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ATTITUDE OF RURAL WOMEN TOWARDS HOMESTEAD VEGETABLE CULTIVATION FOR LIVELIHOOD IMPROVEMENT – A STUDY AT SOUTH SURMA UPAZILA OF SYLHET DISTRICT

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Abstract

The main focus of the study was to assess the attitude of rural women towards homestead vegetable cultivation for livelihood improvement and to explore the relationship between the selected characteristics of the rural women with homestead vegetable cultivation. Data were collected from a sample of hundred (100) women of two villages of South Surma upazila of Sylhet district. The attitude of rural women was determined for 7 items under the vegetable cultivation of homestead. A comparative attitude index was computed for seven statements under vegetable cultivation by using attitude scale. Co-efficient of correlation (r) was computed to test the relationships between the dependent and independent variables. Results showed that highest percent (75%) of the rural women had shown moderate favorable attitude in vegetable cultivation for improving their livelihoods. Computed (r) values indicates that education, farm size, family income, agricultural knowledge, credit availability and communication exposure of the rural women had positive relationship with their attitude towards homestead vegetable cultivation for livelihood improvement. However, age, family size, aspiration and fatalism of the rural women had no significant relationship with their attitude towards vegetable cultivation.

Keywords: Attitude, rural women, homestead vegetable cultivation, livelihood improvement

Introduction

Bangladesh is a small deltaic country with a population of 158 million with an area of 1, 47,570 square kilometers (BBS, 2012). Population is roughly divided into equal percentage of men and women. Bangladesh has about 13 million farm households of which 3.8 millions are landless and marginal (BBS, 2005). Women were the initiators of agricultural activities in the history of mankind. Women in Bangladesh are major but largely recognized as contributors to agricultural and economic productivity. In Bangladesh, women hardly participate in agricultural activities outside their homes (Hossain, 2002). About half (49%) of the population of Bangladesh is women among them 45.6% are associated with the farming activities (AIS, 2012). Women's productive working hour in Bangladesh is 84 hour, 16% more than men's 70 hours a week (PETRA, 2003). Homestead is the centre of all agricultural production activities in rural Bangladesh. It is the dwelling place as well as production unit of vegetables, fruits, fuel timber, livestock and fisheries in an integrated manner. Homestead has special significance in the context of Bangladesh especially for rural women. Hussein *et al.* (2002) reported that about 15% of total homestead area was under vegetable production.

Homestead agriculture may be a lifeboat for their survival and existence because of secured supply of food (Akanda, 1994). Women are the key operators of the homestead production activities in the context of Bangladesh. They are involved in the management of their families as well as equal participation in different economic activities like crop production, post harvest activities, vegetables and fruit production, poultry rearing, management of livestock, fisheries, pisciculture and miscellaneous income generating activities and also try to increases their family income for improving their livelihood status (Nessa *et al*. 2004). Moreover, a vast number (approximately 40%) of the rural women belongs to landless family and 15.6% of our landless are ultra-poor.

Concept of Livelihood

The concept of livelihood is not based on dramatically new methods but utilize the methods that have been developed over the past 20 years. It evolved from a wide array of participatory and other grassroots approaches to

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working with the rural people and in many ways it is a bringing together of past method into a consolidated approach that is both comprehensive and fairly easy to understand and use. The word livelihood can be used in many different ways. A livelihood comprises the capabilities, assets and activities required for a means of living. Livelihood is measured on the basis of household income improvement, household food security and well being. However, household food security means both access to the right kinds and amounts of food to provide a balance diet for all of the members of the family and sustainability of this supply over time. The country has achieved self-sufficiency in cereal production in the recent years, but at the household level, especially in the remote areas resources-poor people have inadequate access to this surplus food grains. Moreover, there is a prominent shortage of protein, vegetables and fruits thus nutritional improvement is of prime concern for livelihood improvement (Haque, 2002). The women of rural families are involved in different income generating activities such as cultivating fruits and vegetables, raise poultry, rear goats, sewing clothes, batik printing etc and earn money for supporting the family (Hossain and Bose, 2004). Due to lack of scientific knowledge and utilization of proper technology and management practices, the production remains below the acceptable level. So, it is very important to know the gap between existing belief and performances of the rural women regarding homestead agricultural production activities.

