
Women Empowerment Status of Bangladesh: Assessment of Char Livelihood Program Initiatives With Special Reference to Northern Char Areas

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Abstract

This paper explores the role of Char Livelihood Programme on women empowerment in northern char of Bangladesh. Char areas are characterized by a set of specific features that set them apart from other parts of Bangladesh and justify different approach. Women on the chars face an additional set of challenges because social norms are patriarchal, education opportunities are limited and they have little control over family finances or decision-making. The purpose of the present study is to know whether Chars Livelihoods Programme lead to the development of empowering women in a society. For measuring women empowerment, the study attempted to address key issues concerning women personal, relational and environmental level of changes. The study was conducted in Sundarganj Upazila of Gaibandha district and Chilmari Upazila of Kurigram district recognized as disaster-prone area of northern Bangladesh. Four villages from four unions of mentioned Upazila were selected randomly as the locale of the research. A list of CLP women beneficiaries and non-beneficiaries' women were considered as the population. Paired –t test analysis was conducted to compare the two groups. The paper pointed out the present condition of empowerment status of char women and also their empowerment level of changes according to personal, relational and environmental. It also discusses about the impact of Char livelihood programs initiatives on changing women level of empowerment.

Key words: Women empowerment, Level of changes, WEI model, Char Livelihood programme, Northern char, Bangladesh

1. Introduction

Women constitute almost half of world population. 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 women in our society is still far below the expected level in some cases. Without developing women, developmental procedure will become farce. Swami Vivekananda realized that “There is

no chance for the welfare of the world unless the condition of women is improved. It is not possible for a bird to fly on one wing”. However, in the new global economy, women’s empowerment has become a central issue for countries to be able to achieve development goals such as economic growth, poverty reduction, health, education and welfare.

Women’s economic empowerment has become a key tool in strengthening women's capacity to improve their economic status and wellbeing, reducing household poverty and enhancing economic growth, productivity and efficiency (Golla et al., 2011)). Linking between gender equality, economic growth, and development, interest in studying the determinants of women's empowerment also increasing (Kharroubi et al.2025). Women’s empowerment has a positive impact on society changing. For this reason, it is necessary to study on its determinants (Sen, 2000). Although women’s empowerment varies from country to country. In recent decades the topic of women’s empowerment has become a serious issue, especially, in developing countries like Bangladesh. Women’s empowerment is of great importance because it is the most important prerequisite for the elimination of widespread poverty and establishing human rights. But progress in the domain is still very slow and uneven (DFID, 2018). Van Eerdewijk (2017) that includes agency, resources and institutional structure for initiating empowerment. Mahbub (2021) also pointed out three forms of women empowerment as economic, political and social empowerment. An empowerment approach centered on economic activity must pay attention to more than the activity itself. According to Stromquist (2015) individual and collective agencies are crucial in the development of women’s empowerment which is associated with ability and choices.

However, the char of Bangladesh is not homogeneous due to differences in economic, demographic and social and cultural norms. In Bangladesh, although women constitute 49.47 percent of the total population, but their social status has continued to remain quite low, particularly in rural areas (World Bank, 2021). As a result, they face adverse conditions of economic discrimination and social harassment.

Paul et al. (2015) mentioned that char land as a zone of multiple vulnerabilities. Nearly 160 million (4-5% of the total population) people live in char land (Islam, 2018). It is also noticed that around 80% of the char land inhabitants are actually ultra-poor (Islam et al., 2017). Formation of new land is a continuous process and it occurs through the natural hydro-morphological dynamics of rivers and human interventions. With the increase in number of settler in chars have been creating various problems those are essential to resolve on priority basis. The major problems of the char landers are frequent shift and relocation, landlessness, acute poverty, epidemic diseases, lawlessness—above all things are become more aggravated by the notions of cruel natural disasters. All these factors affect the livelihood and wellbeing of the life of people of char dwellers.

The constitution of Bangladesh grants equal rights for men and women in all cases like education, health, family planning and employment etc. But, the chars are not exceptions to the overall scenario of the gender discrimination of the country. Still there remains a huge disparity

between men and women in all spheres of basic needs as well as human rights (Hoque et al., 2019). The majority of char women live under extreme poverty and low literacy rate (Hossain et al., 2020). They maintain mostly a lower standard of living. They have relatively little participation in decision making process of their family affairs, which actually indicates the poor status of empowerment of the char women. But it is observed that the women who are involved with income generating activities and contributing in household income have better access to family decision making process compared to jobless char women. According Rahman et al. (2012) to higher contribution of women to their family economy through IGAs higher control of decision resulting in the increased empowerment status. Chars households face food insecurity and suffer from the effects of under-nutrition. 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. According to Sarker and Arifin (2017) the overall status of the char rural women is not satisfactory.

It is acknowledged that national development cannot be achieved without the proper conditions for women's development, and this is true in Bangladesh as well. As the national development of the country is being hampered, the government of Bangladesh is attempting to enable women's participation in the development process and thus promote their empowerment. Bangladesh considers women's participation as a vital issue in the path of women's empowerment as one of the main drivers of transforming the country's status from low-income to middle income one (Protty et al., 2018). The economic empowerment of the char women is the prerequisite for ensuring sustainable development and pro-poor growth of the char dwellers (World Bank, 2011).

