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## PARTICIPATION OF LANDLESS RURAL WOMEN IN INCOME GENERATING ACTIVITIES OF SADAR UPAZILA UNDER RAJSHAHI DISTRICT

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#### ABSTRACT

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The study was conducted to determine the extent of participation of landless rural women in income generating activities and to explore relationships among the selected characteristics of them with their participation in income generating activities. The study also outlined the problems faced by the landless rural women during their participation in various activities. More than three-fourths (78.33 percent) of the landless rural women faced medium problems while 12.5 percent low and 9.16 percent had faced high problems for participation in different income generating activities. Correlation analysis indicated that the characteristics of the landless rural women namely age, annual family income, innovativeness, frequency of visit to agricultural extension services, training received, Radio/TV watching/listening, organizational participation and cosmopolitanism had significant relationship of which annual family income, frequency of visit to agricultural extension services, training received, Radio/TV watching/listening, organizational participation, cosmopolitanism had positive relationship and two characteristics namely age and farm size had negative relationship with their extent of participation in income generating activities.

**Key words:** landless women, participation income generating activities

#### INTRODUCTION

Bangladesh is a densely populated country having about 150 million of people in its 147639.4 sq km of area. About 49 percent of population of the country is female (BBS 2015). Increasing population and massive poverty in the rural areas have been a great threat to the development of Bangladesh. About 80 percent of these women live in rural areas: roughly half of them belong to less landed rural families and hardly have any employment and opportunity to develop their skill (Anwar and Kashem, 1995).

Women are most important of human resources who need attention for their development. The actual target of economic development of a country is to increase the income and quality of a country is to increase the income and quality of life of its population.

Women participate in almost all activities, right from preparatory tillage to harvest, and even in postharvest tasks like processing, storage and marketing, seed cleaning, seed grading, sowing, planting, weeding, harvesting, threshing, shelling, winnowing, feeding cattle, looking after milking animals, and poultry bird are the main job for women can participate in Integrated Plant Nutrition System because compost, Farm Yard Manure homestead waste, kitchen waste, foliage etc. are utilized effectively in Integrated Plant Nutrition System. In view of the foregoing discussion, the present study was taken with the following objectives: to determine the selected characteristics of the respondents in the study area; to find out the participation of landless rural women in income generating activities; to explore the relationship between selected characteristics of the landless rural women and their participation in income generating activities, and to identify the problems faced by the landless rural women in income generating activities.

### METHODOLOGY

Three villages, namely Kazla, Charpara and Jahajghat under Sadar Upazila of Rajshahi district were selected purposively for this study since the socio-economic conditions of the study area are quite familiar to the researcher. The landless rural families in these areas who are struggling against heavy odds and lived in massive poverty were the population of study.

However, a list of 200 landless rural women engaged in different income generating activities from each village was collected from the social welfare office of Rajshahi Sadar Upazila (metropolitan office). Therefore, the population was 600. For the study, 20% respondents were randomly taken from the population. Thus, the total sample size was 120 landless rural women.

The ten selected characteristics of the landless rural women were the independent variables of the study. These were age, family size, education level, annual family income, innovativeness, agricultural extension services, training received, radio/TV exposure, organizational participation and cosmopoliteness. Contrary, extent of participation of landless rural women in the income generating activities was the dependent variable.

To measure participation score, 20 items of income generating activities were selected. The respondents were asked to indicate their extent of participation to each of the 20 items along with a four-point scale. "no participation", "rare participation", "moderately participation", "regularly participations". These scales of response were given scores of 0, 1, 2 and 3, respectively. The contribution score of a landless rural woman was

obtained by summing her scores for all the 20 items. The participation score could range form 0–60, zero indicating no participation and 60 indicating maximum participation.

For better understanding of comparative participation of landless rural women in each of the 20 activities, a participation index (PI) was computed using the following formula:

 $PI (Participation index) = N_{re} \times 3 + N_{m} \times 2 + N_{ra} \times 1 + N_{n} \times 0$ 

Where,

 $N_{re}$ =No. of participants responded regularly,  $N_{m}$ = No. of participants responded moderately,  $N_{ra}$ = No. of participants responded rarely and  $N_{n}$  = No. of participants responded not at all.

