



DECISION MAKING OF RURAL WOMEN IN HOMESTEAD AGRICULTURAL ACTIVITIES

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ABSTRACT

The main focus of the study was to determine the extent of decision making of rural women in homestead agricultural activities. The study was conducted in Rangpursadarupazila. Ninety eight (98) respondents were selected as sample from an updated list of 490 rural women by using simple random sampling method. Data were collected by an interview schedule during 15 February to 25 March, 2013. About three-fourths (71.5%) of the women had medium to high decision making compared to 28.5 percent had low decision making in homestead agricultural activities. The rank order of the homestead agricultural activities revealed that "seed selection" with DMI-300.9 stood first. Among the independent variables education, family farm size, knowledge on homestead agricultural activities, innovativeness, extension contact, participation in vegetable and fruit cultivation, participation in post-harvest activities, participation in poultry management have significant relationships with their participation in decision making at homestead agricultural activities. The highest problem faced by the rural women during their decision making in homestead agricultural activities was social constraints and the least problem was age difference between spouses.

Key words: Decision making, homestead agricultural activities, rural women

INTRODUCTION

In Asia, the female contribution to the overall economy, particularly in agriculture is high. Bangladesh, Bhutan, Cambodia, China, India, Myanmar, Nepal, Pakistan and Vietnam have predominantly high percentage of women employed in the agricultural sector with estimates ranging between 60 and 98%. Among the neighboring countries only 59% of Bangladeshi women as compared to over 74% by Indian, 64% Pakistani and 85% Nepali women are employed in agriculture (FAO 2003). In Bangladesh, about 75% of the population depends on directly or indirectly in agriculture for their livelihood, since she provides income and food. Rapid population growth and in consequence reduction of cultivated land, erosion, loss of soil fertility and biodiversity results in a decreasing agricultural productivity and negative effect on people's income as well as accelerated rural poverty (BBS 2013). Bangladesh is a patriarchal society where men holds the sovereign power to control households and society as a whole and women are frequently secluded in their home. Women are ascribed as being by lower status compared to men and poverty is higher among women than men (ADB 2001). According to some historians, women first initiated agricultural practices, demonstrated and developed art and science of farming. Women played a key role in the

conservation of basic life support system such as land, water, flora and fauna (Swaminathan 1985). In Bangladesh, about 80% people live in rural areas and they are directly or indirectly dependent on agriculture, which is the mainstay of its economy. While comparing the female and male labor force in agriculture it was observed that 44% more females are involved in this sector than males (UNDP 2005). These women contribute to agricultural production in a diversified ways.

Bangladesh is an agro-based country. Her economy mostly depends on agriculture. The cultivable lands of the country are decreasing day by day. Most of the peoples are landless, and these families possess small pieces of land in the homestead areas. Women of the landless families cultivate vegetables, raise poultry, rear goats and earn more compared to the women of medium and large farmers (Halim 1991). Rural women can play vital roles in homestead agricultural activities as well as in decision-making process, if facilities are created with their active participation. Women's participation in the decision-making process has a significant impact on their improved status and greater role in society (Begum 2002). Their participation is potentially important to bring equality between women and men in order to achieve sustainable development (Hindin 2000 and Musokotwane *et al.* 2001).

Women make essential contributions to the agricultural and rural economies in all developing countries. Their roles vary considerably between and within regions and are changing rapidly in many parts of the world, where economic and social forces are transforming the agricultural sector. Rural women often manage complex households and pursue multiple livelihood strategies. Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Many of these activities are not defined as “economically active employment” in national accounts but they are essential to the well-being of rural households.

Effective participation in decision-making process on any issue specially homestead agricultural activities requires some knowledge about it. Women in rural areas usually possess some hidden talents and unique traits. It is very much essential to use their hidden talent in the field of decision making on homestead agricultural activities. The present study was, therefore, undertaken to determine the extent of decision making of rural women in homestead agricultural activities as well as to explore the relationship between the selected characteristics of rural women and their decision making at homestead agricultural activities. And to identify the problems those hinder womens’ in decision making at homestead agricultural activities.

MATERIALS AND METHOD

The study was conducted in Rangpursadarupazila. Interview schedule was used as research instrument which was pre-tested and necessary corrections, additions and modifications were made. Ninety eight (98) respondents were selected as sample from an updated list of 490 rural women by using simple random sampling method. Data were collected by the finalized interview schedule during 15 February to 25 March, 2013.

In order to measure decision making in homestead agricultural activities of rural women each respondent asked to give her extent of decision making on 18 selected homestead agricultural activities. A 5-point rating scale was used to measure the decision making as follows:

Extent of decision making	Score
Very high	4
High	3
Moderate	2
Low	1

of their decision making indices. Decision Making Indices (DMI) ranged from 198.8 to 300.9 against a

No decision making at all 0
 After adding all the weights against the responses, the decision making score of the woman was determined. Decision-making score of a respondent could range from 0 to 72, where 0 indicated no decision making, and 72 very high decision-making.

