## Women's Participation in Disaster Management: towards Institutionalization of New Norms and Practices in Charlands.

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#### **Abstract**

In absence of an effective disaster management system in the charlands; people continue to lose their income and assets. Women in remote char areas are the worst victims of disasters. In this context, some local NGOs have implemented different programme as a part of disaster management strategies to reduce the vulnerability of women and to increase the capacity to face disaster. The strategies are centered on women's participation in disaster risk management activities, and have gradually transformed women from being passive recipient of relief to an active participant in disaster management. Despite difficulties, poor women and NGOs have successfully redefine the role of women in the different phases of disaster management.

#### 1.0. Introduction:

Bangladesh is among the poorest countries of the world with a population close to 140 million and stands out in a poverty league with more than half of its population estimated to live below the poverty line and more than a third (35 percent) living in extreme poverty (2003 UNDP Human Development Report)<sup>i</sup> Among number of factors of poverty, disaster has both long and short term impact on poverty<sup>ii</sup>. The frequency of natural disasters within the boundaries of Bangladesh has been increased during recent years<sup>iii</sup> and its geographical disaster vulnerability lies in the fact that it is an exceedingly flat, low-lying, alluvial plain covered by over 230 rivers. The riverine or sandbanks areas, commonly known as chars<sup>iv</sup> are subject to frequent environmental hazards like floods, cyclone and storm surges, tornadoes, and drought and riverbank erosion<sup>v</sup>. The people

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live in these char lands are the poorest and most vulnerable who have learnt to survive in frequent environmental hazards but the process is longest to recover from the negative effects of disaster. In this backdrop, some NGOs in Northwest Bangladesh familiar and skilled in dealing with char specific problems have integrated disaster risk management with institutional and development program activities to reduce the impact of disasters on the process of reducing disaster vulnerability of char dwellers. Taking these NGOs as case this paper argued that in the process of disaster risk management, especially in the remote char areas where government services are almost absent or rare, local NGO's disaster risk management development activities integrated disaster vulnerability significantly reduce the of char dwellers especially women.

This article explained the nature of disaster vulnerability and effects of NGOs disaster management activities in lives of women in char lands and proceeded towards fulfilling the following two objectives.

- 1. What are the problems women in char land face during disaster?
- 2. Why and what kind of disaster management strategies are adopted by NGOs? To what extent these activities are supporting women to reduce their disaster vulnerability?

## 1.2. Study methodology and Location

The paper was developed on the basis of a survey conducted among the participants of different NGOs in several char areas of Bangladesh. Both primary and secondary sources are used for data collection. The data was collected through the combination several data collection strategies such focus group discussion, in depth and informal interviews with participants and NGOs officials and staff, and field visit. A questionnaire was developed and used for the survey among the women participants. In depth interview with some women was conducted to collect individual case studies. Formal and informal discussion with NGOs officials and development organizers was helpful to understand the nature and problems of chars. Focus group discussion was held with members of different committees (VDC and FSC). However, non participant observation was important to understand and describe how different groups, committees and NGOs are working to mitigate the problem of disasters and to reduce vulnerability of people. The discussion on disaster

management activities in chars throughout this paper is mainly based on the findings from observation.

We applied random sampling method to select the charlands, groups and committees since it was not possible to interview all the groups and committees due to time, resource and accessibility constraints. The remote nature of some char, made it difficult to interview all groups and committees.

In order to ensure some degree of representativeness, ten women groups usually consisted of 10 -12 members and women member of six Village Disaster Committees (VDC) and Flood Shelter Committees (FSC) were selected. The total number of respondent was 120.

The study was conducted in different char lands of three districts namely: Gaibhandha, Shariatpur and Kurigram<sup>vi</sup>. The char lands are Mollar Char, Khanchanpur, Char Deluabari, Khunderpara Baje Fulchhari, Dakkhin Khatiyamari, Ujanteura village and Badamer char in Gaibhandha district, Char Gander Alga, and Miarchar in Kurigram district and Dular Char in Shariatpur.

