

# Empowering Women on the Chars: Increasing Resilience to Disasters and Building Sustainable Livelihoods

Matthew Pritchard<sup>1</sup>, Arifur Rahman<sup>2</sup> and Mahbub Alam<sup>1</sup>

1. Chars Livelihoods Programme, Rural Development Academy Campus, Sherpur, Bogra 5842, Bangladesh

2. Department for International Development (DFID), British High Commission, Road 3 United Nations Road, Dhaka 1212, Bangladesh

**Abstract:** The Chars Livelihoods Programme (CLP)'s response has been to provide a comprehensive package of support, which aims to increase resilience to disasters and build women's empowerment. In 2012, CLP developed an innovative approach to monitor women's empowerment. Understanding that empowerment is context specific, therefore CLP used qualitative approaches to understand how char households define empowerment. From this research, CLP developed a set of 10 (community and household level) indicators, which made up the chars empowerment scorecard. Results show that CLP has a considerable impact on women's empowerment. They also show that CLP has impacts at both the household and community level, driven by two main factors: increased knowledge (through social development training) and increased wealth (through CLP's Asset Transfer Project). Further, impacts on empowerment are seen to occur relatively quickly and sustain over time. The effects of climate change are only likely to further compound problems for char-dwellers. By increasing women's empowerment, CLP is confident that they will be better able to build sustainable livelihoods and increase their resilience to future disasters.

**Key words:** Gender, empowerment, livelihoods, sustainability, Bangladesh.

## 1. Introduction

The Chars Livelihoods Programme (CLP) began in 2004 and enrolled 55,000 core participant households (CPHHs) living on island chars (riverine islands) in North West Bangladesh out of extreme poverty. In its current phase (2010-2016), CLP works to lift 78,000 CPHHs. Char households are confronted by a range of seasonal shocks and constraints imposed by their geography. CLP works with extreme poor households living on island chars in North West Bangladesh. It aims to improve the livelihoods, incomes and food security of at least one million poor and vulnerable women, children and men living on the chars. The CLP provides a comprehensive package of interventions to its CPHHs. A number of interventions

also benefit the wider community. The main objectives of the programme are to improve social and economic assets, reduce environmental and economic risk and increase access to markets and services.

CLP improves women empowerment and the disaster resilience of households through a variety of its livelihoods activities [1, 2]. Through the infrastructure projects, households get support in three ways: raising of the house on a plinth two feet (60 cm) above the highest known flood level; providing access to sanitary latrines; and providing access to improved water sources through tube wells. Each of these interventions reduces the vulnerability of households to hazards. Households are safer on a raised plinth, giving protection also to cattle and homestead gardens. The CLP sanitary latrines and tube wells are also raised two feet above the highest known flood level, reducing the practice of open defecation and giving

---

**Corresponding author:** Mahbub Alam, Ph.D., research field: livestock. E-mail: mahbub@clp-bangladesh.org.

continuous access to improved water sources even during floods [3, 4]. CLP Asset Transfer Project is the cornerstone of the CLP's model of poverty reduction. The programme rests on the assumption that the support package provided to CPHHs is sufficient to help graduate households out of extreme poverty [5]. The initial "primary" asset transferred to the participant through the Asset Transfer Project is conceived as the starting point for a continuous process of asset growth. This asset chosen is most often cattle (98%) [6]. The type of cattle that are found on the chars are very resistant to hazards, as they can swim well and are able to be kept on plinths for long periods of time [7]. CLP provides health and nutrition supports through community level service delivery and volunteer development. CLP also has been introducing markets for the poor (M4P) and strengthening linkage between char and mainland to create enabling markets. While on the CLP support package, participants attend social development group meetings for the entire 18 month period. At these meetings, participants are taught a variety of modules, including disaster preparedness. This covers multiple hazards, including floods, cyclones and fires. These meetings along with other CLP organized meetings (village development committees (VDCs), adolescent groups, couples orientation and men's training) increase social capital, create stronger links within villages and allow for a better coordinated response to disasters. Another group meeting that is organized by the CLP is the village savings and loans groups (VSLGs). These provide households not only with access to microcredit in times of need but also with a way of saving money when shocks occur.

Project interventions affect outcomes in different ways. In terms of female empowerment, the assumption is that interventions including training, couples' orientation sessions and transferring assets to the female head of the household can and do have an impact. To understand which behaviors show that a woman in this context is empowered as well as the

impact of CLP activities on the women empowerments, McIntosh et al. [8] conducted a study in 2012 on CLP's impact on women's empowerment.

