

# The Contribution of Agricultural Service Support Programme to Socio-economic Empowerment of Rural Women in Zanzibar, Tanzania

Asha Fakhi<sup>1</sup> Anna Sikira<sup>2\*</sup>

1.Liaison officer, Agriculture Service Support Programme/Agriculture sector Development programme-Livestock. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. Zanzibar. P.O. Box 159, Zanzibar. IFAD gender Focal person for Zanzibar

2.Senior Lecturer, College of Social Sciences and Humanities, Department of Development Studies, P.O. Box 3024, Morogoro, Tanzania

## Abstract

The existing gender gaps in agriculture cannot be overemphasized. Different approaches and strategies have been used by the development actors to empower women. Using Mkoani District as a study area, the contribution of agricultural programmes towards social-economic empowerment of women was assessed. The study adopted a cross-sectional design, whereby data were collected from 200 respondents. Both qualitative and quantitative data were collected. Strategies used for empowering women were descriptively analyzed. Women's Empowerment Index (WEI) was used to assess socio-economic empowerment levels both for those involved and those not involved in the agricultural programmes. Five constructs were developed and used to assess women's socio-economic empowerment levels. The findings of the study on which this paper is based show that empowerment levels of women who participated in the programme was slightly higher than non-programme members implying that socio-economic levels of women in the programme improved compared to non programme members. This was confirmed by Mann-Whitney U-test whereby variables such as enhanced women's decision making on production resources, increased income and contribution of women in household expenses were statistically significant at 0.05. However, freedom of movement and asset ownership were not significant indicating that there were no differences among women participated in Agriculture Service Support Programme (ASSP) and non-ASSP members. It is therefore concluded that programmes such as ASSP through farmer field schools approach improved women's socio-economic empowerment. Therefore, the paper recommends that women should be encouraged to participate in agricultural related development programme implemented in Zanzibar as most of rural women's wellbeing depends on agriculture.

**Keywords:** Women, Socio-economic Empowerment, ASSP, Zanzibar

## 1. Introduction

Women constitute the majority of smallholder farmers in Tanzania contributing about 53% of the labour force in agriculture (World Bank 2012). According to FAO (2011) Women contribute 60% of the labour force in food production producing more than 70% of food crops. Despite their contribution in agriculture, women lack access to and control over production resources such as land, agricultural inputs, access to market and marketing information and modern technologies. Studies by (Ngoteya and Sikira 2016; Sikira *et al.* 2010) reported that the existing patriarchal tendencies expressed in terms of cultural norms and traditions are the outcomes of these inequalities. In addition, controlled movement of women reduces their access to knowledge and the ability to make use of knowledge acquired from information available to them (Mburu *et al.* 2013). They also lack access to market information, hence they fail to choose what to produce and in which season of the year (Mburu *et al.* (2013). Generally, market information enables men and women to set profitable prices for their products, thus motivating them to produce more (CARE 2010).

Generally, it is believed that women's empowerment can bridge the existing gender inequalities in agriculture (Nisha 2013; Dighe and Wadhvaniya 2013). According to Basu and Basu (2001), raising women's empowerment level can enable them to challenge their oppressive situation in the family and in the society at large, thus, they could be more productive. Women empowerment has been both a national and international issue whereby the first global inter-governmental conference of the International Women's Year in Mexico City was convened in 1975 to strategize on how to empower women in the world (Pietila 2000). Further, the Convention on the Elimination of All Forms of Discrimination against Women [CEDAW] was formulated in 1979 (Malhotra *et al.* 2002). The general outcome of all these empowerment strategies is to ensure sustainable development through improved economic status of women. Although such declarations have been able to increase awareness and understanding of the challenges facing women and their dependants, as such they have not resulted in significant development priorities for rural women in the developing countries Tanzania Zanzibar included (UNIFEM 2000).

In 2012, the United Nations (UN) Women, the World Food Programme (WFP), Food and Agriculture

Organization (FAO) and the International Fund for Agriculture Development (IFAD) joined hands to launch a joint programme to empower poor rural women through economic integration and food security initiatives (UN 2014). The initiative meant to empower rural women to claim for their rights to land, leadership and other opportunities to make choices as regards to their lives. According to Rahma (2013); and CSW (2011), empowered women apart from being able to participate in decision-making and control over resources, they can also participate in shaping laws, policies and programmes. Similarly, the United Republic of Tanzania (URT 2013), in partnership with IFAD and FAO, made commitments on various women empowerment initiatives including the economic, social and political aspects. Generally, the initiatives were directed towards establishment of policies, strategies and legal frameworks as well as institutional mechanisms to enable integration of rural women in development programmes (URT 2005; Rahma 2013).

