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Need for Capacity Building of Rural Women towards Household Food Utilization

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Abstract

The main objectives of the study were to determine the need for capacity building of rural women towards household food utilization and to explore the relationships between some selected characteristics of the women with their need for capacity building. Data were collected through personal interview from 60 women of three Common Interest Groups of Char Nilakshmia union under sadar upazila of Mymensingh district during 12 April to 01 May 2017. Additionally, Focus Group Discussion was conducted to identify different aspects of need related to food utilization and different problems for problem scales. Most of the respondents (80%) had medium status in managing household food utilization. All of the respondents had high need for capacity building towards household food utilization. The women had the highest extent (100%) of need for capacity building in physical facilities and the lowest extent (92%) of need in decision making ability. Among the selected characteristics of the rural women, age, years of schooling, training exposure, decision making capacity in the family and knowledge on food utilization showed positive and significant relationships. Majority (65%) of them faced high problems in managing their household food. Lack of electricity/interrupted supply of electricity, lack of educational facilities regarding proper household food preparation, food price fluctuation etc. were the main problems. Involving rural women in different income generating activities to increase their household income, provision of uninterrupted supply of electricity, training and educational facilities regarding household food utilization etc. were deemed desirable by them to overcome the problems.

Keywords: Need, capacity building, rural women, household food utilization

Introduction

In most developing countries, women perform a large part of the agricultural work and produce the bulk of the world's food crops. Historically, women in developing societies have been principally concerned with food crop production. The division of labor between men and women in farming is well defined. The role of men is focused on land clearing and preparation, while women carry out tasks as planting, weeding, harvesting, winnowing and grinding (IFAD, 2009). So, women are crucial in the agriculture sector mostly in subsistence agriculture, as they are often the persons who cultivate food crops. Fonjong (2004) affirmed that woman's triple roles as food producers, income earners, and home managers make them indispensable in the drive towards food security. 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). Food security is a situation that exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2002).

Women's role in food utilization for food security is perhaps the most critical and underlines the importance of their role in food production and how they spend the income they

earn. Women are typically responsible for food preparation and thus are crucial to serve varied and well-balanced meals for their households (FAO, 2013). They 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. Therefore, different rights, responsibilities and decision-making abilities of women need to be understood to improve food utilization and nutrition. Capacity building of the women for household food utilization is the extent to which they have the accessibility to financial, physical, managerial support services as well as ability to make decision. They are the pioneer of household food utilization. Therefore, their capacity of utilizing household food and ensuring food security to the family members needs to be improved.

Thus, the study intends to investigate the field level scenario of women's status in food utilization in the household, extent of need for capacity building towards food utilization, the relationships between selected characteristics of women and problem confrontation to manage food utilization for the household. Keeping these facts in mind the research was undertaken (i) to assess the existing status of rural women in managing household food utilization issues; (ii) to find out the need for capacity building of rural women in household food utilization; (iii) to explore the relationships between some selected characteristics of the women with their need for capacity building towards household food utilization; and (iv) to determine the problems faced by rural women in playing their role to manage household food utilization efficiently.

Methodology

Locale, Population and Sample

The study was conducted in Char Nilakshmia union under sadar upazila of Mymensingh district of Bangladesh. In Mymensingh sadar upazila there are 140 Common Interest Groups (CIGs) of farmers of which 42 are exclusively women CIGs. CIGs were those groups whose members possess more or less same socio-economic status having same or similar professional/working interests**.** The groups were formed by the National Agricultural Technology Project Phase-1 of DAE during 2008-2013. CIGs consisted more of small and marginal farmers of which minimum 30 percent will be female farmers. There are three women CIGs in each union. Accordingly, Char Nilakshmia union was randomly selected as the locale of the study and all the three women CIGs of Char Nilakshmia union of sadar upazila under Mymensingh district were selected as population of the study. Each CIG consists of 20 women members and thus, the total number of respondents stands to 60 women of three CIGs.

Variables and their Measurement

Eleven selected personal characteristics of the women were age, year of schooling, household size, household farm size, annual household income, training exposure, ability to cope with uncertainty, organizational participation, extension media contact, decision making capacity in the family and knowledge on food utilization. These variables were measured employing prevailing standard measuring methods.

To measure the existing status of rural women in managing household food utilization four aspects of food utilization were identified. These were as follows, food preparation, food preservation, water and sanitation and intra-household food distribution. These aspects were measured on a four-point rating scale. Scores were assigned as 0, 1, 2 and 3 for 'no', 'low', 'medium' and 'high' status respectively. Thus a total score of a respondent might vary from '0' to '60' in this scale, where '0' indicated not at all and '60' indicated high status in managing household food utilization.