Both government and non-government sectors have to play significant role. And char improvement activities should give them support to fragile livelihoods in the chars and improve the well-being of the entire household.

Now a day's char women also adopt various kinds of activities designed by different organizations to build up their capacities for alleviation of extreme poverty and hunger. In an attempt to address these crucial issues of the char dwellers, a study was carried out to examine the livelihoods status of the women of char land in Bangladesh under the intervention of char improvement approaches by the different organizations.

Chars Livelihoods Programmes provide an environment in which char people acquire the technique to develop themselves from poverty. CLP also takes some initiatives for women. In this way women become learners, decision makers, self-established and aware in their own life situation. Being involved in CLP activities, char women could gain more knowledge compared to other women who cannot get the support of CLP. Chars Livelihoods Programme has been worked for char women by creating different income generating activities. The research work will help to know the present improved condition of char livelihoods and help to take steps for the future sustainability of char lands in the river channel of Bangladesh. The scope of this

exercise aims to generate a holistic picture of empowerment, not just what the programme was designed to achieve.

To improve the status and empowerment of women is a central progress in global development, perhaps more importantly, to the achievement of equitable treatment it is crucial to represent women. The purpose of the present study is to know whether the project of Chars Livelihoods Programme lead to the development of empowering women in a society.

1.1 Review of Literature

1. **Rowland, J. (1995)** explored the meaning of empowerment, in the context of its root concept as power. He also pronounced that empowerment has three dimensions such as personal, close relationships, and collectiveness.
2. **Manuere, F. (2018)** suggested ability to choice has been considered the central theme of the concept of power. Power may have a negative sense like a threat but empowerment changes the negative sense to a positive one.
3. **Budgeon, S. (2015)** defined women empowerment is stress the expansion of women's individual and a free exercise of personal choice.
4. **Tandon, T. (2016)** defined empowerment as "altering relations of power which constrain women's options and autonomy and adversely affect their health and well-being."
5. **Das, S. K. (2012)** offered a useful definition of empowerment that "The expansion of people's ability to make strategic life choices in a context where this ability was previously denied to them".
6. **Kabeer,N. (2001)& Kumari,D.A.T. (2020)** revealed the concept of empowerment also incorporates the thought of empowering people either in the form of individual or group who has been facing the challenges of social and economic deprivation (
7. **Hansen (2015)** investigated women's empowerment connected with agency, autonomy, capacity for action, self-determination, and self-confidence
8. **Singh, A.&Rangnekar,S. (2020)** defined empowerment as the process of getting over factors that cause powerlessness
9. **Huis, M.A., Hansen, N., Otten, S.& Lensink, R. (2017)** defined empowerment is as a process from being un-empowered to becoming empowered.
10. **Sikira A.N., jMatekere, T., Urassa, J.K.(2019) & Eyben, R. (2008)** revealed economic empowerment approaches and interventions usually focus on income-generating activities, which allow women to independently acquire their income
11. **Rao, N.(2014)** exposed certain assumptions that economic empowerment will lead to overall empowerment or that participation in the decision-making process will empower women.

1.2 Research gap

As the above shows, it can be suggested that women's empowerment in Bangladesh means women's economic advancement and self-dependency. In this research, women's empowerment refers to develop self-earning capacity, for if a woman can earn money by herself, she should be granted with some abilities like the ability to spend money by herself, the ability to train by herself, the ability to help family members, freedom of choice ,a sense of self-confidence and

self-efficacy ,the ability to create a happy and prosperous life, the ability to get involved politically ,the ability to educate her children. Women’s participation in economic activities can automatically increase the overall status of women and as well as make them empowered. Some studies in South Asia find that women’s economic empowerment is a critical driver for gender equality and an entry point for overall empowerment of women if they are organized under a common platform (Pitchaya,2021). The Chars Livelihoods Programme (CLP) aims to substantially reduce extreme poverty in the chars of North-Western Bangladesh. It provides a package support to the extremely poor char community. CLP approach was only measured the up gradation of women empowerment. But Empowerment is not only up gradation, it should become a perception of power to create changes within a person. In our society women have to fight against the society norms at every point. But the reality is also that women are giving cut throat competition to men today. However, the trade should be changed. And the change should need within a woman to raise empowerment herself. But it should be kept in mind that empowerment is a dynamic process and a complex contract and overtime same women can experience large up and downs in her empowerment level. The changes taking within an individual, how an individual perceives power itself and other persons in a society and its capability to take action and how it carries out them need to be considered about women empowerment.

1.3 Theoretical Framework

Empowerment of women has also been assessed by different researchers in a different way using different sets of indicators. More recently, Oxfam (2017) has been working on a methodological framework that can be adapted to individual contexts in order to evaluators' and practitioners' needs when measuring WEE. Considering WEE as a process that enhances women’s power, the framework explores changes at personal, relational and environmental levels.

