



## Original Article

# Smallholder Women Participation in to Farmers Training Centers (FTC) in Buno Bedele Zone, Southwestern Ethiopia

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### ABSTRACT

The main objective of this study is to assess the smallholder women participation in FTC at Buno Bedele zone, southwestern Ethiopia. The researcher has forwarded three research questions and formulated three research objectives. What status of participation of women in FTC? What were the major challenges women faced to participating in FTC?, what is factors that affecting the women farmers' to participating in FTC?. Multi stage random sampling techniques were employed to select a total of 72 respondents from nine Kebeles. Data were collected from both secondary and primary sources. Finally, the data were analyzed by descriptive and econometrics methods. According to the finding of the research hiring and transfer practice, social barriers such as house hold activities and family care contributed in limiting the participation of women in FTC. The logit estimation technique was estimating the factors that affecting women participation in to FTC. Specifically, women participation in to FTC is significantly influenced by the levels of education, membership to cooperative, extension contact frequencies, and family size. Therefore, policy aimed to accelerate agricultural development in the area could be successful if these factors and problems are taken into consideration to participating women farmers in to FTC. The absence of proper implementation of government policies such as affirmative action and gender quota should be resolved.

**Keywords:** women participation, FTC, challenge, social barriers and logit model

### INTRODUCTION

#### Background of the study

In Ethiopia women work longer hours than men in nearly every part of a country and do more of the total work than men. Even if they have such contribution to the development of the society at large, they have not been enjoying the fruits of development equally with their

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male counterparts, due to the gender based problem that faced them for the centuries. Ethiopia is a patriarchal society's that keep women at subordinate position using religion and culture as an excuse. They also suffer from work stereotype and gender distribution of labor, more are occupying in economically invisible work (Shimelis, 2015).

According to (Adamu and Mekonnen, 2009), Ethiopia is one of the countries where in women's participation is minimal due to the ideological, political, and economic and socio-cultural factors and lack of social and political capacities. However, to enhance the political participation of women the government of Federal Democratic Republic of Ethiopia(FDRE) ratified the Convention on Elimination of all forms of Discrimination against Women, integrated the same in the country's constitution and made it the law of the land.

Although women constitute two third of the world's working hours, produces half of the world's food and more than half of the world population they live in low social status in the society and in lower labor market. For the centuries they have been denied equal access of education, training, and employment opportunities. They were also neglected in the policy formulation and decision making processes and their education is limited to learning domestic skill (WB, 2003).

From the historical perspective of gender issues, it can be understood that women have been victims of inequality since long throughout the world. For instance, in Ethiopia there is a traditional belief that says the role of women is expected to play in their home helping their families with household activities such as cooking, take caring kids, washing and so on. For this as research findings indicate the major cause is gender bias and behavior arises from social, economic, cultural, historical and religious factors. As a result of these factors, inequality is highly prevalent for women in the areas of social, political and economic life (Shimelis, 2015).

In Buno Bedele zone the number of women and men are almost related. Even the number of men are larger compared with that of women farmers. In contrast to these women in the zone are occupying lower proportions of participation in FTC when compared with that of the males. Thus this study is set out to investigate the challenges of women participation in FTC of the zone and to analyze the policies and programs set regarding gender equality including their implementation. Moreover, the study focuses at identifying challenges that hinder women participation in FTC so as to suggest possible strategies that can be used to enhance their participation. Development, to be perfect and sustainable, needs wider participation from all segments of the society including women who are currently uninvolved in FTC. In the line with of the problem discussed above, the study designed to answer the following questions.

1. What is the status of participation of women in decision making of Buno Bedele zone?
2. What were the major challenges for gender gap to participating in FTC of Buno Bedele zone?
3. What are the factors that affecting the women farmers' to participating in FTC?

## RESEARCH METHODOLOGY

### Description of the Buno Bedele Zone Study Area

Chewaka, Didessa and Gechi districts are located in Buno Bedele zone. **Chewaka** is located 600 kilometers west of Addis Ababa. It has 28 administrative kebeles (villages). The total land area of the district is about 52,227 hectares, and the population is estimated to be 78,783(CSA, 2008).

**Gechi** is one of the district in the Buno Bedele Zone, is bordered on the south by Didessa, on the east by the Jimma Zone, on the north by Bedele, and on the east by the Didessa River which separates it from the Jimma Zone. Gechi is the major tow in Gechi. The 2007 national

census reported a total population for this district of 70,478, of whom 35,307 were men and 35,171 were women; 5,442 or 7.72% of its population were urban dwellers.

