International Journal of Gender Studies (IJGS)

UNLEASHING GENDER EQUALITY AND ACCESS TO KNOWLEDGE AMONG SMALLHOLDER FARMERS: RETHINKING IMPLICATION TO POVERTY REDUCTIONS

Farida Kassim Katuli



UNLEASHING GENDER EQUALITY AND ACCESS TO KNOWLEDGE AMONG SMALLHOLDER FARMERS: RETHINKING IMPLICATION TO POVERTY REDUCTIONS

Farida Kassim Katuli Lecturer, Tumaini University Dar-es-Salaam College, kassim07@yahoo.com

Abstract

Purpose: The aim of the study is to examine gender equality in accessing knowledge among smallholder farmers with a focus on poverty reductions strategies.

Methodology: This paper draws from the theoretical and empirical literature review of studies on smallholder farmers on access to agricultural knowledge through collection of secondary data and reviewing information that has been gathered from various studies and reports in research and academic institutions, as well as from internet sources in and outside Tanzania.

Findings: The study found the missing link in poverty reduction strategies, thus there is a need to strengthen the strategies and the agriculture policy. The study also, found that women have less access to agricultural knowledge than men due to cultural barriers, low level of literacy, poverty, and lack of ownership of resources such as land and income for sustainability and security.

Unique contribution to theory and policy/recommendation): The focus and outcomes regarding gender equality in relation to access to agricultural information suggests the need for more refined and socioeconomic models that cuts across gender and other social dimension beyond other factors of culture, education etc. This study recommends that there is a need to rethink of the implications to poverty reduction strategies during preparation of the strategies in order to increase accessibility of knowledge among smallholder farmers, especially women. Hence, this study will contribute to theory and policy to enable smallholder farmers to increase productivity and income especially to women.

Keywords: Gender, Access to Knowledge, Smallholder Farmers, Poverty Reduction, Agricultural Information.

International Journal of Gender Studies ISSN 2520-4025 (Online) Vol.5, Issue 1 No.3, pp 29- 43, 2020



1.0 INTRODUCTION

Poverty is a concept which covers many areas that seek out to measure the levels of deprivation by a person, community, or household (Development Initiatives, 2016, p.1). Even though most of the literature focuses on indicators of deprivation which can often be subjective and therefore may not reveal a full-scale measure of the unmet basic needs in different social settings. This inconsistency leads to concepts such as poverty, social marginalization, and vulnerability which are used interchangeably in development discourse. While permitting variations in indicators of unmet basic desires, economic condition is usually thought of to be a life of deprivation of the fundamental desires that an individual, social unit or community needs to possess a basic customary of living. Deprivation is measured either in terms of a scarcity of resources (e.g. financial gain, assets), capabilities (eg skills, knowledge, technology), or each (Matovela, Msuya, & de Smet, 2006 p.3). This study is mainly concerned with poverty among rural smallholder farmers cannot access to agricultural knowledge, thus leading to less income from agricultural earnings.

Rural farmers account for the larger fragment of the population of any developing country like Tanzania. Governments of developing countries have significant responsibility for guaranteeing that there is adequate rural development within their numerous communities and local governments. Consequently, this could end ineffective and economical agricultural systems that will not solely offer food and animal macromolecule, however, additionally foster the utilization of natural resources in an exceeding property manner (Agu, 2013, p.59). Once the farmers lack access to knowledge that will facilitate them deliver the products of most agricultural yield, they do not only fumble within the dark but are forced to migrate to urban centers looking for formal employment, as the merely way for survival (Mtega and Msungu 2013, p.8). Other factors contributing to limit the contribution of agriculture sector to poverty eradication is the poor network of agricultural information services (Mtega and Msungu, 2013, p.7). Weak linkage among actors in the sector has been mentioned as another limiting factor to the accessibility and usage of agricultural knowledge and information among farmers (Shao, 2007; URT, 2008; Komwihangilo et al., 2010, p.109). This paper also believes that it is important to have centres for farmer's accessibility to knowledge. Although there are shortcomings of ancient print and library-based ways (Mtega & Bernard, 2013, p.67) who live in isolation as from formal sources of knowledge (e.g. extension stations, libraries). Also; agricultural knowledge is produced by farmers themselves. This is a typeof knowledge is termed as indigenous agriculture knowledge (Lwoga, 2010, p.36). Even though farmers have indigenous knowledge but agricultural research has a major role to play in increasing the productivity and profitability of the agriculture sector. However Lwoga & Ngulube, (as cited in Njobvu & Koopman eds. 2008, p. 80) also, were of the opinion that farmers would show pride in international information, uncertainty information centres, which are found in rural areas complete with all information and communication gadgets.