Among all these theories the researcher develops the study on the basis of Oxfam GB Framework. In this theory, women empowerment was put into operation on the basis of three dimensional changes (i.e., personal changes, relational changes and environmental changes) (Oxfam GB Framework, 2017). Each of the dimensions contains a range of indicators. These indicators are intended to represent the characteristics of the women in socio-economic context under analysis.



Figure 1. Women empowerment framework
(Source: Lombadini et al., 2017)

Figure 2.4 provides a clear representation of the three levels of changes, with green arrows representing interactions between three levels of changes of empowering process of the women. Improvement in personal change of a woman can be influenced with the way that how a woman takes decision within household is called as relational change. If a multitude of women are gaining more confidence in personal change and establishing better power relations within their immediate surroundings means relational change, then this will generate changes in the broader environment, influencing social norms possibly effecting political space means environment change. This process can also happen, with the changes in social norms and in broader society (environmental change) affecting how women interact with others (relational change) and how they see and perceive themselves within society (personal change) (Oxfam, 2017).

Oxfam assumes that change at an individual level is unsustainable without positive change in organizations and government policy. Likewise, pro-women economic development policy may not be effective without working to address changes in communities and households. This model supports the design of effective theories of change by identifying the different pathways of change that need to be considered.

Women's empowerment is a process whereby women's lives are transformed from a situation where they have limited power for gendered barriers, to a situation where their power is equal to that of men. Women's economic, social, personal and political empowerment is interconnected; so the positive change in one dimension of women's lives is unsustainable without progress in the others.

1.4 Scope of the study

Chars Livelihoods Programmes provide an environment in which char people acquire the technique to develop themselves from poverty. The scope of this exercise aims to generate a holistic picture of empowerment, not just what the programme was designed to achieve. Overall the findings of this research work will be helpful to the extension personnel and policy makers to formulate new policies for increasing char women empowerment in all sectors. The research

work will help to know the present improved condition of char livelihoods and help to take steps for the future sustainability of char lands in the river channel of Bangladesh.

1.5 Objectives of the study

The following specific objectives were considered for this study:

- i. To measure the present status of empowerment of the char women;
- ii. To assess the level of empowerment of char women through participation in CLP programmers;
- iii. Role of CLP initiatives in changing women empowerment.

1.6 Hypothesis

Hypothesis may be broadly divided into two categories, namely research hypothesis and null hypothesis. Research hypothesis was put forward to test the effect of the selected characteristics of char women on their empowerment.

The research hypothesis was:

There is significant role of the fourteen selected characteristics of the char women in explaining their level of empowerment.

The research hypothesis was converted into null hypothesis for testing the conceptual model of the study. The null hypothesis was:

There is no significant role of the fourteen selected characteristics of the char women in explaining their level of empowerment.

2. Research Methodology

2.1 Locale of the Study

For the proposed study, Gaibandha and Kurigram districts were selected purposively. These char areas are suitable for the proposed study because they are situated near the bank of a river of Brahmaputra, Dharla, Ghaghat and Teesta. With the frequent risk of flooding and erosion, lives in chars are extremely precarious considering this poverty scenario, the two Upazila namely Sundarganj and Chilmari were selected from the two selected districts. One Upazila from each district and two unions from each Upazila were selected. Finally, one village from each union were selected as the locale of the study.

2.2 Population

The total number of participants in a research study is referred to as population. At this stage, a list of CLP women beneficiaries and non-beneficiaries' women from the study villages of Gaibandha and Kurigram districts were considered as the population. A research population is a well-defined collection of individuals or objects having similar characteristics.

A list of the women of the study villages were collected from concerned union parishads. Thus, a total of 1440 women living in these four villages were considered as a population of this study.

2.3 Sampling procedure

In order to obtain the desired sample, a multistage random sampling procedure was employed to get the groups from the villages. According to Kothari (2004) this technique is useful in a large and diverse population. At first, two districts were selected purposively from the northern region of Bangladesh. Because the first phase of the Char Livelihood Programme (CLP) worked with Gaibandha, Kurigram, Bogra, Sirajgang and Jamalpur districts in the northern region of the country. Among the five districts, the percentage of people below the poverty line was higher in Kurigram, Gaibandha and Jamalpur districts. It is reported that the hard core poverty (HCR upper) of Gaibandha district was 46.7% and it was 70.8% in the case of Kurigram district (Poverty Map, 2016). It was also reported that among the seven upazilas of Gaibandha the highest poverty was in Sundarganj upazila and it was 47.6%. Similarly, among the upazilas of Kurigram district poverty was the highest in Chilmari upazila and it was 73.5%. Considering this poverty scenario, the two upazilas namely Sundarganj and Chilmari were selected from the two selected districts.

At later stage two unions were selected purposively after considering research cost, population covered, time frame and availability of transportation cost from each of the selected upazila of Gaibandha and Kurigram districts. The unions were Horipur and Kanchibari from Sundorganj upazila and Chilmari and Raniganj from Chilmari upazila. Then one village from each union was randomly selected. The selection of the respondents was the last stage. At this stage, a list of CLP women beneficiaries and non-beneficiaries women was considered as the population. The researcher collected a list of women CLP beneficiaries with the help of the officers of Rural Development Academy (RDA), Bogura. Then the researcher communicated with the respondents with the assistance of Upazila Agriculture Officer (UAO) and Sub Assistant Agricultural Officer (SAAO) of the respective upazilas and unions.