In Zanzibar, efforts towards empowering women have mainly focused on rural communities whereby the majority of the international (donor funded) and national development programmes focused their attention on improving social and economic status through provision of education, employment, healthcare and involvement in social and economic institutions and agricultural related activities. The Agricultural Services Support Programme (ASSP) was funded by IFAD implemented by the Ministry of Agriculture and Natural Resources (MANR) in Zanzibar. The programme was initiated in 2007 with the main focus on empowering the rural poor including women. The programme aimed at improving women's livelihood through relevant provision of agricultural knowledge and technologies. The programme used the Farmer Field School (FFS) approach to promote group formation, provide training; strengthen farmer's organization and encourage women's participation in the programme activities. The study on which this paper is based, aimed at determining the extent to which ASSP has contributed towards rural women's socio-economic empowerment in Zanzibar. Specifically, this paper aims at assessing levels of socio-economic empowerment among women involved at ASSP in Mkoani District, Zanzibar.

### *1.2 Theoretical approach*

The above mentioned study employed the theory of change which among others, strives towards achieving gender equality through women's empowerment. The study used economic modernity theory through a classical development perspective which considers an increase in democracy and human choice as a direct outcome of economic development (Bell 2000). In relation to women empowerment, economic advancement of women is associated with increased chances for resource ownership, hence improving their freedom of choices. ASSP aimed at increasing agricultural productivity that would in turn increase women's income. The theory further states that in order to empower women, there is a need to organize women in groups to perform collective actions in order to overcome the gender based inequalities. ASSP also organized women in their groups where training was conducted using various training approaches for empowering women. This paper therefore, answers the question as to what extent did the ASSP programme contribute towards women empowerment. Further, the study strives towards the hypothesis that there are no differences in socio economic empowerment status between women involved in the program and those not involved.

## **2. Methodology**

### *2.1 Description of the Study Area*

The study was conducted in Mkoani District, one of the 10 districts of Zanzibar where the ASSP was implemented. The district is situated in the South Region of Pemba Island, Zanzibar Tanzania. Mkoani District was selected because it has high percentage of women who participated in the ASSP compared to other districts. The ASSP programme ended in March 2014; yet to date neither the Government nor any other organization has done research to track changes in levels of social economic empowerment among women.

### *2.2 Research Design*

The study opted for a cross-sectional research design. The design allows collection of data once and collected data can be useful for both descriptive and determination of relationships between variables to establish patterns of association (Kothari 2004).

### *2.3 Sampling Procedures*

The ASSP programme engaged 1500 groups and each group had 17-20 group members (men and women) making a total of 25,500-30,000 population. Of all the population engaged in the programme women were 62%. A list of ASSP women members who participated in the programme and non-members of ASSP programme in Mkoani District constituted the sampling frame. The study used non ASSP participants instead of asking the same respondent before and after programme intervention because changes might be attributed by other causes apart from the programme intervention (OECD 2013).

A total of 150 women who participated in the programme were randomly selected from a list of programme

members, while 50 women were randomly selected from a list of community members available from local leaders (*Sheha*). Purposeful sampling was used to select eight *shehia* where ASSP was implemented while two *shehia* were randomly selected from non-programme area. A structured questionnaire was used to collect quantitative data, while checklist of questions was used to collect qualitative data through Focus Group Discussion (FGD) and Key informants. Six to eight participants per each FGD (two from each *shehia*) participated in the FGDs. Moreover, six key informants were purposively selected to provide detailed information in relation to the study; these were 1 ASSP Project Officer, 2 Farmers Field School Facilitators (one from the government and one from the farmer groups), District Programme Officer, Farmer forum member and 1 local leader (*Sheha*).

#### 2.4 Data Processing and Analysis

In line with Bose *et al.* (2009) five construct were developed to assess women empowerment index (WEI) such as women's participation in the households' decisions on agricultural production and resources distribution (HHD), women's freedom of movement (WFM), women's access and ownership of assets (OA), women's contribution to household expenses (HHC) and women HH income level (HHI). To assess women's participation in decision making, twelve items were identified and women were asked to indicate the person who made the final decisions such as which land to cultivate. Women's freedom of movement (WFM) was assessed by asking them on who usually make the final decision on various movements of the woman such as attending training, while the third one was women's access and ownership of assets (OA). Women were asked to indicate their access and control over assets such as land and many others.

For the first three constructs, the lowest assigned value was = 1 when the decision was taken by males alone, in this case women being least "empowered". When the decision was taken jointly by husband/male and wife/female a value of 2 was assigned. The highest value =3 was assigned when the decision was taken by females alone, that is, when women were most "empowered".

The fourth one was women's contribution to household expenses (HHC) whereby, sources of income were listed, and women were asked to choose if the money obtained from those activities contributed to their household's expenses or not by putting 'Yes' (1) for households where women contributed and 'No' (0) for household where women did not contribute. The fifth construct was women's income level (HHI). This was measured by categorizing four levels of income earned by women as a result of their participation in different activities, and they were asked to indicate which category they belonged to.

