



## Rural women roles in agricultural development activities at Jinaigati upazila of Sherpur district

Md. Shajahan Kabir<sup>1\*</sup>, Sadika Sharmin<sup>1</sup>, Gauranga Chandra Shaha<sup>2</sup>

<sup>1</sup>Department of Rural Sociology, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

<sup>2</sup>Market Facilitator (MF) World vision, Bangladesh

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#### \*Corresponding Author

MS Kabir

✉ mskabir786@gmail.com

### ABSTRACT

The main purposes of the study were to assess the extent of participation of rural women in agricultural activities at Jinaigati upazila under Sherpur district and to explore the roles of the selected variables of the rural women and their extent of participation in different agricultural production. Data were collected from randomly selected 65 respondents during the period of September to October, 2018. Appropriate scales were used to measure the variables of the study. Correlation(s) test was used to ascertain the relationships between the concerned independent variables and dependent variable. Based on the empirical results from the OLS analysis the findings can be presented in such a way that education of women, farm size, experience, and training received, of agricultural farming has significant impact on rural women income by the involvement of women through small scale agricultural production in the selected areas. Women are preferred to discuss with their male counterpart about their farm management activities. Respondents have more decision making process such as cash management, travel and recreation, children's education, voting in election, post harvest operation, use of money after selling and so on. The computed PCI of the 6 problems ranged from 376 to 348 against possible range from 0 to 465. Thus, the PCI of individual problem could range from 0 to 465, where 0 indicating 'no' problem confrontation and 465 indicating 'high' problem confrontation. It might be concluded from the gist findings that, the participation of women in homestead vegetable production is still not satisfactory and necessary steps concerning extension approach should be taken to increase the vegetable production by ensuring barrier-free participation.

### INTRODUCTION

Rural women in Bangladesh play a vital role in a wide range of income generating activities through agriculture, which include post harvesting, livestock and poultry rearing etc. Women also play a key role in home gardening and vegetable growing. Despite their domestic work, rural women in Bangladesh are performing an active role in ensuring household food security. Statistics revealed that rural women contribute 25-50% of household income in rural families. Women rendered a great deal of contribution in making decision on post-harvest operation, management of production activities, selling of crops, purchasing of agricultural inputs etc. to reduce their economic, social and political constraints, some supports such as health care facility, input supply, credit facility, need-based training etc are needed to increase their participation in income generating activities and different household

decision making. Improved financial autonomy has boosted their bargaining power and allowed women to become more active in decision making in the family (Hadi et al., 1997).

Bangladesh is an agrarian country where agriculture is the most potential source of employment for both men and women (About 63%). 19.6% GDP comes from agriculture. Agriculture plays a vital role in the economy of the country accounting for about 32% of total GDP. This sector comprises crops, forests, fisheries and livestock. Of the agricultural GDP, crops contribute 71%, forests 10%, fisheries 10% and livestock 9%. Women play a significant and crucial role in agricultural development and allied fields. Women's contribution to agriculture, which is considered as unpaid family labour, is grossly underestimated. In fact, if unpaid work were included, the figures for female employment in agriculture would be even higher (FAO, 2003).

Women in Sherpur District are involved in various small scale agricultural farming activities like vegetable cultivation, livestock and poultry. They consider these kinds of activities as subsidiary income source for their family. Small scale agricultural activities not only creates income source for the women but also play a highly significant role for their empowerment. In order to assess the extent of women's engagement in small scale agriculture selected women are categorized into several groups based on their agricultural related activities.

The objectives of the study are (a) identifying issues related to the roles and decision making by women, (b) assessing the role of respondents and extent of women's engagement in small scale agriculture and their relationship with different factors and (c) finding out the problem confrontation index by the rural women.

## MATERIALS AND METHODS

Jinaigati upazilla and Sherpur district were selected for this study. Data were collected from participants through personal interview. Consent was taken from each respondent. The study focused on livestock rearing, vegetables

cultivation, dairy rearing and poultry rearing activities. The sample size was 156. Simple random sampling was followed for selecting the participants. In-depth interview and face to face interview were done by using semi structure interview schedule. Descriptive statistics was followed for data analysis. The figures were presented in tabular forms and graphs. In this study, Pearson's Product Moment Correlation Coefficient ( $r$ ) was performed to determine the relationship between various factors (age, education, household size, farm size, savings, household expenditure, training received, farming experience, credit). Here, the dependent variable is the rural women annual income from vegetable, poultry and dairy production.