In view of this context, the present study was, therefore, conducted with the following specific objectives —

1. To determine the attitude of rural women in homestead vegetable cultivation for livelihood improvement.
2. To explore the correlation between the selected characteristics of the rural women and their attitude towards homestead vegetable cultivation for livelihood improvement.

Materials and Methods

Location, Population and Sample

In all 420 rural women from two villages namely Osmanpur and Islampur of Muglabajar union of South Surma upazila under Sylhet district constituted the population for the study. A representative sample of 100 housewives (around 23 percent of the population) was the sample for the present study. South Surma upazila is not very far from Sylhet head quarters but the upazila has all the features of rural Bangladesh. The livelihood of the rural women of this upazila mainly depends on agricultural based activities as well as the women have easy access to the market for their product. This is the reason of selecting this upazila as the study area.

Measurement of Attitude

Attitude was measured by computing scores of attitude items towards homestead vegetable cultivation for livelihood improvement by using a modified Likert-type scale. The items constituted of four positive and three negative items arranged randomly in the scale in order to determine the respondents' real response of attitude. The respondents were asked to indicate, for each of the statements, whether they are strongly agreed, agreed, disagreed and strongly disagreed with a corresponding score of 4, 3, 2 and 1 for the positive items and vice versa for the negative items. Thus, a total score for a respondent could vary from 7 to 28.

Data collection and statistical analysis

A questionnaire was prepared in order to collect necessary information from the selected women. The questionnaire was carefully designed and prepared with open and closed form of questions keeping the objectives of the study in mind. In order to give the final shape, the questionnaire was pre-tested with 20 women. Based on the pre-test results, necessary corrections, modifications, alternation, and adjustments were made and then finalized the questionnaire accordingly. Data were collected during September to November 2014. The collected data were coded into numerical, compiled, tabulated and analyzed keeping the objectives of study in mind. In order to categorize and explain the data, various statistical measures such as range, mean, percentage, standard deviation and rank were used in describing the selected variables, wherever applicable. To find out the relationships, Pearson's Product moment correlation co-efficient was used. Five percent (0.05) level of probability was used as the basis of rejecting any null hypothesis throughout the study. Tables were also used in presenting data and to clarify of understanding.

Results and Discussion

Selected characteristics of the Rural Women

Data obtained regarding characteristics of the rural women show that (52%) of the respondents were young rural women as compared to 14% old and 34% of the respondents were medium aged groups (Table 1). The highest proportion (47%) of the respondents had medium family size while 33% of the respondents had small and 20% had

large family sized categories. Among the respondents rural women, 32% can sign only compared to 28% secondary, 24% primary, 9% illiterate and only 7% above secondary level. The highest proportion (38%) had medium, 30% had small, 18% had large farm size and rest of the 14% had marginal farm size. In the study area most of the respondents (70%) had low access to credit due to repayment risk for unfavorable terms and conditions of the credit providing organizations. Majority (55%) of the respondents rural women had high agricultural knowledge compared to 40% with medium and 5% had low agricultural knowledge. Majority (75%) of the respondent's rural women family had low to medium annual income compared to 25% had high income. Most of the respondents had medium (75%) communication exposure followed by low (15%) and high (10%) communication, respectively. The respondent women show medium (80%), compared to 13% of high and 7% of low aspiration. However, the respondent women showed medium fatalism (88%) compared to 8% of high and 4% of low fatalism.