To assess the individual empowerment status and position of all women respondents in HH decision, mobility and asset ownerships was indicated as follows: Not empowered  $WEI_i \leq 2$  and empowered  $WEI_i > 2$  while for HH contribution it ranged from 0 for those who were not contributing and 1 for those who were contributing. For HH income level, the range was 1 for the lowest level and 4 for the highest level. Each individual construct was assessed separately, and then to understand the Cumulative Empowerment Index (CEI), an average empowerment level of respondents was determined using SPSS. The CEI was computed by averaging these five indices.  $CEI = (HHD + WFM + AO + HHC + HHI)/5$ . The highest likely score was 104 point  $[(12 \times 3) + (8 \times 3) + (11 \times 3) + 7 + 4]$ . The lowest score was 32  $[(12 \times 1) + (8 \times 1) + (11 \times 1) + 0 + 1]$  while 68 i.e.  $[(12 \times 2) + (8 \times 2) + (11 \times 2) + 3.5 + 2.5]$  was the average score. Therefore, the scores ranged from 32 to 104. The smallest value of CEI represented the lowest level of empowerment or no empowerment and the highest index value indicated highest level of empowerment while 68 indicated average empowerment.

Mann-Whitney U test was used to examine the variation in socio-economic empowerment levels of women involved in ASSP programme and non-ASSP programme. The Mann-Whitney U test is the alternative of the t-test for independent samples and also it analyses differences in the positions of ordinal dependent variables in two independent groups (Nachar, 2008). It was used to test the null hypothesis, subject to both samples coming from the same basic set. In the analysis, first the percentages were calculated for women members of ASSP programme and non ASSP -members. Any significant statistical difference suggests that the dependent variable differed significantly between women who were ASSP members and the non-members.

### 3. Results and Discussion

#### 3.1 Socio- Demographic Characteristics of Respondents

##### 3.1.1 Age of respondents

According to Table 1, the mean age was 44.3. Age is a key demographic variable closely related to engagement of women in development interventions leading to empowerment. The results suggest that the study captured the right group of respondents who were in their active age to fully engage in agricultural activities through ASSP as explained in the Zanzibar's development vision 2020 (MOFEA 2002).

##### 3.1.2 Marital status

The majority of ASSP members (73.3%) and non-ASSP members (66%) were married and only 5.3% and 4% were single in the study area, while 16.7% and 18.0% members and non-programme members respectively were

divorced (Table 1). Similarly, during the FGDs it was noted that married couples had to seek permission from their husbands in order to participate in the programme.

One of the participants was quoted saying:

*“We are not restricted to attend any programme activities such as training; however, we must ask for permission from our husbands, if the permission is not granted, we must obey our husbands”.*

This implies that marital status influenced women's mobility and their participation in the ASSP activities in the study area. Limited movement of women would lead to high poverty incidences in line with Danzinger and Haveman (2001).

### 3.2 Strategies Used by ASSP in Empowering Rural Women

It was necessary to know the strategies used by ASSP to empower women. Respondents were asked as to whether they were familiar with the strategies, and if the strategies benefited them. The results in Table 2 indicate that more than half (55.5%) of the respondents agreed that the use of Farmer Field School (FFS), seasonal training and use of farmer facilitator (50.5%) respectively, were the most effective strategies in empowering women. During the FGD women reported that seasonal training helps to acquire agricultural knowledge depending on their training needs. They further explained that the knowledge and skills learnt during the training improved their skills to the extent of teaching others fellow farmers.

Waddington and White (2014) contend that training is very important for women involved in food production because it increases their self-confidence. One of the FGD participants, also reported that

*“ Training of trainers amongst farmers commonly known as facilitator helps us in knowledge dissemination as we easily impart knowledge to our fellow farmers who are staying with us in our respective localities...”*

### 3.3 Extent of Rural Women's Participation in the ASSP Programme

The extent of women's participation in ASSP programme activities was also assessed. An index scale score ranging from 1 to 15 was used to measure the participation level based on the five ASSP activities. The results in Table 3 showed that field study visits was ranked 1 with the highest mean value ( $M = 2.27$  and  $SD = 0.87$ ) It is true that farmer field visits through FFS provided a platform for farmers to learn. Moreover, it can act as part of social inclusion of women and a way to exchanging information which can motivate more women to participate in the programme.

The focus group discussant also added that

*“Through ASSP we got chances to participate in different activities and to share ideas with our colleagues. Through the Farmer field school we have been able to share experiences on farming and also we explore several technical experiences through study visits....”*

Other approaches such as participatory action research activity was ranked low ( $M = 1.77$  and  $SD = 0.53$ ); because women occasionally participated.