2.3.1 Sample size

The researcher selected randomly 6% of the sample as representative to population. Thus, the sample size for this study was 240. Finally, 60 respondents were selected randomly regardless from each village. A reserve list for 12 respondents also made from the selected areas to meet up the gap of any respondent.

Table 1. Distribution of the population and sample

Districts	Upazilas	Unions	Villages	Population		Sample size		Total
				CLP	Non-CLP	CLP	Non-CLP	
Gaibandha	Sundarganj	Horipur	Raghob	200	120	30	30	60
		Kanchibari	Dhubni	145	250	30	30	60
Kurigram	Chilmari	Chilmari	Datiapara	225	125	30	30	60
		Raniganj	Kjoldanga	150	225	30	30	60
Total				1440		240 (6% of total population)		

2.3.2 Data Collection Instruments

In this study, the researcher selected a structured questionnaire according to research objectives used to collect data directly. To measure women’s empowerment, the researcher selected some statements with items according to the studies by Lombardini, Bowman and Garwood (2017); Lombardini (2018). There were three levels of change of empowerment with fourteen items for measuring women empowerment. The questionnaire was constructed in English. But the Bangla version of the questionnaire was used for data collection considering the respondents’ literacy level.

2.3.3 Data collection Method

Both primary and secondary data were collected to fulfill the objectives of the study. For the collection of primary data, personal interview with the char women was performed. However, before preparing the interview schedule and selecting issues associated with empowerment status, participation in Char Livelihood programmes activities 4 Focus Group Discussions (FGDs) were conducted with the char women from the selected villages. Additionally, key informants’ interviews (KII) were conducted with DAE and CLP officials having the same issues into consideration. The pre-testing of the interview schedule was carried out with 12 respondents under actual field conditions from the target population.

Again, to measure the inter-correlations among the items of dependent variable Cronbach’s Alpha test was done. In addition, Cronbach's alpha indicates the average correlation between the items used to measure a specific concept. This method plays an essential role, especially in showing whether the components of a measuring instrument align consistently with the relevant construct (Izah et.al.,2023). The minimum level of 0.70 for Cronbach's alpha is a generally accepted level (Rönkkö & Cho, 2022; Cheung, et al, 2023).

Table 2. Cronbach’s Alpha Coefficients for all Constructs in Pilot Study

Variables		No. of items	Cronbach’s value n = 40
Independent variable	Problem faced by char women in working with CLP	10	0.713
Dependent Variable	Personal level of change	35	0.830
	Relational level of change	22	0.736
	Environmental level of change	13	0.720

2.3.4 Research Design

The design of the study is a post-test with control group design. In this research, the researcher selects two groups; one was control group and other experimental group. These two groups are expected to be comparable as far as possible in every respect. The design helps to understand the effect of a programme clearly and helps to properly analyze the results. It is the process of identifying the change properly among the participants of two groups after the intervention of a programme.

3. Results

3.1 Status of Women Empowerment in Char Areas

Based on their empowerment score the respondents were classified into three categories such as low empowerment (0-25), medium empowerment (26-50), high empowerment (above 50). The distribution of the respondents according to their empowerment is shown in Table 3.

Table 3. Empowerment categories of the respondent’s women

Categories	All women (n=240) <i>Possible score: 0-70; Observed score: 0-60</i>			
	No.	%	Mean	Standard Deviation
Low empowerment (0-25)	74	30.8	1.72	0.51
Medium empowerment (26-50)	159	63.3		
High empowerment (>50)	7	2.9		

Data contained in the Table 3 presents that more than half (63.3%) of the respondents had medium empowerment, while one-third (30.2%) of the respondents had low empowerment. Only 2.9% respondents had high empowerment.

Table 4. Distribution of respondents according to three level of change

Variables	Categories	Score	Frequency	%	Mean	Standard Deviation
Personal Level Of Change	Low	1	75	31.3	1.8375	0.66175
	Medium	2	129	53.8		
	High	3	36	15		
Relational Level Of Change	Low	1	117	48.8	1.5125	0.50089
	Medium	2	123	51.2		
	High	3	0	0		
Environmental Level Of change	Low	1	75	31.3	1.7625	0.57661
	Medium	2	147	63.3		
	High	3	18	7.5		

3.2 Influence of CLP Initiatives in Improving the Indicators of Women Empowerment in Char

Based on the above mentioned findings the researcher evaluated the influence of CLP activities on women empowerment by comparing the overall empowerment index of both group of char women (Table 5).

Table 5. Overall women empowerment

	Empowerment
Intervention group mean (CLP women)	37.000
Comparison group mean (Non-CLP women)	23.068
Difference	13.39 (0.000)
Observations intervention	120
Observations	240

Table 5 examines the mean differences between the CLP women and Non-CLP women groups on overall women’s empowerment index. The first column in the table estimates of the mean difference in the overall women empowerment index CLP women and non-CLP women groups.

