

Women's Participation in Different Agricultural Income Generating Activities under South Surma Upazila of Sylhet District

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Abstract: The main purpose of the study was to assess and describe the extent of participation of the women participant in different agricultural income generating activities (AIGAs). The study was conducted in six villages under Baraikandi union of South Surma Upazila of Sylhet District. Out of specific 400 rural women involved in different agricultural income generating activities, 100 respondents were randomly selected as sample of the study. Data were collected from respondents with the help of a pre-tested interview schedule during December 15, 2017 to February 26, 2018. Participation of a respondent was ascertained through ten agricultural IGAs: a) Homestead gardening, b) Field crop production, c) Post harvest activity, d) Poultry rearing, e) Goat rearing, f) Cattle rearing, g) Fish culture, h) Service, i) Labour selling, j) Collecting fuel wood. A 4-point rating scale of measurement was used for each of the factors. The overall participation score of a respondent was calculated by summing up their scores of these 10 activities. Pearson's correlation coefficient (r) was employed to explore relationship between extents of participation of the respondents with their selected socioeconomic characteristics. The selected characteristics were age, educational qualification, occupation of the respondents, family size, annual family income, farm size, communication media exposure, credit received, training received and agricultural knowledge of the women participant. The findings revealed that 47% of the rural women had medium level of participation while 28% had low, 25% had high participation. The characteristics such as age, educational qualification, occupation, annual family income, communication media exposure, credit and training received by the respondents were positively correlated with their participation.

Keywords: Women, participation, agricultural IGAs, socioeconomic characteristics

1. INTRODUCTION

Women constitute nearly half of the total population in Bangladesh (BBS, 2015). The role of women in the economic development of Bangladesh cannot be over looked. In the male dominant society women are in a disadvantageous position. Women, in custom and practice, remained subordinate to male

in almost all aspect of their lives; greater autonomy was the privilege of the rich or the necessity of the very poor. Most women's lives remained centered on their traditional roles and they had limited access to markets, productive services, education, health care, and local government. At the household level, the girl child often has unequal access to nutrition, health care and education compare to boy child. Many discriminatory practices arise out of some deep-rooted socio-cultural factors. Women still earn less than men earn and are mostly occupied in low paid jobs. They often do not have easy access to credit and other income generation opportunities and are still under represented at management and policy levels. Women's development is a global concern in this new era. In most of the developing countries including Bangladesh, today women issues are in most vital phenomena and the government of Bangladesh has taken necessary steps to reduce the traditional discrimination and violence against women. Women are considered as untapped national resources and the society would be benefited more if they were given the opportunity to use their unique talents. Meaningful development could be expected if women are involved both in their traditional domestic role as well as productive role in a more planned way in technologically sound activities.

In Bangladesh, women typically do more work than other. Women are potential producers of agricultural products and through participation in agricultural IGAs they may contribute to the national economy to increase the Gross Domestic Product (GDP) coming from agriculture. Agricultural IGAs play a vital role in GDP and employment generation. The nature and extent of women's participation varies from region to region. Effective participation on any issue especially in farming activities requires some amount of knowledge about it. Women in rural areas usually possess some extraordinary qualification. It is very much essential to use their hidden talent for participation in agricultural IGAs. Women are highly intended to be engaged in job for ensuring their livelihood

collection as well as economic solvency. But it is very much apologetic that females are always being suffered in their job sector by surrounding social setting as well as co-workers or colleagues. They are not happy in their working station. Neither they have economic security nor is social security. After all, their human rights as well as citizenship rights are being fully disregarded in terms of negligible payment, unhygienic working environment and behavioral patterns of coworkers. Even they are being thought as irrational and unfit economic agency. This kind of oppression of life is also seen in the life of rural women respondents. The economic contribution of women was substantial, but largely unacknowledged. Their contribution in agricultural sector and manufacturing jobs, especially in the ready-made garment industry is remarkable. Despite the fact that women constitute half of our citizenry, they continue to face persistent disadvantages and exclusion, evident in gender differentials for various indicators of health. Many reports show that women play a significant and crucial role in agricultural development including crop production, livestock production, horticulture, post harvest operation, agro-social forestry, fisheries and poultry.

Though the country has made slow and steady progress in agriculture by increasing the cropping intensity from 148 to 180 percent, between the period from 1969-'79 to 1995-'96, and thereby almost doubling the food production, but the agricultural sector has not yet been able to exploit its full potential. Demographic compulsion and declining per capital land availability make it clear that Bangladesh will have to produce more farm products from less and less land. In view of the shrinking resource base coupled with growing population pressure, an onward research of women's participation in agricultural IGAs is necessary.