## RESULTS AND DISCUSSION

It is observed that, 49.03% women are involved merely on vegetable cultivation and this rate is high among others farming activities. Involvement of women in only dairy rearing & poultry and dairy rearing is little and don't show interest to rear dairy. Only 1.29% women are involved in this type of activities. There are only 1.29% women who are not involved in any kinds of farming activities (Table 2).

Table 1

Main effect of garlic lines on height of plant, number of leaves per plant at different days after planting, growth and yield of garlic bulb at harvest under dry land condition.

Types of farming	Number of women's involved	Percentage of women's involvement (%)
Merely vegetable cultivation	75	49.03
Vegetable cultivation and poultry rearing	41	26.45
Only poultry rearing	21	12.90
Vegetable cultivation and livestock rearing	6	3.87
Vegetable cultivation and dairy rearing	3	1.94
Only dairy rearing	2	1.29
Poultry and livestock rearing	3	1.94
Poultry and Dairy	2	1.29
No farming	2	1.29
Total	155	100

Source: Field survey, 2018

Women are involved in small scale vegetable cultivation in Bangladesh. In Sherpur district, about half of the women are involved in vegetable cultivation and they consider it as easy work beside their household work. By cultivating vegetables they meet their family needs and surpluses are sold in the market which contributes to the family incomes, enhances their decision making power in family, contribute to empowerment of women, reducing poverty and gender inequality in society.

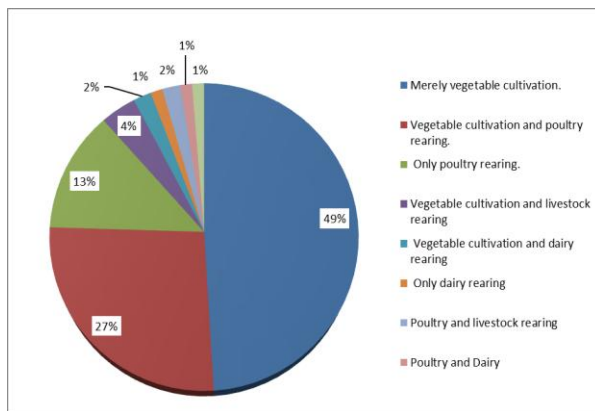


Figure 1  
Percentage of women's participation in different types of farming activities.

Women participate in vegetable production about 49%, shows a high rate compared to dairy rearing about 1% (Figure 1). About 99% the respondent claim that purchase of input, selling of goods are done by their husbands, even sometimes money are expensed by their husband. Most of the respondents claim that before cultivating vegetables they need to take the permission of their husband. It is a strong gender issue in society and potential barriers to women empowerment because Bangladesh is a patriarchal society. Islam et al (2018). About half (48.3 percent) of the rural women had low to medium participation in vegetable cultivation compared to 3.34 percent having high participation. Considering broadly selected 6-aspects of homestead vegetable cultivation, the rural women's participation was highest in seedbed preparation and raising of seedlings, while it was lowest in case of intercultural operation.

In case of vegetable cultivation income range varies from 400 to 100000 taka yearly. The workloads for vegetable cultivation are low as claims by the respondents. They spend 1 to 4 hours per day for farming purposes. They also claim that they get little help from their family members. We may divide the help they get from other family members into three (3) categories such as Sufficient, Little and Moderate

Table 2  
Percentage of help got from other family members for vegetable cultivation.

Types	Percentage (%)
Sufficient	25.90
Moderate	30.94
Little	43.17

Source: Field Survey, 2018.

From the table 2 it is shown that women got 43.17% little help from the family members which is high as compared with the sufficient help 25.90%. That means most of the work are done by the female in case of vegetable cultivation. About 76.77% respondents claimed that they received training from World Vision Bangladesh. Women participation in agricultural activities has gained momentum since last few decades. Women's involvement in poultry, livestock, dairy rearing become an integral part in rural areas. Khatun et al. (2014) found that participation of women considering different aspects in relation to vegetables cultivation, tilling by spade was ranked first. In case of the cultivation of fruit trees, the highest proportion (46.60 percent) of rural women had medium participation and irrigation after planting was in the first position. Agricultural knowledge, attitude and innovativeness had positive relationship with the cultivation of vegetables. Among the respondents, 12.90% were merely participating in homestead poultry rearing. 1.94% respondents were involved in both homestead poultry and livestock rearing and the rate is very low. About 1.29% respondents claimed that they had poultry & dairy rearing. The respondents also claimed that they had less eagerness to dairy rearing because it needs to go outside of home for feeding of dairy. And its management requires more time and a hard work.

