

CAPACITY STRENGTHENING OF RURAL WOMEN TOWARDS SCHOOL-GOING CHILDREN'S NUTRITION: A CASE FROM BANGLADESH

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Abstract — The study investigated the need for capacity strengthening of rural women towards nutrition management of school-going children, conducted in four villages purposively selected from Lama upazila under Bandarban district of Bangladesh. A total of 110 households were selected with data collected from the women of those households through face-to-face setting using pretested interview schedule. Measurement for the need for women's capacity strengthening used 21 issues under four broad dimensions such as 'need for decision-making ability', 'need for support services', 'need for managerial skill' and 'need for physical facilities' were formulated. A four-point rating scale with the responses like 'no', 'low', 'medium' and 'high' was administered with their corresponding scores such as 0, 1, 2 and 3, respectively. Pearson's product moment correlation coefficient (r) was computed to explore the relationships between selected characteristics of the respondents and their extent of need for capacity strengthening. The findings indicated that for all the four dimensions, the highest proportion of respondents were noticed with medium to high level of need for capacity strengthening towards maintaining school-going children's nutrition. Among the dimensions, the highest percentage of respondents (64.44%) was reported with the issues related to the dimension of need for decision-making ability. Correlation analysis indicated that respondents' year of schooling, annual family income, training exposure and household dietary diversity had significant positive relationships with their extent of need for capacity strengthening. It deems necessary to undertake and follow up women focused development initiatives in study areas through better access to resources, inputs and services so that the women folks can play their greater role in maintaining household nutrition for household in general and for school-going children in particular.

Keywords — Bangladesh, capacity strengthening need, nutrition, rural women, school-going children

INTRODUCTION

Nutrition is an important determinant of good health and active life. Food is the main source of good nutrition and people eat food to supply us with substances that are referred to as nutrients. Nutritional value or nutritive value as part of food quality is the measure of a well-balanced ratio of the essential nutrients- carbohydrates, fat, protein, minerals, and vitamins in items of food or diet in relation to the nutrient requirements of their consumers. In Bangladesh, rural women breastfeed the newborn babies, prepare meals for members of their family and their extensive professional involvement in food manufacturing, trade, public catering, health care and education are commendable (World Bank, 2007).

Women's nutritional knowledge have a great impact on the health of their children and, therefore, of the future generation. Lack of nutritional knowledge is one of the most important reasons of nutritional problems and consequently improper practice which can lead to several complications of women. All these they do in the face of constrain and attitudes that conspire to undervalue of their work. This discrimination hampers on food security as well as nutritional security (Islam, 2019).

Many children around the world, especially those from low-income families, start their school as stunted, underweight or suffering from multiple micronutrients deficiencies. At the same time, nutrition and diet-related problems are also highly prevalent in middle- and high-income countries. Indeed, all countries suffer from at least one form of malnutrition (IFPRI, 2017). Increasingly, children are suffering from several forms of malnutrition, ranging from undernourishment to excessive weight or obesity, with both extremes often occurring in combination with micronutrient deficiencies. Schools provide an opportunity to prevent and manage these various forms of malnutrition and contribute to

improving educational outcomes. Students who have participated in school nutrition activities can further act as influencers, with a particular impact on their families and younger siblings, potentially reducing the number of children starting school already malnourished (UNSCN, 2017).

The nutrition experts echoed that a large number of Bangladeshi children and mothers suffer from malnutrition, which is affecting the national development (Ahmed et al., 2012). Women and children suffer from stunting, thinness, underweight, obesity, low-birth weight, micronutrient deficiency and other snags. The main reasons for this poor situation are poverty, inadequate intake of nutritious food and lack of access to diverse foods (FRAC, 2017). Poor nutrition starts before birth, and generally continues into adolescence and adult life and can span generations. Chronically malnourished girls are more likely to remain undernourished during adolescence and adulthood, and when pregnant, are more likely to deliver low birth-weight babies (WHO, 2006). Nutritional status is an important index for measuring quality of life especially in children.