Although the GOB has provided plans and programs for implementation to both GOs and NGOs for getting women involved in development activities, but available literature and review shows that NGOs have been more successful in reaching rural women than GOs. One of the major contributions of NGOs in the development has been made in forming organizations of the poor through socio structural analysis. Besides mobilizing the poor, the NGOs have been providing the credit and other needed inputs through organized services. Sometimes they also borrow technical assistance from the Government sectors for skill development of their target groups. Considering the above facts, the researcher felt a thrust to conduct a study to fulfil the following objectives:

1. To describe the socio-economic background of the respondent women.
2. To determine the nature and extent of participation of the women in agricultural IGAs.

3. To explore the relationship between the selected characteristics of the participating women and their IGAs.

2. MATERIALS AND METHODS

2.1 Study area

The study was conducted in six villages in Baraikandi union under South Surma Upazila of Sylhet district. South Surma Upazila is located in between 24°43' and 24°54' North latitudes and in between 91°47' and 91°58' East longitudes. The area of this Upazila is about 194.26 sq.km. The selection was made on the basis of suggestions made by the Upazila Agriculture Officer (UAO), Sub-Assistant Agriculture Officer (SAAO), Union Parishad Members and Officials of South Surma Upazila.

2.2 Population and sample of the study

The South Surma Upazila has a total population of 188675; male 97113, female 91562. Among 91562 females the six villages have 400 women who were involved in income generating activities. By proportionate random method 25% of the rural women were selected from the population. A reserve list of 10 women was also prepared. Numbers in the reserve list were only used when original respondent's list were not unavailable.

2.3 Data Collection

A structured interview schedule was carefully prepared keeping the objectives of the study in mind in order to collect relevant data for the study. A very simple, direct and easily understandable questions and statements were prepared for the respondents. The schedule contained both open and closed form of questions. Some scales were included in the schedule, wherever necessary. The draft interview schedule was pre-tested with 20 womens from the study area. The pre-test helped the researcher to find out faulty questions in the draft schedule and necessary corrections and modifications were made on the basis of the pre-test results. Data were collected during December 15, 2017 to February 26, 2018.

2.4 Variables of the Study

Ten socioeconomic characteristics of the women participants in AIGAs were taken as the independent variables which includes- Age, Educational Qualification, Occupation of the respondent, Family Size, Annual Family Income, Farm Size, Communication Media Exposure, Credit received, Training received and Agricultural Knowledge of the women participant. The dependent variable of the study was women's participation in different agricultural IGAs. Therefore the underlying hypothesis is "there is no relationship between each of the selected characteristics of women respondents and their participation in different agricultural IGAs".

2.5 Measurement of women participation in different Agricultural IGAs

of various activities especially in agricultural income generating activities. It is the outcome of many activities. The activities, their categorization and scoring were as follows:

Since participation is referred to as the process of involvement

TABLE 1: Measurement of women participation in different Agricultural IGAs

Activities	Category	Score	Activities	Category	Score	Activities	Category	Score
Homestead gardening	Frequently	3	Cattle rearing	Frequently	3	Goat rearing	Frequently	3
	Occasionally	2		Occasionally	2		Occasionally	2
	Seldom	1		Seldom	1		Seldom	1
	Not at all	0		Not at all	0		Not at all	0
Field crop production	Frequently	3	Fish culture	Frequently	3	Labour Selling	Frequently	3
	Occasionally	2		Occasionally	2		Occasionally	2
	Seldom	1		Seldom	1		Seldom	1
	Not at all	0		Not at all	0		Not at all	0
Post-harvest activity	Frequently	3	Service	Frequently	3	Collecting fuel wood	Frequently	3
	Occasionally	2		Occasionally	2		Occasionally	2
	Seldom	1		Seldom	1		Seldom	1
	Not at all	0		Not at all	0		Not at all	0
Poultry rearing	Frequently	3						
	Occasionally	2						
	Seldom	1						
	Not at all	0						

2.6 Data Analysis

The data collected for the study were coded, compiled, tabulated and analysed in accordance with the objectives of the study. Descriptive statistical measures such as range, frequency, number, percentage, mean, standard deviation and rank order were used for categorization and describing the variables. Pearson’s Product Moment Correlation Coefficient (r) was used in order to explore the relationship between the concerned variables through the study. One percent (0.01) and five percent (0.05) level of probability was used as the basis of rejecting or accepting a null hypothesis.

