        |          |   |

1. Social-economic factors of respondents

| Code | Age    | Sex    | Education  | Marital  | Family size            |
|------|--------|--------|------------|----------|------------------------|
|      |        |        | level      | status   |                        |
| 1    | 20-30  | Male   | No formal  | Single   | Small (1-4 members)    |
|      |        |        | education  |          |                        |
| 2    | 31-40  | Female | Primary    | Married  | Medium (5-9 member)    |
| 3    | 41-50  |        | Vocational | Divorced | Large ( above 9 member |
|      |        |        |            |          | )                      |
| 4    | 51 and |        | University | Widower  |                        |
|      | above  |        |            |          |                        |

- 2. Ni ibihe bigenderwaho mu gutoranya abafashamyumvire/abajyanama b'ubuhinzi muri gahunda y'iyamamazabuhinzi/What are selection criteria in FP/FFS for extension services?
- 3. Ku giti cyawe, ni ni izihe ntego z'iyamamazabuhinzi/According to you, what are the main objectives of extension services?
- 4. Ni ibihe bihingwa biri muri gahunda yanyu y'iyamamazabuhinzi/What are the types of agricultural crops under your extension services?
- 5. Nizihe ngaruka (mbi cg nziza) wagaragaza zazanywe n'iyamamazabuhinzi/What are the outcomes (negative or positive) of extension services through FP/FFS and the community?
- 6. Abafashamyumvire/abajyanama b'ubuhinzi mukorera mu rwego rwa koperative/Are the FP/FFS working under a cooperative structure?
  - Yes (yego)
  - Niba ari hoya, sobanura impamvu/No, if no why

- 7. Niyihe miryango nterankunga mukorana muri service y'iyamamazabuhinzi/What are the NGOs in your area which are partners for agriculture extension services?
- 8. Hari inkunga y'umwihariko igenewe abagore (abafashamyumvire/abajyanama b'ubuhinzi) bakora iyamamazabuhinzi/Is there any particular support to empower women FP/FFS from NGOs?
- 9. Hagati y'abagabo n'abagore nibande bibandwaho mu gutoranya abayobozi b'amatsinda y' abafashamyumvire/abajyanama b'ubuhinzi/ who are mostly selected between men and women in AES?
- Abagabo by'umwihariko/Mostly men
- Abagore by'umwihariko/Mostly women
- Bose batoranywa kimwe/Equally
- Sobanura uko ubyumva/Comment
- 10. Uburinganire burubahirizwa mu gutoranya abagize amatsinda y'iyamamazabuhinzi (15-20)/ Is gender respected in in AES?
- Birubahirizwa/Respected
- Ntibyitabwaho cyane/Fairly respected
- Ntabwo byubahirizwa/Not respected
- Sobanura uko ubyumva/Comment
- 11. Ni iki gituma gikundisha abagore kwitabira gahunda y'iyamamazabuhinzi/What motivates women (FP/FFS) to participate in agriculture extension services?
- 12. Urugero rwo kwitabira iyamamazabuhinzi ku bagore ni runini kuruta urw'abagabo. Nawe urabyemera/The level of women participation in agriculture extension services is higher than that of men. Do you agree?
- Ndabyemera cyane/Agree
- Simbyemera/Disagree
- Dusobanurire igisubizo utanze/Explain