Disaster risk reduction, resilience and climate change are all concepts which are mentioned within CLP documents. The CLP addresses certain aspects of these issues and the programme is a clear example of how livelihood projects build up disaster resilience. Barrett et al. [9] conducted a study in 2014 to measure the impact that CLP has had on the disaster resilience of communities.

The present paper is the combination of above two studies, which object is to know how increase the resilience of char people to disasters and building women's empowerment.

## **2. Materials and Methods**

In case of CLP's impact on women's empowerment research, a combination of quantitative and qualitative approaches was introduced. A questionnaire or empowerment scorecard was administered on a panel sample of CLP-1 and CLP-2 households (cohort 2.3 and the control group for cohort 2.3). CLP-2 will support 78,000 CPHHs through six annual groups or cohorts. Additional field research was undertaken through focus group discussions and one-on-one interviews to gain a deeper understanding and to know "how and why" the CLP impacts or does not impact female empowerment. The empowerment scorecard comprises 10 criteria defined by the community and is used to assess the level of female empowerment. If the respondent achieves a criterion, she receives one point. Conversely, she receives no points if she does not achieve the criterion. Indicators have no intermediate point between achievement and non-achievement; a woman can not achieve a criteria partially. To define whether a woman is empowered or non-empowered, CLP introduced a cut-off point of 5. The logic for assigning the cut-off at 5 (rather than, for example, 7) was that this is the threshold at which the majority of control group households were categorized as not

empowered.

In case of the impact of CLP on the disaster resilience of chars communities study, a mixed method with a concurrent nested design has been applied. Quantitative data were collected using questionnaires and then a scorecard was created. Key informant interviews were then performed to collect qualitative data to understand the findings from the survey. Questionnaires were created with four main themes that make up a disaster-resilient community: disaster preparedness and response, knowledge and education, risk assessment and governance. To create the questionnaires on the disaster resilience themes, certain components of resilience were selected and questions were created to be answered by the household. The questionnaires were carried out within all six cohorts. Because cohort 2.6 has not been supported yet by CLP, they acted as the control for the study. Information was collected from CLP implementing organizations about the frequency of flooding, erosion and other hazards. This meant that the total sample was 280 (240 CLP-supported and 40 control). The resilience of different cohorts was then compared as well as with a control. Disaster resilience scoring of women and men was also compared. The present study is designed with the combination of above two studies. Both the studies were conducted in different cohorts and areas which have been mentioned in Tables 1 and 2.

The women empowerment study was conducted as per Table 1. The impact study of the CLP on the disaster resilience of chars communities was conducted as per Table 2.

### 3. Results and Discussion

In case of women empowerment study, community has identified 10 criteria through focus group discussion as most important for determining whether a women is empowered, and 10 criteria are shown in char empowerment scorecard (Fig. 1).

The Figs. 2 and 3 are shown that CLP has a substantial impact on women's empowerment. The findings are unambiguous; the receipt of the CLP package has a considerable effect on a women's level of empowerment. Both the mean empowerment score and the percentage of women empowered in each strata show larger improvements in households which have received or are receiving the CLP package, in comparison to those which have not. A woman who has received the CLP package is six times more likely to be empowered than a woman living in extreme poverty who has never received CLP support.

As shown in Figs. 4 and 5, the CLP has more impact on some indicators of empowerment than others. At the community level, it has a large impact on women's ability to provide advice, ability to solve community conflict, invitations to social occasions and meeting attendance. The programme has a smaller

**Table 1 Sample size according to cohort and areas for the women empowerment study.**

Cohort	Number of households	District
CLP-1	650	Bogra, Gaibandha, Jamalpur, Kurigram, Sirajganj
Cohort 2.3	424	Kurigram, Lalmonirhat, Nilphamari, Pabna, Rangpur, Tangail
Control for cohort 2.3	500	Jamalpur, Pabna, Rangpur, Tangail

**Table 2 Cohort wise areas for study on disaster resilience of chars communities.**

Cohort	District	Upazilla	Village
2.1	Kurigram	Chilmari	Natar Kandi, Modafot Kalikapur
2.2	Kurigram	Kurigram Sadar	Khaser Char, Nayar Hat
2.3	Kurigram	Ulipur	Berahim, Uttar Baladoba
2.4	Kurigram	Nageswari	Char Pattala, Dohinirampur Uttar
2.5	Kurigram	Nageswari	Poshchim Balar Hat, Konnamoti
2.6	Tangail	Bhunpur	Sosua, Gobinda Pur