Table 3  
The percentage of help they get from family members for poultry and dairy rearing.

Extend of support	Percentage (%)	
	Poultry	Dairy
Sufficient	20.46	30
Moderate	50	21.82
Little	29.55	47.28

Source: Field Survey, 2018.

In case of poultry, 50% moderate help get from the family members is high as compared to the 21.82% moderate help in case of dairy (Table 3). About 70% the respondents also said that most of the works related to farming done by them alone. Income of the respondent in case of poultry and livestock varies from 400-70,000 taka yearly. By undertaking agricultural farming activities, women can contribute considerably to family income, ensure constant supply of much needed nutrition, generate self-employment, uplift overall socio-economic condition and become more skilled. Women's level of participation in livestock management activities empower rural women in terms of better gender relations or increased decision-making power on the matters relating to the livestock management (Ahmed 2013). Homestead poultry rearing practices empower rural women. It indicates that independent decision making authority and increased involvement in family affairs are positively associated with empowerment. Greater financial independence for rural women increases their bargaining capacity, reduces violence against women, and enables them

Table 4  
Decision making indicators.

Choice of farming	Frequency
Decision is made by husband alone without consulting	4.49%
By husband and wife jointly	69.23%
By wife even when husband is present	25.64%
Farming management	
Decision is made by husband alone without consulting	8.97%
By husband and wife jointly	66.67%
By wife even when husband is present	24.36%
Selling of products	
Decision is made by husband alone without consulting	10.26%
By husband and wife jointly	64.10%
By wife even when husband is present	25.64%
Purchase of inputs	

to gain more influence over decision-making in the family (Hadi et al, 1997). Through traditional poultry rearing practices, rural women are empowered by being involved in the decision making process in their households. The increased involvement in decision results in the improved status of women in relation to the husband and the family. It helps to reduce gender gap in society.

This requires socio-cultural research and analysis to understand what the norms and expectations are for men and women in any given context and how this might affect the program, so that interventions can be designed accordingly. Assessing how interventions might interact with and influence the attitudes and behaviors of the target group and surrounding community is important; to ensure that negative gender stereotypes and discrimination against women and girls are not reinforced by the program. They also stated that a gender-responsive approach requires empowering women and ensuring that they know their rights, so that they can avail themselves of the services and recourse they are entitled to.

#### Decision making indicators in relation to agricultural activities

In this topic we have selected several indicators which are categorized under three response indicators, the table of each indicator are given below from which we can observe that which response code is higher than others.

Decision is made by husband alone without consulting	11.23%
By husband and wife jointly	65.70%
By wife even when husband is present	23.45%

Source: Field survey 2018

It was observed that women are participating more in decision making than the previous year's which indicating good performance in decision making process. Women are preferred to discuss with their male counterpart about their farm management activities (Table 4). Respondents have more decision making process such as cash management, travel and recreation, children's education, voting in election, post harvest operation, use of money after selling and so on. All the indicators showing almost similar result which indicates that women now a days are performing greater role in small scale farming and they share their valuable consent in decision making process comparing to previous time.

**Gender responsive feedback by women**

In this study, gender responsive activities are analyzed by some indicators of gender responsive activities such as-credit received, training experience, leadership related questions, involvement in social group, community meeting, sharing market, individual leadership and influence in the community and husband's attitude towards small scale agricultural activities etc.

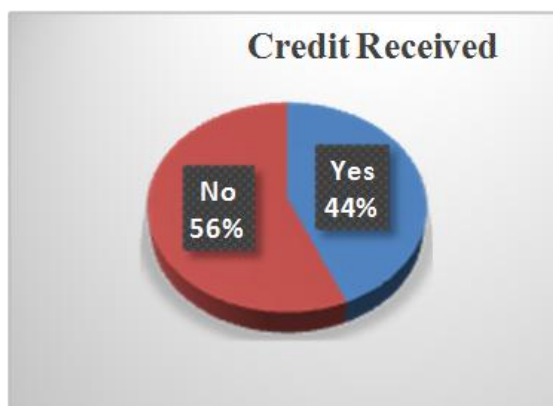


Figure 2  
Percent credit received by women

Women received credit 44% from GO or NGO, money lenders and relatives. 56% of the

respondents did not receive credits in the study area for their agricultural activities (Figure 2).