For clear understanding and in depth analysis of decision making in homestead agricultural activities, rank order for each of the activities was computed by using Decision Making Index (DMI)

$$DMI=(P_{vhdm} \times 4)+(P_{hdm} \times 3)+(P_{mdm} \times 2)+(P_{ldm} \times 1)+(P_{ndm} \times 0)$$

Where,

P_{vhdm} =% respondent with very high decision making

P_{hdm} =%respondent with high decision making

P_{mdm} =%respondent with moderate decision making

P_{ldm} =%respondent with low decision making

P_{ndm} =%respondent with no decision making

The value of DMI in respect of selected homestead agricultural activities could range from 0 to 400, where 0 indicated no decision making and 400 for very high decision making in homestead agricultural activities.

Pearson’s product moment correlation of co-efficient was used for exploring the relationship between the independent and dependent variables.

Problem confrontation of the rural women was measured by applying closed form questions. The women were asked using 3-point rating scale to give their opinion on 13 selected problems regarding decision making in homestead agricultural activities. To ascertain the comparison among the problems, Problem Confrontation Index (PCI) was computed by using the following formula:

$$PCI = (N_s \times 2) + (N_m \times 1) + (N_n \times 0)$$

Where,

PCI=Problem Confrontation Index

N_s = Number of rural women having serious problem

N_m = Number of rural women having moderate problem

N_n = Number of rural women having no problem at all

RESULTS AND DISCUSSION

Decision making of rural women in homestead agricultural activities: Distribution of the rural women according to their extent of participation in decision making at homestead agricultural activities are shown in Table 1 along with their decision making indices. Rank orders of the activities have also been shown on the basis

possible range of 0 to 400. According to rank order, “seed selection” with DMI-300.9, showed as first rank order followed by “poultry management and rearing bovine animals” (DMI=297.1), “dairy

products selling” (DMI=291.7), “boiling and drying of paddy” (DMI=290.9), “storage of crops” (DMI=286.8), “different organizational training received” (DMI=284.9) and “receiving loans from banks & NGOs” (DMI=282.9), showed second, third, fourth, fifth, sixth and seventh in rank order, respectively.

scores for overall decision making of rural women in homestead agricultural activities ranged from 7 to 70 against a possible range of 0 to 72. The mean and standard deviation were 56.33 and 21.14 respectively. On the basis of scores obtained the respondents were classified into three categories which are shown in Table 2.

Overall decision making of rural women in homestead agricultural activities: The computed

Table 1. Rank order of decision making issues on the basis of DMI

Sl. No.	Subject of decision-making	Number of women (N=98)					Decision Making Indices (DMI)	Rank Order
		Very high	High	Medium	Low	Not at all		
1.	Boiling and drying of paddy	48	21.4	14.3	6.1	10.2	290.9	4 th
2.	Poultry management and Rearing bovine animals	38.8	37.8	11.2	6.1	6.1	297.1	2 nd
3.	Dairy products selling	35.7	40.8	10.2	6.1	7.1	291.7	3 rd
4.	Seed selection	46.9	33.7	2	8.2	9.2	300.9	1 st
5.	Storage of crops	39.8	33.7	10.2	6.1	10.2	286.8	5 th
6.	Different organizational training received	33.7	37.8	15.3	6.1	7.1	284.9	6 th
7.	Receiving loans from banks & NGOs	32.7	38.8	14.3	7.1	7.1	282.9	7 th
8.	Participation of group meeting	29.6	40.8	17.3	7.1	5.1	282.5	8 th
9.	Selection and preservation of seed grain	31.6	41.8	9.2	7.1	10.2	277.3	11 th
10.	Cleaning and drying of grains	41.8	23.5	15.3	7.1	12.2	275.4	12 th
11.	Land selection	26.5	52	4.1	8.2	9.2	278.4	9 th
12.	Harvesting of crops from home shed garden	36.7	30.6	16.3	6.2	10.2	277.4	10 th
13.	Carrying the harvested crop to the home yard	34.7	31.6	16.3	6.1	11.2	272.3	13 th
14.	Use of indigenous technical knowledge for vegetable, timber and fruit cultivation	33.7	23.5	27.6	6.1	9.2	266.6	14 th
15.	Preparation of seed bed	20.4	52	9.2	9.2	9.2	265.2	15 th
16.	Selling vegetables	30.6	17.3	9.2	6.1	36.7	198.8	18 th
17.	Raising seedling in the seed bed	15.3	38.8	27.6	9.2	9.2	242.0	17 th
18.	Planting of vegetable, fruits and timber sapling around the homestead	31.6	23.5	27.6	9.2	8.2	261.3	16 th

Table 2 showed that near about three-fourths (71.5%) of the respondent women belonged medium to high decision making compared to 28.5% had low decision making in homestead agricultural activities. This might be due to involvement of women with various types of NGOs and GOs and take part in training which make them competent and empowered influencing high

decision making in homestead agricultural activities.