In Bangladesh, most of the people are still undernourished, especially in case of school- going children's 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 maintaining school going children's nutrition. Additionally, the rural women also actively help in producing vegetables and other crops in homestead and field. Eventually, they are directly assisting in supplying nutritious food in the households. The case is especially significant in the mountainous region where the study was conducted. This area was inhabited mostly by the tribal people and their women usually take part in most of the household and field activities including farming. So, the involvement in and role played by the rural women of mountainous region towards

maintaining household nutrition is of special implication. Analyzing the issues from these rural women's perspectives, the study was particularly designed to find out the need for capacity strengthening of rural women in maintaining school-going children's nutrition and to explore the relationship between the selected characteristic of rural women and their need for capacity strengthening in maintaining school-going children's nutrition.

Thus, the present study was carried out with the following specific objectives: 1) To find out the existing role played by rural women in maintaining school going children's nutrition; 2) To assess the need for capacity strengthening of rural women in maintaining school-going children's nutrition; and 3) To explore relationship of the need for capacity strengthening of rural women in maintaining school-going children's nutrition and their selected personal characteristics.

MATERIALS AND METHODS

Study Area

This study was conducted in four in four villages purposively selected from four unions namely, Aziznagar, Fasyakhali, Rupshipara, and Sarai under Lama Upazila of Bandarban district. In those unions, the Government of Bangladesh has been piloting school nutrition projects with support from FAO and other partners since the early 2000s, and began school feeding in 2011 based on the positive results and experiences of the World Food Programme (WFP) school feeding program. FAO and WFP agreed to implement this project as part of their broader collaboration on promoting nutrition-sensitive initiatives. The project focused on the institutionalization of a nutrition-sensitive school meal program in Bangladesh to ensure its sustainability, by building the capacities of relevant government institutions, local women growers, school teachers and School

Management Committees (SMCs) of Lama Upazila, Bandarban District (FAO, 2021).

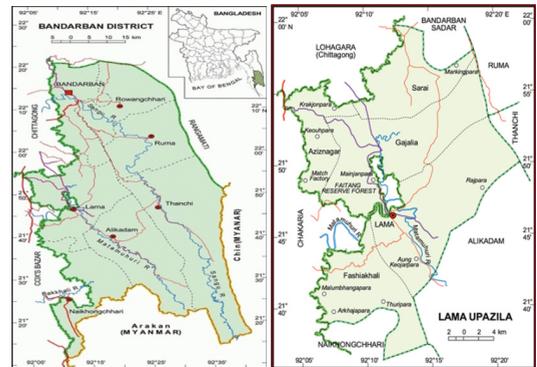


Fig. 1. Map of Bangladesh showing the study areas.

Lama Upazila consists of one municipality, seven Unions Parishads, 18 Mauzas and 247 villages. Lama had a population of 64,717, of whom 33,732 were aged 18 or older. Males constituted 53.94% of the population, and females 46.06%. Lama had an average literacy rate of 21.1% (7+ years), against the national average of 32.4%. The main source of income is agriculture which is 62.18% of the total household income.

Sampling, Data Collection and Analysis

An updated list of all the women was collected from the WFO and 300 selected households of the villages. A total of 110 households with at least one school-going child in each household) were selected purposively from those four villages constituted the sample for this study. Data were collected through personal interview using a pre-structured interview schedule. An interview schedule was carefully prepared in English, keeping in mind the objectives of the research. Appropriate scales were developed to operationalize the dependent and independent variables of the study. A draft interview schedule was pre-tested with 10 farmers from the study area that facilitated the researcher to identify

faulty questions and statements in the draft schedule. On the basis of pretest results and answers of the respondents necessary corrections, alternations, additions, and modifications were done in the interview schedule.

Five dimensions were selected. Each of the dimensions had 5 statements obtained from the FGD. A four-point rating scale was used to measure the role of focus variable. Possible responses were high, medium, low and no with the corresponding scores of 3, 2, 1, and 0 respectively. The innovation capacity of the farmers was computed by adding all the scores obtained from each of the dimension of innovativeness from which respondents will be benefitted. Hence, the scale score ranged from 0 to 15 for each dimension, where 0 indicates no innovation capacity and 15 indicates high innovation capacity of the farmers for adoption of farm machinery. Ranking of the statements was done to prioritize the statements where informal education, interest towards machineries, social networking, good physical health and income were number one for each dimension respectively.