Table 6. Women empowerment index by level of change

	Empowerment Index (Personal)	Empowerment Index (Relational)	Empowerment Index (Environmental)
Intervention group mean	16.58	12.44	7.932
Comparison group mean	10.79	6.99	5.521
Difference	5.791 (0.000)	5.45 (0.000)	2.411 (0.000)
Observations intervention	120	120	120
Observations	240	240	240

Table 6 provides the mean difference in the overall women empowerment index by the level of changes of CLP women and non-CLP women. Table 4.28 suggests that the empowerment status of CLP women is higher than non-CLP women within the three levels of changes. This result confirmed that Chars Livelihoods Programme have significant influence in empowering the

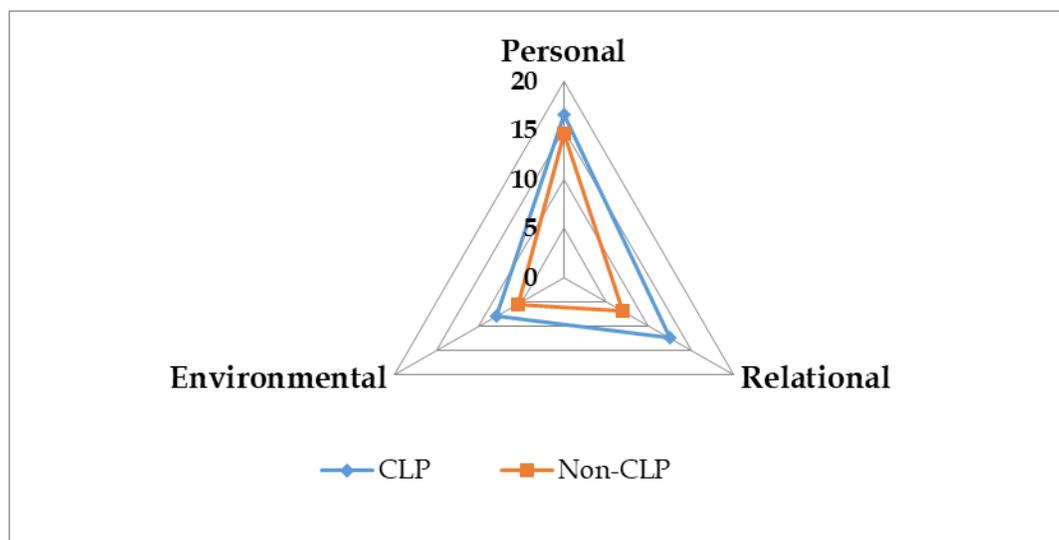


Figure 2. Differences among three levels of change between CLP and non-CLP women

Figure 2 represents that there is difference among the average score of three level of change between CLP women and non-CLP women. However, at personal and environmental level of change there are poor differences between the two groups (CLP vs. non-CLP). On the other hand, there is a significant difference between the score of relational level of change of CLP women and non-CLP women.

3.2.1 Personal level of change

This first level of change refers to changes taking place within the person. This dimension measures changes in personal self-confidence, opinions, attitudes and beliefs. It measures changes in how a woman sees herself and perceives herself in society, and what capability she has to decide her actions and carry them out. In the context under analysis, the following indicators have been identified:

Table 7. Indicators of change at the personal level

	Self confidence	Knowledge and awareness of women’s right	Opinion and Attitude of women’s economic role	Non acceptance of GBV	Personal autonomy	Access of savings
CLP women’s group mean	3.25	4.98	2.93	1.63	2.66	1.13
Non-CLP women group mean	1.77	3.27	1.93	1.74	1.60	.800
Difference	1.48	1.70	1.00	-.108	1.05	.325
t-value	10.37 (0.000)	6.91 (0.000)	7.779 (0.000)	-.595 (0.553)	7.895 (0.000)	4.505 (0.000)
Observations intervention	120	120	120	120	120	120
Observations	240	240	240	240	240	240

Self-confidence refers an attitude of the respondents towards her skill and abilities. It means to know the strength and weakness about herself and have a sense of positive control about her life. Knowledge and awareness of women’s right weather the respondents’ thinks that men and women have the same rights. It assesses whether respondents possess knowledge of their rights, as well as expressing opinions in favour of women’s rights. Opinion and attitude on women’s economic role measures the opinion and attitude of the respondents towards economic development. Question reported in the indicator on the basis of the issues women’s opinion and beliefs on economic development. Non–acceptability of violence measures whether the respondents consider domestic violence against a woman is not acceptable for a man to beat or hurt his wife in a number of different circumstances. Question reported in the indicator on the basis of the issues women’s violence following the questionnaire of Demographic and Health Survey Program. Personal autonomy measures the level of autonomy that a woman has to decide on an action and to carry it out independency. The structure of questions derives from the DHS questionnaire and the WEAI. The respondents were asked to who normally makes most of the decisions relating to a short list of activities considered to be relevant in the context under

analysis. Access of savings measures according to the respondents want to access and saving a small amount of money with their own interest.

