

Rural Women's Awareness on Agricultural Extension Services: a case study on Manikgonj district in Bangladesh

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Abstract: *The major purpose of this paper was to have an understanding on rural women's awareness on agricultural extension services. Furthermore, the study aimed at exploring relationships between the selected characteristics of the rural women and their awareness on agricultural extension services. The study was conducted in a village of Singier upazila, Manikgonj and 125 rural women were selected as sample from the list of 502 housewives of the village. Data were collected from the selected rural women through using a pre-tested structured personal interview schedule during 16-28 February 2014. The majority of the rural women (56 percent) had medium awareness on agricultural extension activities, while 43 percent and only one percent had high and low awareness, respectively. Education, cosmopolitanism and extension contact of the rural women were positively correlated with their awareness on agricultural extension services, while family size was negatively correlated with their awareness. The rest of the variables, namely age, training exposure. Participation in farming activities, social participation, and role in decision making of the rural women showed no relationship with their awareness on agricultural extension services.*

Key words: *Awareness, rural women, agricultural extension service, DAE*

I. Introduction

A major function of agricultural extension is to help farmers make efficient, productive and sustainable use of their land and other agricultural resources through the provision of information, advice, education and training. A key factor of the extension approach, as adopted by the New Agricultural Extension Policy (NAEP) by the Government of Bangladesh in 1996, is responsiveness to farmer needs (DAE, 1999). In the context of targeting this means that extension plans must ensure that the needs of male and female farmers and small and large farmers are addressed. In addition to the broader social issues, the extension agencies need to consider gender issue as part of its extension approach. Thus, womenfolk of Bangladesh nowadays have become an important stakeholder of agricultural extension programs.

Women's involvement in agriculture started from time immemorial. The works of women in Bangladesh are mostly confined in homestead due to its cultural, religious and other restrictions.

Homestead agriculture is the traditional job of our rural women. But with the change of the socio-economic situation of the country the women are breaking through the traditional norms and coming forward to participate in development activities outside their homestead. Though they are gradually involving in a number of productive and income generating activities, agriculture related activities are being considered as their major field of work. Some authors argue that, even in agriculture, women do more work than men (Halim, 1987). Thus, the role of rural women in the socio-economic development of Bangladesh can not be overlooked. It is essential, therefore, that women become a priority target group for agricultural extension.

Rural women, who are half of the rural population of Bangladesh, must be included in development activities and services. In the line of NAEP, the Department of Agricultural Extension's (DAE) mission is to provide efficient and effective need based extension services to all categories of farmers and to enable optimize their use of resources in order to promote sustainable agricultural and socio-economic development (DAE, 1999). The Department of Fisheries (DOF) and the Department of Livestock Services (DLS) are also supposed to initiate gender-sensitive programme in the line of the NAEP. So, when rural women are involved and included with this development activities and are aware about their rights and claims, awareness on agricultural extension services gradually grows up and then their participation in rural development and farming activities will be increased to a great extent. But in reality only few instances are found that rural women are actively participating in on-going extension activities (Rahman, 2005) and they are well incorporated into the mainstream extension activities (Haque *et al.*, 2003). Some studies even reports women's lack of awareness on on-going extension activities (Asaduzzaman, *et al.*, 2004; Nazneen *et al.*, 2004).

In the backdrop of the situation and prospectus regarding rural women's involvement in agricultural extension, the present study has been undertaken with the following objectives: (i) to determine the extent of awareness of rural women on agricultural extension services as provided by different public sector extension

agencies, and (ii) to explore relationships between the selected characteristics of rural women and their extent of awareness on agricultural extension services.

II. Objective of the study

Bangladesh is one of the major agriculture based country in the world. The economy of the country largely depends on agriculture. Most of the industries of Bangladesh are based on agriculture. Male and female ratio of Bangladesh is 100:105. So women have a great contribution in agriculture. The experiment was done to obtain the following objectives:

1. To find out the women's response in rural agriculture
2. To observe how much women participate in agricultural work
3. How they manage their family to continue the agricultural production?
4. To find out the problem arises due to agricultural work in rural society
5. How they contribute to the economy with their age in rural agriculture?

Limitation of the study:

During conducting the research we found a few number of limitations. Some of the limitations are mentioned below:

1. The women are of different age
2. Most of the women did not want to give their family information
3. Rural women are so busy that they spoke few minutes with us
4. They never feel the importance of agriculture so they had a little interest about us.

III. Methodology

Location, population and sample

The study was conducted among the rural women in the village of Singier upazilla under Manikgonj district. Women of the selected village were the population of the study. Therefore, housewives of 502 farm families of the village constituted the population of the study and 125 of them (around 25%) were randomly selected as the sample.