3. RESULTS AND DISCUSSIONS

3.1 Socio-economic characteristics of the farmers

The data presented in the table indicates that the middle aged women participants comprised the highest proportion 55 percent and the lowest proportion was made by the young aged category 21 percent. ‘Primary education category’ constitutes the highest proportion 63 percent and the lowest 7 percent above secondary education level category.

TABLE 2: Selected socio-economic characteristics of the respondents

Socio-economic factor	Frequency	Percent	Socio-economic factor	Frequency	Percent
Age (years)			Credit received (thousand taka)		
Young age (upto 30)	21	21.0	Low credit received (upto 6)	18	18
Middle age (31-50 years)	55	55.0	Medium credit received (7-18)	63	63
Old (above 50 years)	24	24.0	High credit received (upto 18)	19	19
Mean	40.56		Mean	12.28	
Standard Deviation	10.67		Standard Deviation	6.177	

Socio-economic factor	Frequency	Percent	Socio-economic factor	Frequency	Percent
Education (year)			Annual family income		
Illiterate (0-0.5)	0	0	Low income (upto 89)	7	7.0
Primary (1-5)	40	40	Medium income (90-217)	79	79.0
Secondary (6-10)	45	45	High income (Above 217)	14	14.0
Above secondary (Above 10)	15	15	Mean	153.23	
Mean	4.77		Standard Deviation	64.99	
Standard Deviation	3.82		Communication media exposure (score)	2.618	
Family Size (number)			Poor exposure (upto 11)	26	26.0
Small (upto 6)	13	13.0	Medium exposure (12-19)	56	56.0
Medium(7-10)	65	65.0	High exposure (Above 19)	18	18.0
Large(Above 10)	22	22.0	Mean	15.46	
Mean	6.96		Standard Deviation	4.87	
Standard Deviation	2.17		Training received (days)		
Farm size (ha)			No (0)	14	14.0
Marginal (less than 0.2)	38	38.0	Low (1-5)	63	63.0
Small (0.2-less than 1)	56	56.0	Medium (Above 5)	23	23.0
Medium (1-3)	6	6.0	Mean	3.23	
Mean	0.44		Standard Deviation	2.286	
Standard Deviation	0.405		Agricultural knowledge (score)		
Occupation (score)			Poor (upto 6)	30	30.0
Housewife	53	53.0	Medium (7-10)	46	46.0
Student	20	20.0	High (Above 10)	24	24.0
Services	27	27.0	Mean	8.1	
Mean	1.74		Standard Deviation	2.797	
Standard Deviation	0.860				

The highest proportion 53 percent of the respondents were housewife followed by 27 percent respondents were involve in services, and 20 percent respondents were students. The medium size family constitutes the highest proportion 63 percent and the lowest 13 percent respondents had large family size. In terms of annual family income, large proportion (79 percent) of the respondents belonged to medium (90-217 thousand taka) category followed by 14 percent respondents of high (above 217thousand taka), and 7 percent respondents of low (0-89 thousand taka) income category. The low land holder constitutes the highest proportion 56 percent and the lowest 6 percent in medium farm holder. The highest proportion 56 percent of the respondents belonged to medium category for communication media exposure followed by 26 percent respondents belonged to low category. Women IGAs participants having medium credit received constitute the highest proportion 63 percent (7-18 thousand taka) and low credit received (upto 6 thousand taka) 18 percent constitute the

lowest proportion. The large proportion 63 percent of the respondents received low training where 14 percent did not receive any training. However, 46 percent of the respondents had medium agricultural knowledge while 30 percent of the respondents had low agricultural knowledge and 24 percent had high agricultural knowledge

3.2 Participation in different agricultural income generating activities

Participation in different agricultural income generating activities was the dependent variable of this study. This was measured by computing ten activities that provide strong bases for the participation. These are: - a) Homestead gardening, b) Field crop production, c) Post harvest activity, d) poultry rearing, e) Goat rearing, f) Cattle rearing, g) Fish culture, h) Service, i) Labour selling, j) Collecting fuel wood. For a clear understanding of the participation in different agricultural