## 2.0. Conceptual discussion:

#### Lives in Char lands

The char settlements originate through the sponsorship of powerful elites (matbar) and inevitably grow through power filtration process (Bagee 1998). The settlers have to undergo a process of scrutiny at the outset. Kin ship, factional bondage political disposition are the determinants of preferences. The power elites control the char land and lives of poor char people to a great extent through different ways and means (Bagee 2001). Domination of powerful, lack of access to basic services like health and educationvii, communication with mainland and within chars, dependence on agriculture for livelihood, weak institutional support, lack of justice all together developed a vicious cycle of deprivation for char dwellers and frequent environmental hazards like flood, flash flood, mongaviii, river bank erosion, further enhance their vulnerability ix through displacement, lost of land and assets. The combination of extreme environmental conditions and large number of functionally landless house holds result in out -migration<sup>x</sup>. Poverty and vulnerability in char lands differs among gender.

Women in char lands face more difficulties and are the worst victim of disaster. Lack of knowledge and awareness about disaster, lack of security and safe shelter, with cost of moving along with assets in absence of male usually turn them in to the worst victim of disaster and only passive recipients of relief

## 2.1. Concept and operationalization of certain key terms

#### **Disaster vulnerability**

The term disaster refers to a serious disruption of the functioning of the community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community to cope using its own resources. A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.

Vulnerability, on the other hand refers to the condition determined by physical, social, economics and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. The term has been defined as the lack of capacity to withstand the shock and stress.

In the United Nations Relief Disaster Office (UNRDO) context, disaster vulnerability means vulnerability which in turn means disaster risk. UNRDO has termed vulnerability analysis as a method of establishing the nature and degree of risks present and their potential impact for the purpose of disaster prevention and mitigation. Therefore disaster risk / vulnerability may be expressed as the product of natural risk and damage probability:

Vulnerability (disaster risk) = Natural hazards risk × Damage probability (Fook1991: 141)

This simplified expression implies that risk of disaster can be reduced either by reducing the natural hazards itself or by reducing the probability of damage which may result from such hazard. In most cases, it is beyond our present means and capabilities to reduce the intensity or frequency of natural phenomena and leave us with only one choice, reduction of damage probability through disaster management.

Since it is not possible to control natural hazards, therefore disaster vulnerability of char people can only be reduced by lowering the damage probability through an effective disaster risk management system.

#### 2.2. Disaster risk management

Disaster management is a special type of emergency management. It is the systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters (UN, 2004:17).

In this study disaster management refereed to both long and short term structural and non-structural activities which are designed and implemented to avoid and reduce the disaster risk and adverse effects of disaster on the lives of char community and women.

## **Mitigation**:

Mitigation includes structural and non structural measures undertaken to limit the adverse effects of natural hazards, environmental degradation and technological hazards.

In this study mitigation indicates those sets of structural and non structural measures that are adopted by NGOs to reduce the effect of disaster i.e. losses of life and assets, and secondary damages in char areas.

## **Preparedness**

Disaster Preparedness is the most important phase of disaster management. It includes forecasting and taking precautionary activities and measures in advance to ensure effective response to the impact of hazards including the issuance of timely and effective early warning, evacuation of people and property from threatened locations. Training, maintenances of resources and counter disaster plan all are part of preparedness

In this study, preparedness will be understood in terms of individual and community's level of awareness about pre and post disaster activities, and strategies adopted for coping disaster.

#### **Response**

The actions closely related to disaster impact and include providing emergency assistance i.e. rescue and opening shelter, reducing the probability of secondary damages and helping to speed up recovery operations (Quarantelli 1991:113-119).

In this study response towards disaster will be understood in terms of different support taken immediately prior to and during disaster i.e. rescue and relief and actions taken to reduce the impact of damages i.e. to decrease the probability of outbreak of diseases, causality due to starvation and accident.

## **Recovery**

Those disasters relevant activities those are undertaken after the emergency period is over in an attempt to return to normal functioning. These range from providing of financial assistance crisis counseling and technical information, rebuilding of damaged destroyed facilities etc (Quarantelli 1991:113-119).

Therefore recovery will be understood as those activities which help disaster affected people and community to return to normal life after disasters. These activities may have financial, technical or structural aspect.

