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# Participation of Landless and Marginal Farmers in Agricultural Income Generating Activities Poverty Alleviation

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Abstract: The main purpose of the study was to identify the extent of participation by landless and marginal farmers in Agricultural Income Generating Activities (AIGAs) for their poverty alleviation. The study was conducted in Bogra and Jhenaidah districts, Bangladesh. An interview schedule was used to collect data from randomly selected 190 respondents of 11 villages of the selected districts through face to face interview. A remarkable difference was observed in the characteristics of the districts. Majority, 52.7% and 53.8% in Bogra and Jhenaidah districts, respectively of the respondents belonged to middle aged (31 to 45 aged people) category having high illiteracy rate (35.5% and 36.3% in Bogra and Jhenaidah districts, respectively). All the respondents (100%) in Bogra and 95% of the respondents in Jhenaidah were married. More than half of the respondents (61.8%) in Bogra and about half of the respondents (55%) in Jhenaidah possessed small sized of four member's family. Majority (72.7%) of the respondents in Bogra was marginal and 61.3% of the respondents in Jhenaidah were landless farmers. In Bogra about half of the respondents (48.2%) usually took scientific balanced diet but in Jhenaidah majority of the respondents (88.8%) usually took rice and vegetable as daily food. About half of the respondents (54.5%) in Bogra and third-fourth (76.3%) of the respondents in Jhenaidah lived in katcha, soil made houses. Moreover, the financial condition of most of the respondents in Bogra was moderate ( $\geq 60000$  Tk./year). But in Jhenaidah the income level of most of the respondents ranged from 25000 Tk. to 90000 Tk. per year. The level of cosmopoliteness of most of the respondents in both districts was medium. But in Jhenaidah the income level of most of the respondents ranged from 25000 Tk. to 90000 Tk. per year. Furthermore, most of the respondents (90% and 73.8% in Bogra and Jhenaidah, respectively) were characterized by low extension media contact. The level of decision making authority of the husbands in Bogra was high whereas it was medium for Jhenaidah district. Most of the respondents (95.4% and 86.3% in Bogra and Jhenaidah, respectively) in both districts possessed at least medium level of agricultural knowledge. Attitude of most of the respondents (61.8%) in Bogra towards their own participation in agricultural IGAs was highly positive whereas it was positive for most of the respondents (87.5%) of Jhenaidah. The levels of organizational participation of the majority of respondents (79.1% and 63% in Bogra and Jhenaidah) were low. In Bogra, characteristics of the respondents like educational status, food habit, housing status, farm size, innovativeness, attitude towards participation, agricultural knowledge, decision making authority of husband, and experience about AIGAs were positively and significantly correlated with their overall participation. In case of Jhenaidah, characteristics of the respondents like age, annual income, decision making authority of wife, organizational participation, organizational participation duration and experience about agricultural IGAs were positively and significantly correlated with their participation. But educational status, innovativeness and their participation in agricultural IGAs showed significant negative relationship with their participation. High price of inputs, economic hardship and lack of training facilities, lack of marketing facilities, misappropriation of funds and lack of understanding about agricultural IGAs were the important problems faced by the respondents for their participation in agricultural IGAs that were more or less similar in both districts.

Keywords: Agricultural Income Generating Activities, Bogra and Jhenaidah districts, marital status, farm size, cosmopoliteness, annual income, housing and educational status

#### I. INTRODUCTION

Income generation activities are considered as those initiatives that affect the economic aspects of peoples living through the use of economic tools such as credit. Farmers possessing a land area below 0.02 ha are categorized as landless farmers. Landless farmers used to have homestead in their possession with no cultivable land [1]. At present farmers under this category, mostly belong to a NGO group, who usually make saving a certain amount of money each week and after 12 to 15 weeks when group become



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graduated, they take loan and start and income generating activities. In this way they try to improve their living conditions. Farmers do not belong such group usually undergo maintaining their livelihood through day laborer in most of the cases. Farmers possessing a land are under 0.02-0.20 ha are categorized as marginal farmers [1-2]. Pervasive poverty affects millions of people in Bangladesh on many levels and then it alleviation requires diverse measures. The government has made poverty alleviation one of its primary concerns in various development plans and in its continues efforts to obtain foreign assistance in agriculture [3]. Landless and marginal farmers 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 [4-7]. The nature and extent of participation varies from region to region. Effective participation on any issue especially in farming activities requires some amount of knowledge about it. It is very much essential to use their talent for participation in agricultural IGAs. Socio-demographic characteristics like age, education, marital status, family size, family type, farm size, food habit, housing status, annual gross income and annual family expenditure have been discussed. Fig. 1 shows the map of Bangladesh in world demonstrating Jhenaidah and Bogra district [8].