- 13. Ni ubuhe bushobozi/ibikoresho bihabwa abafashamyumvire/abajyanama b'ubuhinzi muri gahunda y'iyamamazabuhinzi/What are the facilities/tools given to FP/FFS for extension services?
- 14. Ni izihe mbogamizi abagore (abafashamyumvire/abajyanama b'ubuhinzi) bahura nazo mu iyamamazabuhinzi/What are the challenges women FP/FFS face in agriculture extension services?
- 15. Amafishi ya raporo z'ibikorwa by'iyamamzabuhinzi zuzuzwa nande cyane, ari abagabo cg abagore/Diaries and checklists that shows group activities are mostly filled by men or women FP/FFS?
- Cyane ni abagabo/Mostly men
- Cyane ni abagore/Mostly women
- Sobanura igisubizo utanze/Comment
- 16. Habaye imikorere idatanga umusaruro ituma habaho gusimbuza umufashamyumvire/umujyanama w'ubuhinzi, asimburwa n'umugore cg umugabo/ Who are mostly replaced among men and women?
- Asimburwa akenshi n'umugabo/Mostly men
- Asimburwa kenshi n'umugore/Mostly women
- Sobanura uko ubyumva/Comment
- 17. Abagabo n'Abagore bombi (abafashamyumvire/abajyanama b'ubuhinzi) bagira uburenganzira gungana, buzwi kugutunga ubutaka/Do both men and women FP/FFS have equal right to land?
- Abagabo babufite 100% (100% owned by men)
- Abagabo babufite 50% (50% owned by men)
- Abagore babufite 100% (100% owned by Women)
- Abagore babufite 50% (50% owned by Women)
- Ibindi /others
- 18. Haba hari imigenzo ijyanye n'umuconyarwanda mugenderaho muri gahunda y'iyamamazhuinzi/Are there some culture norms in extension services system?
- Oya/No

- Yego/Yes
- Sobanura/Comment
- 19. Haba hari itandukanirizo riboneka ku musaruro w'ubuhinzi hagati y'abagabo n'abagore? Is there any difference between the production for women and men FP/FFS?
- Yego/Yes
- Hoya/Not
- Sobanura uko ubyumva/comments
- 20. Mu gihe cyo kujya mu nama, amahugurwa, iminsi y'imurikabikorwa mu murima, ni bande bitabira cyane hagati y'abagabo n'abagore/During meetings, trainings, field days who attends most among men and women FP/FFS?
- Cyane abagabo/Mostly men
- Cyane abagore/Mostly women
- Sobanura uko ubibona/Comment
- 21. Ni izihe mbogamizi abagore bahura nazo mu bikorwa by'ubuhinzi no kubigira ibyabo/What are the constraints faced by women (FP/FFS) in the Adoption of Agricultural practices?
- 22. Haba hari amakimbirane ajyanye n'uburinganire mu gushaka inyungu ziva muri gahunda y'iyamamazabuhizi/Are there some conflicts of interest related to gender in extension services?
- Hoya/No
- Yego/Yes
- Niba ari yego sobanura neza/If yes, Specify
- 23. Ni gute abagore (abafashamyumvire/abajyanama b'ubuhinzi) bagira uruhare mugukemura amakimbirane ajyanye n'uburinganire mu gushaka inyungu ziva muri gahunda y'iyamamazabuhizi /How do women FP/FFS participate in solving conflicts of interest related to gender in extension services?

- 24. Ni izihe nama watanga zatuma abagore (abafashamyumvire/abajyanama b'ubuhinzi) bafata ibyemezo mu buryo bwisumbuye muri gahunda yiyamamaza buhinzi/What do you suggest to increase further women FP/FFS as decision makers in extension services?
- 25. Ni izihe nama watanga mu guha abagore ubushozi mu kwitabira cyane gahunda y'iyamamazabuhinzi/What do you suggest to empower women's participation in extensions services?

Tubashimiye uruhare rwanyu.

Thank you for your participation.

## **QUESTIONNAIRE FOR OPINION LEADERS**

| Names:           |          |   |
|------------------|----------|---|
| Address: Village | Cell     | • |
| Sector           | District |   |
| Telephone        |          | • |