Need for Capacity Strengthening of Rural Women towards Maintaining School-going Children's Nutrition

Need for capacity strengthening of rural women towards school- going children's nutrition was the main focus of the study. Capacity development is the process of strengthening the abilities of individuals, organizations and societies to make effective use of the resources in order to achieve their own goals on a sustainable basis (UNDP, 2009). To measure need for capacity strengthening of rural women regarding post- harvest activities for selected fruits and vegetables, Rahman and Begum (2009) - suggested five aspects viz. a) need for financial ability, b) need for decision making ability, c) need for access to support services, d) need for management skill,

and e) need for physical facilities. Ahmed (2007), Sharmin (2008) and Gazi (2009) also reported similar aspects in measuring capacity strengthening of rural women in their respective studies. By analyzing these earlier studies, the researcher selected four broad dimensions of capacity strengthening towards maintaining school going children's nutrition. These were:

1. Need for decision making ability
 - Identification of nutritious food
 - Selection of nutritious food
 - Processing of nutritious food
 - Buying of food for consumption
 - Distribution of food and nutrition
 - Preservation of food and nutrition
2. Need for access to support services
 - Credit facilities
 - Motivational video about nutrients
 - Awareness program nutrition
 - Information about nutritious food
 - Development workers for advice
3. Need for management skill
 - Knowledge on nutritional value
 - Operational ability
 - Time allocation for cooking
 - Allocation of nutritious food items
 - Nutritious food serving
4. Need for physical facilities
 - Preservation facilities
 - Processing equipment
 - Uninterrupted supply of electricity
 - Storage facilities
 - Water and sanitation facilities

Thus, a total of 21 issues were selected emphasizing the four broad dimensions of need for capacity strengthening of women. All the issues under each of the dimensions were measured on a four-point rating scale. Scores were assigned as 0, 1, 2 and 3 for the responses like 'no', 'low', 'medium' and 'high' need, respectively. The scores of all issues of each dimension are added to obtain the total score of a single dimension. The scores of all the four dimensions formed the total score of their need for capacity strengthening of rural women who could

vary from 0 to 63, where 0 indicates no need and 63 indicates high level of need. In addition, for making the rank order of each issue of four broad dimensions, the responses were multiplied with the total number of respondents (110) and thus, the total score of an issue in rank order could range from 0 to 330.

The coded data were put into the computer for statistical analyses. The SPSS computer program and MS Excel was used for analyzing the data. Pearson's product moment correlation co-efficient (r) was computed (Ray and Mandal, 2004) to explore the relationship between need for capacity strengthening of rural women and their selected characteristics towards maintaining school-going children's nutrition.

RESULTS AND DISCUSSION

Characteristics Profile of the Respondent Rural Women

There were various characteristics of the rural women that might influence their extent of need for capacity strengthening towards maintaining school going children's nutrition. In the present study, eleven personal characteristics of the rural women were selected which included age, year of schooling, household size, household farm size, annual family income, involvement in local associations training exposure, exposure of nutritional information and household dietary diversity. The salient features of the characteristics of the respondents are presented in Table 1.

Age of the respondents ranged from 20 to 50 years with a mean of 36.66 years and a standard deviation of 9.53 years. Based on their age, the women were classified into three categories as young (18-35), middle-aged (36-55) and old (>55).

Data presented in the Table 1 revealed that 52.7 percent of the respondents were

young, 40.9 percent were middle-aged and 6.36 percent were found as old. Ahmed (2007), Hoque (2011), Kowsari (2014) and Nasrin (2015) found 68 percent, 50 percent, 54 percent and 51.2 percent as middle-aged respondents, respectively. It should be mentioned that women involved in household food utilization were mostly covered by the young and middle-aged women. This seems logical, because it is expected that the young and middle-aged women were more active, energetic and enthusiastic in performing their activities for ensuring effective household food utilization. It was observed from the research that most of the young women were very much enthusiastic to learn new things about capacity strengthening towards maintaining school going children's nutrition and to contribute more in these kinds of activities.

The level of education of the respondents ranged from 0 to 10 years of schooling having a mean of 4.41 years and a standard deviation of 3.25 years. On the basis of their level of education, the women were classified into four categories as illiterate (0), primary (1- 5), secondary (6-10) and higher secondary (>10) presented in Table 1. Farm size influences both access to technology adoption and increase innovation capacity towards farm machinery (Lashgarara et al., 2012). Table 1 also reveals that average farm size of the respondent farmers was 0.7 ha and average annual family income 73,000 BDT. As family income is the key factor in the process of innovation capacity and adoption of new farm machinery. It is imperative to take necessary decisions towards innovation and adoption capacity apply machinery to the farm (Wang et al., 2008).