### 3.4 Participation index

Although the participation of women in ASSP activities was high (72%, as seen in Table 4), not all women participated fully in all activities; some of them participated occasionally due to various reasons. The most common reasons for low attendance and drop out were given by FGD participants that FFS sessions were time-consuming and sometimes had many responsibilities at home as indicated in the quote:

*“We were participating in the programme with difficulties because we have many responsibilities such as weeding especially during rainy season, performing all the domestic chore such as cooking, fetching firewood and many others.....had it been that we have modern equipment such as planters and weeders, our workload would have been reduced.....”*

Reducing women's workload to enhance their participation in the programme activities was an issue requiring an attention from the development actors.

### 3.5 Empowerment Levels of Women Involved in ASSP and Non-ASSP

Five constructs were developed including household (HHs) decision on agricultural production, women's freedom of movement, women ownership and acquisition of assets, women's contribution on HH expenses and HH women's income level.

#### 3.6.1 Household decision on Agriculture Production and Resources

To assess the extent of participation of respondents in HH decisions, twelve family aspects were considered. Respondents were asked to choose from three different scores provided: whether the decision was taken by male alone (1), males and females jointly (2) and females alone (3) with respect to each of the listed statements. The results in Table 5 show that more than half (60%) of ASSP members made decisions alone on land size to cultivate, followed by joint decisions (30.6%). On the other hand, good proportion (36.0%) of non-programme

members' decisions was made by their husbands. Similarly, Kato (2013) found that women who participated in programme had greater role in household decision.

#### 3.6.2 Women's freedom of movement

To assess women's freedom of movement, eight social and community activities were listed and the respondent were asked to respond to the 8 statements indicating who had power to decide for women's mobility. The results in Table 6 show that women in the ASSP and those not had no significant difference in freedom of movement from their households. The majority of the respondents (62.6% and 62.3% of the programme and non-programme members respectively) said that men were the ones who had power on women's movement, especially the married ones except for widows, single and divorced women who can freely move out without any permission (Table 8).

#### 3.6.3 Women's ownership and acquisition of assets

Eleven different assets were listed, and the respondents were requested to comment on their access to and ownership of the assets. The results show that almost all women interviewed had access to land and houses acquired through inheritance, purchased or rented. This is not surprising as women in Zanzibar have the right to inherit land/house or even to rent from their families, friends or relatives. However, the ownership was only 33.9% and 28.9% for land and 27.3% and 34.2% for houses for programme and non-programme members respectively (Table 7). The ASSP group members owned more assets (31.2%) compared to their counterpart (25.32%). The findings show that the majority of the respondents (both groups) had access to and control over poultry than other types of livestock.

#### 3.6.4 Women's contribution to household expenses

In assessing women's contribution to household expenses, common sources of income in the study area were listed, and women were to choose if money obtained from those activities contributed to their household's expenses or not. The results in Table 8 show that women in the ASSP Programme contributed more to household expenses using money from selling livestock (mainly poultry) and from credit and saving groups (75.3% and 56.0% livestock and 61.3% and 26% for programme and non-programme members respectively. Information from key informants and FGDs also confirmed that the women involved in the ASSP programme were contributing to their households' expenses. Generally, women participating in the programme activities were no longer depending entirely on their husbands for household needs such as paying schools fees and medical costs (Ellis *et al.* 2007; OECD 2011)) that women are responsible for purchasing food and household goods.

#### 3.6.5 Women's income level

Women's level of income was measured by categorizing four levels of income earned in a month due to women's participation in different activities in the programme. Women were required to choose in which category they belong. The results show that there was a difference in income levels between women who participated in the programme and those who did not participate in the programme. Eighty per cent (80%) of the non-programme members earning less than Tshs 200,000/= categories compared with 60.7% of programme members earning the same. Additional observation showed that 34.0% and 4.7% earned slightly higher amount of income respectively for programme members, while for non-programme members it was 18.0% and 2% only (Table 9) from agricultural activities.

#### 3.6.6 Cumulative Empowerment Level

Women's empowerment is a multidimensional construct; hence, cumulative Empowerment Index (CEI) was developed by summing up the individuals' scores for all the five dimensions of women's empowerment. The value of CEI ranged from 32 to 104. The smallest value of CEI represented the lowest level of empowerment or no empowerment and the largest value of index indicated the highest level of empowerment while 52 indicated moderate empowerment. Table 10 shows that the majority of the programme members (70.6%) scored above 68 and 27.33, which was below the average level, while the majority of non-programme members (60%) had low level of empowerment and only 40% had above the average level. The plausible reason for high levels of empowerment was because programme women received various trainings through farmer field schools in relation to agricultural production.