Need for capacity building of rural women towards household food utilization was considered as the main focus of the study. To measure need for capacity building of rural women, four aspects of capacity building were selected *viz.* need for decision making ability,

need for access to support services, need for management skill, need for physical facilities. The aspects were measured on a four-point rating scale. Scores were assigned as 0, 1, 2 and 3 for 'no', 'low', 'medium' and 'high' need, respectively. The scores of all items of each aspect were added to obtain the total score of a single aspect. Finally, scores of all the four aspects formed the total score of the extent of need for capacity building for a respondent.

Problems faced by the rural women in farm household in contributing to their household food utilization were measured by asking their opinion on the selected problems. The possible problems were first identified through Focus Group Discussion (FGD). FGD is a structured discussions led by a facilitator (Anonymous, 2003 and Popham, 1993). Fourteen problems were identified through FGD. A four point rating scale was used for computing the problem score of a respondent. For each problem score of '3', '2', '1' and '0' was assigned to indicate extent of problem as 'high', 'medium', 'low' and 'not at all' respectively. The total problem scores were computed for each respondent by adding his scores for all the problems. The possible range of problem score could range from '0' to '42', where '0' indicated no problems and '42' indicated highest level of problems. From the identified problems rank order was made based on the number of responses made by the rural women.

Data Collection and Analysis

A structured interview schedule was used for collection of relevant data from the women engaged in respective farm households. The interview schedule was pre-tested with 10 respondents. Necessary corrections, additions and modification were made in the interview schedule based on the pretest results. Data were collected through personal interview from 60 women of three Common Interest Groups in the study area. Different descriptive statistical methods were used in describing the variables. Pearson's Product Moment Correlation Co-efficient (r) (Ray and Mandal, 2004) was used to explore the relationships between the concerned variables.

Results and discussion

Status of Women in Managing Household Food Utilization

The observed status score of the women in managing household food utilization ranged from 26 to 45 with a mean of 37.18 and a standard deviation of 3.82. The observed range was 26-45 against the possible range from 0-60. Based on their extent of status of the food utilization of the respondents were classified into three categories as presented in Table 1.

Table 1: Status of rural women in managing household food utilization

Categories of status	Respondents		Mean	Standard deviation
	No.	%		
Low utilization (≤20)	0	0	37.18	3.82
Medium utilization (21-40)	48	80		
High utilization (>40)	12	20		

Findings in the Table 1 show that the highest proportion (80 percent) of the women had medium status while 20 percent had high status in managing household food utilization. Most of the women played medium to high role in managing household food utilization. None of the respondents had low contribution towards household food utilization. Women often play a

greater role in ensuring nutrition, food safety and quality, and are also responsible for processing and preparing food for their households (Opara, 2010). So, women who have knowledge about different aspects of household food utilization can also perform better in this area. The finding is an indication that there remained ample opportunity to improve the situation regarding women's role in household food utilization. The policymakers may utilize the findings in national level food and nutrition security programmes. The finding has conformity with the findings of Nasrin (2015).

Rank Order of the Activities of Women in Managing Household Food Utilization

The status of women in managing household food utilization has been examined by computing rank order through status score as shown in Table 2. Status score of the women of twenty selected activities in household food utilization ranged from 0 to 180 against a possible range 0 to 180. The first one (180) was using arsenic free deep tube-well water. The second one (180) and the third one (177) were washing hands with soap after using latrine and using sanitary latrine, respectively.

Table 2: Rank order of the activities of women in managing household food utilization

Activities	Score	Rank
Food preparation		
Washing cutting materials before cooking	174	1
Washing food materials before cooking	174	1
Discarding disease affected parts of raw materials before cooking	164	2
Picking up of nutritious food for cooking	129	3
Measurement and allocation of nutritional value of food materials as per body requirement	121	4
Food preservation		
Preservation through heating	115	1
Preservation in refrigerator	86	2
Preservation by using salt	61	3
Preservation by using turmeric	52	4
Preservation by using different chemicals	1	5
Water and sanitation		
Using arsenic free tube-well water	180	1
Washing hands with soap after using latrine	180	1
Using sanitary latrine	177	2
Using water after boiling	28	3
Using water purifying tablets	11	4
Using water filter	9	5
Intra-household food distribution		
Special food for growing members	151	1
Arranging meal for male members earlier to female	149	2
Arranging meal for younger members earlier to older ones	135	3
Pass out special food for male members	133	4

Overall Need for Capacity Building of Rural Women

The extent of need for capacity building of women was assessed in terms of need score. The observed need score ranged from 44 to 60 against the possible score range from 0 to 63. The mean was 52.91 and the standard deviation was 3.67. Based on their need score the respondent rural women were classified into three categories as shown in Table 3.