About 71.4 percent of the women were literate. It was quite logical, because most of the respondents were young and middle-aged and education was generally correlated with age. So, most of the respondents were literate. It might help improve their knowledge on capacity strengthening

Table 1. Socioeconomic characteristics of the respondents.

Characteristics	Respondent Categories	No	%	Mean	SD*
Age (Years)	Young (18-35)	58	52.7		
	Middle aged (36-55)	45	40.9	36.66	9.53
	Old (> 55)	7	6.36		
Years of schooling (Years)	Illiterate (0)	31	28.2		
	Primary (1-5)	42	38.2	4.41	3.25
	Secondary (6-10)	36	32.7		
Household size (No. of farmers)	Above secondary (>10)	1	0.9		
	Small (2- 4)	37	36.6		
	Medium (5-6)	65	59.1	5.22	1.64
	Large (>7)	8	7.3		
	Landless (0.002-0.02)	2	1.82		
Household farm size (ha)	Marginal (0.021-0.2)	39	35.44		
	Small (0.21-0.99)	53	48.2	0.65	1.6
	Medium (1.0-3.0)	16	14.5		
	Large (>3.0)	0	0		
Annual family income ('000' Tk.)	Low (≤80)	52	47.3		
	Medium (81-150)	45	40.9	98.73	54.39
	High (>150)	13	11.8		
Involvement in local associations (Years)	No (0)	62	56.36		
	Low (≤2)	39	35.45	0.99	1.42
	Moderate (2-4)	6	5.45		
	High (>4)	3	2.74		
Training exposure (Days)	No (0)	35	31.8		
	Short (1- 3)	59	53.64	1.2	1.45
	Medium (4-7)	5	4.56		
	Long (>7)	11	10		
Exposure to nutritional information (Scale score)	No (0)	5	4.54		
	Low (up to 10)	57	51.82	7.73	3.43
	Moderate (11-20)	48	43.64		
	High (above 20)	0	0		

*SD = Standard Deviation; *BDT = Bangladeshi Taka

towards maintaining school going children's nutrition. Rahman and Begum (2009), Hoque (2011), and Nasrin (2015) found 50 percent, 34 percent, 40 percent and 30 percent of the respondents had secondary level of education in their respective studies. Education is one of the basic needs of human life. It helps individuals become conscious of their surroundings and develop logical insight into many affairs of daily life. It also broadens outlook of individuals and leads them to explore new ideas to overcome many unwanted situation. It is assumed that women having higher education are more progressive and innovative than those of illiterate. They could perform better in managing capacity strengthening towards

maintaining school going children's nutrition and also could contribute many more than those who have less education.

The household size of the respondents ranged from 2 to 8 members, with a mean of 5.19 and a standard deviation of 1.7. On the basis of their household size, the respondents were classified into three categories as small (2-4), medium (5-6) and large (>7) as shown in Table 4.1. Similar categorizations were followed by Mandal (2011), Billah (2013), and Nasrin (2015). Result showed that among the respondents 36.6 had small sized, 59.1 percent had medium sized and 7.3 had large sized family. Data revealed that the most of the respondents (59.1 percent) had medium sized family. Islam (2019), Hoque (2011), and Nasrin (2015) found 53.33 percent, 53.85 percent, 56 percent and 48.8 percent respondents had medium sized household respectively. It should be mentioned that almost all of the respondents had small and medium sized family. Additional family related information of the respondent women were investigated and presented in Table 1. The table indicates that in average every family has one school going (pre-primary and primary) children. It is also shown that average number of non-school going children is very low in the study area. Thus, it is inferred that the school going children's percentage is relatively higher in the study area. This is a common trend as large households are breaking down into small household. It is assumed that the respondents having small and medium household likely to play more contribution in capacity strengthening towards maintaining school going children's nutrition.

