

Contribution of Rural Women to their Household Food Utilization

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Abstract:

Objectives of this study were to determine the contribution of rural women to their household food utilization and explore relationship with their selected characteristics. Besides, attempts were also made to explore problems of rural women encountered towards their household food utilization. The study was conducted with the rural women (who were key role player in household management) of farm households of Khicha village under Tarakanda Upazila of Mymensingh district. Eighty households were selected randomly as sample from 277 farm households. A pre-tested interview schedule was used to collect data from the respondents during April, 2015. Additionally, a Focus Group Discussion (FGD) was conducted to

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identify the usual problems faced by the rural women towards household food utilization. Pearson's Product Moment Correlation Coefficient (r) was computed to explore the relationship between the concerned variables. All of the women played medium to high contribution towards household food utilization. Among different aspects of food utilization the most important contribution was played by rural women for food preparation followed by intra-household food distribution. Correlation analysis indicated that household size, annual household income, extension media contact and ability to cope with uncertainty were positively correlated with the contribution to their household food utilization. Among the rural women, majority of them (81.3 percent) faced medium level of problems towards household food utilization. Involving rural women in different income generating activities to increase their family income, and training and educational facilities regarding household food utilization were deemed desirable by them to triumph over the constraints.

Key words: Household, food utilization, rural women, contribution

INTRODUCTION

Food security is an important development goal of Bangladesh. The National Food Policy of Bangladesh has explicitly stated that it aims to ensure “a dependable and sustained food security for all people of Bangladesh at all times,” (FPMU, 2008). Our country, since its independence has been given top priority to food security for its people and accordingly all development programs in agriculture are geared to faster increase in the production.

A household is food secure when it has access to the food needed for a healthy life for all its members (adequate in terms of quality, quantity, safety and culturally acceptable) and when it is not at undue risk of losing such access. The WHO states that there are three pillars that determine food security: food availability, food access, and food use. The FAO adds a fourth pillar: the stability of the first three dimensions of food security

over time. In 2009, the World Summit on Food Security stated that the "four pillars of food security are availability, access, utilization, and stability"(Wikipedia, 2015).

Food utilization addresses not only how much food the people eat but also what and how they eat. It also covers the food preparation, intra-household food distribution, water and sanitation and health care practices. Food utilization is dependent on the quality of the food, its preparation and storage method, nutritional knowledge, and the health status of the individual consuming the food (IFPRI, 2008). Throughout the world, women are the principal guarantors of nutrition, food safety and quality at household and community levels. They are the ones who often produce, purchase, handle, prepare and serve food to families and community institutions. Women are the key to food security for their household food utilization (Quisumbing *et al.*, 1995).

In our country most of the people are still undernourished, especially in case of rural people it is seen in large scale, where women have been found to control their households nutritional status through food preparation, processing of food products and through daily use of the available resources for determining of quantity and quality of food status and in turn, contribute to reducing hunger and malnutrition and play important role in food utilization. But women are often faced with a variety of obstacles and constraints, which render them unable to fulfill their role as gatekeepers of household food utilization, and committed to removing these obstacles.

Analyzing the issues from the rural women's perspectives, the study was specially designed to determine the contribution of rural women to their household food utilization, to explore the relationship between the contribution of rural women and their selected characteristics towards household food utilization and to explore problems of rural women encountered towards their household food utilization.

METHODOLOGY

The study was conducted at Khicha village of Tarakanda Upazila under Mymensingh district. As per suggestion of the Upazila Agriculture Officer (UAO), the Khicha village was selected because the women of the village had long tradition of involvement in income generating activities (IGAs) as well as homestead farming. It is also assumed that the women of this area also have been playing a key role in household management including food. Another reason for selecting this village is that, this Khicha village is a model village designated by Bangladesh Rural Advancement Committee (BRAC).

Eighty farm households were considered as sample of the study chosen randomly from these total households of 277. In interview, a structured interview schedule was used to gather data on women's contribution in household food utilization status. Data were collected during April, 2015. A Focus Group Discussion (FGD) was conducted in the study area comprising eight participants. Various problems faced by the rural women and probable solutions to overcome the problems were identified through this method. The additional information gathered from the FGD (Anonymous, 2003 and Popham, 1993) was used for interpreting the results of the survey.

Selected characteristics of the respondents were measured by using standard measurement procedures. The focus variable of this study was contribution of rural women to their household food utilization. It was determined through 4-point rating scale. Score was assigned as '0' for not at all, '1' for low, '2' for medium and '3' for high contribution to the activities related to household food utilization. Relationship between the contribution of rural women and their selected characteristics was computed through Pearson's Product Moment Correlation Coefficient (r).