**Didessa** is one of the districts in the Oromia Region of Ethiopia. It is named after the Didessa River, a tributary of the Abay River. Part of the Buno Bedele Zone, Didessa is bordered on the south by the Didessa River which separates it from the Jimma Zone, and on the north by Gechi. The major town in Didessa is Dembi. Soybean is an important cash crop of this district.

**Types and Sources of Data**

Both primary and secondary sources were used. Primary data sources were smallholder farmers from six purposely selected Kebeles. Secondary data was collected from different sources, such as: District Agricultural Office, reports, bulletins and websites.

**Sampling Procedure and Sample Size**

Multistage sampling technique was employed to select respondents for the study. In the first stage, three districts were randomly selected. Nine Kebeles were selected randomly from three districts in the second stage. In the third stage, simple random sampling technique was used to select the households. Probability proportional to size (PPS) was used to determine the number of farmers. The sample size determination was resolved by means of Yamane (1967) sampling formula with 95 percent confidence level.

$$n = \frac{N}{1 + N(e)^2} \dots \dots \dots (1)$$

n= sample size for the research use

N= total number of respondents

e= margin of errors at 5%

As a result, 77 respondents were selected for the purpose of the study.

**Methods of Data Analysis**

Descriptive and econometrics analyses were used for analyzing the data collected from respondents in the study area.

**Model specification**

The logit model based on probability function is used in this study since it is believed to offer better explanation on underlying the factors affecting women participation in to FTC. The dependent variable in this case is dummy variable which takes the value of one for participate or zero otherwise. According to Hosmer and Lemeshew (1989), the logistic distribution function for analyzing the factors influencing women participation in to FTC at the study area can mathematically be specified as follows:

$$p_i = \frac{1}{1 + e^{-z_i}} \dots \dots \dots (2)$$

Where  $p_i$  is the probability of being willing to participating in to FTC for the  $i^{th}$  women farmers and  $z_i$  is a function of  $n$  explanatory variables ( $x_i$ ) and expressed as:

$$z_i = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots + \beta_nX_n \dots (3)$$

Where  $\beta_0$  is the intercept and  $\beta_i$  are the slope parameters in the model. The slope tells how the log-odds in favor of being willing to participation change as independent variables change.

Since the conditional distribution of the outcome variable follows a binomial distribution with a probability given by the conditional mean  $P_i$ , interpretation of the coefficient was

understandable if the binary logistic model can be rewritten in terms of the odds and log of the odds, (Gujarati, 1995). The odds was defined as the ratio of the probability that a women farmer were participating (Pi) to the probability of non-participation (1-Pi).

But

$$(1 - p_i) = \frac{1}{1 + e^{z(i)}} \dots \dots \dots (4)$$

Therefore,

$$\left(\frac{p_i}{1 - p_i}\right) = \frac{1 + e^{z(i)}}{1 + e^{-z(i)}} = e^{z(i)} \dots (5)$$

And

$$\frac{p_i}{1 - p_i} = \frac{1 + e^{z(i)}}{1 + e^{-z(i)}} = e^{\beta_0} + \sum_{i=1}^m \beta_i Y_i \dots (6)$$

Taking the natural logarithms of the odds ratio of equation (5) will result in what is known as the binary Logit model as indicated below.

$$\ln\left(\frac{p(i)}{1 - p(i)}\right) = \ln\left[e^{\beta_0} + \sum_{i=1}^m \beta_i x_i\right] = z(i) \dots (7)$$

If the disturbance term  $u_i$  is taken in to account the logit model becomes:

$$z_i = \beta_0 + \sum \beta_i x_i + u_i \dots \dots \dots (8)$$

Therefore, the above binary logit model was employed to estimate the effect of the hypothesized explanatory variables on participation decision of women farmers to participating in to FTC.

**RESULT AND DISCUSSION**

**Participation of Women in decision making**

The quality and capacity of women towards the improvement of participation of women in decision making process is varying as to the situation and their capacity. The manager’s skills and knowledge about the contribution of women in decision making can create the ability in developing different performances which lead to success.

As it can be seen from table 1, that 66.65% of respondents perceive that women participate in routine manual work and 13.88%, 12.5% and 6.9% expressed their feelings that of they were participate as others, planning and controlling, and team leader respectively.

The result shows that more than half of women participate in the only activities of routine manual wok and surprisingly there were no single organizational head from the respondents.