Gender equality, poverty reduction, and access to information are somehow related, and that relies judgmentally on enrichments in agriculture. These factors have different ways in which to concentrate on increasing access to knowledge and innovation among small-scale farmers and



access to gain employment for the rural poor who lack access to land. Most poor and food insecure farmers in rural areas who rely totally on agriculture for their livelihoods live in poverty (Benard, Dulle, & Ngalapa, 2014, p.20). On average, agriculture provides sixty percent of employment and represents thirty-four percent of gross domestic product (GDP) within the poorest countries (Katuli, 2017, p.3).

The implementation of a gender perspective can contribute to the formation of more efficient poverty reduction policies. The policies will ensure that women can have control over productive assets, and have the security of land tenure in their own right. Moreover, this will increase access to inputs like credit, extension services, fertilizers, and access knowledge. These measures are actual means of speeding up and expanding growth that will ensure sustainable poverty reduction in rural areas.

1.2 Women's Constraints in Agriculture

Some of the international studies have indicated that women face obstacles in agriculture, particularly inequalities, in access to and management of vital resources and inputs similar to land, labor, fertilizer and credit facilities (Lwoga, Ngulube & Stilwell, 2011, p.389). Women additionally face obstacles to membership in rural organizations and cooperatives, agricultural inputs, and technology such as better seedlings, coaching and extension, and selling services. The researcher has thought about these findings as prohibiting women's access to knowledge and has implications in financial condition most importantly reduction of knowledge among women in agriculture (Lwoga, Ngulube & Stilwell, 2011, p.389).

Studies by Lwoga et al (2011, p.385) on Access and use of agricultural information and knowledge in Tanzania indicated that the extension officers were important sources of information and knowledge, though farmers were dissatisfied with the frequency of their interactions, as it was also found in Nigeria (Adomi et al., 2003, p.390), and Vietnam (Castella et al., 2006, p.110). Agricultural input suppliers, village meetings, and farmer groups were important sources of agricultural information and knowledge in some regions. Explicit sources of knowledge, with the exception of books, had low use due to their unavailability and the absence of the reading habit. This finding is consistent with the research findings observed in Nigeria (Adomi et al., 2003, p.390), and South Africa (Mosia & Ngulube, 2005, p.179). Thus, there are still gaps in access to information and knowledge which need to be strengthened. The findings also indicated that there were variations in sources of knowledge according to gender. The study found that males dominated formal sources and explicit sources of knowledge, while women dominated NGOs and local sources of knowledge. Studies in India (Conroy et al., 2004) and Nigeria (Adomi et al., 2003) also showed that women were frequently disadvantaged in accessing information and knowledge. Illiteracy and cultural responsibility could be some of the factors which limited women's access to information and knowledge.

Moreover, such barriers and restrictions greatly constrain women's agricultural productivity. Studies in India (Conroy et al., 2004) and Nigeria (Adomi et al., 2003, p.392) also showed that women were frequently disadvantaged in accessing information and knowledge. It is imperative that in most of the analysis, findings have indicated that these obstacles account for food shortages, the forgone economic process through lower crop yields, delayed adoption of the latest technology and plant varieties, and environmental degradation. On the other side, data



from the geographical areas of access to knowledge reveal that agricultural output is reduced due to women's restricted access to inputs and support services.

Small Farmers in Tanzania



(For the Courtesy of Tanzania ZOOM 2010)

2.0 Abstract and Theoretical Issues

The most important assumption of this study is that women play a polar responsibility as construction blocks for food production and social unit management in agriculture (May 2012, p. 36). These assumptions are limited by the lack of the right to use and utilize agriculture data for household food security.

The theory in generating knowledge is standpoint theory which is a postmodern method for analyzing inter-subjective discourses. This theory concern with the authority generated by people's knowledge and the power of such authority has to shape people's opinions in daily life. The American feminist theorist (Sandra Harding as cited in Harding, Hintikka, & Merrill (eds.), 2004, p.5) coined the term Standpoint theory which categorizes epistemology that emphasizes women's knowledge. The feminist theoretical perspective argues that knowledge comes from the social position. The theory emerged from the Marist argument that people from an oppressive class have special access to knowledge. This theory is useful in this study as it has the power to shape people's ideas after accessing new knowledge that will help them change their opinion in agricultural knowledge.

