



Determinants Associated with Women Empowerment: The Perspectives and Views of Char Area of Bangladesh

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Aim: The study analyzed the determinants associated with empowerment of char women in the northern region of Bangladesh.

Study Deigns: Purposive random sampling procedure.

Place and Duration of Study: Data was collected from two villages namely Horipur and Kanchibari from Sundorganj upazilla of Gaibandha district and Chilmaly and Raniganj from Chilmaly upazilla of Kurigram district. The duration of data collection was from 15th October to 12th December 2020.

Methodology: From 1440 population around 6percent of the representative sample was taken randomly as sample of the study. The sample size of the study were 200. Descriptive statistics and multiple regression model were used to data analysis.

Results: Outcomes reveals that most of the respondents had medium empowerment 57 percent where 39 percent had low empowerment and only 4 percent had high empowerment. Training, women personal income, access to credit and extent of participation on income generating activities were the important variables that significant at .05percent and .01percent level influence women empowerment of the study area with an R² value of 0.44. Contrary, access to resources and problem was important fact in char area which had negative trend with women empowerment.

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Conclusion: To minimize the existing char problem should be ensured the supplying of enough agricultural inputs (seeds, fertilizer, pesticides, vaccine) and nonagricultural inputs in time through regular governmental programs. Education has potential link with women empowerment and recommends for the promotion of education in char rural area to build women's capacity.

Keywords: Women empowerment; char women; factors, women's capacity.

1. INTRODUCTION

A Char is a sand bar which has emerged from the riverbed following deposition and accretion of silt and alluvium [1]. The economy of the river Basin is highly dependent on agriculture, resulting in few local employment opportunities for char dwellers. River erosion, flood, cyclone and drought were found most frequent in the char area that cause several damage to the respondents cultivable land, assets, agricultural enterprises and basic necessities [2]. Limited access to improve water sources and sanitation and low levels of services such as health, education and livelihoods support are further challenges, resulting in chars-dwellers being amongst the poorest people in Bangladesh. Women on the chars face an additional set of challenges because social norms are patriarchal, opportunities for education are limited and they have little control over family finances or decision-making. Through Bangladesh's women have made progress in various aspects of health, education, and work, but still face sizable gender gap [3]. In char, households face food insecurity and suffer from the effects of under-nutrition than mainland. In reality, women are the most deprived section in Bangladesh considering education, income earning, scope of employment, decision making etc. thus making them less empowered [4]. Empowerment in its emancipatory meaning is a serious word one which brings up the question of personal agency, one that links action to needs, and one that results in making significant collective change. Empowerment from participatory approach differentiates the aspects of power structures in society: ideas (ideologies), resources (distribution of material and intellectual reassures) and institutions and systems (family, community, state) [5]. The ability to choose has been considered as the central theme of the concept of power. Power may have a negative sense like threat but empowerment changes the negative senses to a positive one [6]. But empowerment not only for men; it also should be for women. Women empowerment has been a prime focus of the tripartite partnership between the Government of Bangladesh. Women

empowerment an effort to empower themselves by having abilities or skills in accordance with the interest and talents possessed by women [7]. It is the process of having and using resources in an agentic manner to reach certain achievements [8]. Women's empowerment through collective rather than individual business ownership, thereby adhering to relevant cultural norms emphasizing collective rather than individual growth [9].

Almost fifty percent of Bangladesh's population is women. Like men, women take the responsibility of human capital formation in the family and hence in building nation and its destiny; but the status of char women in our country is far below the expected level. Women are poor because lack of right to the very least specifications for living [10]. Opportunities in cash expenditure for rural women including household decisions remains little restricted in a traditional society of Bangladesh [11]. Both, economic control and decision-making powers are vested in the hands of men as the household authority [12]. Women are attributed as being of reduced position in comparison to men, and hardship is greater among women than men [13]. Only about 36 percent Bangladeshi women participate in the labour market [14].

Most of the riverbank women dwellers involved to Non-government organizations (NGOs) for borrowing loan. Besides taking loan, they are becoming aware by getting training from NGOs. Some NGOs provides relief services at the emergency period like flood, river erosion, cyclones etc. NGO involvement especially microfinance programs have a significant influence on social empowerment, awareness and education, self-esteem, sense of dignity, organizational and management skills, mobilization of collective lengths, etc. Microfinance can increase the standard of living of the economically active poor, improve their access to healthcare and education, reduce vulnerability and promote the empowerment of the women and marginalized group [15]. But it is also found that 75 percent women have almost no access to income, credit, property control,

knowledge and training. They are in trap of socio-cultural barriers. Their participation in the socio-economic actions is low as compared to men participation. Though, Bangladesh has taken several initiatives to decrease the poverty percentage by empowering women, but many issues hinder it. In an attempt to address these crucial issues, study is carried out to examine the factors associated with empowerment of char women.