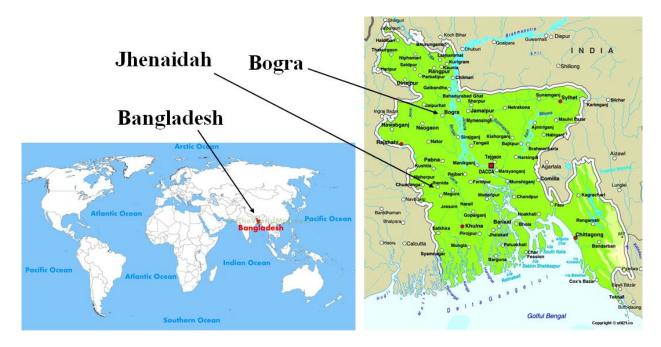


Fig. 1: Bangladesh in world map demonstrating Jhenaidah and Bogra district.

## **II. METHODS**

This study was conducted in Bogra sadar, Shibganj upazila under Bogra district and Moheshpur sadar upazila under Jhenaidah district. The main objective of the study was to identify the extent of participation in different agricultural IGAs by landless and marginal farmers for alleviation of poverty and find out the relationship between the selected characteristics of the respondents and their participation.

## **III.RESULT AND DISSCUSSION**

The distribution of the respondent according to their marital status is shown in Table 1. All of the respondents (100%) in Bogra and most of the respondents (95%) in Jhenaidah were married. Only a few were unmarried (5%) in Jhenaidah and standard deviation was 0.0 and 0.22, respectively. Table 2 shows the distribution of the respondent according to their family type. Most of the respondents (84.5% and 75% respectively in Bogra and Jhenaidah) had nuclear type of family. Size of family was measured on the basis of total member in a family. Total number of the family members of respondents ranged from 2 to 12 in Bogra and 2 to 10 in Jhenaidah. Analysis of the Table reveals that in Bogra about 72.7% of the respondents were marginal farmer and 27.3% belonged to landless.



Category		Respo		SD		
	Во	gra	Jhena	aidah	Bogra	Jhenaidah
	Number	Percentage	Number Percentage			
Married	110	100	76	95.0	0.0	0.22
Unmarried	0	0.0	4	5.0		
Total	110	100.0	80	100.0		

# Table 1. Distribution of the respondents according to their marital status

Table 2.	Distribution	of the rea	spondents	according to their	family type
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Category		Respo		SD		
	Bo	gra	Jhena	aidah	Bogra	Jhenaidah
	Number	Percentage	Number Percentage			
Nuclear	93	84.5	60	75.0	0.36	0.44
Joint	17	15.5	20	25.0		
Total	110	100.0	80	100.0		

The distribution of the respondent according to their farm size is listed in Table 3. The farm size of the respondents was with an average of 0.24 and 0.26 hactor respectively in Bogra and Jhenaidah, respectively. The respondents were classified into two categories according to their farm size as shown in Table 3.

Table 3. Distribution of the respondents according to their farm size

Category	Size (ha)		Respo	ondent		Mean		SD	
		B	Bogra Jhenaidah		Bogra	Jhenaidah	Bogra	Jhenai-dah	
		No.	%	No.	%				
Landless	≤0.02	30	27.3	49	61.3	0.24	0.26	0.11	0.20
Marginal	0.02-0.20	80	72.7	31	38.8				
Total		110	100.0	80	100.0				

Table 4 gives the indications of the distribution of the respondents according to their cosmopoliteness. There was a wide variation in the cosmopoliteness of the respondents. The observed cosmopoliteness scores of the respondents ranged from 3 to 10 in Bogra and 2 to 10 in Jhenaidah. The average cosmopoliteness score scores of the respondents were 5.88 and 5.86 in Bogra and Jhenaidah, respectively. Highest proportion (70% and 81.3% in Bogra and Jhenaidah, respectively) of the respondents had medium cosmopoliteness compared to 17.3% and 12.5% low cosmopoliteness, respectively.