Farm size of the rural women's household was measured in terms of hectare. Farm size of the women ranged from 0.02 to 1 hectare, with a mean of 0.65 hectares and a standard deviation of 1.6 hectares. On the basis of their farm size, the respondents were classified into five categories following the classification

of DAE (1999) such as landless (<0.02), marginal (0.021-0.20) and small (0.21-1.0). Distribution of the respondents according to their farm size has been shown in Table 1. Data presented that the highest proportion of the rural women (48.2percent) had small farm size, 35.44 percent had marginal, 14.5 percent had medium and 1.82 percent were landless respectively and there were no large farm sized women in the study area. The findings indicated that majority (about 83.6 percent) of the women had marginal to small sized farm. Almost similar findings were found by Rahman and Begum (2009), Hossain (2013), and Nasrin (2015) in their respective studies. The findings indicated that most of the respondents had marginal household farm size. This is a general trend in Bangladesh that farm size of the people is being decreased day by day due to land fragmentation from generation to generation.

The family income of the respondents ranged from Tk. 15 to 375 thousand, with a mean of 98.73 thousand and a standard deviation of 54.39 thousand. On the basis of their annual family income, the respondents were classified into three categories such as low (≤ 80), medium (81-150) and high (>150) income. Distribution of the respondents according to their annual household income has been shown in Table 4.1. Data presented that the highest proportion of the rural women (47.3 percent) was in low income category, while 40.9 percent and 11.8 percent of them were in medium and high income category, respectively. Hossain (2013), Nasrin (2015) and Khalak (2016) found 75 percent, 52 percent, 70 percent and 53.3 percent medium annual household income respectively in their studies. Results revealed that most (88 percent) of the respondents had low to medium annual family income which had positive relationship with household farm size. Since most of the respondents had small to marginal household farm size, less number of earning member in 58 the

family and did not operate new technologies and other income generating activities, the annual income tended to be medium to low.

Involvement in local association score of the respondents ranged from 0-4 with a mean of .99 and a standard deviation of 1.42 (Table 1). On the basis of local association score, the respondents were divided into four categories as No (0), low (≤ 2), moderate (2-4) and High (>4). Data revealed that most of the respondents (56.36 percent) had no involvement while 35.45 percent and 5.45 percent had low and moderate involvement and only 2.74 percent had high involvement in different association. Ahmed (2007), Sharmin (2008) and Rahman and Begum (2009) observed almost similar findings in their respective studies. They found 79 percent, 50 percent and 92 percent less involvement in association respectively. Most of the respondents were involved with less number of an association for less number of years. It might be due to women being normally less affiliated with associations than that of men.

Training exposure score of the respondents ranged from 1 to 30 days with a mean of 1.2 days and a standard deviation of 1.45 days (Table 1). On the basis of training exposure, the respondents were divided into three categories as short-term (1-3), mid-term (4-7) and long-term (>7). Findings showed that majority of the women (53.64 percent) had short-term training exposure, while 4.56 percent having mid-term and 10 percent having long-term training exposure. Ahmed (2007) found similar findings in her study. Training exposure was directly related to organizational affiliation which reflected in the present research. Most of the respondents had less participation in different organizations and hence their training exposure was also low. Though these training were helpful for their improvement, they were not functionally active to income generating activities because of insufficient and high interest credit.

Exposure to information score of the respondents ranged from 0 to 24 against a possible range of 0 to 45, with a mean of 7.73 and a standard deviation 3.43. On the basis of their exposure to information, the respondents were classified into four categories No (0), low (up to 10), moderate (11-20) and high (>20) contact. Distribution of the respondents according to their exposure to information has been shown in Table 1. It was found that 51.82 percent of the respondents had low exposure of information, while 43.64 percent and 4.54 percent had moderate and no exposure information. None of the respondents had high exposure information. Rahman (2010) and Nasrin (2015) also reported almost similar findings in their respective studies. They found 76 percent and 93.8 percent respectively. Exposure to information is a very effective source of receiving information about new and modern technologies. The findings clearly showed that most of the rural women had low exposure to information which was an indication of inadequate extension service to that community.

Household Dietary Diversity

The information on dietary diversity was collected using a qualitative 24-hour recall at individual level of all the foods and drinks consumed by the respondent in the previous day, inside and outside the home for calculating household dietary diversity in Lama. The data collected with the dietary diversity questionnaire was analyzed to calculate dietary diversity score. While calculating the average dietary diversity score, the proportion of respondents consumed individual food groups of interest were also calculated. Information on consumption of individual food groups was also calculated to investigate dietary patterns by quintile of the dietary diversity score (terciles) has been shown in Figure 2. The percent households consuming each food group are normally used as a one-time measure or for on-going monitoring. The

study included 110 households in Lama and the distribution of the households consumed each food group by any member in last 24 hours is presented in Figure 2.