Therefore the following specific objectives were formulated for giving proper direction to the study

To determine and describe socio-economic characteristics of char rural women.

To explore the factors associated with women’s level of empowerment.

2. METHODOLOGY

The study was conducted on char areas by randomly selected two village namely Horipur and Kanchibari from Sundorganj upazilla of Gaibandha district and Chilmary and Raniganj from Chilmary upazilla of Kurigram districts. These char areas are suitable for the proposed study because those are situated near the bank of river of Bharmhaputro, Dharla, Ghaghot and Tista. These areas are naturally low land and extremely flood prone. Almost every year flood occurs in those villages and causes human sufferings and damage to crop, livestock, fisheries and other resources. With the annual risk of flooding and erosion, life on chars is extremely precarious.

Based on the preliminary information taken from field level, about 1200 women from the study area were constitute the population of the study. From this population around 6percent of the representative sample was taken as sample of the study. From each study village 50 women were selected randomly from the list of the population. Thus a total of 200 women were formed the sample size of the proposed study.

A sample or sub sample of 50 respondents is to be done regardless of the population size [16].

Therefore, the 50 women were selected from four villages included in the study.

SPSS software was used to data analysis. To describe the socio-economic characteristics multiple regression analysis was used to identify the determinants influence the empowerments.

The model is as specified.

$$Y = b_1X_1 + b_2X_2 + b_3X_3 + \dots \dots \dots b_n X_n + c \quad (1)$$

Where,

- Y = women empowerment
- X₁ + X₂ +X₃+.....X_n =Variables
- b_i = Regression coefficient (b₁.....b_n)
- e = error term

3. RESULTS AND DISCUSSION

3.1 Socio-Economic Characteristics of Char Women

The socio-economic characteristics of char women include age, marital status, personal education, household size, farm size, household income, women’s personal income, credit received, training received , access to resources and problem of respondents. Distribution of respondents by socio-economic characteristics is as shown in Table 2.

The percentage distribution of respondents by age showed that most 43.5 percent of the respondents in the study area were within the age of 18 and 35, they are said to be in their active and energetic age. They are able to cope with different activities. The mean age of the respondents was 35 years which indicates that they are still very active. According to development psychologists, young and middle age groups of people are physically stronger, mentally sound in compare to old aged people. The age characteristics of the women has been considered as positively contributing if she is in active youths because she could actively engage in income generating activities.

Table 1. Distribution of the respondents according their Sample size

Name of the districts	Name of the Upazilas	Name of the villages	Population	Sample size
Gaibandha	Sundorganj	Horipur	325	50
		Kanchibari	345	50
Kurigram	Chilmari	Chilmari	230	50
		Raniganj	300	50
Total			1200	200

Findings on the analysis of marital status distribution of the respondents showed that highest proportion of the respondents were married 84 percent and 32 percent were divorce. Marriage helps women to achieve empowerment as compared to girls who are not yet married [17]. A married woman has been given many rights regarding taking important household and financial decisions [18].

The distribution of the personal education of the respondents in the study area showed that most of the respondents were illiterate 62 percent. Only 31 percent respondents had formal education from primary level. 7 percent had secondary education. It implies that most of the respondents in study area cannot read or write [19]. Education is the process of developing the mind of an individual and it increases his power of observation, analysis, integration, understanding, decision-making and adjustment to new situation. It helps individuals to become rational, conscious and get useful information to solve their day-to-day problems from different sources of information. It is expected that for the livelihood improvement there might be an impact on education. Education helps to gain knowledge on the improved capacity on awareness about oneself.

In this study majority of the respondents had household size 59.5 percent of between 4 and 6 with the mean household size 5 persons. It means that most of the respondents had medium household size. Most of the respondents in rural area had medium category family size 5-6 members [20].

Majority of the respondents 92 percent had small to marginal farm size category. In Bangladesh small farmers live on a subsistence level and this may be one of the vital reasons for their apathy towards adoption of improved farming practices in their farm. Small farm size normally gives less produce of course with less capital and less management. Evidence shows that 80percent of char land inhabitants were ultra-poor [21].