3.2.2 Relational level of change

This second level of change measures changes taking place in power relations within the woman’s surrounding network. This can be expressed as changes in power relations among individuals. In the context of the study this evaluation identified the following indicators:

Table 8. Indicator of change at the relational level

	Group participation	Ability to make decision in political sphere	Control over household assets	Involvement in household decision	Contribution in household income	Experience in gender based violence
CLP women’s group mean	0.93	1.05	2.60	5.80	0.883	1.16
Non-CLP women group mean	0.53	0.74	1.32	.183	1.60	1.20
Difference	0.40	0.32	1.28	2.79	0.700	0.033
t-value	6.98 (0.000)	6.69 (0.000)	9.32 (0.000)	9.96 (0.553)	14.97 (0.000)	-0.47 0(.000)
Observations intervention	120	120	120	120	120	120
Observations	240	240	240	240	240	240

Group participation and degree of influencing a community group measures the extent to which the respondent actively participates in established groups and in taking important decisions in it. The second column in Table reports the mean of women who report participating in groups (women's associations, NGOs, development, cultural or religious associations) and being involved in organizing. Ability to take decision in political sphere measures whether the respondent actively participates in public and political events (village development meetings, demonstrations, public meetings, etc.) and is involved in taking important decisions in it. Control over household assets measures whether a woman has control over assets and resources in her household. Involvement in household decision measures the extent to which the respondent is involved in taking decisions in her own household. Each respondent was asked who normally makes decisions in ten activities in different areas, including decisions on whether and when to have children, the education of the children, who cooks and clean the house, how to spend money, and when to go to the health center. Contribution in household income measures the proportion of self-perceived contribution made by a woman to total household income. Experience in gender based violence measures whether the respondent would be willing to report about a man in the case of experiencing violence. Measuring women’s experience in

GBV is important because freedom from violence has been widely recognized as a critical dimension for empowerment and also violence may be the results of recognition of a power within households and communities as women become more empowered (Hughes et al., 2015). According to Gender Statistics of Bangladesh in 2018 the physical violence is higher in rural areas (51.8%) than urban areas (42.2%). The questionnaire was structured on the basis of Domestic Violence Module.

3.2.3 Environmental Level of Change

The final level of empowerment measures changes in the broader environment. Safety of movement measure the level of perceived safety of movement of women’s outside the house. Respondents were asked if they agree or disagree with statements referring to security outside the house (Table 9).

Table 9 . Indicator of change at the environmental level

	Safety of movement	Social norms and stereotypes of women’s economic role (Men’s perception)	Social norms and stereotypes of women’s economic role (Women’s perception)
CLP women’s group mean	2.52	2.62	2.82
Non-CLP women group mean	1.77	1.85	1.84
Difference	0.75	0.77	0.98
t-value	6.705 (0.000)	5.03 (0.000)	8.35 (0.000)
Observations intervention	120	120	120
Observations	240	240	240

Table 9 suggests that CLP women feel more confidence about safety when she goes outside. Social norms are shared beliefs about what is typical and appropriate behavior in a group. A norm is a prescription or proscription of behavior that applies to a particular group and can be informal or formal. Social norms underlie women’s greater responsibility for household production and restrictions on women’s mobility, both of which affect women’s economic choices. The indicator for social norms and stereotypes measures whether the respondent considers men and women in her community to have opinions that respect women’s economic role. Social norms and stereotypes of women’s perception measures by comparing the data obtain from the questionnaire where the respondent were asked to assess to what extent other women in her community agree or disagree with a number of statements referring to the economic role of women.

The respondent was asked to assess to what extent men in her community agree or disagree with a number of statements referring to the economic role of women. The question did not measure the respondents thinks, but rather what in her view other women in her community think.

4. Discussion

Most of the respondents in the char areas were medium to low (94.1%). Paul et. al. (2016) also found similar findings in their respective study. The findings suggests that women involved in programme empowerment score positively in, on average, 37% compared with women did not involve in the programme, who score positively, on average, in only 23% (Table 5). This difference is statistically significant; showing the overall empowerment status of CLP women is satisfactory. Similar findings were found by Ahmed et al. (2020) in their respective study. There have a significance difference between two groups in case of relational level of changes (Figure 2).

The findings also suggests that at the personal level, more than half (53.8%) of respondents had a medium level of change, while one-third (31.3%) experienced a high level of change, and 15% had a low level. For the relational level, more than half (51.2%) had a medium level of change, with 48.8% experiencing a high level and no respondents reporting a low relational level of change. Regarding the environmental level, over half (63.3%) of respondents had a medium level of change, with 31.3% reporting a high environmental level, and 7.5% reporting a low environmental level (Table 4). The findings also clearly defines the difference of CLP women group's indicators like self confidence level, level of knowledge and awareness, opinion and attitude on women's economic role, level of personal autonomy and access of savings are higher than non-CLP women group except the acceptance level of violence of non-CLP women (Table 7). Non -CLP women easily accept all kinds of family and social violence due to their traditional norms, culture and lack of proper knowledge support system. They think it is a part of life. They have no knowledge, education or training about the self-right awareness. Again, economic dependency is a one of the factor which reinforce acceptance of violence. In that cases violence treated as a family matter rather than a social issue. However, Table 7 indicates that's the programme activities had a positive and significant influence to improve the indicator of CLP women. The t- value also delivers that's the programme had a positive and significant influence to build up the all indicators of CLP women.