IGAs, a summary of every selected activities has been presented in table 3. Through systematic analysis, it is evident from the table 3 that out of selected ten activities, rural women participated almost all activities. But they participated comparatively more in homestead gardening, fuel wood collection, post-harvest activities and field crop production. Women like to do homestead gardening because, it can be practiced within a short area besides household and they need not to go out of home as they need to maintain the traditional family rules of not going outside, family caring, take care of their father and mother in-law and rearing their children. Due to their progressive education and need based training reception, they know the benefit of quick return of different homestead vegetables. They can easily participate in different post-harvest activities like harvesting, threshing, winnowing of crop with their husband as a helping hand or full time for family support. Women participate in producing different field crop. This may be because of their appropriate training reception and reception of necessary credits that help them to invest a lot and produce some grain crop successfully. They participate

seldom in poultry rearing. This may be because of their little bit negative behavior on poultry as it needs extra rooms with appropriate food supply. Sometimes loss is high when disease is severe in poultry which causes sudden death of poultry. Though some women participate frequently in poultry rearing but their overall participation in poultry is little bit lower. Women participate frequently in fuel wood collection as it is easy to collect and almost available in rural area. They can sell it out in market for earning instant cash money. Collecting fuel wood is very much popular in them. Their participation in cattle and goat rearing was not satisfactory level but still had little bit participation. Their participation in fish culture was comparatively low as it needs lot of capitals for investment and it is time consuming. They also participate in different service because of their progressive education but comparatively low. However, need based training program with adequate level of credit distribution and different literacy campaign should be initiated in these areas for increasing the level of participation in different agricultural IGAs.

TABLE 3: Distribution of the respondents depend on participation in different agricultural IGAs

Activities	Categories	Respondent		Mean	Standard deviation
		Number	Percentage		
Homestead gardening	Frequently	48	48	2.16	0.884
	Occasionally	20	20		
	Seldom	32	32		
	Not at all	0	0		
Field crop production	Frequently	27	27	1.71	0.998
	Occasionally	29	29		
	Seldom	32	32		
	Not at all	12	12		
Post-harvest activity	Frequently	32	32	1.86	0.985
	Occasionally	35	35		
	Seldom	23	23		
	Not at all	10	10		
Poultry rearing	Frequently	24	24	1.54	0.968
	Occasionally	16	16		
	Seldom	50	50		
	Not at all	10	10		
Goat rearing	Frequently	33	33	1.69	1.160
	Occasionally	26	26		
	Seldom	18	18		

Activities	Categories	Respondent		Mean	Standard deviation
		Number	Percentage		
	Not at all	23	23		
Cattle rearing	Frequently	15	15	1.15	1.086
	Occasionally	22	22		
	Seldom	26	26		
	Not at all	37	37		
Fish culture	Frequently	16	16	1.06	1.108
	Occasionally	16	16		
	Seldom	26	26		
	Not at all	42	42		
Service	Frequently	15	15	1.33	1.016
	Occasionally	28	28		
	Seldom	32	32		
	Not at all	25	25		
Labour Selling	Frequently	12	12	1.19	1.001
	Occasionally	25	25		
	Seldom	33	33		
	Not at all	30	30		
Collecting fuel wood	Frequently	48	48	2.09	1.016
	Occasionally	21	21		
	Seldom	23	23		
	Not at all	8	8		

The scores for participation in income generating activities of the respondents ranged from 6 to 27. The mean and standard deviation were 15.81 and 6.647 respectively. To find out the overall participation in agricultural IGAs, the respondent was further classified into three categories as shown in table 4.

TABLE 4: Distribution of the respondents depend on their total participation in IGAs

Category	Frequency	Percent	Mean	Standard deviation
Low participation (upto 9)	28	28.0	15.81	6.647
Medium participation (10-22)	47	47.0		
High participation (Above 22)	25	25.0		
Total	100	100.0		

It is evident from the table 4 that the highest proportion 47 percent of the women had overall medium participation in agricultural IGAs while 28 percent had low participation and

25 percent had high participation. From the above table, it was observed that women had moderate participation in almost all sphere of agricultural income generating activities. This may

because of their educational progressiveness, favourable occupation, moderate level of training received, getting adequate loan from different organizations.

3.3 Relationships Between the selected characteristics of the women and their participation

Pearson’s product Moment Co-efficient of Correlation (r) was computed in order to explore the relationship between the selected characteristics of the women and their extent of participation through income generating activities. The relationship between the dependent and independent variables has been presented in table below. To reject or accept the null hypothesis at 0.05 and 0.01 level of probability was used. A statistically significant and non-significant relationship was observed when the computed value or “r” was greater or smaller than the tabulated value, respectively.