Almost all the respondents 93percent had medium to low household income. The gross annual household income of a family is an important indicator of how he can invest in his family. Naturally, the person who has more income can invest more in his family and as a result he may lead a quality life. People with low income generally invest less in their family with poor lives. As a result a considerable number of the women face difficulty or risk in rural char

areas in Bangladesh because of low family income. The average household income of the respondents were 96500 taka [22] in char rural area.

Women's personal income distribution of respondents in the study area also showed that most of the respondents 74.5 percent respondents had low category. Women's personal income is a very important variable of women empowerment. Women who are engaged in income generating activities have more power than who are not. They have a priority in their family in every sphere. So personal income helps to develop empowerment [23].

It also indicates that about fifty seventh percent respondents had no access to credit. Only 42.5 percent of the respondents received credit. Credit helps to rural people to overcome crisis. Char Livelihood Programme gives credit support to rural women. Some women took credit and engaged themselves in different IGAs activities. Thus they helped their families and develop their position in their families. Similar findings of another study shown that about 81 percent were taking loan in char area [24].

Training distribution of the respondents in the study area showed that about 48 percent respondents had no training. Among them 45.5 percent had high to medium training. Only 7 percent had low training. Training helps to develop one's knowledge as well as skill. It is a motivating factor of empowerment. CLP gives several training on different issues. Those who have taken training develop themselves and improve their risk handling capacity.

Most of the respondents 98 percent were engaged in medium to high IGAs practice. Sustainable development cannot succeed without active participation of women; so women's participation in all sphere should be given importance [25].

Access to resources distribution of the respondents in the study area showed that 53.5percent respondents had medium access to resources. The production sector needs inputs in order to procedure desired goods or products. Shortage or non-availability of those essential inputs in time hampers production seriously. As a consequence, this factor is considered as very important. Essential production inputs and facilities for rural people included good quality of seed, fertilizer, farm machinery, irrigation water, technical support, information technology, and

Table 2. Salient feature of CLP beneficiaries' women in char

Variables	Frequency	Percentage	Mean
Age			17.790
Young (18-35)	87	43.5	
Middle (36-50)	68	34	
Old (Above 50)	45	22.5	
Marital status			2.16
Unmarried(0)	0	0	
Married(1)	168	84	
Divorce(2)	32	16	
Personal Education			.450
No education (0)	124	62	
Primary education (1-5)	62	31	
Secondary education (6-10)	14	7	
Higher education (Above 10)	0	0	
Household size			1.64
Low (1-3)	76	38	
Medium(4-6)	119	59.5	
High (Above 6)	5	2.5	
Farm size			1.48
Landless (.002-.02)	16	8	
Marginal (.021-.2)	72	36	
Small (.21-.99)	112	56	
Medium (1-3)	0	0	
Large (Above 3)	0	0	
Household income			1.63
No (0-.99)	0	0	
Low (1-50000)	88	44	
Medium (50001-100000)	98	49	
High (Above 100000)	14	7	
Women personal Income			1.05
No(0-.99)	24	12	
Low(1-1000)	150	74.5	
Medium(1001-8000)	19	9.5	
High(Above 8000)	8	4	
Access to credit			.9650
No(0-.99)	115	57.5	
Low(1-10000)	19	9.5	
Medium (10001-20000)	24	12	
High(Above 20000)	42	21	
Training			1.43
No(0-.99)	96	48	
Low(1-9)	15	7.5	
Medium(10-19)	42	21	
High(Above19)	47	23.5	
Extent of participation			2.45
No(0-.99)	1	.5	
Low(1-9)	2	1	
Medium(10-19)	102	51	
High(Above19)	95	47	
Access to resource			2.27
Low(1-9)	19	9.5	
Medium(10-19)	107	53.5	
High(Above19)	74	37	
Problem			2.42
No(0-.99)	0	0	
Low(1-10)	8	4	
Medium(11-20)	100	50	
High(Above 20)	92	46	

credit facility. All the essential individual input scores were added together to have the availability of input scores.

Most of the respondents had faced medium to high problem 96 percent. Women are continuously facing many problems even after having self-confidence, individuality, self-respect, personality, capacity, talent and efficiency more than men [25]. They are facing problems in their daily life even after they are given equal rights and opportunities like men. There are also discrimination of power and work between men and women because of the patriarchal system families. Problem hinders empowerment; high problem have low empowerment.