The range of score of participation index could be 0 to 360, where 0 indicating no participation and 360 indicating highest participation. An interview schedule was prepared to collect necessary and relevant information according to the objective of the study. Data were collected through face to face interviewing using interview schedule by the researcher herself during 25 March to 25 April 2016.

The computer software like Microsoft Excels and SPSS were used to analyze the data. Descriptive statistical measures such as frequency, range, mean, percentage distribution, standard deviation, rank order, categories and indices etc. were used to describe and interpret the data. For exploring relationships between any two variables, Pearson's Product Moment Correlation (r) was used.

#### FINDINGS AND DISCUSSION

The ten selected of the characteristics of the landless rural women related to socio economic background of the study were considered. Descriptive statistics of the individual characteristics of the responded are presented in Table 1.

Table 1. Salient characteristics profile of the landless rural women income generating activities

|                   | Scoring Possible C |       | Observed score Categories | Women                                |                       | Mean  | SD     |       |  |
|-------------------|--------------------|-------|---------------------------|--------------------------------------|-----------------------|-------|--------|-------|--|
| Characteristics   |                    |       |                           | Categories                           |                       | n=120 |        |       |  |
|                   |                    | 50010 |                           |                                      | no                    | %     |        |       |  |
| Age               | Number             | -     | 18-50                     | Young (up to 25)                     | 26                    | 21.66 |        |       |  |
|                   | of year            |       |                           | Middle aged (26-43)                  | 69                    | 57.5  | 34.16  | 8.26  |  |
|                   |                    |       |                           | Old aged (above 43)                  | 25                    | 20.83 |        |       |  |
| Family size       | Number             | -     | 1-12                      | Small family (up to 2)               | 1                     | 0.83  |        |       |  |
|                   | of member          |       |                           | Medium family (2-6)                  | 96                    | 80    | 4.79   | 1.98  |  |
|                   |                    |       |                           | Large family (above 6)               | 23                    | 19.16 |        |       |  |
| Education         | Year of            | -     | 0.5-12                    | Only can sign (0.5)                  | 39                    | 32.5  |        |       |  |
|                   | schooling          |       |                           | Primary education (1-5)              | 51                    | 42.5  | 3.59   | 3.32  |  |
|                   |                    |       |                           | Secondary education (6-10)           | 27                    | 22.5  | 3.39   | 3.32  |  |
|                   |                    |       |                           | Higher education (above 10)          | 3                     | 2.5   |        |       |  |
| Annual family     | In thousand        | -     | 0.00-0.02                 | Low (up to 33)                       | 26                    | 21.66 |        |       |  |
| income            | taka               |       |                           | Medium (33-95)                       | 78                    | 65    | 64.44  | 31.32 |  |
|                   |                    |       |                           | High (above 95)                      | 16                    | 13.33 |        |       |  |
| Innovativeness    | Scale score        | -     | 7-35                      | Low (up to 15) 43 3                  |                       | 35.83 |        |       |  |
|                   |                    |       |                           | Medium (16-30)                       | 61                    | 50.83 | 0.0079 | .0069 |  |
|                   |                    |       |                           | High (above 30)                      | 16                    | 13.33 |        |       |  |
| Agricultural      | Scale score        | 0-3   | 0.00-10.00                | Low (up to 0.51)                     | 93                    | 77.5  |        |       |  |
| extension         |                    |       |                           | Medium (0.51-1.57)                   | 3                     | 2.5   | 0.53   | 1.04  |  |
| service frequency |                    |       |                           | High (above 1.57)                    | 24                    | 20    |        |       |  |
| Training received | Days               | -     | 0.00-3                    | Low (up to 0.99)                     | 105                   | 87.5  |        |       |  |
| · ·               |                    |       |                           | Medium (0.99-1.94)                   | 0                     | 0.00  | 0.47   | 1.47  |  |
|                   |                    |       |                           | High (above 1.94)                    | 15                    | 12.5  |        |       |  |
| Radio/TV          | Days               | 0-3   | 0.00-15                   | Never watch/listen (up to 0.52)      | 99                    | 82.5  |        |       |  |
| watching          |                    |       |                           | Often watch/listen (0.52-1.33)       | 2                     | 1.66  | 0.40   | 0.93  |  |
| /listening group  |                    |       |                           | Continuous watch/listen (above 1.33) | 19                    | 15.83 |        |       |  |
| Organizational    | Scale score        | 0-15  | 0.00-12                   | Low (up to 1.45)                     | 54                    | 45    |        |       |  |
| participation     |                    |       |                           | Medium (1.45-6.447)                  | 40                    | 33.33 | 2.49   | 3.95  |  |
| - •               |                    |       |                           | High (above 6.44)                    | 26                    | 21.66 |        |       |  |
| Cosmopoliteness   | Days               | 0-12  | 0.00-12                   | Low (up to 0.09)                     | ow (up to 0.09) 4 3.3 |       |        |       |  |
| •                 | ,                  |       |                           | Medium (0.09-5.37)                   | 105                   | 87.5  | 2.73   | 2.63  |  |
|                   |                    |       |                           | High (above 5.37)                    | 11                    | 9.16  |        |       |  |