The significance of the standpoint theory concept defines that a person's viewpoint is shaped by the standpoint at most times engage in more than one factor. For example, if you look at different Hispanic women, their standpoints may bear a resemblance to one another in terms of groupings that are classified in biological sex and races; however, if their socioeconomic status is different,



then their standpoints are different. These perspectives are the center point of observation for individuals to see the world as pointed out by Steiner (as cited in Hannan ed. 2014, p.280). Steiner argue that the gender aspect of standpoint theory observes that feminist viewpoints allow women to communicate with the world and themselves. Also, the standpoint has a big impact on how people perceive changes from one situation to another. Therefore, Standpoint is a situation from which one view and sees the world that determines both what one focuses on as well as what is hidden. Depending on one's circumstances, one's standpoint may differ from that of another individual who may be of a similar position. Importantly, Standpoint theories are said to remind people why a real-lifestyle of knowing anything is important. On the other hand, knowledge does support people to know part of the world that they usually are inclined not to know. Gaining knowledge occurs only in exact situations and has genuine consequences as pointed out by Steiner (as cited in Hannan ed. 2014, p.282). These consequences can have an outcome on how a person will live his or her life. It matters politically moreover as epistemically that ideas are intelligible, which claims are detected and understood by whom, which options of the globe are perceptually most important, and which reasons are understood to be significant and powerful, as well as which conclusions are realistic. The theory of standpoint is relevant for this study as it allows women to access information on agricultural issues and use them for better life.

There seem to be several theories that are specific to the library and knowledge science. Burt (2004, p.35) highlights the lack of a national, unifying theoretical framework within the field of knowledge of Science which ends up in the use of theory from different disciplines. Whereas the Interior theory is especially employed in communication, which I think should be widely applied to disciplines starting from agriculture to selling to extend the adoption of innovative merchandise and ideas. Its flexibility lies within the indisputable fact that it is not a comprehensive theory however it is rather a meta-theory that has many theoretical views that relate to the construct of diffusion. Therefore, the idea's pertinence in other disciplines akin to agriculture and knowledge technology renders it versatile and most relevant for this study.

2.1 Literature Review on Gender Access to Knowledge and Poverty Reduction in Agriculture

For any community to perform impassively a basic stock of usable information is necessary. It is apparent that in this age of information and knowledge, more efforts are needed to reinforce the access to information of male and female smallholder farmers. Moreover, globalization among different forces has speeded the requirement for knowledge rigorous work performance altogether in the subdivisions of the economy. Quisumbing & Pandifelli (2010, p.583) observed that knowledge and information became vital factors for the production of products and services. To the current effect, it is progressively turning into a reality that the longer term of food security within the developing world, for example in the continent of Africa and Asia, is going to be dependent less on resource-intensive agriculture and a lot of on information-intensity. The achievement of the Green revolution in Asia and also the Middle East indicates that giving rural communities access to knowledge, technology and services add to increasing and stimulating agriculture. Some studies, for instance by the United Nations Agency (2004), United Nations (2002), IFPRI (2004) agree that the longer-term of food security within the developing world is progressively turning into the dependent more on data and knowledge than inputs. In accordance



with Fleischner (2008 p. 670) inorder to maintain the property of farming or food crop production is hampered in the African nation because of varied factors, for instance, absence of inputs and mainly, absence of contact to information and knowledge on funds by women who are deceptively the key players. Rural communities need information inter alia on the offer of inputs, new technologies, early warning systems (drought, tormentors, and diseases), credit, market costs, and their competitors. They have information on farming systems pest and diseases, cropping, education credit management, livestock management, selling and pricing, harvest management, health and nutrition, farm security, finance and credit different information including farming lacking chemical fertilizers; and famine resilient crops (Doss & Morris, 2001 p. 30). Agricultural information is so essential to prosper to farmers and agriculturists so as to fulfill their needs. If farmers incidentally have access to appropriate agricultural information, food shortages will also be eradicated. Such information is critical to their farming undertakings and effect on social unit food security.

The satisfaction of the data is generally subjective by the individual temperament. The individual temperament refers to the background and distinctive of the individual similarly because of the individuals' situation, which has factors like age, education, inspiration, responsibilities, problems, and roles. The key challenge nevertheless is that almost all reproduction of imprint is in English however the extent of attainment of respondents in accessing such information disable them from accessing such information by the low level of literacy. Smallholder farmers lack literacy abilities and economic proficiency to access and use pertinent information.

Women's access to information relies not solely on the supply and dissemination of information within the languages they perceive, but also, on literacy levels. Such information is though still applicable if repackaged and directed to ordinary societies through government and relevant institutions. Even with no such data despite their numbers within the agriculture sector, women's involvement in households and afterward national and regional development is constrained. A capability to scan and take part in society increases one's self-worth as a Mozambican Factory worker, Christina Mavale (as cited by Marshall 1975) pointed out that people with low literacy do not take the initiative of learning new things although they have vast knowledge. Mavale mentioned of her confidence, after exploitation of acquisition of skills.