Table 3: Categories of rural women based on overall need for capacity building in food utilization

Categories of the women based on need scores	Respondents (n=60)		Mean	Standard deviation
	No.	%		
Low need (≤21)	0	0	52.91	3.67
Medium need (22-41)	0	0		
High need (>41)	60	100		

The presented data show that 100 percent of the respondents had high extent of need for capacity building and none of them had medium or low extent of need for capacity building in utilizing household food. While collecting the data, it was observed in the study area that there was scarcity of different facilities i.e. physical, support services, managerial and ability to make decision regarding proper utilization of household food and even a little facility was available but those were not easily accessible form for the rural women. Thus, the respondents logically felt high need for their capacity building towards proper utilization of household food. Moreover, having similar socio-economic background, the women included in the sampling expressed similar opinion for their need for capacity development. Hence, they all fell under same category of need for their development. Ahmed (2007) and Rahman and Begum (2009) also observed similar outcomes in their respective studies.

Aspects-wise Need for Capacity Building of Rural Women

Four aspects of capacity building were selected to assess the extent of need for capacity building of rural women for household food utilization. The computed need score of all the aspects have been shown in Table 4.

Table 4: Aspect-wise need for capacity building of rural women towards household food utilization

Aspects of need for capacity building	Score range		Respondents			Mean	Std. Dev.
	Possible	Observed	Categories	No.	%		
Decision making ability	0-18	12-18	Low (≤6)	0	0	14.76	1.43
			Medium(7-12)	5	8.3		
			High(>12)	55	91.7		
Access to support services	0-15	9-15	Low (≤5)	0	0	12.68	1.44
			Medium(6-10)	4	6.7		
			High(>10)	56	93.3		
Management skill	0-15	10-14	Low (≤5)	0	0	12.16	.99
			Medium(6-10)	1	1.7		
			High(>10)	59	98.3		
Physical facilities	0-15	11-15	Low (≤5)	0	0	13.30	1.06
			Medium(6-10)	0	0		
			High(>10)	60	100		

Data presented in the Table 4 indicated that almost all of the respondents felt high need for capacity building in all four aspects. The highest proportion (100 percent) of the respondents was in high need for physical facilities followed by management skill (98.3 percent), access to

support services (93.3 percent) and need for decision making ability (91.7 percent), respectively. Thus, it was a simple analogy that the components available in low quantity would be felt as high need components.

Figure 1 shows that highest extent of need score (160) of the respondents was in physical facilities followed by access to support services (154), decision making ability (148.67), respectively and the lowest extent of need (147) of the respondents was in management skill.