Problems of rural women encountered towards their household food utilization was measured through 4-point rating scale. Score was assigned as '0' for not at all, '1' for low, '2' for medium and '3' for high extent of problems faced by the rural women. Data obtained from the respondents were compiled to a master sheet, then tabulated and analyzed in accordance with the objectives of the study.

FINDINGS AND DISCUSSION

Contribution of Rural Women to their Household Food Utilization

The score of contribution of women towards household food utilization could range from 0-60, while observed score ranged from 27-45. The mean was 38.44 with a standard deviation of 3.94. The respondents were categorized based on their extent of contribution into three categories as low (≤ 20), medium (21-40) and high (> 40) (Table 1).

Data contained in the Table 1 shows that the highest proportion (71.2 percent) of the women had medium contribution, while 28.8 percent had high contribution towards household food utilization. Most of the women play medium to high contribution towards household food utilization.

Table 1: Classification of rural women based on their contribution towards household food utilization

Score range: Possible 0-60 and observed 27-45

Category	Respondents		Mean	Std. Dev.
	Number	Percent		
Low (≤ 20)	0	0		
Medium (21-40)	57	71.2	38.44	3.94
High (> 40)	23	28.8		

Women's knowledge and intra-household activities were also very important to secure household from food crisis. Households, where women have access to their own incomes and can exercise decision-making powers, tend to have an

expenditure pattern different to the one existing in male dominated households. For effective household food utilization no extra money was required. So, women who have knowledge about different aspect of household food utilization can perform better in this sector.

Contribution of the rural women in food preparation

Contribution Indices (CI) of the women of six selected activities in household food preparation ranged from 142 to 215 against a possible range 0 to 240 as in shown in the Table 2. The first one (CI-215) is using lid on pots of food materials to keep food clean. Majority of women use lid on pots of food materials after cooking to protect their food from dust, different insects like ants, flies etc.

Table 2: Rank order of the contribution of the rural women in food preparation

Activities	CI	RO
Using lid on pots of food materials to keep food clean	215	1
Discarding the disease affected parts of raw materials before cooking	204	2
Selection of nutritious food material for cooking	191	3
Measurement and allocation of nutritional value of food material as per body requirement of the household members	173	4
Washing food materials before cutting/preparing raw materials for cooking	159	5
Washing food materials after preparing raw materials for cooking	142	6

Notes: CI = Contribution Index, RO = Rank Order

So, to maintain hygienic condition they tried their best. The second one (CI-204) is discarding the disease affected parts of raw materials before cooking. Rural women discard injured and disease affected parts of raw materials before cooking to cook clean food. The third one (CI- 191) is selection of nutritious food materials for cooking. Rural women play important contribution in selection of nutritious food materials for cooking. On the other hand, the activities of washing food

materials after preparing raw materials for cooking ranked last (CI-142).

Contribution of the rural women in food preservation

Contribution Indices (CI) of the women of four selected activities in household food preservation ranged from 0 to 189 against a possible range 0 to 240 as presented in Table 3. The first one (CI-189) is food preservation through heating. Most of the rural women preserve their food material after cooking through frequent heating. The second one (CI-145) is food preservation by using different materials like-turmeric, salt etc. They also preserve their food materials like fishes, meats and so on by using different materials like-turmeric, salt etc. The third one (CI-74) is food preservation in fridge. Sometimes they preserve their food materials in fridge. But most of them have no own fridge. They keep their food in other owned fridge.

Table 3: Rank order of the contribution of the rural women in food preservation

Activities	CI	RO
Food preservation through heating	189	1
Food preservation by using different materials like-turmeric, salt etc.	145	2
Food preservation in fridge	74	3
Food preservation by using different chemicals	0	4

Notes: CI = Contribution Index, RO = Rank Order

Contribution of the rural women in water and sanitation

Data contained in Table 4 shows that Contribution Indices (CI) of the women of six selected activities in water and sanitation ranged from 0 to 240 against a possible range 0 to 240. The first one (CI-240) was using arsenic free deep tube-well water. All rural women used to use arsenic free deep tube-well water to their household members in the study area. Awareness generating broadcastings regarding health impacts of arsenic was disseminated in both mass and print media at the study

area to make the people aware about the ill effect of arsenic to the human health.