Major proportion (57.5%) of the rural women fell in middle aged category compared to young (21.66%) and (20.83%) old aged categories. Most of the respondents (80%) families were found to be medium sized were (0.83%) and (19.16%) were small and large sized respectively. About (22.5%) of the landless rural women fell under the category of secondary education compared to (32.5%) can only sign, about (42.5%) having primary education. More than fifty percent (65%) respondent had medium annual family income while (21.66%) had

low and (13.33%) having high annual family income. More than fifty percent of the respondents (50.83%) had medium to high innovativeness while (35.83%) had low and (13.33%) had high innovativeness. Near about three fourth (77.5%) of the respondent had low access to agricultural extension service while (2.5%) had medium and only (20%) respondent had highly interaction to agricultural extension service. Most of the landless rural women (87.5%) had no training experience about income generating activities and only (12.5%) respondent had effective training experiences. Most of the respondents (82.5%) never watched TV and never listened radio while (1.66%) watched TV but (15.83%) respondent spent much more time for watching TV or listening radio. About 45% of the respondents had low participation with different organizations compared to 33.33% had moderate and 21.66% had high participation with various organizations. Most of the respondents (87.5%) had medium category cosmopoliteness while 3.33% had low and only 9.16% had highly cosmopoliteness.

#### Participation of landless rural women in income generating activities

Participation indices for an individual in income generating activities ranged from 0-60 with an average of 15.57. However, findings observed that an individual score ranges minimum '0' and maximum 40. According to participation indices, from listed twenty activities, to feed on cattle and poultry ranked first (264), followed by land preparation for vegetable (201), to sell/ buy cattle in/from the market (176), irrigation for vegetable production (174), taking care of chickens everyday (171), seed collection /plant selling (161), the intercultural operation for vegetable production (139), seed and polybag collection (130), to sell eggs and fowl on the market (123), soil and organic matter mix for nursery bed (70), vegetable selling (58), shading and irrigation for nursery bed (49) management of seedling (44), selling the making handicraft in the market (37), vaccination regularly (31), tailoring (30) and lastly selling seedling in the market had participation indies (11).