**Training experience**

Training experience is very important for women to their empowerment and equality. Along with the man, now-a-days women receive training for their better understanding about crop production, poultry and livestock rearing, vegetable cultivation, poverty reduction by small scale farming etc. In this study area, women received some training programs from World Vision, PDB, BRAC and Sub-Assistant Agriculture Officer (SAAO).

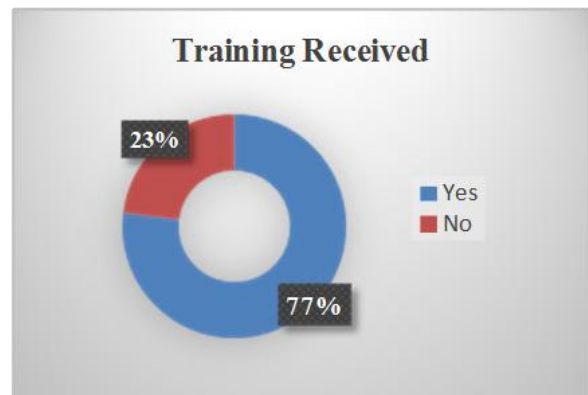


Figure 3  
Percent credit received by women.

Data showed that 77% of the respondents received training in the study area and 23% of the respondents did not receive any kind of training programs. Most of the respondents received training programs from different organizations.

Table 5  
Individual leadership and influence in the community.

Category	Frequency	Percentage (%)
Do not speak in public	58	37.18
Speak in public	97	62.82
Total	155	100

Source: Field survey 2018



From the data it is observed that 37.18% of the respondents are in the category of ‘Do not speak in public’ and 62.82% of the respondents fall in the category of ‘Speak in public’ (Table 5). Most of

the respondents have an individual leadership quality and has influence in the community.