### 3.7 Comparison of members and non-members of ASSP on socio - economic empowerment variables

In order to test the hypothesis of the study, the non-parametric Mann-Whitney U-test was used to determine whether there were significant differences between the women based on their involvement in the ASSP. The findings in Table 11 show that the results from Mann-Whitney U-test for three variables among five between ASSP and non-ASSP members, were statistically significant at  $p < 0.005$  (Z-test -2.49  $p < 0.013$ ). However, the median score of household income level was one out of four, but the test showed significant difference between the two groups; that is programme participants earned more income than non-programme members. The results in HH decision on production resources show significant difference (Z-test -5.3 and  $p < 0.000$ ) with high median score range of 32 out of 36, while household contribution revealed significant difference with median score range of six out of seven (Z-test -3.43; and  $p < 0.001$ ) (Table 13). This result depicts that the programme members

participated more in HH decision in production resources and HH contribution compared to non-programme members.

The results conform to those reported by OECD (2012) that women's participation in ASSP in Zambia resulted in improving their farming skills, gaining increased control over household income, and their relationships between them and their husband. Similarly, Davis *et al.* (2012) found that FFSs had the largest impact on agricultural income in Tanzania, compared with Uganda and Kenya.

Studies by Sikira and Mwageni (2010) indicated the relationship between increased income, household decision, household contribution and socio-economic empowerment. Increased women's participation in HH production decision might be due to increase in HH income which increased women's confidence and self-esteem. Likewise increase in production and income led to women's increased contribution to households' expenses. All these are indicators of women empowerment in the study area. The results suggest that ASSP members generally earned more income; they were able to make household decisions alone and contributed more to household expenses than non-members in the study area.

On the other hand, freedom of movement and asset ownership were not statistically significant between women in the ASSP programme and women not in the ASSP programme. This can be due to the fact that most of the respondents were Muslims and their culture; women are not allowed to move without permission from their spouses. Similar results were observed by Hossain (2011) in his study on the obstacles of women's empowerment in Bangladesh whereby restrictions of women's movement was a major obstacle found in the study areas. Also Njuki (2013), in their study in some countries in Africa and Asia, found that over 80% of women always or most often have to get permission to leave the house to earn money or to travel outside the village. As for asset ownerships, the results show that women contributed more to the HH. These results are similar with the results obtained during basic demographic and socio-economic survey NBS (2014) that ownership of assets was higher among male-headed than female-headed households. Therefore, the results indicate that the null hypothesis "there are no difference in socio economic empowerment status between women involved in the Programme and those who are not involved" is rejected.

#### 4. Conclusions and Recommendations

##### 4.1 Conclusions

Socio-economic empowerment of rural women has been the focus of many international and national development programmes as a result ASSP strived at empowering rural women through agricultural programmes using FFS approach. From the findings, it is concluded that women engaged in the programme participated in decision making especially on issues related to agriculture. Implying that knowledge obtained from the programme improved their decisions. Similarly, socio-economic empowerment of rural women had also been improved from the role of women in intra-family decision making processes, household contribution and increase in income. Using Women Empowerment Index, it was found that women who participated in the ASSP were relatively empowered compared to those who were not involved.

##### 4.2 Recommendations

- i. To further strengthen, sustain, improve participation and encourage women to participate in development programmes, women's workload should be minimized by providing labour saving technologies, for example drip irrigation and small working machines (small power tillers, push weeders). Also women friendly pre-harvest as well as post-harvest technologies for crop production and processing technologies need to be developed for effective participation of women in agriculture.
- ii. Agriculture is the main women's economic activity in rural areas, agricultural development programmes should be given priority as a process of empowering women to be able to play their roles and participate effectively in improving their livelihoods. It is therefore recommended that the government and development partners should increase the programme outreach to non-programme areas in order to provide more opportunities for women to improve socio-economic status among poor/vulnerable smallholder farmers in Zanzibar.
- iii. Lobbying by traditional and religious leaders is also recommended to do away with cultural and religious norms that hinder women's mobility to improve their social economic status.

#### References

- Basu, S. and Basu, P. (2001). *Income Generation Program and Empowerment of Women – A case study in India.* [Online] Available: <http://crawford.anu.edu.au/acde/asarc/pdf/papers/conference/CONF2003.pdf>. (16 August 2014).
- Bell, D (2000). *East meets West: Human Rights and Democracy in East Asia.* Princeton University Press. PP344. [Online] Available: <http://www.jstor.org/stable/j.ctt7s489>. (5 February 2018)
- Bose, M., Ahmad, A. and Hossain, M. (2009). *The Role of Gender in Economic Activities with Special*