| Table 2. Rank order of income |  |  |
|-------------------------------|--|--|
|                               |  |  |
|                               |  |  |
|                               |  |  |

| Sl. No. | Selected income generating activities            | Participation indices | Rank order |
|---------|--|-----------------------|------------|
| 1       | To feed on cattle and poultry                    | 264                   | 1          |
| 2       | Land preparation for vegetable production        | 201                   | 2          |
| 3       | To sell/buy cattle in /from the market           | 176                   | 3          |
| 4       | Irrigation for vegetable production              | 174                   | 4          |
| 5       | Taking care of chickens everyday                 | 171                   | 5          |
| 6       | Seed collection /plant selling                   | 161                   | 6          |
| 7       | Intercultural operation for vegetable production | 139                   | 7          |
| 8       | Seed and poly bag collection                     | 130                   | 8          |
| 9       | To sell eggs and fowl in the market              | 123                   | 9          |
| 10      | Soil and organic matter mix for nursery bed      | 70                    | 10         |
| 11      | Vegetable selling                                | 58                    | 11         |
| 12      | Shading and irrigation for nursery bed           | 49                    | 12         |
| 13      | Management of seedling                           | 44                    | 13         |
| 14      | Selling the making handicraft in the market      | 37                    | 14         |
| 15      | Vaccination regularly                            | 31                    | 15         |
| 16      | Tailoring  | 30                    | 16         |
| 17      | Selling seedling in the market                   | 11                    | 17         |
| 18      | Making toy, doll etc.                            | 0                     | -          |
| 19      | Small grocery business                           | 0                     | -          |
| 20      | Katha making and selling                         | 0                     | -          |

From Table 2 it was observed that landless rural women in three village of Kazla, Charpara and Jahajghat of Rajshahi district mostly participated to feed on cattle and poultry, land preparation for vegetable production, to sell/buy cattle in /from the market and they had lowest participation in Katha making and selling.

## Relationship between the selected characteristics of landless rural women and extent of participation in the income generating activities

Among the 10 selected characteristics of the respondents age, annual family income, innovativeness, agricultural extension service frequency, training received, Radio/TV watching/listening, organizational participation, and cosmopolitanism had significant relationship of which annual family income, agricultural extension service frequency, training received, Radio/TV watching/listening, organizational participation, cosmopolitanism had positive relationship and two characteristics such as age and innovativeness had negative relationship with their extent of participation in the income generating activities.

It means that the superior the selected personal characteristics of the respondents had the higher in the participation in income generating activities. Similar finding was also observed by Hossain (2014).

Table 3. Co-efficient of correlation showing relationship between the selected characteristics of the landless women in income generating activities

| Dependent variables                             | Independent variables              | Co-efficient of correlation |
|---|------------------------------------|-----------------------------|
|   | Age                                | -0.261**                    |
|   | Family size                        | $0.060^{\rm ns}$            |
|   | Education                          | 0.025 <sup>ns</sup>         |
| David david and Claudian                        | Annual family income               | 0.485**                     |
| Participation of landless rural women in income | Farm size                          | -0.552**                    |
|   | Agricultural extension services    | 0.450**                     |
| generating activities                           | Training received                  | 0.303**                     |
|   | Radio/TV watching /listening group | 0.427**                     |
|   | Organizational participation       | 0.423**                     |
|   | Cosmopoliteness                    | 0.237**                     |

Ten characteristics of the women were selected of which eight showed significant correlations and two showed non-significant correlation with participation of landless rural women in their income generating activities. Findings indicated that age and innovativeness of the rural women had significant negative relation with their participation of income generating activities, i.e. the rural women with high age participated very low in income generating activities. Khatun (2004), Alam (2001) and Islam (2003) observed that age had negative relationship with participation in income generating activities. Annual family income, agricultural extension services, training received, Radio/TV watching, organizational participations and cosmopoliteness showed a positive trend and had significant positive relationship with their participation in income generating activities. Aktaruzzaman (2006) and Amin (2003) found the similar relationship in their respective researches. These findings indicated that the landless rural women who had high family income, who communicate regularly with agricultural extension services, who received training, participated highly with GOs and NGOs and are also cosmopolite, they actively participated in income generating activities.

### Problem confrontation by the landless rural women in the participation of income generating activities

Fifteen problems were identified as confronted by the landless rural women in participation of income generating activities. The overall problem confrontation score of the landless rural women regarding participation in  $IGA_s$  ranged from 17-40 against the possible range of 0-45. On the basis of problem confrontation scores their mean and standard deviation, the landless rural women were classified into three categories which are shown in Table 4.