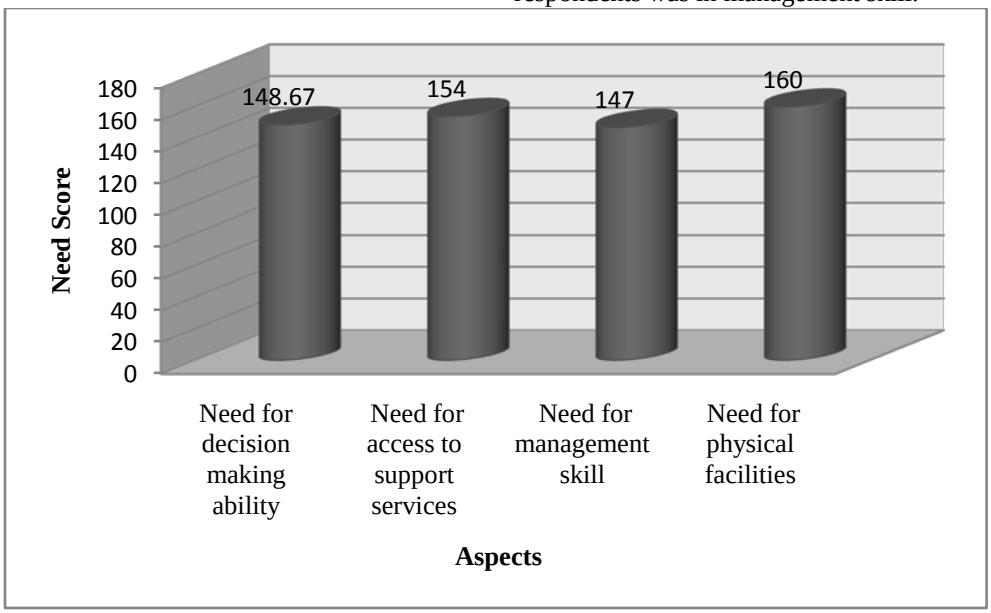

Figure 1: Comparison of different aspects of need for capacity building of women

It might be worthy to mention that the differences among the aspects of capacity building in respect of need felt by the respondents were small. Therefore, the rural women felt more or less same need for all the aspects of capacity building towards household food utilization.

Rank order of the Issues of Need for Capacity Building of Women

Different issues associated with need for capacity building of women has been examined by computing rank order through score are shown in Table 5. Data presented in the following Table 5 showed that score of the issue associated with need for capacity building of women ranged from 0 to 179 against a possible range 0 to 180.

However, top one issue in each four aspects of need for capacity building of rural women have been discussed here. Preservation of food (158) shows higher score in need for decision making ability. In most cases women take decision about how to preserve their food. But they were not in satisfactory level that's way they felt high need for decision making about preservation of food.

Information about nutritious food (173) scores high in need for access to support services. Rural women felt high need in information about nutritious food. This issue is completely involved with effective utilization of food. If they have available information about nutritious food, they can contribute a lot.

Knowledge on food safety (174) shows higher score in need for management skill. Knowledge on food safety is an important issue. Respondents in the study area have fair knowledge about different aspect of food utilization. They are interested about learning new things but they don't get proper support. Thus, they felt high need about knowledge on food safety.

Finally, uninterrupted supply of electricity (179) show higher score in need for physical facilities. It was observed in the study area that supply of electricity is not in a better condition. This condition should be improved that's why women felt high need in uninterrupted supply of electricity.

Table 5: Ranking of the issues of need for capacity building of the respondents

Issues	Score	Rank
Need for decision making ability		
Preservation of food	158	1
Distribution of food	154	2
Selection of food items	150	3
Buying of food for consumption	149	3
Preparation of food	144	4
Processing of food	137	5
Need for access to support services		
Information about nutritious food	173	1
Awareness program on food	171	2
Motivational video on food	170	3
Development workers for advice	170	3
Credit facilities	86	4
Need for management skill		
Knowledge on food safety	174	1
Food serving	157	2
Allocation of food items	142	3
Operational ability	135	4
Time allocation for cooking	127	5
Need for physical facilities		
Uninterrupted supply of electricity	179	1
Preservation facilities	177	2
Water and sanitation facilities	153	3
Storage facilities	153	3
Processing equipment	138	4

Relationship between the Selected Characteristics of Rural Women and their Extent of Need for Capacity Building

Pearson's Product Moment Coefficient of Correlation (r) was computed in order to explore relationship between the selected characteristics of the women and their extent of need for capacity building for household food utilization. The co-efficient of correlation (r) was used to test the null hypothesis regarding the relationship between two concerned variables. The relationship between the characteristics of rural women and focus variable has been presented in Table 6.

Among the eleven characteristics of the respondents, five characteristics had positively significant relationships with their extent of need for capacity building towards household food utilization. The correlation coefficient between age of the women and their extent of need for capacity building for household food utilization was significantly positive. Age is a key factor influencing the physical efficiency, as well as, performance in one's profession. It is said that the younger and the middle age group members are more active and more prone to change; they are more motivated than those of elder members. Patilkhede et al. (2016) observed almost similar relationship in his study.

Table 6: Relationship between the selected characteristics of rural women and their extent of need for capacity building

Personal characteristics of rural women	Correlation Co-efficient (r) with 58 df
Age	0.493**
Years of schooling	0.555**
Household size	-0.239
Household farm size	-0.125
Annual household income	-0.068
Training exposure	0.384**
Ability to cope with uncertainty	0.134
Organizational participation	0.087
Extension media contact	-0.122
Decision making capacity in the family	0.259*
Knowledge on food utilization	0.369**

*Correlation significant at 0 .05 level (2-tailed); ** Correlation significant at 0 .01 level (2-tailed)
Tabulated values (r) significant with 58 df: 0.250 (at 5%) and 0.325 (at 1%)

The correlation coefficient between years of schooling of the women and their extent of need for capacity building for household food utilization was significantly positive. This indicated that the educated women had more information seeking behavior about the programs that are related to training, skill development and building capacities of women. Patilkhede et al. (2016) and Khalak (2016) found almost similar relationship in their respective studies.