## 3.0. NGOs approaches towards disaster management

The transitory nature of char lands means that strategies for environmental improvement with medium or long term outcomes cannot be ineffective and disasters cannot be reduced. Therefore, NGOs working in these char areas have initiated different approach and strategies keeping in consideration the frequency and nature of disaster in chars.

Understanding the fact, that disasters cannot be reduced, NGOs have adopted two fold strategies, structural and institutional and implementing different activities to reduce disaster vulnerability by increasing awareness, participation, and capacity of people to response disasters.

NGOs, rather than just following traditional ways or doing things, design and implement new and different ways for effective disaster preparedness and as a part of their structural strategy, implement Homestead raising programme, and construct Clustered Village and Flood Shelter to increase the preparedness and coping capacity of people.

Through institutional strategy NGOs, provide training, conduct workshop, seminar, rally, drama, folk song, and video show on disaster and publish different posters to increase disaster awareness and preparedness during non response times. To ensure peoples participation in disaster management activities, committees are formed both by men and women of char with specific duties and responsibilities to perform in different phases of disaster management. The following figure depicts the NGOs approaches and strategies in short.

Approaches

Strategies

Flood shelter construction
Homestead raising
program Emergency
storeCluster village

Flood Shelter Committee
Disaster Management
Committee Disaster
Training and education
toGroups

Figure 1.0: NGO's approaches and strategies of Disaster Management

## 3.1. Impact of NGOs Interventions

As already mentioned, chars are highly vulnerable to disaster mainly flash flood, riverbank erosion, normal flood, and monga. The people living in char loss their lives and assets due to disaster that occurs on almost regular basis and governmental system for disaster preparedness (including warning and response) are not fully developed and are comprehensively under resourced. In case of some chars, condition is much more complicated due to the remoteness and lack of communication with mainland. It takes almost a day to reach some chars by boat. There are no other means of communication during the rainy seasons. Part of some chars; we visited, was eroded within two days and people had to take shelters in the flood shelter even during normal period. Women in these chars have to fight this adverse situation by themselves in absence of men ( who abandoned their families and migrated to other places).

During the study, the following problems have been identified by char women that helped to identify the factors for their disaster vulnerability and damages.

Tab: 1.0: Problems and factors responsible for disaster vulnerability (identified by the char women)

	N-120	<b>%</b>
1. Frequent disasters	114	95
2. lack of emergency disaster forecast and warning system	90	75
3. Less time to move and lack of transportation (boat)	78	65
4. Lost of land and assets	90	75
5. Livelihood become threatened	96	80
6. lack of multipurpose and sustainable flood or cyclone	84	70
shelter	96	80
7. Crisisof food ,safe drinking water and sanitation(especially women)	102	85
8. No income during disaster	94	80
9. Inadequate support for long term and emergency needs.	72	60
10. Savings spend to move and to make up the damages		

<sup>\*</sup> multiple responses

In response to our question, 95% respondents identified frequent disaster and 75% said lack of timely warning is responsible for damages. 65% said they did not get enough time to save their assets and 75% lost their lands and assets which increased vulnerability. Among the respondents, 80% opinioned that livelihood which is based on agriculture and firm activities were threatened due to disaster. 70% said that they had no place to take shelter other than embankment or road and 80% experienced crisis of food, safe drinking water and sanitation especially for women and adolescent girls. 85% respondents become unemployed and 80% opinioned inadequate governmental support responsible for their vulnerability. 60% respondents used their saving to move to safe places and to recover the damages which further enhance their vulnerability and poverty. Even in the normal flooding, chars dwellers deplete physical and financial capital to cover costs of moving to safer areas.

#### Case study of losing the beloved

Halima Khatun, of Madhya Falur char village, in 3 no Bhandabher union, in Kurigram district was married to Md. Abdur Razzak only at the age of fifteen and became the mother of five children. She experienced misery and hardship in her married life and lost everything to river erosion. The signs of early marriage, child birth and constant poverty are written all over her face and body. During the flood of 1998, Hazera and her family had to take shelter on the road where her 2 years old son died from starvation and lack of treatment.