Ten null hypotheses were tested to explore the relationship between ten independent variables and participation of women in agricultural IGAs. Seven null hypotheses out of ten null hypotheses were rejected. Among these Age (0.638**), Educational qualification (0.504**), Occupation of the respondent (0.212*), Annual family income (0.219*), Communication media exposure (0.684**), Credit received (0.340**), and Training received (0.303**) were positively

significant. Similarly, The study of Rahman (2006) on involvement of rural women in homestead vegetable cultivation revealed that age, educational qualification, annual family income and communication media exposure had positive significant relationship with each of their winter, summer and overall homestead vegetable cultivation. Haque (2008) conducted a study on participation of rural women in income generating activities in agricultural model farm project of Sabalumbu Unnayan Samity (SUS) and found that occupation of the respondent had positive significant relationship with the extent of participation in AMF project activities. While conducting a study on participation of rural women in farm and nonfarm activities, Chowdhury (2009) found that credit received had positive significant relationship with their participation. The study of Yesmin et al.(2007), Rahman (2007) and Chowdhury et al. (2009) demonstrated that training received had positive significant relationship with women’s participation. On the other hand, family size (-0.017^{NS}), farm size (-0.094^{NS}) and Agricultural knowledge of the women participant (0.109^{NS}) did not show any significant relationship with the participation. However, Haque (2008) also did not find any relationship of family size and farm size with women’s participation in their participation of rural women in income generating activities in agricultural model farm project.

TABLE 5: Relationships between the selected characteristics of the women and their participation

Dependent variable	Independent variables	Computed value of co-efficient of correlation ‘r’	Tabulated value at 98 df	
			0.05 level	0.01 level
Women’s Participation in different agricultural IGAs	Age	0.638**	0.197	0.257
	Educational qualification	0.504**		
	Occupation of respondent	0.212*		
	Family size	-0.017 ^{NS}		
	Annual family income	0.219*		
	Farm size	-0.094 ^{NS}		
	Communication media exposure	0.684**		
	Credit received	0.340**		
	Training received	0.303**		
	Agricultural knowledge of the women participant	0.109 ^{NS}		

** : Correlation is significant at the 0.01 level; * : Correlation is significant at the 0.05 level; ^{NS} Not significant

4. CONCLUSION AND RECOMMENDATIONS

Rural women largely participate in homestead gardening, fuel wood collection, field crop production and different post-harvest activities. They seldom participate in poultry rearing.

Their participation in goat and cattle rearing is not satisfactory level. They seldom participate in fish culture as it is time consuming and needs a good amount of capital. Generally, their participation in almost all activities is low to medium. So, development of their necessary skill by giving appropriate

training and loan and improving their educational qualification can accelerate their level of participation in different agricultural IGAs. If need based income generating programs can be initiated more, participation of less participating women who are still staying in low level of participation in many agricultural IGAs like poultry, cattle and goat rearing and fish culture etc. can increased satisfactorily. Satisfactory educational level of the study area percept that basic requirement of participation is prevailing more or less in the study area. While formulating any new program at rural areas, Government and NGOs should consider it carefully for obtaining fruitful outcome. About 82 percent of the respondents had low to medium communication media exposure, while only 18% had high communication media exposure. Communication media exposure is an important and vital phenomenon which makes the women respondents more knowledgeable, understanding and sincere about their self-dependency. They can be found new ideas and thoughts through it. So, it could be concluded that, the more they contact with communication media, the more their participation will increase in different agricultural IGAs. Steps should be taken to improve the communication media exposure for increasing the participation of rural women in different agricultural IGAs. Credit received by women had a positive significant relationship with their participation. When loan availability increases, their ability for investment also increases and thus their situation of more participation in different agricultural IGAs enriched. Training received had positive significant relationship with the participation of women respondents. So, it can be concluded that if they are given appropriate need-based training to the rural women, their level of participation in different agricultural IGAs will be more and more. On the basis of findings of the study the some recommendations have been generated. Need based training program should be undertaken for developing the skill of rural women and thus improving their level of participation in different agricultural IGAs and

make them self-reliant. Necessary steps should be taken by the Government and NGOs to initiate fruitful literacy program for the improvement of the respondent women's livelihood status and level of participation in different agricultural income generating activities. Steps should be taken by the concerned authorities for necessary financial support so that women have access different IGAs. Necessary steps including different plan communication campaign should be undertaken by different GOs and NGOs to improve the participation in different agricultural income generating activities.

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