Table 4: Rank order of the contribution of the rural women in water and sanitation

Activities	CI	RO
Using arsenic free deep tube-well water	240	1
Washing hands with soap after using latrine	219	2
Using sanitary latrine	218	3
Cleaning home and homestead to keep food hygienic	210	4
Using water after boiling	0	5
Using water through water filter	0	6

Notes: CI = Contribution Index, RO = Rank Order

The second one (CI-219) is washing hands with soap after using latrine. The respondents in the study area were aware about sanitation facilities and they knew that different diseases are disseminated through these germs. So, most of the women in the study area used to wash hands with soap after using latrine and also suggest their household members. The fifth and sixth one (CI-0) are using water after boiling and serving water through water filter.

Contribution of the rural women in intra-household food distribution

Contribution Indices (CI) of the women of four selected activities in intra-household food distribution ranged from 143 to 213 against a possible range 0 to 240 as shown in Table 5. The first one (CI-213) was arranging meal for younger members earlier to older ones. Majority of rural women played important role in intra-household food distribution by arranging meal for younger members earlier to older ones.

The second one (CI-176) was serving appropriate food items for the growing members of the household. Women used to serve appropriate food items like milk, fruits, eggs etc. for the growing members of the household. On the other hand,

allocating special food items for male members of the household ranked four (CI-143).

Table 5: Rank order of the contribution of the rural women in intra-household food distribution

Activities	CI	RO
Arranging meal for younger members earlier to older ones	213	1
Serving appropriate food items for the growing members of the household	176	2
Arranging meal for male members earlier to female	171	3
Allocating special food items for male members of the household	143	4

Notes: CI = Contribution Index, RO = Rank Order

Comparison of different aspects of household food utilization

Findings revealed that most of rural women played important contribution in food preparation (180.67) followed by intra-household food distribution (175.75). Most of the women play highest contribution in food preparation because food preparation no extra cost is required and they can prepare their food easily by considering different aspect of food utilization.

Most of their children are educated and they suggest their mother about different aspect of food preparation like nutritional aspect, washing of food material, protection of food material from dust and insects and so on. They also played next highest contribution in intra-household food distribution because it requires personal interest and they all were aware about their household food distribution.

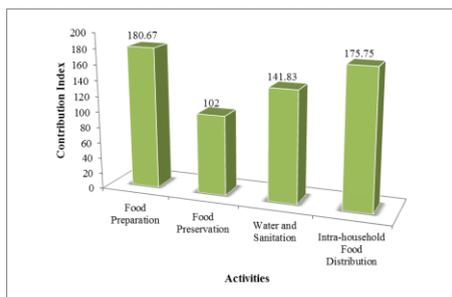


Figure 1: Comparison of different aspects of household food utilization

Relationship between the Selected Characteristics of Rural Women and their Contribution in Household Food Utilization

Among ten characteristics, household size, annual household income, extension media contact and ability to cope with uncertainty of the rural women were positively correlated with the contribution towards their household food utilization. Other characteristics of the rural women were not significantly correlated with the contribution to their household food utilization (Table 6). So, from these it can be said that with the increase of these characteristics their contribution towards household food utilization also increases.

Table 6: Relationship between the selected characteristics of the rural women and their contribution towards household food utilization

Sl. No.	Selected characteristics	'r' value with 78 df
1.	Age	-0.128
2.	Year of schooling	0.184
3.	Household size	0.235*
4.	Dependency ratio of the household	0.170
5.	Farm size	0.071
6.	Annual household income	0.271*
7.	Training exposure	-0.147
8.	Credit received	0.108
9.	Extension media contact	0.389**
10.	Ability to cope with uncertainty	0.330**

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Again it was found that household size was positively correlated with dependency ratio of the household, farm size and annual household income. With the increase of household income of the women the women's contribution towards household food utilization also increased. So, the contribution in household food utilization could increase with the increase of household size.

The woman who received more information through extension media contact had more opportunities regarding

contribution towards household food utilization and those having more ability to cope with uncertainty had more capacity to handle the issues of household food utilization.

Problems Faced by the Rural Women in Household Food Utilization

The observed score of the problems faced by the rural women in household food utilization ranged from 13 to 33 against a possible of 0 to 42. Data presented in Table 7 show that the mean and standard deviation of this score was 23.14 and 4.71 respectively. Among the rural women, 81.3 percent of them faced medium level, 13.7 percent faced high level and only few (5.0 percent) faced low level of problems in household food utilization.

Table 7: Categorization of rural women based on their problems faced in household food utilization

Score range: Possible 0-42 and observed 13-33

Category	Respondents		Mean	Std. Dev.
	Number	Percent (N=80)		
Low (≤ 14)	4	5.0	23.14	4.71
Medium (15-28)	65	81.3		
High (> 28)	11	13.7		

The mean and standard deviation of the scores were small. This means that almost all of the respondents faced similar problems to similar extent. This was might be due to the similar socio-economic background of the respondents.