Agricultural knowledge in most of the developing countries is controlled by women, who use, access, and accept the technologies compelled to have access to agricultural knowledge (Lwoga et al, 2011: p. 387). This can be indicated simply as completely diverse results. In most cases, the tendency of agricultural extension officers has shown bias within the choice of the type of women to be included in the training. This is shown in a number of the literature on agriculture and human resources who has explored varieties of literature in numerous zones. This is equally true on the findings of feminine studies of the male farmers on access, implement and use of data which are non-heritable in the various areas of agriculture. However, a comparative study by Davis and colleagues (2010) studied FFS (Farmers Field Schools) in Kenya, Tanzania, and Uganda, employing a longitudinal quasi-experimental impact analysis design. Findings showed that female community members in Tanzania and Kenya have identical access to services, whereas women in the Republic of Uganda are less likely to participate in FFSs. An inspiring finding by Roy (2012, p.55) study is that women who took part in FFS are a lot of likely to accept nearly all different chief technologies, as well as improved seed varieties, soil fertility



management, and management techniques. Scholars (eg, Ismail et al., 2015; Magesa et al., 2014; Otekunrin et al., 2019) have acknowledged an information gap where smallholders have poor access to agricultural management information.

All other revised studies on extension services report indicated that mean values of access to knowledge that are lower for women than men: nineteen % versus eighty-one percent in Malawi (May 2012, p. 36) amongst 1.13 contacts versus 2.03 contacts in Uganda (Kiiza & Pederson 2012, p. 254), seven % versus thirteen percent in Malawi (World Bank and Malawi, 2007). Another study from Senegal, found that women's information of assorted agricultural techniques is smaller than men's, with the exception of nursery techniques, within which they are just about equal (Siyao 2012, p.15). In general, sample sizes within the extension literature are a lot of larger, for example, 1,385 farms (in May 2012, p. 37), 11,280 in the World Bank study which used the Malawian Integrated social unit Survey as linked to sample sizes in studies of examining different inputs, maybe reflective use of social unit associate degreed other survey data which were not collected specifically for an extension or other framework evaluation.

Nevertheless one interesting unknown avenue of research is whether or not there are genderbased variations within the quality of information received by men and women. One issue that will influence quality and amount of information is that the gender of the extension agents or livestock officers. Consequently, the World Bank and IFPRI (2010) study found extension agents and livestock officers in Ghana, Ethiopia, and the Republic of India to be entirely male. Whilst in Ghana, solely ten of seventy extension agents interviewed were female. Moreover in Ethiopia, agents were virtually solely male; while in Karnataka, India, none of the forty-one agricultural extension staff were female, 1 of four junior engineers was female, and 4 of forty veterinary assistants were female.

Gender inequalities could cause issues in distributive information. For example, in Ethiopia, researchers note that male extension agents are prohibited from interacting with female farmers by harsh cultural taboos. Also, male extension officers take the common thought that women are not farmers and overlook women within the social unit once delivering information. Nevertheless, researchers in Senegal found that female extension agents will have a constructive effect on the dissemination of knowledge among each man and women (Quisumbing & Pandolfelli 2010, p. 589). Another issue that will influence both value and amount of data on the market to women is access to knowledge. In Karnataka, the Republic of India, seventy-one % of female heads of the social unit have access to those ethereal connected services, as do seventyeight percent of male heads of household. Within the Indian context, researchers pointed to the similar rates of access to the importance of dairy farm cooperatives that incline to be a lot of gender-neutral. Fascinatingly, proof from Ghana, Ethiopia, and India indicates that the public sector offers the bulk of extension services. The World Bank and IFPRI (2010) study found that NGOs, private-sector enterprises, and community-based organizations (CBOs) all play a comparatively restricted role in the delivery of extension services. As to the magnitude of information of data of knowledge within the World Bank and IFPRI (2010) report, a whole section may be dedicated to the discussion of extension services alone; these findings indicate that women have limited access to knowledge particularly in the sector of agriculture.



3.0 RWANDA CASE STUDY ON GENDER EQUALITY IN AGRICULTURE

Rwanda was stratified at 167th out of 182 on the Human Development Index (UNDP, 2007), which indicates as one of the world's poorest countries. Impoverishment is so high, showing that some 56.4% of the population lives underneath the line of poverty of \$ 1 income (NISR 2007) and 80% of the population live under US \$2 (which purchasing power parity indicator of the World Bank (NISR, 2007). However, Rwanda was ranked 139th before fifteen alternative African countries. However, the Gender-related Development Index, showed that expectancy at birth was 49.7 for the male and 51.4 for females, with 64.9% of adults aged fifteen and over, whilst they classified as literate. Impoverishment in Rwanda is high as the manifests geographical, gender, and activity disparities indicated. In this regard, poor citizens are probably to be women, disabled, widowed, rural dwellers, or engaged in agricultural activities.