The Findings also suggests that the women who involve in CLP activities most of the women had independent income sources and contribute 30% from her own source than non-CLP women group. The programme seems to have had a positive and significant influence on all these indicators except experience in gender based violence (Table 8). The participation difference is higher of CLP women. The respondents were asked directly if she had experience in violence or if she knew of anyone close to her who had experienced violence. Table 8 suggests that non-CLP women group experience in violence more than CLP women. CLP women had more confidence in taking action to stop violence. This result suggests it is a power of empowerment that comes as a result of the programme. So the estimate suggest that the program effect is driven by positive results among CLP-women. In the cases of environmental changes estimates suggest

that, on average, there was statistically significant differences in the perception of social norms in the community between the two groups (Table 9).

From the above-mentioned findings, it is clear that the Chars Livelihoods Programme plays a vital role in improving the status of its respective participants.

5. Conclusion

The findings of present empowerment status of the char women due to participation of CLP activities showed that the empowerment status of char women was found satisfactory. The study also employed paired t-test that revealed the difference between the indicators of two groups of women. The average difference of women empowerment index was found statistically significant, confirming an overall positive impact of the chars' livelihoods programme on women's empowerment.

There is also compelling evidence that the programme had a positive and significant impact on group participation, as well as decision-making in household events and political sphere. Again, the evaluation identified that overall more than 80 percent of the women interviewed reported at least one episode of physical violence. But it also notices that the evaluation found negative results of the programme on women's willingness to report in the case of being a victim of violence. The fear of stigma or social harassment can discourage women from speaking out against violence. And among all characteristics of personal level of change and relational level of changes mean difference of non-acceptance of gender based violence and experience in gender based violence are statistically negative significance. Identify strategies for supporting changes at environmental level. However, the evaluation also found changes in social norms. The evaluation found a positive and significant effect among rural women on improving their opinion on women economic participation.

As the information was collected and analyzed using the paired t-test technique. Based on the three hypotheses, the study revealed interesting results. The study revealed that level of empowerment status of char women was found moderate. The introduction of Chars Livelihoods Programme in northern char areas, has been contributing much to increase char women's socio-economic status. Women need to be empowered within the home, within the community, within the economy and within politics at the global and local stages. So, while observing the facts in this way regarding women empowerment, it should be crucial to measure women empowerment on an environmental level. Finally, a model of women empowerment measurement was developed and tested that can now be adopted by future researchers, policy makers and industry practitioners.

6. Limitation and Policy recommendations

The findings of the study revealed that the empowerment status of CLP beneficiaries group was satisfactory except GBV. So, the government organization with the aid of NGOs should provide enough need-based training to facilities to develop women's awareness against violence. Again,

more initiatives are needed to encourage char women's participation in national economic and social policies. Similar program with supportive initiatives as like Char Livelihood Programs provided to their participants also need for the non-CLP women to enhance empowerment of rural char areas.

The study also recommended that the policy makers of relevant government agencies, donors and other charity foundations need to be taken steps against the problems which are the threats of women empowerment as well as char improvement. Overall the findings of this research work will be helpful to the extension personnel and policy makers to formulate new policies for increasing char women empowerment in all sectors.

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References

- Bae, Y., & Choi, J. (2021). Consumer acceptance of edible insect foods: An application of the extended theory of planned behavior. *Nutrition Research and Practice*, 15(1), 122-135.
- Budgeon, S. (2015). Individualized Femininity and Feminist Politics of Choice. *European Journal of Women's Studies*, 22; 303–318.
- DAFI Report. (2018). By Foni Joyce, Co-chair UNHCR Global Youth Advisory Council and Graduate.
- Das, S.K. (2012). Microfinance and Women Empowerment: Does Self-help Group Empower Women? *International Journal of Management and Business Studies*, 2(2), 71-79.
- Eyben, R. (2008). Conceptualising Policy Practices in Researching Pathways of Women's Empowerment. Brighton: Pathways of Women's Empowerment Research Programme, Institute of Development Studies, 13, 5-71.
- Golla, M.A., Anju M., Priya, N.& Rekha, M. (2011). Understanding and Measuring Women Economic Development. International Center of research for Women, DFID, 3-9.
- Hansen.(2015). The Development of Psychological Capacity for Action, *Journal of Social Issue*. DOI:10.1111/JOSI.13130.
- Haque, T., Siwar, C., Bhuiyan, A.B.& Joarder, M.H.R. (2019). Contributions of Amanah Ikhtiar Malaysia (AIM) Microfinance to Economic Empowerment (EE) of Women Borrowers in Malaysia. *Economics & Sociology*, 12(4), 241-333.
- Hoque, M. & Ithohara, Y. (2009). Women Empowerment through Participation in Micro-Credit Programme: A Case Study from Bangladesh. *Journal of Social Sciences*, 5(3), 244-250.