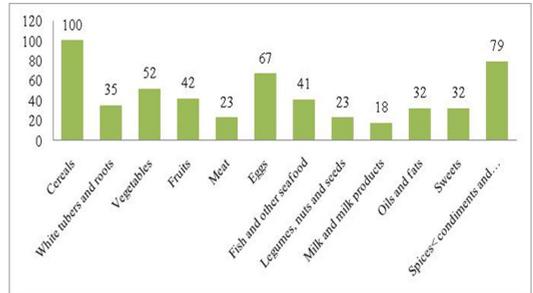


Fig. 2. Distribution of respondents (%) to household dietary diversity.

Figure 2 shows all the respondent sate cereals as a source of carbohydrates. Vegetables and fruits groups were the next predominant food groups from where nearly two thirds of the total respondents included items to their diet. More than half of the households consumed eggs and fish/other sea-foods food groups. The proportion of respondents who eat meat and legumes/nuts, milk/milk products, oils/fats food groups were only 23%, 18%, 32% respectively. Besides cereals, white tubers, and nuts remained as the partial source of energy for slightly above of one third of the total respondents (35%). However, a large majority of the households (79%) consumed spices/condiments/ beverages food group as a taste enhancer of their diet.

Role Played by Rural Women in Maintaining School-Going Children’s Nutrition

Good nutrition can help reduce the risk of some diseases, including heart disease, diabetes, stroke, some cancers, and osteoporosis. Food insecurity at the household level constricts the opportunities that an education can provide. In a nutshell, children from poor and food-insecure families face significant constraints in going to school, continuing schooling and learning in school.

Maintaining school going children's nutrition promote educational outcomes by enabling more children to attend class consistently and improving children's ability to learn once they are there. Existing role played by rural women in maintaining nutrition may include health and nutrition improvements and local economic development along with educational outcomes.

Anyway, the mountainous women played their great roles in both production and utilization of food for the households and especially school-going children. Their contribution were regarding in main areas of food production and preparation, food preservation, water quality maintenance and sanitation, and household food distribution. The major roles played by the women for household nutrition were as follows:

1. Growing vegetables in main land and homestead
2. Growing vegetables in homestead year-round to meet household nutrition
3. Helps husband to select appropriate vegetables for year-round cultivation
4. Discarding the disease affected parts of raw materials before cooking
5. Selection of nutritious food material for cooking
6. Measuring and allocating nutritional food material as per body requirement of the household members, especially for the school-going children
7. Cleaning/washing food materials before cutting/preparing raw materials for cooking
8. Using lid on pots or cover the of food materials to keep them safe
9. Preserving food through heating
10. Food preservation in fridge
11. Using clean, tube-well water for drinking and cooking
12. Instructing/practicing school-going children for washing hands with soap after using latrine
13. Instructing to use sanitary latrine by

the children

14. Cleaning kitchen, home and homestead to keep food hygienic
15. Using water after boiling when tube well water is not available
16. Contacting health workers to know about nutrition, hygiene and sanitation for the children and the overall household members

In conclusion, it can be said the women in mountainous villages play a great role to maintain nutrition of school-going children of them. Studies of Nasrin (2015) and Fariha (2018) revealed similar findings in their studies on related issues. But the remoteness of housing areas from the school and farming land, uneven and poor road communication, poverty, lack of irrigation waters in summer/winter, lacking in knowing about nutrition etc. hindered their role to be played appropriately. They need support and services from the concerned agencies in the mountain areas to keep up their household nutrition in general.

The Need for Capacity Strengthening

The capacity strengthening of rural women towards maintaining school going children's nutrition was defined as the extent to which they have the need for accessibility to physical, managerial, support services as well as the ability to make decision about maintaining nutrition. Need for capacity strengthening of rural women was the focus variable of the present study. Four aspects of capacity strengthening were selected to measure need for capacity strengthening of rural women. The findings have been interpreted in the following subsections.