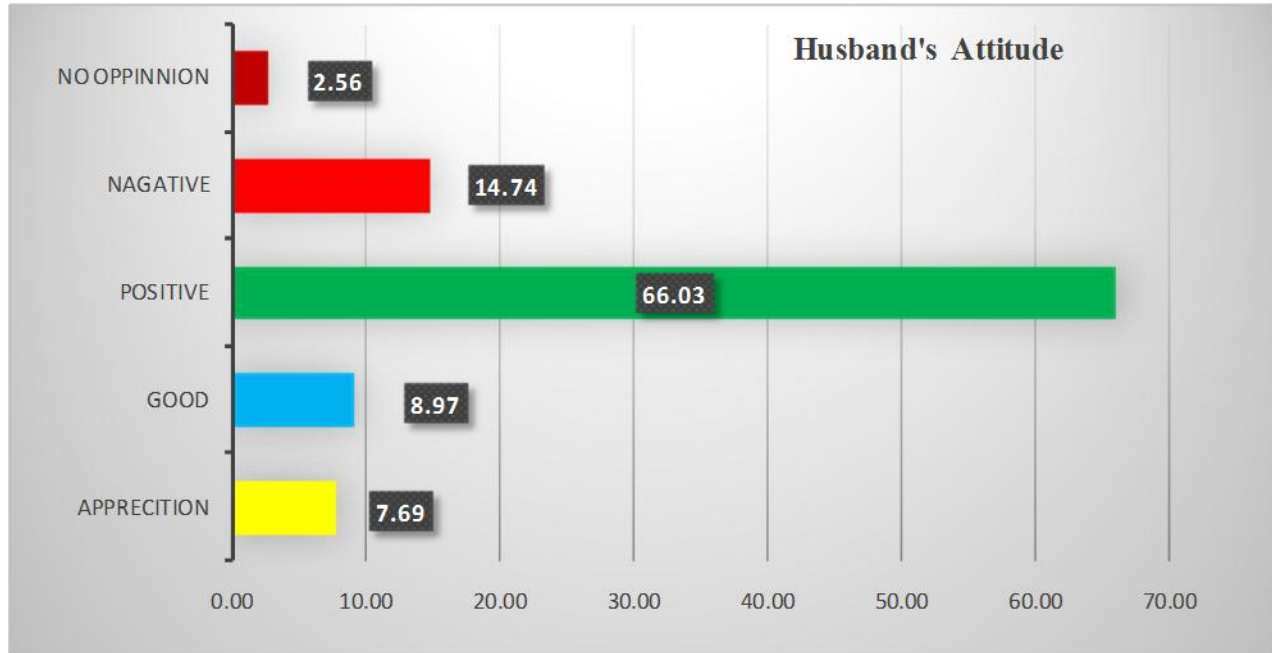


Figure 4 Husband attitude towards wife engagement in agriculture.

**The Pearson correlation analysis**

In this study, Pearson’s Product Moment Correlation Coefficient (r) was performed to determine the relationship between various factors

(age, education, family size, farm size, savings, household expenditure, training received, farming experience, credit). Here, the dependent variable is the rural women annual income from vegetable, poultry and dairy production.

Table 6 Co-efficient of correlation between explanatory variables and household income (n = 155).

Selected explanatory variables of rural women	Correlation coefficient (r)
Age	.330**
Education	.527**
Farm size	.484**
Household size	.090
Farming experience	.469**
Training received	.650**
Savings	.475**
Credit received	-.009
Household Expenditure	.782**

\*indicates correlation was significant at the 5% level and \*\* indicates correlation was significant at 1% level (2-tailed test,).

The Pearson correlation analysis revealed that independent variables such as age, education, farm size, savings, household expenditure, training received, farming experience were positively correlated to respondent's income which were statistically significant. While credit received was negatively correlated to the household income and another variable household size was positively correlated to respondent's income but not this one was statistically significant with the rural women income (Table 6).

### Problem Confrontation Index

A four point rating scale was used for computing the problem score of a respondent. The respondents were asked to 4 alternatives responses as 'high' 'medium' 'low and 'not at all' against each of 6 selected problems. Scores were assigned to those alternative responses as:

High = 3, Medium = 2, Low =1 and Not at all = 0, respectively.

Table 7  
Computation of Problem Confrontation Index.

Sl No.	Problems	Extent of problem				PCI	Rank order
		High (3)	Medium (2)	Low (1)	Not at all (0)		
1	Lack of cultivable land	78	56	21	0	367	3
2	High price of inputs	69	76	10	0	369	2
3	Lack of training facilities	81	59	15	0	376	1
4	Transportation problem	71	66	18	0	363	4
5	High rate of interest	58	77	20	0	348	6
6	Lack of Credit	67	70	18	0	359	5

Source: Field survey, 2018

Table 7 revealed that lack of training, high price of input and lack of available cultivable land rank 1, 2 and 3 respectively, others problems also very important in a sense that transportations, high rate of interest and lack of credit facilities hindered the farming activities.

### CONCLUSION

On the basis of the above findings it can be concluded that highest proportion of the rural

Problem Confrontation Index (PCI) was computed by using this formula

$$\text{Problem Confrontation Index (PCI)} = Ph \times 3 + Pm \times 2 + Pl \times 1 + Pn \times 0$$

Where,

Ph = Total number of the rural women expressed 'high' problem;

Pm = Total number rural women of the expressed 'medium' problem;

Pl = Total number of the rural women expressed 'low' problem;

Pn = Total number of the rural women expressed 'not at all' problem

To measure the extent of severity of the problems confronted by the rural women in small scale agricultural production, Problems Confrontation Index (PCI) was computed. The computed PCI of the 6 problems ranged from 376 to 348 against possible range from 0 to 465. Thus, the PCI of individual problem could range from 0 to 465, where 0 indicating 'no' problem confrontation and 465 indicating 'high' problem confrontation. The results have been arranged in rank order according to their problem severity (Table 7).

women had low to medium participation in homestead vegetable cultivation. The overall women empowerment status was not satisfactory in the study area, where there is a huge scope to work. In this area very few women can take their own decision most of them are take decision with consulting their husband. Various problems such as unavailability of sufficient credit as, insufficient capital, inadequate training facilities, support of helping hand and high price of inputs etc. problems are faced by women in this area. After

all economically active participation of the respondents in the study area gives them opportunity to improve their empowerment status in their household.

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