Table 4. Distribution of the respondents according to their cosmopoliteness

Category	Size (ha)		Respo	ondent		Mean		SD	
		B	ogra Jhenaidah		Bogra	Jhenaidah	Bogra	Jhenai-dah	
		No.	%	No.	%				
Low	≤4	19	17.3	10	12.5	5.88	5.86	1.95	1.55
Medium	5-8	77	70.0	65	81.3				
High	≥9	14	12.7	5	6.3				
Total		110	100.0	80	100.0				



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Table 5 represents the distribution of the respondents according to their annual income. It is satisfactory in respect of national average but a long way still to go which can be achieved through agricultural IGAs. In the table 5, there is a significant difference between the two districts considering annual income.

Category	Size (ha)	Respondent				Mean		SD	
		B	ogra Jhen		naidah	Bogra	Jhenaidah	Bogra	Jhenaidah
		No.	%	No.	%				
Low	≤60,000	22	20.0	49	61.3	79497.7	61627.50	23456.6	46287.71
Medium	60,000-	56	50.9	24	30.0	3		5	
	90,000								
High	≥90,000	32	29.1	7	8.8				
Total		110	100.0	80	100.0				

Table 5. Distribution of the respondents according to their annual income

The distribution of the respondents according to their annual family expenditure is listed in table 6. Most of the respondents (84.5% and 47.5% in Bogra and Jhenaidah, respectively) had savings. On other the hand, 91% (Bogra) and 46.3% (Jhenaidah) had equal level of annual family income and expenditure. In Bogra and Jhenaidah, it is a positive indication of economic development that majority respondents are now enjoying the freedom from indebtedness. This might be due to involvement in different agricultural IGAs.

Table 6. Distribution of the respondents according to their annual family expenditure

Category		Respo		SD		
	В	ogra	Jhe	naidah	Bogra	Jhenaidah
	Number	Percentage	Number Percentage			
Have savings	93 84.5		38	47.5	0.55	0.61
Income and	10	9.1	37 46.3			
Expenditure equal						
Remain in debt	7	6.4	5	6.3		
Total	110	100.0	80	100.0		

Table 7 presents the distribution of the respondents according to their housing status. Most of the respondents (54.5% and 76.3% in Bogra and Jhenaidah, respectively) had katcha type, soil made houses, whereas a few of the respondents (45.5% and 22.5% respectively in Bogra and Jhenaidah, respectively) who have higher asset status are living in semi pucca and pucca, brick made house, respectively. The reason behind the ability, farmers are not able to build pucca, brick made building according to their low income.

Category		Respo		SD		
	В	logra	Jhe	enaidah	Bogra	Jhenaidah
	Number	Number Percentage		Percentage		
Katcha, soil made	60	54.5	61	73.3	0.50	0.46
Semi-pucca	50	45.5	18	22.5		
Pucca, brick made	0	0.0	1	1.3		
Total	110	100.0	80	100.0	1	



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Table 8 shows the distribution of the respondents according to their education status. The highest (35.5% and 36.3% in Bogra and Jhenaidah, respectively) were illiterate. In Bogra, 28.2% of the respondents had secondary level of education followed by primary level of education of 19.1%, can read and write of 15.5%, and HSC level of 1.8%. It is found that, in Jhenaidah, 28.8% of the respondents had primary level of education followed by secondary level of 15%, can read and write of 13.8%, and HSC level of 1.3%. The reason behind the highest illiteracy is the maximum population of medium aged and during their childhood there were lack of educational facilities and their parents were encouraged them to farm work.

Table 9 depicts the distribution of the respondent according to their Age. Age of the respondents ranged from 24 to 78 years in Bogra and 19 to 70 in Jhenaidah with an average of 41.11 and 37.71 respectively and the standard deviation of 11.88 and 10.13, respectively. Table 10 illustrates the distribution of the respondents on the basis of overall participation in agricultural IGAs. The largest proportions (51.8% and 45% in Bogra and Jhenaidah, respectively) of the respondents had medium participation in agricultural income activities. However, 22.7% and 41.3% of the respondents in Bogra and Jhenaidah, respectively had low participation in agricultural income activities. The reason behind low participation due to lack of information about agricultural IGAs, illiteracy. Fairly, large portion of the respondents had medium participation in agricultural IGAs.