Overall need for capacity strengthening of Rural Women

The need for capacity strengthening of rural women was assessed in terms of score. Possible need score could range from 0 to 63, while observed score ranged

from 16 to 61. The mean score is 38.81 with a standard deviation of 10.66. Based on the need score the respondents were classified into three categories as shown in Table 2.

Table 2. Overall need for capacity strengthening of rural women (n=110). Possible score=0-63 and observed score=16-61.

Categories of need	Respondents		Mean	Std. Dev.
	No	%		
Low (≤21)	0	0		
Medium (25-41)	0	0	38.81	10.66
High (>45)	110	100		

Data presented in Table 2 shows that 100 percent of the respondents had high extent of need for capacity strengthening. While collecting the data, it was observed in the study area that there was scarcity of different facilities e.g. physical, support services, managerial and ability to make decision regarding strengthening of nutrition 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 strengthening towards maintaining school going children’s nutrition. Having similar socio-economic background, the women included in the sample 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 showed similar outcomes in their respective studies.

Aspects-wise Need for Capacity Strengthening of Rural Women

Four aspects of capacity strengthening were selected to assess the extent of need for capacity strengthening towards maintaining school going children’s nutrition. The computed need score of all the aspects have been shown in Table 3.

Almost 65% of the respondents was in high need for decision making ability with a mean of 11.36 and a standard deviation of 2.84. This was logical because the aspects of decision making ability like identification of nutritious food, selection of nutritious food, processing of nutritious food, buying of food for consumption, distribution of food and nutrition, preservation of food and nutrition were explored in the present study area but these were not atsatisfactory level. These issues were actually connected capacity strengthening in maintaining school going children’s nutrition that’s why

Table 3. Aspect-wise need for capacity strengthening.

Aspects of need	Possible score (Observed score)	Respondents			Mean	SD
		Categories	No	%		
Decision making Ability	0-18 (5-16)	Low (≤6)	11	10		
		Medium(7-11)	28	25.45	11.36	2.84
		High(>11)	71	64.55		
Access to support services	0-15 (6-15)	Low (≤5)	0	0		
		Medium(6-10)	59	53.64	10.19	2.03
		High(>10)	51	46.36		
Management skill	0-15 (3-15)	Low (≤5)	7	6.36		
		Medium(6-10)	67	60.91	9.52	2.98
		High(>10)	36	32.73		
Physical facilities	0-15 (2-15)	Low (≤5)	27	24.54		
		Medium(6-10)	58	52.73	7.74	2.81
		High(>10)	25	22.73		

women felt high need for that aspect in the study area. Second highest proportion (60.91 percent) of the respondents was in high need for management skill.

Management skill was directly associated with proper utilization of household food. If their existing skill increased, they would contribute effectively. The third and fourth highest proportion followed by 53.64 percent access to support services and 52.73 percent need for physical facilities respectively. It seems normal that women did not have low need for any aspects of capacity strengthening.

Thus, it was a simple analogy that the components available in low quantity would be felt as high need components.

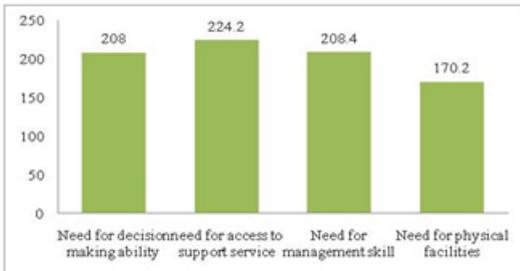


Fig. 3. Comparison of different aspects of need for capacity strengthening.

Figure 3 shows that the highest need score (224.2) of the respondents was in access to support services followed by access to management skill (208.8), decision making ability (208), respectively and the lowest need (170.2) of the respondents was in physical facilities. It might be worthy to mention that the differences among the aspects of capacity strengthening 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 strengthening towards maintaining school going children's nutrition.

Rank Order of the Issues of Need for Capacity Strengthening of Women

Different issues associated with need for capacity strengthening of women has been examined by computing rank order through score are shown in Table 4. Data presented that score of the issue associated with need for capacity strengthening of women ranged from 0 to 255 against a possible range 0 to 330. The value of score of twelve issues exceeded 200 and eight issues exceeded 150, the value of one issue is below 150. However, top one issue in each four aspects of need for capacity strengthening of rural women have been discussed here. Preservation of food and nutrition (239) shows higher score in need

for decision making ability. In most cases women take decision about how to preserve their food and nutrition. But they were not in satisfactory level that is why they felt high need for decision making about preservation of food.