**Table 1: participation of the respondents in decision making process**

No	Stages	In Number	In percentage (%)
1	Kebele manager	0	0
2	Team leader or committee leader	5	6.9
3	routine manual work	48	66.7
4	Planning and controlling	9	12.5
5	Others	10	13.9
<b>Total</b>		72	100

Source: field survey February 2019

**Major challenges for gender gap to participating in FTC**

**Social Barrier**

As the research findings indicates on the table 2 below shows from the respondents 79.16% said “yes” and 19.48% said ‘No’. Surprisingly 55.55% of respondents put socio- cultural attitudes of society have medium level of impact in the limiting the participation of women and others 34.74%, 13.88%, 6.94% of high, never and low respectively.

**Table 2: Socio- culture attitudes of the society**

	Categories	Frequency	Percentage
<b>Challenge of socio cultural attitude of the society</b>	Yes	57	79.2
	No	15	19.3
	Total	72	100
<b>Extent of the challenge</b>	High	25	34.7
	Medium	40	55.6
	Low	5	6.9
	Never	10	13.9
	Total	72	100

Source: field survey February 2019

According to the result of research findings on the above table most of the respondents believes that socio- cultural attitudes of society is one of the challenge that tackle the participation of women participation in FTC. Most of the women say still attention should be given and different short and long term training is required in order to change socio- cultural attitudes of society towards women. Therefore, this result it can be possible to say that socio cultural attitude of the society contribute in limiting the participation of women.

**Attitude of the Staff towards Women**

The table 3 below depicts from the respondents 69.44% say “yes” and they believes that women are successful if they participating in FTC. Surprisingly 62.5%, 13.88%, 13.88%, 79.97%, of respondents put the success of women if training is given for them from high, medium, low and never respectively.

**Table 3: success of women in FTC**

	Categories	Frequency	Percentage
<b>Success if they had provided a training in FTC</b>	Yes	50	69.4
	No	22	30.5
	Total	72	100
<b>Extent of their success</b>	High	45	62.5
	Medium	10	13.8
	Low	10	13.8
	Never	7	9.7
	Total	72	100

Source: field survey February 2019

**Impact of Household Activities on Women**

Women have primary responsibility for management of household water supply, sanitation, child care, cooking and so on. As the result of findings indicates on the figure 4.4 below from

the respondents 69.44% say “yes” household activities were the challenge that limited the participation of women in decision making.

According to the results depicts on the above figure house hold activities and family care had great obstacles on women in the limiting participation of women in decision making. Because most of their time was consumed by house hold activities such as cooking and family care. This was supported by the result of research gathered from key informant and participant of focused group discussion.

As the research depicts on the table 4 below from the respondents 55.55% of respondents put House hold activities have high level of impact in the limiting the participation of women. And others 27.77%, 25%, 6.9% have low, medium and never level of impact in the limiting the participation of women respectively.

**Table 4: impact of household activities on women**

Categories	Frequency	Percentage
<b>High</b>	40	55.6
<b>Medium</b>	10	13.9
<b>Low</b>	18	25
<b>Never</b>	5	6.9
<b>Total</b>	72	100

Source: field survey February 2019

According to the result shown on the above table and figure most of the respondents had believes that House hold activities were one of the challenges that tackle the participation of women in FTC. Most of the women say still burden of house hold activities such as child care and cooking requires emphasis. This was supported by the research finding gathered through interview that held with the manager and vice manger. The result indicates that household activities imposed on women had impact to improve the participation of women in decision making.

**Determinants of Women Participation in FTC**

**Interpretation of significant explanatory variables**

**Educational level:** influence the smallholder women positively at 1% significance level. The result confirmed that if the educational level of women increasing from illiterate to read and write, grade (1-8), and grade (9-12) and above, the probability of participating in to FTC increased by 184.2377, 645.1383, and 41144.88, respectively. This implies that being literate would improve one’s chances to participating as literate women are more capable to interpret the information, easily understand and analyze the situation better than the illiterate women. Education is believed to give individuals with the necessary knowledge that can be used to collect information, interpret the information received, and make productive and marketing decision. The low level of education of the women may have contributed for limited use of FTC sector by women. This result is in line with Jari (2009), who stated that people with higher educational levels are more able to interpret information much better than those who have less education or no education at all.

**Family size:** negatively influence the women farmers’ participation in FTC at 5% level of significance. This result depicts that as the family size increases by one adult equivalent, the probability of women farmers’ participation in to FTC decreases by .368158.