3.2 Measurement of Women Empowerment

Women empowerment was put into operation on the basis of five indicators. To assess the level of empowerment of char women respondents were asked 40 questions on the basis of their indicators. Each question was weighted by two marks. A 4-point rating scale was used. The assigned score of the respondents were 3, 2, 1 and 0. In order to measure women empowerment index all the indicators were then

sum up and combined into one unique measure. Thus, the score of empowerment ranged from 0-80, where 0 indicated very low empowerment and 80 indicated high empowerment.

In the context under analysis, the following indicators have been identified:

- Self- confidence
- Knowledge and awareness on women rights
- Personal autonomy
- Access of savings
- Participation in household decision making

The score of women empowerment index was ranged from 1 to 80. The average score was 1.65 with a standard deviation of .5559. The distribution of the respondent's according to their empowerment has been presented in Table 3.

Data contained in the table indicated that highest proportion of the respondents had medium level of empowerment 57 percent and 39 percent respondents had low level of empowerment. Only 4 percent respondents had high level of empowerment. So, women level of empowerment in char area was medium to low.

Table 3. Distribution of the respondents according to their level of empowerment

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
No(0-.99)	0	0	1.65	.5559
Low(1-25)	78	39		
Medium(26-50)	114	57		
High(Above 50)	8	4		
Total	200	100		

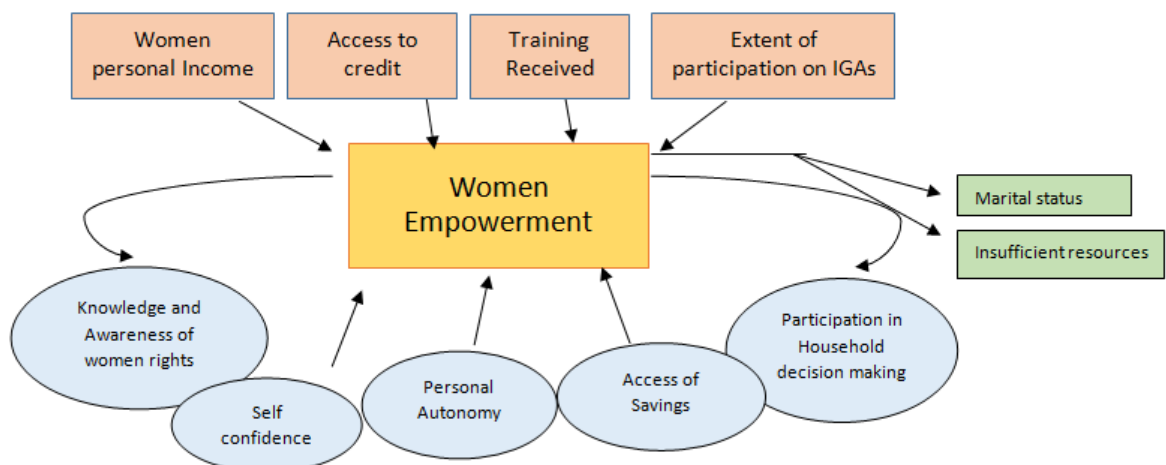


Fig. 1. Diagram of women empowerment in char area

3.3 Determinates Associated with Women Empowerment

To determine the factors associated with the women empowerment, multiple regression analysis (enter method) was conducted. Age, marital status, personal education, household size, farm size, household income, women's personal income, access to credit received, training received, extent of participation on IGAs, access to resources and problem faced by rural women were considered as independent variables of the regression analysis.

The result of the factors that influence the women empowerment in the study area is presented in table 4. These was achieved by multiple regression analysis. From the results the overall F- statistics (12.249) is significant in 5percent level of probability implying the fitted variables significantly influence women empowerment. The coefficient of multiple determinations $R^2 = .440$ an implication that the fitted variables accounted for 44 percent variations in women empowerment in the study area.

The findings of multiple regression analysis indicated that the factors associated with women empowerment were women personal income, access to credit, training received and extent of participation on IGAs.

Detail results shows that coefficient of women personal income is positive and significant at 5percent level implying that the higher the income higher the empowerment [26]. Only when women add a larger amount of money to the family income, become able to get the position of decision-making, access to resources, a voice against violence and empowerment.