Awareness program on nutrition (255) scores high in need for access to support services. Rural women felt high need in awareness program on nutrition. This issue is completely involved with effective maintaining of nutrition. It was observed in the study that awareness program on nutrition was not in a good condition. This condition should be improved and this is why women felt high need of awareness program on nutrition and they can contribute a lot.

Knowledge on nutritional value shows high score (227) in need for management skill which is an important issue in this regard. Respondents in the study area have fair knowledge on different aspects in maintaining nutrition. They were interested about learning new things but they did not get proper support. Thus, they felt high need about knowledge on nutritional value. Finally, water and sanitation facilities showed a high score (198), in need for physical facilities. It was an important issue in maintaining nutrition. Need for water and sanitization facilities also appeared as an important physical facility. However, there is a huge crisis of water and sanitary facilities in remote hilly areas.

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

Among nine characteristics, the years of schooling, annual family income, training exposure, and household dietary diversity of the rural women were positively correlated with the need for capacity strengthening in maintaining school going children's nutrition. Other characteristics of the rural women were not significantly correlated with the

Table 4. Ranking of the issues of need for capacity strengthening of the respondents.

Issues	Score	Rank
Need for decision making ability		
Preservation of food and nutrition	239	1
Processing of nutritious food	219	2
Identification of nutritious food	219	2
Selection of nutritious food	201	3
Distribution of food and nutrition	193	4
Buying of food for consumption	177	5
Need for access to support services		
Awareness program on nutrition	255	1
Development workers for advice	239	2
Information about nutritious food	227	3
Motivational video about nutrients	224	4
Credit facilities	176	5
Need for management skill		
Knowledge on nutritional value	227	1
Allocation of nutritious food items	214	2
Nutritious food serving	209	3
Operational ability	202	4
Time allocation for cooking	192	5
Need for physical facilities		
Water and sanitation facilities	198	1
Uninterrupted supply of electricity	197	2
Processing equipment	168	3
Storage facilities	158	4
Preservation facilities	130	5

need for capacity strengthening maintaining school going children’s nutrition (Table 5).

So, from these it can be said that with the increase of these characteristics their need for capacity strengthening maintaining school going children’s nutrition also increases. Patilkhede et al. (2016) and Khalak (2016) found almost similar relationships in their respective studies. This indicated that the educated women had more information seeking behavior about the programs that were related to training, skill development, maintaining and strengthening competencies of women which, therefore, contributed to their

increase in the level of need for capacity strengthening in maintaining school going children’s nutrition.

Table 5. Relationship between the characteristics of the rural women and need for capacity strengthening.

Personal characteristics of the rural women	Correlation Coefficient (r) with 108 df
Age	-0.004
Years of schooling	0.208*
Household size	-0.013
Household farm size	-0.076
Annual household income	0.202*
Training exposure	0.328**
Exposure to nutritional information	-0.037
Involvement in local association	0.030
Household dietary diversity	0.240*

CONCLUSIONS

The remoteness of housing areas from the school and farm land, uneven and poor road communication, poverty, lack of irrigation waters in summer/winter, lacking in knowing about nutrition etc. hindered their role to be played appropriately. Concerned GOs and NGOs may conduct training and awareness programs, provide supports according to need of rural women for increasing their operational ability in maintaining school-going children’s nutrition.

All of the respondents felt high need for capacity strengthening to maintain school going children’s nutrition. The felt needs for capacity escalation must be fulfilled to ensure better involvement of women maintaining school going children’s nutrition. But it is not an easy task alone for government to discharge the responsibilities. Government

organizations like Department of Agricultural Extension, Ministry of Health and other Non-Government Organizations like BRAC, Helen Keller, GRAMEEN BANK may take proper initiative to provide motivational video, information about nutritious food, periodical campaign on food safety issue to the women so that they can strengthen their capacity.

Years of schooling, annual family income, training exposure, and household dietary diversity of the were some of the personal characteristics of the rural women found to be significantly linked to their felt need for capacity strengthening towards maintaining school going children's nutrition. In formulating any action plan for the women regarding such activities, at least these variables might be considered on priority basis.

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