- Reference to Women's Participation and Empowerment in Rural Bangladesh. *Gender, Technology and Development* 13 (1): 414 – 427
- CARE(2010). Women and Agriculture Project; Gender Analysis Report for CARE/Tanzania, Government Printer, Tanzania. 70 pp.
- Commission on the Status of Women (2011). The empowerment of rural women and their role in poverty and hunger eradication, development and current challenges. [<http://www.wunrn.com>] site visited on 15/12/2013.
- Danzinger, S and Haveman, R. (2001). *Understanding Poverty*. Harvard University Press, Cambridge. 551 pp.
- Davis, K., Nkonya, E., Kato, E., Mekonnen, D., Odeno, M., Miiro, R. and Nkuba, J. (2012). Impact of Farmer Field Schools on Agricultural Productivity and Poverty in East Africa. *World Development* 40 (2): 402–413.
- Dighe, P. and Wadhvaniya, S. (2013). The Unheard Voices- Empowerment of Women through Participation Socially, Economically, and Politically in India. *Journal of humanities and Social Science I (IV)* 93-102.
- Ellis, A.; Blackden, M. , Cutura, J., MacCulloch, F. and Seebens , H. (2007) Gender and Economic Growth in Tanzania: *Creating Opportunities for Women*. [Online] available: <http://www.worldbank.org>. (9 February 2015).
- FAO (2011). Women in Agriculture: Closing the gender gap for development. [Online] Available: <http://www.fao.org/docrep/013/i2050e/i2082e00.pdf>. (19 July 2014).
- Hossain, A (2011) Socio-Economic Obstacles of Women Empowerment in Rural Bangladesh: A Study on Puthia Upazila of Rajshahi District. *Research on Humanities and Social Sciences* 4 (1): 1- 13.
- Kato, M. and Kratzer, J. (2013). Empowering women through microfinance: evidence from Tanzania ACRN. *Journal of Entrepreneurship Perspectives* 2(1): 31 – 59.
- Kothari, C. (2004). *Research Methodology Methods and Techniques*. (2<sup>nd</sup> Ed.), New Age International Publishers, New Delhi, India. 401pp.
- Malhotra, A., Schuler, S. and Boender, C. (2002). *Measuring Women's Empowerment as a Variable in International Development*. World Bank, Washington, DC. [Online] Available: <http://siteresources.worldbank.org/INTEMPowerment/Resources/4863/malhotra.pdf>. (15 June 2014).
- Mburu, S., Njuki, J., Kaeiuki, J (2013). Women's Access to Livestock Information and Financial Services. In : Women, Livestock Ownership and Markets. Bridging the gender gap in Eastern and Southern Africa.
- Ministry of Finance and Economic affairs (MOFEA), (2002). Zanzibar Vision 2020. [online]available: [http://planipolis.iiep.unesco.org/upload/.../Zanzibar/ZanzibarVision\\_2020.pdf](http://planipolis.iiep.unesco.org/upload/.../Zanzibar/ZanzibarVision_2020.pdf). (16 July 2014).
- Nachar, N. (2008). The Mann- Whitney U:A Test for Assessing Whether Two Independent Samples Come from the Same Distribution. *Tutorials in Quantitative Methods for Psychology* 4 (1): 13–20.
- National Bureau of Statistics (NBS) and Office of Chief Government Statistician (2014). *Basic Demographic and Socio-Economic Profile, Tanzania Zanzibar, (Volume III)*. Government Press, Dar es Salaam, Tanzania 145 pp.
- Ngoteya, C.B and Sikira A.N (2016). Small holder's perception towards Gender Inequitable Practices at Household Level in Arumeru District, Tanzania. *International Journal of Research Methodology in Social Science*. Vol. 2, No. 2, 19-35.
- Nisha, M. (2013). Empowerment of women: Special focus on rural women Review. *Golden Research Thoughts* 2 (12): 1 - 6.
- Njuki, J., Kruger, E. and Starr, L. (2013). Increasing the Productivity and Empowerment of Women Smallholder Farmers: Results of a Baseline Assessment from Six Countries in Africa and Asia. [Online] Available: [www.carepathwaystoempowerment.org](http://www.carepathwaystoempowerment.org). (20 February 2014).
- OECD (2011). Aid in support of women's economic empowerment. [Online] Available: <http://www.oecd.org/investment/stats/46864237.pdf>. (30 August 2014).
- OECD (2013), "The DAC Network on Development Evaluation 30 years of strengthening learning in development," DAC Network on Development valuation OECD: Paris.
- Office of Chief Government Statistician President's Office (OCGS), (2013). *2012 Population and Housing Census Report*. Government Press, Zanzibar, Tanzania 264 pp.
- Pietila, H. (2000). The Unfinished Story of Women and the United Nations. [Online] Available at [www.un-ngls.org/orf/pdf/UnfinishedStory.pdf](http://www.un-ngls.org/orf/pdf/UnfinishedStory.pdf) (19 July 2014).
- Rahman, A. (2013). Women's Empowerment: Concept and Beyond. *Global journal of human social science sociology and culture* 13(6): 0975-587.
- Revolutionary Government of Zanzibar, (2013). *Mkoani, District annual report*: Government Printer, Tanzania, Zanzibar. 38pp.
- Sikira A.N, Mwageni,E.A and Kagosi, P.J, (2010). Exploring the Link between Socio-Economic Status and Gender Based Violence: Lessons from Serengeti District, Tanzania. *Rural Planning Journal* 12(1).195-225
- Sikira, A.N and Mwageni, E.A, (2010). Women Empowerment and Gender Based Violence: A Decision Making Perspective in Serengeti District, Tanzania *Local Government Development Journal* 1(2). 115-133