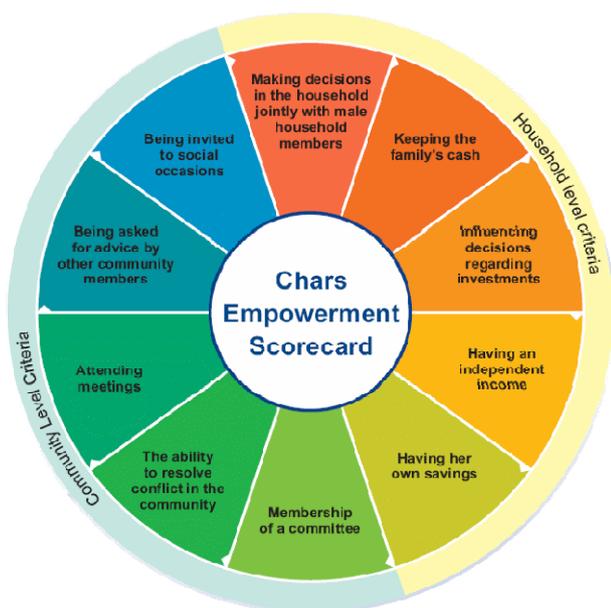


Fig. 1 Women empowerment scorecard.

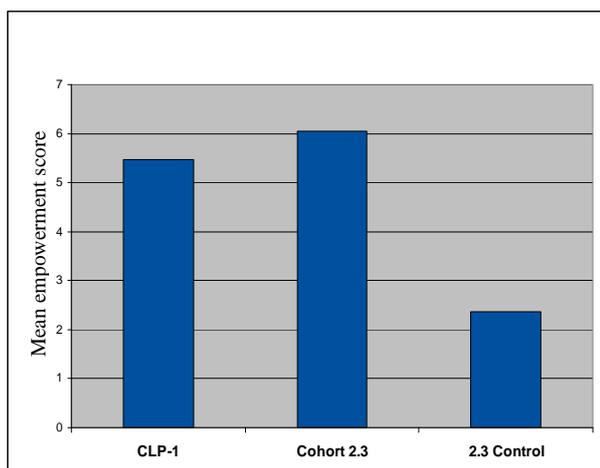


Fig. 2 Mean empowerment score by group.

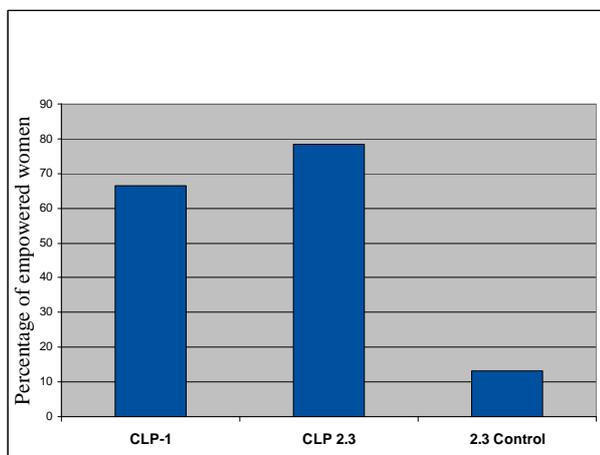


Fig. 3 Percentage of women empowered by group.

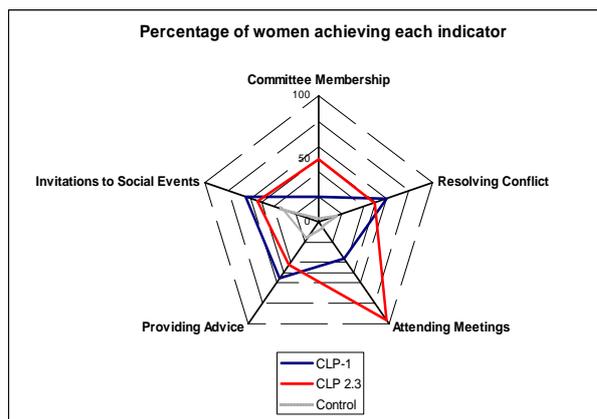


Fig. 4 Percentage of women achieving each community level indicator ore by group.