One of the Millennium Development Goals stipulated that collectively of the 191 world organization member states that dedicated to the attainment of the eight-millennium development goals (MDGs) by 2015, Rwanda has associated its development methods towards meeting the MDGs. Although, within the context of agricultural service delivery and gender, MDG 1 (eradication of extreme poverty and hunger); MDG three (Promotion of gender equality and empowerment of women); MDG seven (make certain environmental sustainability), and MDG 8 (Development of world partnership for Development), Rwanda have produced the policy and strategy instrument for gender equality and agricultural service delivery for adoption in Rwanda. A case study with the appraisal of the good follows up in gender in incorporating agriculture and some of the lessons learned alongside each other of the suggested interventions. In the integration of gender in agriculture, the World Bank and the Guide of gender in agriculture, and Thailand Ministry of Agriculture documents provided vital material and guides for the case studies reviewed.

Women farmers, agricultural employees and agri-business operators in Rwanda have one common draw back – lack of skills and organizational capacity, additionally to extreme vulnerability for sort of rural ones (Siyao 2012, p. 11). The agricultural development method may have Goals deep result on their productivity and invention - absolutely if gender issues are carefully analyzed and integrated, however may worsen their scenario if interventions do not take such problems into consideration. For example, several informal women's organizations are being united into cooperatives in conjunction with alternative organizations. If organizational challenges that exist do not seem to be addressed, they will become additional difficult and girls will lose out. The Micro-finance strategic frameworks recognise the gender disparities in ability to access funding and employment opportunities. Significant innovations are required to handle the barriers are faced by women. As an example, the way to overcome the communication and knowledge barriers that rural and semi-literate women face; alternatives to collateral in accessing finance may facilitate women who are restricted by lack of assets (Sife, Kiondo & Macha, 2010, p. 9).

There is need to address knowledge and skills gaps. Access to new technologies is extremely important for improved and sustained productivity, diversification and enhanced returns on agricultural investment. However women and men farmers, researchers and scientists have totally different needs, priorities and knowledge. Incorporating the local knowledge of women



farmers will help agricultural researchers develop technologies that are adjustable to local conditions.

Extension/advisory services (Ubujyanamamu'ikoranabuhanga): agricultural extension services are rare, and thus the women farmers claimed solely time they see the Agronome is throughout mobilization for land consolidation after they are told what crops to cultivate and the way, Girinka activities and sometimes in Ubudehe. Access to information on the right crops, agro-forestry tree species, nursery bed management, and how to determine home curtilage garden (Akarimak'igikoni), nutrition, were mentioned as vital services that women farmers and agricultural employees need. Knowledge and skills in project style project, monetary and organizational management, nutrition. The women farmers met farmers claim varieties of their associations have folded as a result of none of the members' knowledge to conceptualize again generating project.

4.0 INVESTING IN WOMEN SMALLHOLDER FARMERS

Smallholder farmers generally face many challenges. However, women smallholders face several limitations beyond those of men farmers. Women are inclined to be unseen by policymakers because they are not seen as 'productive' farmers (ActionAid International, 2011). They frequently are anticipated to offer unpaid farm work and tolerate the uneven burden of upkeep and procreative roles within the family and community. They are disadvantaged of access to key assets, markets, and inputs, and are often left out from decision-making. And women are even disproportionately obstructed by poverty and hunger - as well as having little access to health care facilities and education. These several constraints point out that agricultural policies aiming at targeting women need that historically targeted men have to be different. Principal and chief, policymakers must start identifying women farmers and their numerous roles and make sure that well-funded and well-accomplished programs especially target women farmers are taken care of. Donors and international institutions have taken a good interest in both agriculture and smallholders lately, especially in Africa, but women farmers continue to be thoroughly ignored by agricultural policies (ActionAid International, 2011). Some governments are encouraging women farmers (e.g., over specific gender policies, or distinct gender units in Ministries of Agriculture), but such changes remain too uncommon.

5.0 SYNTHESIS OF GOOD PRACTICES AND KEY LESSONS LEARNED

Some of the good practices in gender and agricultural services are summarized as follows:

The summary of the good practices in gender and agriculture are as follows:

The method to develop a gender mainstreaming strategy provides a stimulating lesson, notably as a result of: it's been dealt with in comparatively wide neutral sessions, and efforts are placed in developing a standard abstract understanding of gender and its implications for a meeting the arena goals. This process, though static on-going by the time of assembling the report, can foster common understanding and stakeholder possession of the strategy. This can be particularly vital because most strategic designing processes are outwardly managed; rather than result processfocused; leading to unsuccessful strategy application. Leveraging contemporary technology to boost agro-marketing, guarantees to interrupt the communication barriers that women face in



accessing agricultural services. MINAGRI has partnered with RITA beneath the Rwanda project to develop an electronic (SMS-based) system to supply information on producer costs and markets to rural, smallholder farmers. This involvement is an innovative approach to evading communication barriers that a lot of Rwandan farmers face. Women farmers' knowledge and contribution to agricultural analysis are being recognized and rewarded because the gap between subtle scientific researchers and their purchasers (often semi-literate smallholder farmers) is receiving an enclosed new cooperative analysis paradigm. In this respect, ISAR has named one among the fifteen rise bean varieties discharged in the month of December 2010, where Gasilida, in appreciation of a lady farmer from Rwerere, Ms. Cansilida Mujawamariya, who donated within breeding the breeding of the unleashed varieties climbing bean varieties. On a similar occasion, the message from the ISAR Director-General and former Agriculture Minister, Dr. Daphroser Gahakwa at a farmers' field day to release 15 new bean varieties, meaning that women's role and knowledge in agriculture, was known even among prime policy makers.