**Extension contact frequency:** positively influences the women farmers’ participation in FTC at 1% level of significance. This result depicts that as the frequency of women farmers’



access to extension contacts increases, the probability of participation in FTC increases by 95.16646. Extension visit are more likely to increase the information base and decision making abilities of the farm households including the ability to choosing appropriate production technology.

**Membership to cooperative:** It was positively and significantly associated with women participation in to FTC at less than 5% significance level. The result shows that, if women farmer is member of cooperative the probability of women farmers participation in to FTC increased by .0461106. It could be because of the different productivity enhancing services such improved verities and fertilizers cooperatives provide to their members. Some of the households of the Kebeles are members of the multipurpose service cooperatives and they get different services including credit. For other agricultural activities credit is provided for members only (Table 5).

**Table 5: Determinants of Women Participation in FTC**

Logistic regression

participation	Odds Ratio	Std. Err.	P>z
AGEHH	1.291762	.3272	0.564
RELIGIONHH	.7793467	.4318	0.746
EDUCNHH			
READ AND WRITE	184.2377	1.8872	0.006***
GRADE(1-8)	645.1383	2.0209	0.001***
GRADE(9-12) AND ABOVE	41144.88	3.3360	0.001***
FAMILYSIZEHH	.368158	.1946	0.034**
DISTANCEMRKT	1.03074	.0749	0.839
TRANSPOTYFCLT	-.7497	.9045	0.407
LANDSIZE	.3831843	.3451	0.214
EXPRFRM	-.7574226	.3207	0.449
COOPMEMBER	.0461106	1.8291	0.038**
MARITUSHH	-.1464894	1.0001	0.125
EXTENSIONCONTACT	95.16646	2.1774	0.002***
cons	.1325803	6.4247	0.706

LR  $\chi^2$  (15) = 53.08, Prob >  $\chi^2$  = 0.0000, Pseudo  $R^2$  = 0.5427, Log likelihood = -22.3619  
 Standard errors in parentheses, \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1 **Source:** Survey result, 2019

## CONCLUSIONS

In Ethiopia, women work longer hours than men in nearly every part of a country and do more of the total work than men. Even if they have such contribution to the development of the society at large, they have not been enjoying the fruits of development equally with their male counterparts, due to the gender based problem that faced them for the centuries. The main objective of this study is to assess the smallholder women participation in FTC at Buno Bedele zone, southwestern Ethiopia. The researcher has forwarded three research questions and formulated three research objectives. What status of participation of women in FTC? What were the major challenges women faced to participating in FTC?, what is factors that affecting the women farmers' to participating in FTC?. Multi stage random sampling techniques were employed to select a total of 72 respondents from nine Kebeles. Focus group discussion, group interview and field observations were held to generate qualitative data. Data were collected from both secondary and primary sources.

Finally the data were analyzed by descriptive and econometrics methods. According to the finding of the research hiring and transfer practice, social barriers such as house hold activities and family care contributed in limiting the participation of women in FTC. In

addition, according to the finding of the research office did not give emphasis for the participation of women and they did not implement any mechanism or tools in order to encourage the participation of women. The logit estimation technique was estimating the factors that affecting women participation in to FTC. Specifically, women participation in to FTC is significantly influenced by the levels of education, membership to cooperative, extension contact frequencies, and family size.

In general majority of the women were found in productive age and they can play active role if opportunity is given for them. According to the result explained under chapter four gender quota and affirmative action were the best administrative tools in order to increase the participation of women. So from this it can be possible to easily conclude that gender quota and affirmative action is the best mechanism in order to increase the participation of women in decision making even if the office were not implemented properly.

### RECOMMENDATIONS

Based on the findings of this study the following recommendations are forwarded to improve women in participation in FTC of the zone.

Women must join and actively participate in the existing community organizations in order to show their capabilities to the community and at the same time must form special organizations which raise their awareness and work as lobbying forces that promotes their equal rights in both civil and political domains. Developing Women awareness about their legal rights as well as allocating adequate resources for implementation gender equality.

The public office of Bedele town should give emphasis during selection process, take effective affirmative action, give quota during the hiring and selection process. And there is need by the government and the relevant stake holders to undertake the quota system to facilitate women's participation in decision making.

The public office of Bedele town should take different mechanism in order to increase the participation of women in FTC. And also the office should arrange short and long term trainings for women to build their capacity. The serotype against women for the centuries still did eliminate so the concerned bodies should work in order to change the attitude of the society towards women.

The community, women activist, civil society and the government bodies need to work towards sensitization awareness creation among the community to realize the need of the women to participate in FTC and also has to play their role in solving the challenges of women participation in decision making.

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