The correlation coefficient between training exposure of the women and their extent of need for capacity building for household food utilization was significantly positive. Training is an important component for building capacity on any matter. The training exposure of the respondents is also positively correlated with their felt need of capacity building for household food utilization. Here, it may be assumed that the women those who were exposed more to a limited extent of training, they understood more of their own need areas for further capacity development on the told issue. Because training opened their eyes i.e. made them aware of further need for improvement regarding household food utilization. Khan (2016) and Khalak (2016) found similar relationship in their respective studies.

The correlation coefficient between decision making capacity in the family of the women and their extent of need for capacity building for household food utilization was significantly positive. The correlation coefficient between knowledge on food utilization of the women and their extent of need for capacity building for household food utilization was significantly positive. Knowledge is derived through education and training. It helps to manage any activities properly. This implies that increase of knowledge on food utilization of the respondents, their capacity towards effective utilization will also increase. Khan (2016) and Khalak (2016) found similar relationship in their respective studies.

Extent of problems faced by the rural women

The observed score of the problems faced by the rural women in household food utilization ranged from 15 to 39 against a possible range of 0 to 42. Data presented in Table 4.8 showed that the mean and standard deviation of this score was 29.11 and 4.72 respectively.

Data presented in Table 4.8 indicated that the highest proportion (65 percent) of the respondents in the study area faced high extent of problem, while the rest 35 percent of the respondents faced medium extent of problem towards utilization of household food and none of the respondents in the study area faced low level of problem.

Rank order of the Problems as Faced by the Rural Women

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. Data furnished in the Table 8 indicated that the problem which ranked first was "Lack of electricity/interrupted supply of electricity" followed by second one "lack of educational facilities regarding proper household food preparation" and third one "food price fluctuation". "Non-cooperation of household members" was the least important problem among those faced by the rural women in their household food utilization.

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

Categories of the women based on problem score	Respondents		Mean	Standard deviation
	No.	%		
Low problem (≤14)	0	0	29.11	4.72
Medium problem (15-28)	21	35		
High problem (>28)	39	65		

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

Problems faced by the women	Score	Rank order
Lack of electricity/interrupted supply of electricity	160	1
Lack of educational facilities regarding proper household food preparation	156	2
Food price fluctuation	154	3
Lack of contact with communication media	148	4
Insufficient money for purchasing different food preserving material	145	5
Insufficient money for purchasing nutritious food	144	6
Want of fridge in house	129	7
Deficiency of knowledge of different aspects of household food utilization	120	8
Lack of food storage facilities	118	9
Lack of proper sanitation facilities	113	10
Inadequate materials and equipment in kitchen	111	11
Social and religious restrictions or prejudice	90	12
Lack of personal interest in proper food utilization in household	90	13
Non-cooperation of household members	85	14

Respondents' Suggestions on Solution of the Problems

Improving food utilization status in most low-income and farm households is not only to increase food availability but also to increase incomes of the farm household in order to increase their economic access to food and to provide the economic growth necessary to finance the educational and health services critical to improve food utilization. Among the suggestions, Involving rural women in different income generating activities to increase their household income, provision of uninterrupted supply of electricity, training and educational facilities regarding household food utilization etc. were deemed desirable by them to overcome the constraints.

Conclusions

Most of the respondents (80 percent) had medium status in managing household food utilization and short duration of training exposure as well as low extension media contact. The medium status of rural women to their household food utilization could be increased by enhancing their training exposure and extension media contact. Government and non-government organizations may conduct training and awareness programs according to need of rural women for increasing their awareness, management skill and operational ability as well as to develop manpower. All of the respondents had high need for capacity building towards household food utilization. So, there was a tremendous scope to provide facilities regarding household food utilization which may improve the capacity of rural women. DAE, Ministry of Health and other NGOs working in that area may take proper initiative to provide motivational video, information about nutritious food, periodical campaign on food safety issue.

Majority (82 percent) of the respondents had primary and secondary level of education. These characteristics are duly related to their capacity building for effective utilization of household food. In formulating any action plan for the women regarding such activities, age, years of schooling, training exposure, decision making capacity in the family and knowledge on food utilization might be considered on priority basis. Proper food utilization issues are blocked mainly due to lack of better income earning capacity, education and awareness of the household members. 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.

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