- Ugboh, O (2006). Factors Impeding Women Active Participation in Agricultural and Rural Development. 11th Annual Conference Agricultural Extension Society of Nigeria (AESON), Nigeria, 3 – 6, April, 2006. 162 pp
- UN (2014). The role of women in rural development, food production and poverty reduction [Online] Available: <https://www.un-ngls.org/orf/pdf/UnfinishedStory.pdf> (23 March 2017)
- UNIFEM, (2000), Progress of the World’s Women: *UNIFEM Biannual report, 2000*. 166 [Online] Available: [http://www.unifem.undp.org/progress\\_of\\_the\\_world\\_s\\_women\\_2000.pdf](http://www.unifem.undp.org/progress_of_the_world_s_women_2000.pdf). (20 February 2015).
- United Republic of Tanzania, (2005). Country report on implementation of the Beijing plat form for action.[Online] Available at [www.tanzania.go.tz/egov./country\\_report\\_beijing\\_19\\_2\\_sw.pdf](http://www.tanzania.go.tz/egov./country_report_beijing_19_2_sw.pdf). (13 February 2014).
- United Republic of Tanzania, (2013). *Country Programme Review. Zanzibar Sub-Programme*. Government Printer, Tanzania, Zanzibar. 103pp University Press, Cambridge. 551 pp.
- Waddington, H. and White, H (2014). Farmer Field schools from agricultural extension to adult education: Systematic Review Summary. London: International Initiative for Impact Evaluation. [Online] Available at <http://www.campbellcollaboration.org/>(20<sup>th</sup> March/2015)
- World Bank (2012), Gender and Economic Growth in Tanzania: Creating Opportunities for Women. [Online] Available: <http://elibrary.worldbank.org/doi/book/10.1596/978-0-8213-7262-3>. (31August 2014)

**Table 1: Respondent Socio-Economic Demographic Characteristics n=200**

Socio-economic Demographic	Group members	Group members (F)	%	Non group members (F)	%	Total	%
Age group	41-50	57	38.0	12	24.0	69	34.5
	31-40	46	30.7	12	24.0	58	29
	51-60	22	14.6	8	16.0	30	15
	20 – 30	16	10.7	9	18.0	25	12.5
	>61	9	6.0	9	18.0	18	9
Marital status	Married	110	73.3	33	66.0	143	71.5
	Single	8	5.3	2	4.0	10	5
	Divorced	25	16.7	9	18.0	34	17
	Widow	6	4.0	6	12.0	12	6
	Separated	1	0.7	0	0	1	0.5

**Table 2: Strategies used by ASSP in empowering women**

Strategies	Ineffective (n=150) (%)	Neutral (n=150) (%)	Effective (n=150) (%)
FFS seasonal training	19.5	25.0	55.5
Farmer facilitator	14.0	35.5	50.5
Farmer network	12.5	41.5	46.0
Annual stakeholder meeting	17.5	52.0	30.5
Participatory action research	50.0%	27.5%	22.5%
<b>Average score</b>	<b>22.7%</b>	<b>36.3%</b>	<b>41.0 %</b>

**Table 3: Ranking women's participation in ASSP programme activities**

ASSP programme activities	Mean	SD	Total Score	Rank
Field study visits	2.27	0.872	454	1
Training activity	2.27	0.853	453	2
Farmers group meetings	2.18	0.805	435	3
PRA activities	2.16	0.865	432	4
Participatory research activities	1.77	0.537	354	5

Scale: 1=Not at all, 2=occasionally, 3=Mostly

**Table 4: Participation index**

Participation level	Participation rate (%)
High	72
Moderate	0
Low	28
<b>Total</b>	<b>100</b>

**Table 5: Respondent's decision on household issues**

	Programme members			Non programme members		
	M(1)	M&F(2)	F(3)	M(1)	M&F(2)	F(3)
Land size to cultivate	9.4	30.6	60.0	36.0	40.0	24.0
Type of crop to be grown	8.0	33.0	58.7	32.0	36.0	32.0
Purchasing inputs	9.3	34.7	56.0	38.0	30.0	32.0
Selling your product	10.7	33.3	56.0	38.0	30.0	32.0
Amount for sell/consumption	7.3	34.7	58.0	40.0	28.0	32.0
Setting Selling price	10.0	35.3	54.7	42.0	26.0	32.0
Utilization of income from sale	6.7	39.3	54.0	38.0	28.0	34.0
Purchasing food from sales	10.0	34.0	56.0	38.0	30.0	32.0
Paying school fees	10.0	35.3	54.7	40.0	24.0	34.0
Purchasing assets	14.7	29.3	56.0	42.0	26.0	32.0
Purchasing luxury things	5.3	47.3	47.4	36.0	24.0	40.0
Joining SACCOS	8.0	33.3	58.7	34.0	32.0	34.0