Research instrument

For the purpose of data collection, an interview schedule was prepared keeping objectives of the study in mind. The schedule contained both open and closed form of questions. Appropriate scales were developed to operationalise some selected variables.

A scale was developed to assess rural women's awareness on agricultural extension services. Fifteen statements regarding agricultural extension services were selected which could be checked by "know" or "don't know." A score of one (1) was assigned for having awareness on each of the selected extension activities. Thus, a respondent's awareness score could range from 0 to 15.

Data collection and analysis

Data were collected during 16-28 February, 2014 from the selected rural women by using the interview schedule following face-to-face interview. Analysis of data was done by using frequency count, percentages, mean, standard deviation and ranks wherever applicable. For exploring the relationship between the concerned variables Pearson's Product Moment Correlation Coefficient (r) was computed.

IV. Results And Discussions

Rural women' awareness on agricultural extension services

The awareness scores of the respondent rural women ranged from 3 to 14 against the Possible range from 0 to 15. Based on the awareness scores, the rural women were classified into three categories as presented in Table A.

Table A. Distribution of the rural women by the awareness scores

Categories of women (scores)	Rural women		Mean	St. dev.
	Number	Percentage		
Low awareness (up to 5)	1	0.80	10.6	2.01
Medium awareness (6-10)	70	56.00		
High awareness (> 11)	54	43.20		
Total	125	100.00		

The finding clearly indicates that the rural women of the study area, in general, had medium to high level of awareness on agricultural extension services and activities of different public service extension agencies, particularly of DAE. The finding apparently stands against the popular belief of the academicians that rural women are not well aware of agricultural extension activities (Asaduzzaman *et al.*, 2004). As there was an indication of such outcome from the result of pre-testing of questionnaire, the issue was carefully cross-checked during the survey. It needs consideration here that the study locale situated just adjacent to Manikgonj district town and DAE has a good number of extension activities in the area. A good number of beneficiaries and farmers groups of the major projects of DAE (such as SFFP, SAIP) were active in the area. A number of demonstration plots were also seen during data collection.

Moreover, NGOs-activities were also very common in the area. Many respondents reported that they used to participate in different extension programs like informal training sessions, group discussions, demonstration meetings etc, as organized by both government extension agencies as well as NGOs. These factors could be the major causes of the finding, which indicated that almost all of the rural women had medium to high level of awareness on extension activities.

In order to have a clear understanding of the issue, item-wise analysis was done to identify the areas where the rural women had more or less awareness. Table B presents the analysis of the responses regarding awareness on extension activities and services as provided by different public sector extension agencies.

Table B. Item-wise analysis of the responses regarding awareness on extension services

No.	Statements regarding agricultural extension services	Respondents (%)	
		Know	Don't know
1.	We can receive information on agricultural production from the Upazila Agriculture Office.	86.4	13.6
2.	There are offices at the Upazila headquarter for assisting farmers in aspects of aquaculture and livestock production.	56.8	43.2
3.	There is a Block Supervisor in our locality, who helps farmers and farm families in any aspect of farming.	98.4	1.6
4.	Sometimes, method demonstration meetings are organized in our locality to inform farmers about use of new technologies.	63.2	36.8
5.	There are result demonstration plots in our locality, where we can learn about the advantages of new farm technologies.	57.6	42.4
6.	Group discussion meetings are arranged by the Block Supervisors, where men and women can participate.	79.2	20.8
7.	Block supervisors of DAE organize meeting to identify farmers problems and needs.	70.4	29.6
8.	Block Supervisor visits and meets the farmers and farm families to inform about new farm practices.	88.0	12.0
9.	We can receive reliable information regarding availability of inputs and credit from the Block Supervisor.	78.4	21.6
10.	Agricultural fair and farmer rally are sometimes organized by Upazila Agriculture Office, where people can learn about appropriate farm technologies.	27.2	72.8
11.	We can collect seeds/seedlings of different vegetables and fruit trees from Upazila Agriculture Office and Horticulture Center located at Savar near the village.	33.6	66.4
12.	DAE provides a number of training programs where farmers can participate and learn new skills and practices.	71.2	28.8
13.	There are training programs for rural women regarding homestead agriculture, as organized by DAE.	75.2	24.8
14.	In case of any disease of poultry and cattle, we can receive advice and treatment from the Upazila Livestock Office.	52.8	47.2
15.	We can request officers of Upazila Livestock Office to visit our home to see the condition of our poultry and cattle.	41.6	58.4

The Table B gives a number of good information about rural women's awareness on existing agricultural extension activities. Items 1 and 2 indicated that women's awareness on duties and responsibilities of DAE was considerably higher than those of the DOF and DLS. Again, the respondents were highly aware on Block Supervisors (now Sub Assistant Agriculture Officer, SAAO) activities and responsibilities (item nos. 3, 7, 8 and 9). Programs like demonstrations, group discussion and training were not unfamiliar to the rural women as indicated by the responses against the item numbers 4, 5, 6, 12 and 13. Awareness on agricultural fair and farmer rally were found lowest among all the 15 items (no. 10), while the same on availability of seeds and seedlings was found second lowest (item no. 11). It is evident from the items no. 14 and 15 that rural women were generally unaware about the extension services available for the farm households regarding livestock problems.