Category		Respo		SD		
	В	ogra	Jhe	naidah	Bogra	Jhenaidah
	Number Percentage		Number	Percentage		
Illiterate	39	35.5	29	36.3	1.35	1.32
Can read and write	17	15.5	11	13.8		
Primary (I-V)	21	19.1	23	28.8		
Secondary (VI-SSC)	31	28.2	12	15.0		
Higher Secondary (HSC)	31	1.8	1	1.3		
Total	110	100.0	80	100.0		

Table 8. Distribution of the respondents according to their education status

Table 9: Distribution of the respondent according to their Age

Category	Size (ha)		Respo	ondent		Mean		SD	
		B	ogra Jhenaidah		Bogra	Jhenaidah	Bogra	Jhenai-dah	
		No.	%	No.	%				
Young	≤30	23	20.9	22	27.5	41.11	37.71	11.88	10.13
Middle	31-45	58	52.7	43	53.8				
Old	≥46	29	26.4	15	18.8				
Total		110	100.0	80	100.0				

Table 10. Distribution of the respondents on the basis of overall participation in agricultural IGAs

Category	Scores	Respondent					Mean	SD	
		B	ogra	Jhenaidah		Bogra	Jhenaidah	Bogra	Jhenaidah
		No.	%	No.	%				
Low	1-6	25	22.7	33	41.3	9.56	8.04	3.52	4.08
Medium	7-11	57	51.8	36	45.0				
High	≥12	28	25.5	11	13.8				
Total		110	100.0	80	100.0				



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Moreover, In Bogra most of the respondents (48.2%) were habituated to intake scientific balance diet who have higher educational attainment are habituated to intake scientific balanced diet, whereas some of the respondents (40%) were habituated to intake rice and vegetables. The reason behind that most of the farmer had inadequate nutritional knowledge and economic insolvency. Most of the respondents (90 % and 73.8% in Bogra and Jhenaidah respectively) had low sure to mass media compared to 10% and 25% respectively medium exposure to media) In Jhenaidah 1.30 % high exposure to mass media. It was observed that, agricultural knowledge of the respondents ranged from 5 to 14 in Bogra and 3 to 13 in Jhenaidah, respectively.

### **IV.CONCLUSIONS**

Based on the findings on the socio-economic background of the respondents it could be concluded that the middle aged, illiterate and married respondents participated more in different agricultural IGAs. They had small sized and nuclear type of family, and marginal sized farm and no land, respectively. They were habituated to intake rice-vegetable type of food habit, living in katcha, soil made type houses with medium and low income respectively and more or less of the respondents had savings. On the basis of the findings on the motivational and attitudinal factors it might be concluded that the respondents had low (in both districts) training facilities medium cosmopoliteness, low extension media contact and low organizational participation. However, they had medium agricultural knowledge in both districts. Both the respondents had highly positive and positive attitudes respectively towards participation in agricultural IGAs. Most of the respondents had medium participation in agricultural IGAs in both areas. This indicates that there is still scope for enriching their level of participation. Based on the correlation analysis it could be concluded that the relationships between education status, food habit, housing status, farm size, attitude towards participation, agricultural knowledge, decision making authority husband, experience about agricultural GAs; and their participation in agricultural IGAs were positively correlated with extent of participation in Bogra. On the other hand, in Jhenaidah area, education status, annual income decision making authority wife, organizational participation, organizational participation duration, and their participation in agricultural IGAs were positively correlated with extent of participation. The reason behind the differences of correlation results between the two districts are the differences of experience and organizational participation of the respondents. Majority of the respondent's family income improved the most due followed by family nutrition, literacy and, health and diseases management etc. Based on the findings from tables like age, education status, marital status, family size, family type, cosmopoliteness, agricultural knowledge, duration of experience and duration of organizational participation, the numerical values of each category of both districts are almost similar. On the other hand, farm size, food habit, housing status, annual gross income, annual family, expenditure, training facilities, extension media contact, decision making authority (both husband and wife) and organizational participation in both district are not similar and there have significant differences between Bogra and Jhenaidah districts.

#### V. ACKNOWLEDGMENT

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