Gender analysis in project/programme have shown that gender equality have risen even though gaps still remain. For example, the Kirehe Watershed Development Project (KWAMP) signifies a good practice in gender-responsive project though target gender problems analysis that reflects some gaps. The project has uneven number of share of women among the agricultural poor and landless farmers, KWAMP has targeted women through development activities in the direction and competence, in which case almost 50% of employment opportunities are earmarked for women in the areas of market equivalence. The project has introduced different actions to organize women to partake in project activities, together with leadership which aimed at organizations that a minimum of 30% is reserved; which selected crosscutting issues coordinators with gender who have proficiency as focal points for gender integration. Whereby, a minimum of 30% of service suppliers should be women, and personnel choice committees are super-sensitized on gender problems. The project style has incorporated gender-disaggregated indicators within the M&E framework to modify and following the flow of advantages to men and women. The project commits to involving stakeholders, for instance, the National Women's Council in watching activities, and to mention case studies to analyse the gender dimension of project results. These commitments offer chances for hard to please answerability on whichever gender issues are addressed in project activities and results. The challenge is to follow up informed the commitments.

Mainstreaming gender-responsive planning: MINAGRI is in the way of developing a gender mainstreaming strategy for the sector, a part of that has been impressed by the gender-responsive budgeting (GRB) interventions of MINECOFIN and engagement with GMO.

6.0. CONCLUSION AND WAY FORWARD

The paper accomplishes that access to knowledge among men and women in agriculture for reduction of poverty must bear the gender equality phenomenon. In most of the literature review, women are depicted as having inadequate skills and knowledge with regards to agricultural knowledge. However, the challenges still continue for gender mainstreaming in programmes for bridging gender equality. While low education, unequal distribution of resources, yet as lack of access to resources and decision-making powers, agriculture remains women employment problem who got to move out of the trap of economic condition. Inclusively globalization has



exaggerated the lack of accessibility of markets among poor women who lack knowledge on ICT and the ability of agriculture.

This study recommends the subsequent actions, in order to remedy the situation, and they are:

1) Build capability for gender analysis, gender-responsive budgeting, gender-sensitive sectoral designing, and performance measurements. Integration of gender problems analysis within the agricultural service delivery chain ranging from coaching (i.e. course of study review); skills and guide tools for gender analysis, in the planning and implementation (including the production of reporting) of agricultural services delivery, are going to be critical, and making a start line are going to be a comprehensive policy paper and training agricultural service suppliers with knowledge and skills in gender analysis.

2) Applying a comprehensive direction programme aiming at women in agricultural value chains. The main focus ought to be on organizational management skills; appropriate technical skills important of nursery bed management and bookkeeping; micro-enterprise development; communication and conflict management. On the other hand, develop, publish, and disperse information directory on opportunities for women agro-enterprises, hot to access and utilize them.

3) Institutionalization of monitoring and evaluation framework which is gender focus, starting with gender-responsive service delivery indicators and acceptable tools and systems for monitoring and feedback. Some key gender-responsive service delivery indicators are counseled. The tools (Questionnaires, coverage formats,..) accustomed monitor and report progress in agricultural service delivery got to be reviewed to replicate relevant gender issues.

REFERENCES

ActionAid, International, (2011). Agriculture Report.

- Adomi, E. E., Ogbomo, M. O. & Inoni, O. E. (2003). Gender factor in crop farmers' access to agricultural information in rural areas of Delta State, Nigeria. Library Review, 52, 8, pp. 388- 393.
- Agu, M.N. (2013). Application of ICT in Agricultural Sector: Women's Perspective,

International Journal of Soft Computing and Engineering 2, 6, pp.58-60.