The conventional approaches of disaster management have not been successful to reduce damages and disaster vulnerability in the char areas. The nature and type of disasters in char land are different from the other areas and require different approach and strategies to these problems of char dwellers. In this backdrop, the strategic thrust of NGOs intervention is towards disaster risk management, which means avoidance or minimization of the impact of disasters through increased coping capacity at community, group and individual levels. The idea is to shift from reactive response activities towards developing and institutionalizing a proactive disaster risk reduction culture within the char or riverine community.

The proceeding section presents an analysis of NGOs interventions to reduce disaster impact and vulnerability of char dwellers.

## 3.1.1Impact of Institutional approach and strategies:

Reduction on the vulnerability of people and institutions will be better done with people's participation. Any national disaster programmes calls for people's participation and involvement, if it were to succeed. Disaster preparedness and training again, are inoperable in the absence of people's participation. For successful implementation of any preparedness planning, a management system geared to the village level and involving local volunteers must be established; otherwise it will be reduced to a pious wish on paper (UNCRD- CIRDAP Workshop 1989-2).

The activities designed under structural approach, directly support people to cope and reduce the amount of losses where NGOs play major role. In institutional approach, participation of the community members in disaster management is emphasized. Here skill and knowledge are transferred to and responsibilities are shared by the community in the process of strengthening their capacity to absorb disaster impact with minimum damage and thereby reducing disaster vulnerability of char dwellers. It focuses on strengthening capacity of char community through involving various members working towards long- term well being, creating platforms for community participation and mobilization and implementing proactive capacity building activities with multiplier effects.

## **Training and other programmes**

Training is one of the techniques to transfer skill and knowledge to increase coping capacity of people during disasters. Group members and committee members received the disaster training. Through the training people become aware about disaster and its impact. They are trained

about disaster warning, preparedness, safety, relief and post disaster activities. In fact training helps them to cope with disaster and reduce the vulnerability to a larger extent by imparting knowledge about disaster and disaster preparedness.

Tab 2: Degree of Knowledge about pre and post disaster preparedness

Degree of knowledge	Number of Respondents $N = 120$	Percentages
Little knowledge	24	20
Moderate knowledge	42	35
High knowledge	54	45
TOTAL	120	100

The above table indicates that 20% respondents have little knowledge about disaster whereas 35% and 45% have moderate and high level knowledge. The respondents with little knowledge are yet to receive training since they were new in the groups and will receive training in future.

Before training, these women had no awareness or knowledge about preparedness and experienced lost of assets and outbreak of diseases. They were heavily depended on the relief and support, but situation has changed. Disaster training has increased their knowledge and changed the perception about disaster that in turn increased their capacity to cope more effectively during and after disaster. In this regard, Nasima a member of Tushar women group in Dular Char in Shariatpur said that,

"Previously during disaster we could not live a day without relief and support from others but now we can sustain 15-20 days without any help from others. I have learned to make saline, store dry foods, matches candles or kerosene, strengthen the bamboo pole before disaster. I also collect safe drinking water and carbolic acid for protection from snakes."

Other than disaster training, NGOs conduct workshops with different stakeholders and government officials, distribute posters and set up bill board in places about disaster and preparedness to increase disaster awareness among people. Street drama, folk songs and show of documentary film during non response time in char areas are organized on the theme of pre and post disaster activities to aware and motivate people about disaster management activities. Moreover, group discussions and celebration of National Disaster Day are part of awareness raising approach.

## Flood Shelter Committee (FSC)

As apart of preparedness, response and recovery, Flood shelter committee is formed with men and women from the char for the management of each flood shelter. The responsibilities of the committee include the management of the shelter, arrangement of the accommodation for the people during disaster and to ensure their security and safety. During disasters, each member is given specific duties. The committees make and implement plans to generate income for the maintenance of the shelter. The members voluntarily participate in the committee function in disaster management activities. During the study, it was observed that, committee members despite their business hold meetings and discuss the matters of maintenance of the flood shelter. They distribute the responsibilities on the members (such as to grow vegetables, cultivate fish and poultry and plantation during normal period) to generate income for the shelter. Also all of the members voluntarily contribute 1 or ½ kg of rice grain to store for disaster period.