Table 1. Selected characteristics of the respondents

Variables	Way of measurement	Observed range	Categories according to their selected characteristics	Rural women (Number or percentage) N=100	Mean	Standard deviation
Age	Assigning a score of 1 for each year	18-60	Young (18-35) Middle (36-50) Old (Above 50)	52 34 14	35.14	8.51
Family size	Assigning a score of 1 for each member of the family	2-10	Small (up to 4) Medium (5-6) Large (7 and above)	33 47 20	5.35	1.55
Education	Score	0-14	Illiterate (0) Can sign only (0.5) Primary level (1-5) Secondary level (6-10) Above Secondary level (Above 10)	9 32 24 28 7	4.32	3.46
Farm size	Hectare	0.17-3.21	Marginal (< 0.02) Small (> 0.02-0.99) Medium (1-2.99) Large (3.0 and above)	14 30 38 18	1.982	0.32
Credit availability	Rated Score	0-60	No credit receiver (0) Low credit receiver (up to 15) Medium credit receiver (16-20) High credit receiver (above 20)	6 70 9 15	19.34	7.21
Agricultural knowledge	Assigning a score by adding all the marks obtained from asking 15 question	0-100	Low (up to 33) Medium (34-66) High (above 66)	5 40 55	50.65	15.14
Family income	'000 Taka	19-69	Low (up to 30) Medium (30-40) High (41 to 80)	46 29 25	36.76	11.35
Communication exposure	Score	0-75	Low (up to 25) Medium (26-50) High (above 50)	15 75 10	37.15	13.33
Aspiration	Score	6-24	Low (up to 10) Medium (11-20) High (above 20)	7 80 13	16.8	4.48
Fatalism	Score	6-26	Low (up to 12) Medium (13-25) High (above 25)	4 88 8	26.74	2.86

Attitude of rural women towards homestead vegetable cultivation for livelihood improvement

The observed score for attitude ranged from 12 to 23 with an average of 17.67 and standard deviation 2.59. The respondents were classified into three categories based on their score as - (a) less favorable attitude, (b) moderately favorable attitude and (c) favorable attitude. Data presented in the Table 2 show that most of the respondents (75%) had medium attitude in homestead vegetable cultivation compared to 13% of favorable attitude and 12% of less favorable attitude for improving their livelihoods.

There were 7 (seven) attitude statements in relation to homestead vegetable cultivation representing improvement of livelihood condition of the rural families. Attitude of rural women was measured on the basis of their responses on those statements. Percentage distribution of rural women in each statement along with attitude index and rank order

has been computed and presented in Table 3. Computed attitude index for each of the seven statements ranged from 189 to 356 against possible score of 100 to 400. It is evident from Table 3 that the statement "I think that every women farmer should cultivate vegetables, because it shows higher yield performance than others" had highest attitude index (AI=356) and ranked 1st position. Similar findings were also reported by Rahman *et al.* (2008). Some aspects of livelihood was improved through adoption of high yielding homestead crops like spinach, brinjal, radish etc. "Women farmers do not show the interest of homestead vegetable cultivation because it is very laborious" was last position with AI of 189. It is encouraging that women have considerably favorable attitude in all statements. Now a days TV, radio, and other mass media are also disseminating information regarding the importance of vegetables that might have brought a remarkable change in their attitude. Moreover, different GOs and NGOs have taken several programmes on homestead vegetable cultivation and they are giving special emphasis to involve women in homestead vegetable cultivation. The proliferation of non-government organizations (NGOs) operating largely in the rural areas has improved women's access to social organizations and networks in Bangladesh (Hamid, 1996). Women participation in environment friendly agricultural practices of different development organizations can be taken into consideration. According to activity report (2001-2002) of PROSHIKA among the group members of its Ecological Agricultural Programme (EAP) 71% members are female where 29% are male (PROSHIKA, 2002).

Table 2. Attitude towards homestead vegetable cultivation for livelihood improvement

Aspect	Observed range	Categories of respondents	Rural women (Number or percent)	Mean	SD
Homestead Vegetable Cultivation	12-23	Less favorable attitude (7-14 score)	12	17.67	2.59
		Moderately favorable attitude (15-21 score)	75		
		Favorable attitude (Above 21 score)	13		

Table 3. Attitude of rural women in seven statements of homestead vegetable cultivation with attitude index (AI) and rank order

Statements	Nature of response				Attitude index	Rank order
	Strongly agree	Agree	Disagree	Strongly disagree		
I think that every women farmer should cultivate homestead vegetables, because, it shows higher yield performance than other crops and contributes in improving livelihoods.	253	55	38	10	356	1
I think that cultivation of homestead vegetables will not impose of any adverse effect on environment.	223	49	34	14	320	2
I am interested in homestead vegetables cultivation, because it is more profitable.	125	85	70	10	290	3
I am interested in homestead vegetables cultivation, because it meets up our nutritional requirement for sound health.	98	110	54	25	287	4
I have no interest in homestead vegetables cultivation due to its low market prices in peak season of production.	18	45	157	33	253	5
I think that women farmers have no interest in homestead vegetables cultivation	12	172	25	3	212	6
I think women farmers don't show the interest in homestead vegetables cultivation, because it is very laborious.	27	97	50	15	189	7

Correlation between the selected characteristics of the rural women with their attitude

The observed coefficient of correlation revealed that age, family size, aspiration and fatalism of the rural women had no significant correlation with their attitude towards homestead vegetables cultivation. Hence, the researcher

accepted the null hypothesis concerning these variables. But the variables, like, education, farm size, family income, credit availability, agricultural knowledge and communication exposure had positively significant correlation with the attitude of rural women towards homestead vegetable cultivation. Thus, the null hypothesis concerning these variables was rejected.