Rank order of the problems faced by the rural women in household food utilization

The extent of problems faced by the rural women in achieving household food utilization with their rank order values have been presented in Table 8. In the study area few households had fridge of their own but maximum households could not afford to buy fridge of their own where they could store their household food materials. That is why the problem of 'No fridge

in house' ranked first. Again, there were lack of different government and non-government organizations in the locality and the respondents had low participation in any organization. So, the respondents could not able to get enough knowledge of different aspect of household food utilization. So, 'Deficiency of knowledge of different aspects of household food utilization' ranked second. Most of our rural women were illiterate or had minimum level of education. As there were insufficient GOs and NGOs, majority of them had no training exposure. So, women were not educated enough or they had no formal education and training regarding proper household food preparation. So, lack of educational facilities regarding proper household food preparation was the third ranked problem faced by rural women.

Table 8: Rank order of the problems faced by the rural women in household food utilization

Problems faced by the women	Extent of the problems				OI	RO
	High	Medium	Low	Not at all		
No fridge in house	57	4	3	16	182	1
Deficiency of knowledge of different aspects of household food utilization	16	62	2	0	174	2
Lack of educational facilities regarding proper household food preparation	19	53	8	0	171	3
Insufficient money for purchasing different food preserving material	19	52	9	0	170	4
Insufficient money for purchasing nutritious food	17	53	10	0	167	5
Lack of food storage facilities	12	49	10	9	144	6
Lack of contact with communication media	0	61	16	3	138	7
Food price fluctuation	15	42	7	0	136	8
Inadequate materials and equipment in kitchen	3	51	24	2	135	9
Lack of electricity/interrupted supply of electricity	0	51	27	2	129	10
Lack of proper sanitation facilities	3	29	38	10	105	11
Lack of personal interest in proper food utilization in household	2	20	30	28	76	12
Non-cooperation of household members	2	12	22	44	52	13
Social and religious restrictions or prejudice	0	9	15	56	33	14

OI = Opinion Index, RO = Rank Order

Probable suggestions of the problems as mentioned by the respondents

Among the suggestions, involving rural women in different income generating activities to increase their household income ranked first followed by training and educational facilities should be provided regarding household food utilization as second. Again, easy and low interest credit facilities should be provided by different GOs and NGOs was identified as third rank (Table 9). If government and non-government organizations take initiatives to involve rural women in different income generating activities, they would be able to increase their household income which will help them to purchase nutritious food materials, food preserving material etc. Awareness developed through training will also help them to increase their decision making ability regarding household food management.

Table 9: Probable suggestions of the problems as mentioned by the respondents

Suggestions mentioned by the respondents	No. of citation	Rank order
Involving rural women in different income generating activities to increase their household income	71	1
Training and educational facilities should be provided regarding household food utilization	69	2
Easy and low interest credit facilities should be provided by different GOs and NGOs	65	3
Uninterrupted supply of electricity should be ensured in the locality	61	4
SAAOs should visit the households regularly	49	5
Health workers should stay in the clinic regularly	43	6
Communication facilities should be improved	31	7
Family bonding should be strengthened	13	8
Sanitary latrine should be provided by different GOs and NGOs	9	9

Training and educational facilities should be provided to the rural women regarding household food utilization, so that they can broaden their outlook and able to take part in utilizing

their household food effectively. When GOs and NGOs provide easy and low interest credit facilities to the rural households they will be able to buy different food storage material which will help them to increase their food storage facilities. If communication facilities could be improved and health workers stay in the clinic regularly, rural women will be able to increase their sanitation facilities through consultation with health workers.

CONCLUSIONS

The medium extent of contribution of rural women to their household food utilization should be increased by enhancing their training exposure and extension media contact. Government and non-government organizations should conduct training and awareness programs according to need of rural women of farm households for increasing their awareness, management skill and operational ability so that they can contribute more to their household food utilization.

Government and non-government organizations should take proper initiatives to create diversified income generating activities at household level so that rural women would engage them in such activities to increase their annual household income and could play important contribution to their household food utilization.

Rural women of the study area faced various types of problems towards household food utilization properly. DAE, Ministry of Health and other NGOs working in that area may motivate household members to be aware of the proper roles in food utilization and try to solve their problems themselves. Further, steps may be taken by these organizations to assist rural households to solve the problems which the households cannot solve without technical and financial cooperation from the organizations.

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