- Benard, R., Dulle, F. & Ngalapa, H. (2014). Assessment of information needs of rice farmers in Tanzania; A case study of Kilombero District, Morogoro, Library Philosophy and Practice (e-journal), pp. 1–34, viewed 30 July 2020, from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2666&context=libphilprac
- Burt, R.S. (2004). Structural holes and good ideas. Am. J. Sociology, 110, pp. 349–399.
- Castella, J., Slaats, J., Quang, D. D., Geay, F., Van Linh, N. & Tho, P. T. H. (2006). Connecting marginal rice farmers to agricultural knowledge and information systems in Vietnam Uplands. The Journal of Agricultural Education and Extension, 12, 2, pp. 109–125. Retrieved November 1, 2020 from: <u>http://dx.doi.org/10.1080/13892240600861625</u>
- Conroy, C., Sparks, N., Chandrasekaran, D., Shindey, A. D., Singh, L. R., Natarajan, A. & Anitha, K. (2004). Understanding livestock keepers' agricultural knowledge and



information systems: a case study from India. The International Workshop on Enhancing the Contribution of Small Livestock to the Livelihoods of Resource-Poor Communities, Masaka, Uganda, 15–19 November 2004. Retrieved August 13, 2020 from: http://www.smallstock.info/research/reports/R7633/R7633-masaka2.pdf

- Davis, K., E. Nkonya, D. Ayalew, E. Kato, M. Odendo, R. Miiro, and J. Nkuba. (2010). Impact of East Africa. IFPRA Discussion Paper. Washington, D.C.: International Food Policy Research Institute.
- Doss, & Morris (2001). How does gender affect the adoption of agricultural innovations? The case of improved maize technology in Ghana. Agricultural Economics, 25, pp. 27–39.
- Enete, A. A., (2009), Middlemen and smallholder farmers in cassava marketing in Africa, Tropicultura, vol. 27, pp.40-44.
- Fletschner (2008). Women's access to credit: Does it matter for household efficiency? American Journal of Agricultural Economics, 90, pp.669–683.
- Harding, S., Hintikka, M., & Merrill B. (2004). Introduction, in Harding S., Hintikka, M., & Merrill B. (eds.), The feminist standpoint theory reader: intellectual and political controversies, New York: Routledge, pp. 1–16, ISBN 9780415945011
- Ismail, I. J., Srinivas, M., & Tundui, H. (2015). Transaction costs and market participation decisions of maize small holder farmers in Dodoma region, Tanzania. Global Journal of Biology Agriculture and Health Sciences, 4(2), pp.12–20.
- IFPRI. (2004). Knowledge and Finance for Education in Sub-Saharan Africa. London. Bingley.
- Katuli F. K. 2017. Assessment on Determinants of Gender Biases in Rural Agricultural Employment in Sub-Saharan African: Literature Review. Researchjournali's. Journal of Sociology. India. Vol. 5/No. 4 June/2017. ISSN 2347-8241. pp.1-13
- Keys, E., (2005), Exploring Market-Based Development: Market Intermediaries and Farmers in Calakmul, Mexico, American Geographical Society, vol. 95, pp. 24-46.
- Komwihangilo, D.M., Urassa, N.S. Masao, D.F., Kasiga, R.and Kabungo, C. (2010) Essence of Strong Links between Research and Extension: The Case of Mpwapwa Cattle Introduced in Chunya District, Tanzania. In: Kimaro W.H, Mukandiwa, L. and Mario E.Z.J. (Eds.) Towards Improving Agricultural Extension Service Delivery in the SADC Region Proceedings of the Workshop on Information Sharing among Extension Players in the SADC Region.pp. 105–113. <u>http://www.sadc.int/</u> fanr/agricresearch/icart/inforesources/ImprovingExtension.pdf.
- Larsen, G.D. (2011). Understanding the early stages of the innovation diffusion process: Awareness, influence, and communication networks. Constr. Manag., 29, pp.987– 1002.
- Lwoga, E. T. and Ngulube, P. 2008. Managing indigenous and exogenous knowledg through information and communication technologies for agricultural development and achievement of the UN Millennium Development Goals. In Njobvu,



- B. & Koopman, S. (Eds). Libraries and information services towards the attainment of the UN Millennium Development Goals (pp. 73-88). Berlin: Walter de Gruyter.
- Lwoga, E.T., Ngulube, P., & Stilwell, C., 2011. Access and use of agricultural information and knowledge in Tanzania. Library Review 60(5): pp. 385- 395. http://www.emeraldinsight.com/
- Lwoga, E. (2010) Application of Knowledge Management Approaches and Information and Communication Technologies to Manage Indigenous Knowledge in the Agricultural Sector in Selected Districts of Tanzania University of KwaZulu-Natal, South Africa: Doctoral dissertation.
- Lwoga, E. T. and Ngulube, P. 2008. Managing indigenous and exogenous knowledge through information and communication technologies for agricultural development and achievement of the UN Millennium Development Goals. In Njobvu, B. & Koopman, S. (Eds). Libraries and information services towards the attainment of the UN Millennium Development Goals (pp. 73-88). Berlin: Walter de Gruyter.
- Magesa, M. M., Michael, K., & Ko, J. (2014). Access to agricultural market information by rural farmers in Tanzania. International Journal of Information and Communication Technology Research, 4, pp. 264–273.
- May, J. (2012). Digital and Other Poverties: Exploring the connection in four East African countries. Inf. Technol. Int. Dev., 8, 33–50.
- Matovelo, D. S., Msuya, J. & de Smet E. 2006. Towards developing proactive information acquisition practices among smallholder farmers for empowerment and poverty reduction: a situation analysis. International Association of Agricultural Information Specialists (IAALD) Quarterly Bulletin, 51, 3-4.
- Mosia, L. N. & Ngulube, P. 2005. Managing the collective intelligence of local communities for the sustainable utilisation of estuaries in the Eastern Cape, South Africa. South African Journal of Library and Information Science, 71, 2, pp. 175-18.
- Mosia, L. N. & Ngulube, P. 2005. Managing the collective intelligence of local communities for the sustainable utilisation of estuaries in the Eastern Cape, South Africa. South African Journal of Library and Information Science, 71, 2, pp. 175-186.
- Mtega, W.P. and Msungu, A.C. (2013) Using Information and Communication Technologies for Enhancing the Accessibility of Agricultural Information for Improved Agricultural Production in Tanzania, The Electronic Journal of Information Systems in Developing Countries, 56, 1, 1-14.
- Shao, F.M. (2007) Analysis of the Agricultural Technologies Development and Dissemination Situation in Tanzania. SADC Multi-country Agricultural Productivity Programme. <u>http://www.sadc.int/fanr/agricresearch/mapp/workshops/Tanzania%20workshop%20repo</u> <u>rt.pdf</u>