Table 4. Correlation between dependent and independent variables

Dependent variable	Independent variable	Computed value of (r)	Tabulated value of (r)	
			0.05	0.01
Attitude towards homestead vegetables cultivation	Age	- 0.082 NS	0.196	0.254
	Education	0.382**		
	Family size	0.012 NS		
	Farm size	0.225*		
	Family income	0.232*		
	Credit availability	0.220*		
	Agricultural knowledge	0.375**		
	Communication exposure	0.212*		
	Aspiration	-0.072 NS		
	Fatalism	-0.052 NS		

* *Significant at p<0.05; ** Significant at p<0.01; NS=Not significant*

Education of the rural women indicates a significant positive correlation with their attitude towards homestead vegetable cultivation for livelihood improvement. It manifests that higher level of education of the rural women might have influenced for their moderately favorable attitude towards homestead vegetable cultivation. These aspects of homestead vegetable cultivation are mostly performed by women in rural areas and have rightly been reflected in the present study. Though attitude is moderate, questions arise about productivity of homestead vegetable cultivation that has been studied. It is very important to know the present level of production and to find out the possible means for its improvement.

Agricultural knowledge of the rural women indicates a significant positive correlation with their attitude towards homestead vegetable cultivation for livelihoods improvement. "Knowledge is power" but this has to be shared with women and not only with men. Although women roles are confined within the homestead, they should also be provided with technical knowledge and skills on different aspects of vegetable production like modern varieties of different vegetables, quality seeds and its preservation, appropriate time of fertilizer application, IPM technique etc. In this regards Bays (2003) reported that modern agricultural knowledge plays an important role to adopt homestead vegetable cultivation.

Farm size, family income, credit availability and communication exposure has significantly positive correlation with the attitude of rural women towards homestead vegetable cultivation for the improvement of livelihoods. It implies that, these characteristics of the rural women have profound influence on their attitude. These characteristics are liable to change to a great extent with change in agricultural knowledge.

Age, family size, aspiration and fatalism of the rural women had no significant correlation with their attitude towards homestead vegetable cultivation. In case of age, Sultana (2003) found the similar type of findings for adoption of homestead vegetable cultivation.

On the basis of above findings, it may be concluded that most of the rural women had moderate attitude towards homestead vegetable cultivation for improvement of their livelihood. Rice consumption may supply energy but only cereals cannot fulfill the requirements of balance food. In this case, addition of vegetables and fruits in daily diet can improve the nutritional value of other food items since these are important sources of vitamins and minerals. Although fruits and vegetables serve the same nutritional purpose, vegetables are much easier and cheaper to produce. If women are provided with highly agricultural knowledge, they can easily use improved technology in vegetable production and harvest better yield. Need based training programme should be developed and implemented extensively to improve the skill of rural women in different homestead production areas and thereby increase production. Now-a-days different NGOs are working with the government to establish the rights and overall development of women. NGOs enable their clients and beneficiaries to graduate into higher standards of living. In addition to their poverty alleviation programs, they set many motivational programs for the women at grassroots level. These programs have made women aware of their rights and the women have their platform to raise their voices. Although government is taking initiatives to ensure the political rights, increase awareness,

participation and empowerment but government have to be more sincere, active and give proper attention to increase the real awareness of the vulnerable and disadvantaged women by fully implementing the initiatives. Especially cooperation between government and NGOs can expedite the process of women development. Opportunities are growing for the NGOs throughout developing world to work with government in helping the poor women to improve the quality of their lives. As their attitude was favorable, proper extension strategy may help in boosting homestead vegetable production, which can ensure both nutritional aspect and economic benefits. Hence, homestead vegetable production can play an important role in changing social and livelihood issues.

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