Table 4 showed that the access to credit was significant and showed a positive trend, it implies that the probability of the change at women empowerment increases with the increasing of the taking credit of the respondents. A person can take credit when he was in problem. The land-less char women have less opportunity to get the credit due to having no valuable assets for security and the small number of credit institutions available in char areas. Their social net-works are poor due to their remoteness. Access to technology for better livelihoods also requires money. If women have the opportunities to take credit and use it for family crisis her

status in a family can be develop. On the other hand she can use it for creating the sources of income activities. Microcredit helped to many women in their business. Most of the microcredit organization target women as they have limited access to credit and limited access to have employment opportunities. Thus women with are low credit risk and more likely to share their credit benefits with their family and specially children [27]. Micro-credit programmes tend to focus on promoting changes at the individual level. Microcredit helped to influence women economic empowerment [24].

The findings of the multiple regression analysis indicated that training received was significant and showed a positive trend. It implies that It means that increasing training improve women's personality, self confidence level and also level of empowerment. A person who receive training could able to do solve anything. To adopt new practice in char women should gain knowledge about it. Women with knowledge are likely to be able to take quick and appropriate decisions in household crisis. So, possessing higher skill and knowledge by an individual is a crucial factor for decision making process on various aspects of household activities [28].

Multiple linear regression analysis also indicated that extent of participation on IGAs was significant and showed a positive trend, it implies that the probability of the change at women personal level increases with the increasing of the participating in IGAs practice of the respondents. Increasing women's income is the right way to empower women [29] in the patriarchal society of char Bangladesh. Economic empowerment through income-generating activities, on the other hand, reduces the poverty of the women themselves [30]. Char livelihood programme provided various income generating activities. Most of the CLP women beneficiaries were involved in IGAs program. Thus their income increased which contributed to family income. Therefore, their social status also increased. They can take part in family decision making. It helped to improve their confidence and personality.

3.4 Step-Wise Multiple Regression Analysis

A step-wise multiple regression analysis had been applied to identify significant explanatory variables that have effects on empowerment. The results of the multiple regression analysis

Table 4. Multiple regression estimates of the determinants of women empowerments

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.194	.327		3.646	.000
Age of respondents	.040	.045	.056	.893	.373
Marital status	-.133	.093	-.088	-1.427	.155
Personal education	.036	.055	.040	.658	.511
Household size	.070	.065	.067	1.085	.279
Farm size	.077	.050	.089	1.533	.127
Household income	-.054	.060	-.059	-.900	.369
Women's personal income	.126	.050	.170	2.528	.012
Access to credit	.115	.028	.256	4.161	.000
Training received	.116	.026	.337	4.463	.000
Extent of participation	.161	.077	.159	2.087	.038
Access to resource	-.031	.068	-.035	-.466	.642
Problem	-.109	.055	-.112	-1.984	.049

$N=200, R = .440, Adjusted R = .404, F=12.249 p=.000$

Table 5. Summary of step wise multiple regression analysis

Model	Variables entered	Multiple R	Multiple R ²	Increased in R ²	F value	Significance level
Constant +X ₉	Training (X ₉)	.289	.286	28.6	80.533	.000
Constant + X ₉ +X ₈	Access to credit (X ₈)	.362	.355	6.9	55.786	.000
Constant +X ₉ +X ₈ + X ₇	Women personal income (X ₇)	.393	.383	2.8	42.261	.000
Constant +X ₉ +X ₈ + X ₇ +X ₁₀	Extent of participation on IGAs (X ₁₀)	.408	.396	1.3	33.568	.000

shows that among the explanatory variables, four variables such as training (X₉), access to credit (X₈), women personal income(X₇), and extent of participation on IGAs (X₁₀), had significant influences on women empowerment. These four variables were finally entered into the model and the contribution of these variables accounted for 40 percent of the total variation in the level of empowerment. Hence, the hypothesis is almost true and the null hypothesis can be rejected. The results of the analysis are shown in Table 5 the variable-wise effect is explained.

Results of the study also showed that among the significant variables training received has the highest contribution (28.6 percent) in women empowerment followed by to credit (6.9 percent), women personal income (2.8 percent) and extent of participation (1.3 percent) had contributed on women empowerment.

4. CONCLUSION

Conclusion can be drawn that most of the women in the study area had medium to low

level of empowerment. Though women's personal income, access to credit, training received and extent of participation on IGAs had significant contribution on empowerment, but empowerment status of char women was not satisfactory. It was also observed that most of the women in char rural areas can only sign but constitute economically active while they are illiterate. Education is milestone of women empowerment because it enables them to responds to the challenges, to comfort their traditional role and change their life. Marriage in early age and limited supply of resources were the challenges in char area than mainland. Char women are trapped in many problem that hinders their empowerment. So, Bangladesh government should take immediate steps to be strengthened the project like char improvement approaches with different NGOs to overcome these barrier.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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