- United Republic of Tanzania (URT) (2008) Agricultural Sector Reforms in Tanzania: Perspectives from Within. Tanzania, Ministry of Agriculture Food Security and Cooperatives. Government Printers, Dar Es Salaam.
- United Republic of Tanzania (URT) (2013) National Agriculture Policy, Ministry of Agriculture Food Security and Cooperatives Dar Es Salaam, Tanzania October http://www.faoilo.org/fileadmin/user_upload/fao_ilo/pdf/ICA_MLW_and_TZ/NATI
- ONAL_AGRICULTURAL_POLICY-2013.pdf. United States Agency for International Development.
- Otekunrin, O. A., Momoh, S., & Ayinde, I. A. (2019). Smallholder farmers' market participation: Concepts and methodological approach from sub- Saharan Africa. Current Agriculture Research Journal, 7(2), pp. 139–157.
- Quisumbing, A.R. & Pandolfelli, L. (2010). Promising approaches to address the needs of poor female farmers: resources, constraints, and interventions. World Development, 38, pp. 581–592
- Roy, M., (2012), Agricultural Marketing: New Challenges, International Journal of Humanities and Applied Sciences, vol. 1, pp. 54-57.
- Sife, A.S., Kiondo, E. & Lyimo-Macha, J.G., (2010). Contribution of mobile phones to rural livelihoods and poverty reduction in Morogoro region, Tanzania, Electronic Journal of Information Systems in Developing Countries 42(3), pp. 1–15.
- Siyao, P.O., 2012, Barriers in accessing agricultural information in Tanzania with a Gender perspective: The case study of small-scale sugar cane growers in Kilombero district, Electronic Journal of Information Systems in Developing Countries 51(6), pp. 1–19.
- Sousa, F.; Nicolay, G.; Home, R. Information technologies as a tool for agriculture extension and farmer-to-farmer exchange: Mobile-phone video use in Mali and Burkina Faso. Int. J. Educ. Dev. Using Inf. Commun. Technol. 2016, 12, pp.19–36
- Steiner, L. (2014). Sandra Harding: the less false accounts of feminist standpoint epistemology, in Hannan, Jason (ed.), Philosophical profiles in the theory of communication, New York: Peter Lang, pp. 261–289, ISBN 9781433126345.
- United Nations. (2002). Best Practices for Organic Policy. What developing country Governments can do to promote the organic agriculture sector. New York. UNCTAD.
- UNDP. (2007). RWANDA Human Development Report, 2007. Turning Vision 2020 into Reality. From Recovery to Sustainable Development. http://hdr.undp.irg/en/reports/nationalreports/africa/rwanda/RWANDA_2007_en.pdf
- United Nations Development Programme (2007). Human Development Report, New York
- URT. (2008). Agricultural marketing policy. Dar es Salaam, Tanzania: Ministry of Industry, Trade and Marketing.



- World Bank and Malawi. (2007). Malawi poverty and vulnerability assessment (PVA): Investing in our future. Synthesis report: Main findings and recommendations. Poverty Reduction and Economic Management 1, Report 36546-MW, Washington, D.C.: World Bank
- World Bank, and IFPRI. (2010). Gender and Governance in Rural Services: Insights from India, Ghana, and Ethiopia. Washington, D.C.: The World Bank; International Food Policy Research Institute.
- World Bank, and The ONE Campaign. (2014). "Levelling the Field: Improving Opportunities for Women Farmers in Africa." Washington, D.C.: World Bank.