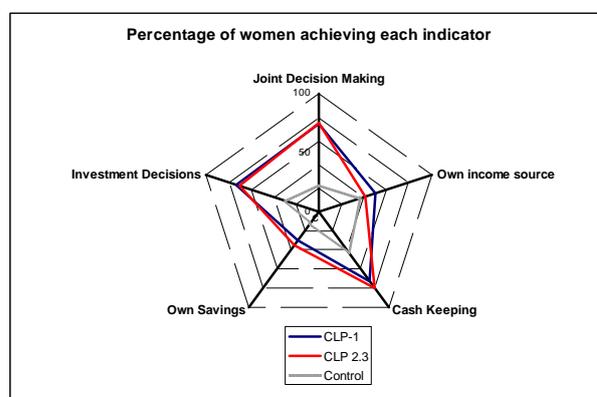


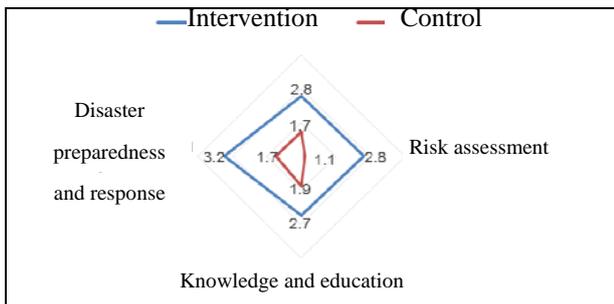
Fig. 5 Percentage of women achieving each household level indicator ore by group.

impact on committee membership, perhaps because this is a more difficult criterion to meet; participants may need more time to achieve this criterion.

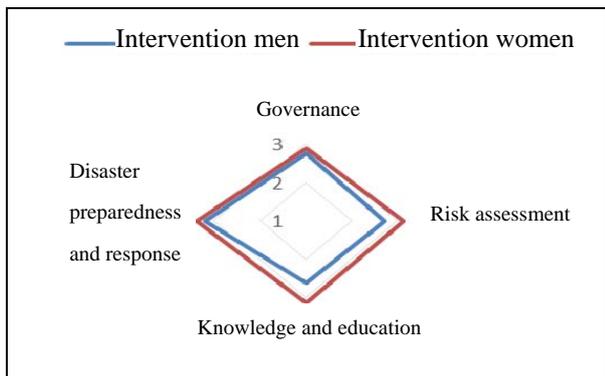
It is found in Strengthening Household Ability to Respond to Development Opportunity (SHOUHARDO) Programme that through the implementation of different interventions, the percentage of women who participated in various types of decisions rose sharply in several categories during the course of its first programme. In case of buying or selling major household asset (land, livestock, crop), it has increased from the baseline 23.5% to 48.8%; in case of active participation and involvement in local courts, it has increased from the baseline 10.1% to 40.4% [10]. In another study, it is shown that 40% had poor level of empowerment, 9% had fair and 41% had good level of women

empowerment [11]. The results of both studies are supportive with this present study.

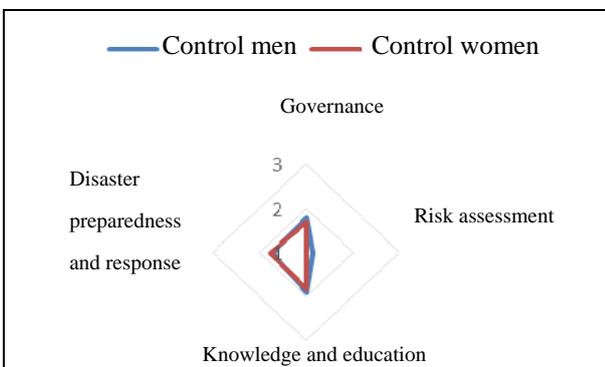
In case of the impact of CLP on the disaster resilience of chars communities, Fig. 6 was created to show the disaster resilience of households which have been supported by the CLP compared to that of the control group which has had no intervention. It can be seen that in all four thematic areas, the intervention group scores higher than the control. Disaster resilience is at a similar level in each of the four theme



**Fig. 6 Disaster resilience of intervention group VS control group.**



(a) Women VS men in intervention group



(b) Women VS men in control group

**Fig. 7 Disaster resilience of men and women in different groups.**

areas, except for the disaster preparedness and response, intervention communities scored slightly greater and the risk assessment score of the control group communities was significantly lower. This quantitatively shows that the interventions which CLP are carrying out on the chars are significantly improving the disaster resilience of communities on the chars.

When male and female were compared, the following two diagrams (Fig. 7) were created. As can be seen in the graphs in the intervention group, women have greater resilience than men; whereas in the control group, the men have marginally more resilience than women. This shows that not only has CLP improved the resilience of the community but also empowered women in the process.