Salient features of the selected characteristics of rural women

A summary of rural women's selected characteristics is presented in Table C. The Table gives useful information about the rural women under the study.

Table C. Salient features of the rural women with their selected characteristics

Characteristics	Scoring system	Range		Mean	Standard deviation
		Possible	Observed		
Age	Years	Unknown	16-72	31.82	9.73
Education	Level of schooling	0-16	0-14	3.30	3.68
Family size	Number of members	Unknown	2-10	5.14	1.59
Extension media contact	Scale score	0-42	7-23	15.74	2.74
Cosmopolitaness	Scale score	0-18	2-11	5.63	1.94
Training exposure	Number of days	Unknown	0-11	3.31	2.24
Participation in farming activities	Scale score	0-18	2-11	15.03	4.33
Social participation	Scale score	0-48	3-40	14.42	7.38
Role in decision making	Scale score	0-30	6-20	10.19	3.83

The Table C shows that the selected rural women were young in general, while their level of education was primary in average (in fact, 48% were illiterate and 27% had primary level of education). The women were further characterized by having medium family size. Regarding extension media contact and cosmopolitaness, it could be concluded that the respondents were in good positions in these areas (in fact, 68% had moderate level of extension media contact, while 58% had moderate level cosmopolitaness). The women had good level of participation in farming activities (73% and 20% had medium and high participation, respectively), while their average social participation could be considered as low in average (in fact, 65% and 30% having low and medium participation, respectively). The women could be termed as having low voice in family decisions considering their average scores in role of family decision making (53% low role in decision making). All these characteristics of the respondent rural women were found confirmatory to rural women in different areas of Bangladesh as revealed by a number of studies (Asaduzzaman *et al.*, 2004; Nazneen *et al.*, 2004; Sharmeen, 2005; Rahman, 2005).

Relationship between rural women's characteristics and awareness

The summary of the results of correlation tests has been presented in Table D. It is evident from the Table D that education, family size, extension media contact and cosmopolitaness of the rural women were the significant factors in shaping their awareness on agricultural extension activities as provided by different public sector extension agencies.

Table D. Coefficient of correlation (r) between rural women's awareness and their selected characteristics (N=125)

Characteristics of rural women	r-value (df = 123)
Age	-0.067
Education	0.215*
Family size	-0.270**
Extension media contact	0.330**
Cosmopolitaness	0.179*
Training exposure	0.112
Participation in farming activities	-0.160
Social participation	0.049
Role in decision making	0.123

*Significant at 5% level of probability

**significant at 1% level of probability

A positively significant relationship between education and awareness on agricultural extension activities implies that education is instrumental to make one conscious about ongoing development activities and so was the case for the women of the present study. A negative correlation between family size of rural women and their awareness on extension activities meant that big family size may hinder one's exposure to matters outside household and in this case it might negatively contribute to the rural women's awareness on extension activities. Extension media contact and cosmopolitaness are two important traits, which may have positive impact on one's awareness on agricultural extension activities. The positive and significant relationship of rural women's awareness with these two traits imply that the more the cosmopolitaness and extension media contact one have, the more aware one is on agricultural extension activities.

V. Concluding Remarks

The finding, interestingly, reveals that almost all the rural women in the study area possessed at least medium level of awareness on agricultural extension activities of different public sector extension organizations, particularly the DAE, the mainstream agricultural extension agency of the country. Should this finding reflects real scenario of the study area, this is encouraging for DAE and other extension service providers. However, the result should be carefully evaluated considering the location of the area, which locates exactly adjacent to a district town and also a good number of activities- of GOs and NGOs are available their. Again, the study indicates that the rural women have higher awareness on DAE activities in comparison to two other major extension agencies, DOF and DLS. Moreover, awareness was high on activities relating to Block Supervisors (SAAO), while low in issues relating to central programs of DAE. All of the concerned extension agencies should pay necessary attention on this issues for shaping their field oriented policies and programs. Moreover, rural women's awareness on extension activities showed significant positive correlations with their education, extension media contact and cosmopolitaness, while a negative correlation was established with their family size. This definitely implies that the first three factors might be instrumental for the success of any gender sensitive extension program.

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