1 decision made by men, 2 decisions made by both and 3 decisions made by women

**Table 6: Women's freedom of movement**

Decision on Movement	Programme members %			Non programme members %		
	Score			score		
	1	2	3	1	2	3
Attending the training	68.0	3.3	28.7	72.0	0.0	28.0
Participating in training trip	67.3	14.0	18.7	72.0	0.0	28.0
Visiting neighbour	68.0	10.7	21.3	62.0	10.0	28.0
Going to the market	68.0	10.7	21.3	66.0	6.0	28.0
Sending children hospital	65.3	11.4	23.3	56.0	8.0	36.0
Attending communal meeting	67.3	10.7	22.0	62.0	10.0	28.0
Attending weeding	68.7	10.0	21.3	62.0	10.0	28.0
Attending funeral	28.0	8.7	63.3	46.0	0.0	54.0

1 decision made by men, 2 decisions made by both and 3 decisions made by women

**Table 7: Asset access and ownership**

Asset	Programme members % Score				Non programme members % Score			
	Access		Ownership		Access		Ownership	
	Yes	No	Yes	No	Yes	No	Yes	No
Land	100.0	0.0	33.9	66.1	100.0	0.0	28.9	71.1
Bicycle	46.7	53.3	5.0	95.0	42.0	58.0	2.6	97.4
TV	14.0	86.0	5.0	95.0	16.0	84.0	2.6	97.4
Radio	60.0	40.0	31.4	68.6	50.0	50.0	18.4	81.6
Sewing machine	40.7	59.3	41.3	58.7	38.0	62.0	31.6	68.4
House	100.0	0.0	27.3	72.7	100.0	0.0	34.2	65.8
Gold	45.3	54.7	61.2	38.8	38.0	62.0	55.3	44.7
Local cow	44.4	56.6	18.8	81.2	24.1	75.9	5.0	95.0
Dairy cow	4.6	95.4	5.9	94.1	3.4	96.6	5.0	95.0
Poultry	90.7	9.3	92.9	7.1	93.1	6.9	95.0	5.0
Goat	24.1	75.9	21.2	79.8	13.8	86.2	0.0	100

**Table 8: Women's Contribution on Household Expenses**

Household contribution items	Programme members %		Non programme members %	
	Contribution		Contribution	
	Yes	No	Yes	No
Land cultivation	98.0	2.0	98.0	2.0
Livestock for HH contribution	75.3	24.7	56.0	44.0
Use of harvest for HH consumption	98.7	1.3	98.0	2.0
Other source of income	84.0	16.0	80.0	20.0
Member of credit and saving	58.7	41.3	30.0	70.0
Utilization of credit for HH expenses	61.3	38.7	26.0	74.0

**Table 9: Level of Income n=200**

Income categories from agricultural activities (Tsh)	ASSP members		Non ASSP members	
	Freq.	%	Freq.	%
Less than 200 000	91	60.7	40	80.0
200,001 to 400 000	51	34.0	9	18.0
400,001 to 600 000	7	4.7	1	2.0
More than 600 000	1	0.7	0	0.0

**Table 10: Overall empowerment level**

Empowerment level	Programme members (%)	Non-Programme members (%)
Highest	70.6	40.0
Moderate	2.0	0.0
Lowest	27.33	60.0

**Table 11: Comparison of members and non-members of ASSP on socio - economic empowerment variables**

Variable	Mann-Whitney U	Z - test	Asymp. Sig. (2-tailed)	Median
Women's level of income***	3014.000	-2.496	0.013	1
Participation in HH decision***	1917.500	-5.308	0.000	32
Freedom of movement	3602.000	-0.476	0.634	10
Asset ownership	3543.000	0.585	0.558	11
Contribution to HH expenses***	2556.500	-3.435	0.001	6

**Note:** \*\*\* indicates significant at 1% \*\* at 5%

**Biodata of the author**

Place of birth	Musoma, Mara region in Tanzania	Institution the degree was earned	Year
Date of birth	24 <sup>th</sup> October 1962,		
Education	PhD in Rural development majoring in Gender	Sokoine University of Agriculture, Morogoro, Tanzania	2010
	• Master of science in Agricultural education and education		
	• Bachelor of Science in Home Economics and Human Nutrition	Sokoine University of Agriculture, Morogoro, Tanzania	2001
	• Diploma in Poultry production	Sokoine University of Agriculture, Morogoro, Tanzania	1999
	Uyole Agricultural centre, Mbeya, Tanzania		1988