- 1. Ni ibihe bigenderwaho mu gutoranya abafashamyumvire/abajyanama b'ubuhinzi muri gahunda y'iyamamazabuhinzi/What are criteria's in selecting FP/FFS for extension services?
- 2. Ni ni izihe ntego z'iyamamazabuhinzi/What are the main objectives of extension services?
- 3. Nizihe ngaruka (mbi cyangwa nziza) wagaragaza zazanywe n'iyamamazabuhinzi/What are the outcomes (negative or positive) of extension services through FP/FFS and the community?
- 4. Abafashamyumvire/abajyanama b'ubuhinzi mukorera mu rwego rwa koperative/Are the FP/FFS working under a cooperative structure?
  - Yes (yego)
  - Niba ari hoya, sobanura impamvu/No, if no why
- 5. Uburinganire burubahirizwa mu gutoranya abagize amatsinda y'iyamamazabuhinzi (15-20)/ Is gender respected in selecting 15-20 farmer promoters group?
  - Birubahirizwa/Respected
  - Ntibyitabwaho cyane/Fairly respected
  - Ntabwo byubahirizwa/Not respected
  - Sobanura uko ubyumva/Comment
- 6. Ni ubuhe buryo mukoresha mu kugeza ku bafashamyumvire/abajyanama b'ubuhinzi ubumenyi na tekiniloji z'iyamamazabuhinzi? How do FP/FFS access agriculture technology and extension services?

- 7. Ni iki gituma abagore (abafashamyumvire/abajyanama b'ubuhinzi) bashishikarira mu kwitabira gahunda y'iyamamazabuhinzi/What motivates women (FP/FFS) to participate in agriculture extension services?
- 8. Ni ibihe bikoresho cg ubufasha bihabwa abafashamyumvire/abajyanama b'ubuhinzi muri gahunda y'iyamamazabuhinzi/ What are the facilities/tools given to FP/FFS for extension services?
- 9. Habaye imikorere idatanga umusaruro ituma habaho gusimbuza umufashamyumvire/umujyanama w'ubuhinzi, asimburwa n'umugore cg umugabo/ In case of a poor performer, he or she is usually replaced by mostly men or women?
  - Asimburwa akenshi n'umugabo/Mostly men
  - Asimburwa kenshi n'umugore/Mostly women
  - Sobanura uko ubyumva/Comment
- 10. Mubona ibitekerezo n'inama by' abagore (abafashamyumvire/abajyanama b'ubuhinzi) byitabwaho mu gihe cy'amahugurwa n'inama /Do you think FP/FFS women views and opinions are considered in extension services trainings and meetings?
  - Yeog/Yes
  - Hoya/No
  - Sobanura uko ubibona/comments
- 11. Ni izihe mbogamizi abagore (abafashamyumvire/abajyanama b'ubuhinzi) bahura nazo mu bikorwa by'ubuhinzi no kubigira ibyabo /What are the constraints faced by women FP/FFS in the Adoption of Agricultural Practices?
- 12. Amafishi ya raporo z'ibikorwa by'iyamamzabuhinzi zuzuzwa nande cyane, ari abagabo cg abagore/Diaries and checklists that shows group activities are mostly filled by men or women FP/FFS?
  - Cyane ni abagabo/Mostly men
  - Cyane ni abagore/Mostly women
  - Sobanura igisubizo utanze/Comment

- 13. Hagati y'abagore n'abagabo, ni bande bagaragaza umusaruro kurusha abandi haba mu myumvire cg mugutanga serivisi mu iyamamazabuhinzi/Among women and men who qualifies as the best FP/FFS performer in terms of understanding and delivery of extension services?
  - Cyane abagore/Mostly women
  - Abagabo cyane/Mostly men
  - Sobanure uko ubyumva/Comment
- 14. Mu gihe cyo kujya mu nama, amahugurwa, iminsi y'imurikabikorwa mu murima, ni bande bitabira cyane hagati y'abagabo n'abagore/During meetings, trainings, field days who attends most among men and women FP/FFS?
  - Cyane abagabo/Mostly men
  - Cyane abagore/Mostly women
  - Sobanura uko ubibona/Comment
- 15. Ni izihe nama watanga mu guha abagore ubushozi mu kwitabira cyane gahunda y'iyamamazabuhinzi/What do you suggest to empower women's participation in extensions services?
- 16. Ni izihe ngamba zafatwa kugiraho uruhare rw'abagore (abafashamyumvire/abajyanama b'ubuhinzi) rurusheho gutanga umusaruro muri gahunda y'iyamamazabuhinzi /What are your recommendations for more effective participation of women FP/FFS in agricultural extension services?

Tubashimiye uruhare mugize

Thank you for your participation.