It is found in a report [12] that the soft activities, like raising awareness, community mobilization, risk assessment advocacy and capacity building, have significant impacts in the community in case of disaster resilience and respond, which is related with the present study.

**4. Conclusions**

Women who have received the CLP package are six times more likely to be empowered than women living in extreme poverty who have never received CLP support. This means that the level of women’s confidence in individual level and acceptance in the family as well as in the community will be increased. The interventions that CLP are carrying out on the chars are significantly improving the disaster resilience of communities on the chars, which may result to increase the coping capacity from socks and stresses.

**Acknowledgments**

The authors thankfully acknowledge CLP for conducting two studies: (1) The CLP’s impact on women’s empowerment and (2) the CLP’s impact on the disaster resilience of chars communities. The

present paper is prepared to combine key findings of the studies.

## References

- [1] Haneef, C., Kenward, S., Hannan, M., Pritchard, M., and Alam, Z. 2014. "CLP's Impact on Women's Empowerment on the Chars and Its Sustainability." Chars Livelihoods Programme (CLP). Accessed November 20, 2014. <http://clp-bangladesh.org/publications/research-reports/page/2/>.
- [2] Haneef, C., Pritchard, M., Hannan, M., Kenward, S., Rahman, M., and Alam, Z. 2014. "Women as Entrepreneurs: The Impact of Having an Independent Income on Women's Empowerment." Chars Livelihoods Programme (CLP). Accessed October 12, 2014. <http://clp-bangladesh.org/publications/research-reports/page/3/>.
- [3] Pritchard, M., Kenward, S., and Hannan, M. 2015. "Climate Change and Resilient Livelihoods: CLP's Approach to Reducing the Vulnerability of the Extreme Poor in the Riverine Islands of Northwest Bangladesh." Chars Livelihoods Programme (CLP). Accessed June 14, 2015. <http://clp-bangladesh.org/publications/research-reports/>.
- [4] Kenward, S., Cordier, L., and Islam, R. 2012. "A Study to Assess the Performance of CLP Raised Plinths, Low Cost Latrines and Access to Clean Water during the July 2012 Flood." Chars Livelihoods Programme (CLP). Accessed September 1, 2012. <http://clp-bangladesh.org/publications/research-reports/page/7/>.
- [5] Kenward, S., Pritchard, M., and Hannan, M. 2015. "Resilient Livelihoods: CLP's Multi-sectoral Approach to Promoting Livelihoods and Reducing Poverty in the Chars." Chars Livelihoods Programme (CLP). Accessed June 14, 2015. <http://clp-bangladesh.org/publications/research-reports/>.
- [6] Barrett, A. T., McIntosh, R. A., Pritchard, M., Hannan, M., Alam, Z., and Marks, M. 2013. "Asset Values: Why Are Some Households Doing Better than Others?" Chars Livelihoods Programme (CLP). Accessed December 2, 2013. <http://clp-bangladesh.org/publications/research-reports/page/4/>.
- [7] Marks, M. 2010. "The Chars Livelihoods Programme: Alleviating Poverty and Building the Climate Resilience of the Poorest Families." Chars Livelihoods Programme (CLP). Accessed May 1, 2010. <http://clp-bangladesh.org/publications/research-reports/page/12/>.
- [8] McIntosh, R. A., Kenward, S., Islam, R., and Alam, Z. 2012. "The CLP's Impact on Women's Empowerment." Chars Livelihoods Programme (CLP). Accessed November 2, 2012. <http://clp-bangladesh.org/publications/research-reports/page/6/>.
- [9] Barrett, A., Hannan, M., Alam, Z., and Pritchard, M. 2014. "Impact of the Chars Livelihoods Programme on the Disaster Resilience of Chars Communities." Chars Livelihoods Programme (CLP). Accessed January 30, 2014. <http://clp-bangladesh.org/publications/research-reports/page/4/>.
- [10] Nosbach, M. 2012. *Women's Empowerment: The Journey So Far*. The Experience of the SHOUHARDO Program in Bangladesh.
- [11] Zaman, U. R., Rahman, M. M., Akram, S. M., and Zaki, M. M. 2008. "Women Empowerment in Different Household Issues of Bangladesh." *Bangladesh Medical Journal* 37 (2): 41-5.
- [12] Ali, S. S. 2012. "Bangladesh: A Sustainable and Disaster Resilient Future." 6th DIPECHO Action Plan. Accessed October 2014. <http://www.slideshare.net/MizanurMithun/bangladesh-a-disaster-resilient-future>.