Table 4. Distribution of the landless rural women according to their problems confronted in participation IGA

| Category                              | Wo  | men   | Mean  | Standard deviation |  |  |
|---------------------------------------|-----|-------|-------|--------------------|--|--|
| Low problem confrontation (17-29)     | 15  | 12.5  |       |                    |  |  |
| Medium problem confrontation (30-37)  | 94  | 78.33 | 22.56 | 3.86               |  |  |
| High problem confrontation (above 37) | 11  | 9.16  | 33.56 |                    |  |  |
| Total                                 | 120 | 100   |       |                    |  |  |

Data in Table 4 indicated that majority (78.33 percent) of the landless rural women respondents faced medium problem in participation of income generating activities. Furthermore, 12.5 percent landless rural women respondents faced low problem whereas, 9.16 percent faced high problems during participation in income generating activities. Similar finding was also observed by Rahman (2015); Haque (2016) also found the same results in identifying rural farmers' problem about accessing agricultural information.

In order to make comparison among the problem item a problem confrontation Index (PCI) was calculated. The PCI for an individual could range from 0 to 45 where 0 indicated no problem confrontation and 45 indicated highest PCI of the fifteen problems ranged from 17 to 40 and has been arranged in a rank order which appears in Table 5. As PCI of the fifteen problems showing high values, it could be concluded that all of these problems should be taken in to consideration by the concerned authority.

Table 5. Rank order of the problems confrontation by the landless rural women in participation in IGAs

| Sl. | Noture of pueblom                             | Extent of problem confrontation |     |        |      | PCI | Rank  |
|-----|---|---------------------------------|-----|--------|------|-----|-------|
| No. | Nature of problem                             | Not at all                      | Low | Medium | High | rci | order |
| 1   | Lack of seed                                  | 3                               | 17  | 62     | 38   | 255 | 10    |
| 2   | Lack of liquid money                          | 3                               | 10  | 44     | 63   | 287 | 8     |
| 3   | Scarcity of land                              | 3                               | 25  | 25     | 87   | 276 | 9     |
| 4   | High price of seed/fertilizer                 | 3                               | 1   | 3      | 113  | 346 | 3     |
| 5   | Climate hazard                                | 3                               | 0   | 1      | 116  | 350 | 1     |
| 6   | Lack of training                              | 2                               | 8   | 34     | 76   | 304 | 7     |
| 7   | Lack of improved variety of bird              | 2                               | 0   | 49     | 69   | 305 | 6     |
| 8   | Lack of credit                                | 0                               | 57  | 59     | 4    | 187 | 12    |
| 9   | Low price of product                          | 0                               | 1   | 39     | 80   | 319 | 4     |
| 10  | Lack of support from extension service        | 0                               | 2   | 8      | 110  | 348 | 2     |
| 11  | Lack of pesticides                            | 0                               | 61  | 57     | 2    | 181 | 14    |
| 12  | Complication in loan allotment                | 8                               | 49  | 55     | 8    | 183 | 13    |
| 13  | High interest                                 | 0                               | 2   | 43     | 75   | 313 | 5     |
| 14  | Problem to work due to health hazard          | 2                               | 42  | 64     | 12   | 206 | 11    |
| 15  | Problem to work due to children health hazard | 5                               | 65  | 47     | 3    | 168 | 15    |

#### **CONCLUSION**

Bangladesh is an over populated country. Women are half of total population. Over population, landlessness and unemployment are great threat to the development of Bangladesh. The findings indicated that annual family income, agriculture extension service, training exposure, organizational participation, cosmpolitness are positively correlated with participation in income generating activities of rural women. In this situation, it is necessary to introduce different developmental programs for rural women for empowering them and for being self employed by their activities. Need based training support and various income generating activities should be provided by different government and nongovernmental organizations for rural landless women.

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