- Hossain, B., Sohel, M.S.& Ryakitimbo, C.M. (2020). Climate Change Induced Extreme Flood Disaster in Bangladesh: Implications on People's Livelihoods in the Char Village and their Coping Mechanisms. *Progress in Disaster Science*, 6, 100079.
- Huis, M.A., Hansen, N., Otten, S.& Lensink, R. (2017). A three-dimensional model of women's empowerment: Implications in the field of microfinance and future directions. *Frontiers in Psychology*, 8, 1678.
- Islam, M.R. (2018). Climate Change, Natural Disasters and Socioeconomic Livelihood Vulnerabilities: Migration Decision among the Char Land People in Bangladesh. *Social Indicators Research*, 136(2), 575–593.
- Islam, M.R.& Samsuddoha, M. (2017). Socioeconomic consequence of climate induced human S displacement and migration in Bangladesh. *International Sociology*, 32(3), 277-298.
- Islam, M.R.(2018). Gender Statistics of Bangladesh. Reproduction, Documentation and Publication Section. Bangladesh Bureau of Statistics, 143
- Izah, S.C.,Ligeiaziba, S. & Milan, H. (2024).Cronbach's Alpha: A Cornerstone in Ensuring Reliability and Validity in Environmental Health Assessment. *ES Energy & Environment, Engineered Science Publisher*, 23, 1-14, DOI: <https://dx.doi.org/10.30919/esee> 1057
- Kabeer, N.(2001). Women's Empowerment-Theory and Practice. Reflections on the Measurement of Women's Empowerment. Novum Grafiska AB, Stockholm
- Kapur, R.(2019). Employment Opportunities of Rural Women. DOI: 10.31080/ asag. 2019.03.0564.
- Kumari, D.A.T.(2020). Women's Economic Empowerment: An Integrative Review of Its Antecedents and Consequences. *Journal of Poverty, Investment and Development*, 56.
- Lombardini, S. (2018). Women's Empowerment inTunissia: Impact evaluation of the project "AMAL": Supporting women transformative leadership in Tunisia, Oxfam GB.
- Lombardini, S., Kimberly, B.& Rosa, G. (2017). A 'How To' Guide to Measuring Women's Empowerment. Sharing experience from Oxfam's impact evaluations. Oxfam GB.
- Mahbub, M.(2021). Women empowerment, Definition, Theory, Process, Practice and Importance-An analysis, MS Thesis, University of Dhaka, 5-6.
- Manuere, F.(2018). A Literature Review of Women Empowerment and Development in Zimbabwe: A look at New Insights and Perspective, 8(7) ,57.
- Paul, G.K., Sarkar, D.C.& Naznin, S.(2016). Present Situation of Women Empowerment in Bangladesh. *International Journal of Mathematics and Statistics Invention*, 4(8), 31-38.
- Paul, S.& Islam, M.R.(2015). Ultra-poor Char People Rights to Development and Accessibility to Public Service: A Case Bangladesh. *Journal of Habitat International ELASEVIER*, 48, 113-121.
- Pitchaya, S. (2021). Women's Economic Empowerment in Asia. Asian Development Bank Institute. Suan Liao, Intern pp. 2-21.
- Prottoy& Nasim, S.(2018). Gender Equality & Women's Empowerment: Role of Bangladesh Government, Published in Dhaka Tribune, 2018.
- Rahman, M.T., Rahman, Uddin, Alam& Kamaly (2012). Empowerment of Rural Women through Participation in IGA for Maintaining Livelihood. *Journal of Socio Research Development*, 9(6), 1409-1417.

- Rao, N.(2014). Caste, Kinship, and Life Course: Rethinking Women's Work and Agency in Rural South India. *Feminist Economic*, 20(3), 78-102.
- Rehman, H., Moazzam, D.A.& Ansari, N. (2020). Role of Microfinance Institutions in Women Empowerment: A Case Study of Akhuwat, Pakistan. *South Asian Studies*, 30(1) ,107-125.
- Rowlands, J. (1995). "Empowerment Examined." *Development in Practice*, 5(2), 101-107.
- Sarker, N.I.& Arifin, S.(2017). An Investigation into the Status of Riverbank (Char) Women Dwellers in Bangladesh. *International Journal of Rural Development, Environment and Health Research (IJREH)*, 1(1), 86-92.
- Sikira, A.N., Matekere, T.& Urassa, J.K. (2019). Engaging Men in Women's Economic Empowerment in Butiama District, Mara Region, Tanzania. In *Gender Economics: Breakthroughs in Research and Practic*, 371-387.
- Singh, A.& Rangnekar, S.(2020). Empowering Leadership in Hospital Employees: Effects on Goal Orientation, Job Conditions, and Employee Proactivity. *International Journal of Productivity and Performance Management*, 60(7) ,1497-1519.
- Stromquist, N.P.(2015). Women's Empowerment and Education: linking knowledge to transformative action. *European Journal of Education*, 50(3) ,307-324.
- Tandon, T.(2016). Women Empowerment: Perspectives and Views. *The International Journal of Indian Psychology*, 3(3), 6-12.
- World Bank (2011). *Women's Economic Empowerment*. Issues paper by DAC Network on Gender Equality (GENDERNET).