Relationships between selected characteristics of the rural women and their decision making in homestead agricultural activities: To determine the relationship between independent variables and dependent variable, the following null hypothesis was tested, “There is no relationship between the

selected characteristics of rural women and their participation in decision-making at homestead agricultural activities". Pearson's Product Moment Co-efficient of Correlation (r) has been used to explore the relationship. The relationships of independent variables and decision making at homestead agricultural activities are shown on Table 3.

Correlation co-efficient analysis indicated that education, family farm size, knowledge on homestead agricultural activities, innovativeness, extension contact, participation in vegetable and fruit cultivation, participation in post-harvest activities, participation in poultry management have significant relationships with their decision making at homestead agricultural activities. However, age, family size, annual family income, participation in cattle rearing of the women had no significant relationship with their decision making at homestead agricultural activities.

Problems faced by the rural women in decision making in homestead agricultural activities: The problems identified in decision making by rural women in homestead agricultural activities are shown in Table 4 along with Problem Confrontation Index (PCI) and rank order regarding the distribution of respondents. Computed PCI values ranged from 159 to 193 with the possible range of 0 to 196.

In order to understand the comparative importance of different problems and to identify their severity, 13 problems were arranged in rank order (Table 4). Most important five problem faced by the rural women during their participation in decision making at homestead agricultural activities were social constraints, lack of appropriate technology for women, complexity of receiving training, no excessive land surrounding the homestead, and lack of appropriate knowledge for improved crop, vegetables and fruit cultivation, respectively.

Table 2. Distribution of the respondents according to their overall decision making in homestead agricultural activities

Category	Number of respondents	%	Mean	*SD
Low decision making (up to 50)	28	28.5		
Medium decision making (51 –64)	23	23.5		
High decision making (> 64)	47	48.0	56.33	21.14
Total	98	100		

*SD= Standard Deviation

Table 3. Coefficient of correlation of socio-demographic characteristics of the rural women with their decision making in homestead agricultural activities

Socio-demographic characteristics (variables)	Decision making of rural women
Age	0.151
Education	0.242*
Family size	0.062
Family farm size	0.405**
Annual family income	0.126
Knowledge on homestead agricultural activities	0.492**
Innovativeness	0.442**
Extension contact	0.420**
Participation in vegetable and fruit cultivation	0.659**
Participation in post-harvest activities	0.585**
Participation in poultry management	0.319**
Participation in cattle rearing	0.054

** Correlation is significant at 1% level and * Correlation is significant at 5% level

Table 4. Rank order of comparative problem confrontation on the basis of PCI

Sl. No.	Problem Statements	Women N=98			*PCI	Rank order
		High	Medium	Low		
1.	Non ownership of land	81	11	6	173	8 th
2.	Social constraints	95	3	0	193	1 st
3.	No participation in decision due to unemployment	70	26	2	166	11 th
4.	Age difference between spouses	69	21	8	159	13 th
5.	Complexity of receiving different training	86	9	3	181	3 rd
6.	Lack of appropriate knowledge for improved crop, vegetables and fruit cultivation	83	11	4	177	5 th
7.	Limitation of capital for purchasing of seeds and fertilizers & insecticides	79	14	5	172	9 th
8.	Lack of proper knowledge in decision-making	82	10	6	174	7 th
9.	No excessive land surrounding the homestead	84	11	3	179	4 th
10.	No fallow land for rearing of poultry and livestock	77	16	4	170	10 th
11.	Lack of control over the family members	70	24	4	164	12 th
12.	Family members / Neighbors become annoyed due to the hazards created by poultry	79	17	2	175	6 th
13.	Lack of appropriate technology for women	86	11	1	183	2 nd

CONCLUSIONS

The researcher studied the rural women's decision making in homestead agricultural activities attentively and conclude that rural women of the study area having participation on each of the selected homestead agricultural activities to some extent. However, the extent of decision making in "seed selection" was the highest. Some of the selected characteristics have positive significant relationship with the decision making in homestead agricultural activities. Therefore, the researcher concluded that, these characteristics of the rural women have profound influence on their decision making. Among thirteen identified problems, findings revealed that the most important problem faced by the rural women during decision making in homestead agricultural activities was "social constraints". So, it may be concluded that the motivation work may be increased for social change from mass media. On the basis of findings and conclusion of the study, the researcher recommended that awareness should be increased among the people on the importance of women's contribution to agricultural activities. Rural women are not fully aware of scientific management of homestead agricultural activities. So, it is recommended that programs should be taken for

increasing women's knowledge on agricultural activities. Extension services should be strengthened particularly for women. Due to existing social system and religious norms, rural women are reluctant to come in contact male extension worker. So, more female extension worker should be recruited for effective and successful implementation of extension programmes and greater decision making in homestead agricultural activities.

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