#### **Village Disaster Committee (VDC)**

The committee formed with both men and women members of the community who inform and disseminate information to char dwellers about possible disaster warning, help them to move to safer places, and advised them about precautionary measure for disaster. During any disasters, the members, in coordination with local government agencies and NGOs take part in the rescue and relief operation. The members, mostly from the poor section of the society work voluntarily and contribute to savings fund. The committee also selects the hardcore families for relief and other supports. The advantages of the formation of the committees are:

- a. Committees is innovative in nature and for the first time such initiatives are taken to reduce the damages of disaster
- b. New norms and code of conduct on disasters has been established and practiced
- c. People's participation has increased in many areas of disaster management
- d. Awareness and preparedness has increased, perception about disaster has changed
- e. Since women constitute the majority in the committees, it provides an opportunity for developing women leadership on disaster activities.
- f. Confidence in own abilities have increased in many fold to face disaster and
- g. Losses of lives and assets have decreased to great extent.

In fact, training and functions of different committees have increased level of community's disaster awareness, preparedness capacity, mobilization and participations. The common perception about disaster among the poor char dwellers has changed. Women, once not allowed going out of their home, now taking part in the decision making and implementation of disaster management. The new role of women in disaster management activities has been gradually institutionalized and accepted among the char communities. There is a common understanding and motivation within the communities to exercise benefits of preparedness and risk reduction. Through the activities of committees, peoples confidence in own abilities to deal with upcoming situations, understanding of roles and responsibilities and ownership in the preparedness activities has been established. These committees brought a radical change in the role of women in char areas where more than 60 percent members of committees are women who along with men take part in rescue and relief activities, participate in decision making for preparedness and other disaster management activities. With the absence of male, there are more opportunities for women to take greater leadership roles. These mechanisms have changed the role of women from passive recipient of relief to an active participant in disaster management.

Again people realizing the importance and necessity of such committees, in their own initiatives formed VDC in other chars where there are no NGO programmes or activities. In a way, people's participation becomes an institutional requirement where duties and responsibilities are shared by the community along with government and non governmental organization in disaster management.

#### Woman in disaster leadership

Fatema Abdul Aziz, single mother of two, a social leader and member of the gram sarka in 3 no Bhandhaber Union in Kurigram Districtr. During disasters, she works to increase awareness of the people and takes part in the rescue operations as a member of village disaster committee. Also as a member of flood shelter committee it's her responsibility to look after the people in the flood shelter and ensure their safety and security.

## 3.1.2. Impact of Structural approach and strategies:

"The transitory nature of char lands means that strategies for environmental improvement with high or long term outcomes may not be effective and all physical assets in the chars have a high risk to erosion and this need to be considered before investing in buildings and expensive infrastructure in char (Kelly 2001 cited in Char livelihood program Document 2002, Annex 8 p: 4)"

NGOs working in the remote char to support people during and after disaster; they need to focus on structural aspects in char lands that would reduce their disaster vulnerability. Since long term costly infrastructural investment has high risk to erosion in chars , NGOs have implemented different small scale structural projects like homestead rising, cluster village, construction of flood shelter and establishing an emergency store on the local branch of the NGOs as part of their disaster management.

## **Home stead raising Programme**

As a part of mitigation and to increase the coping capacity of char dwellers, Homestead raising programme has been implemented during Monga, the period of acute shortage of work and income which force the poor to starve, eat once a day, sell their labor in advance or migrate to other places for work leaving the families back in char. To support the monga affected people, NGOs implement the cash for work programme to raise homestead from the anticipated flood level. The members raise their own homestead in cash for work project. This cash for work project benefited people in two ways first, they received cash to face Monga situation and second houses were saved from being flooded.

During the study, we observe the homestead raising programme in the Dular char where the members of the NGO were working in the project and received money for raising their own houses from anticipated flood level , which would had been otherwise flooded. During the study 60 group members from 10 groups whose houses had been raised were interviewed and their opinion is presented in the following table.

Tab 6: Opinion of respondents about the advantages of homestead raising program

Opinion of the respondents	N=60	Percentage
Protect their home from being flooded	60	100
Saved their assets	57	95
No need to move to another place during flood	54	90
Income during lean period	45	75
No need to sell the cattle's and poultry in lower prices	48	80

<sup>\*</sup> multiple responses

In response to our question, 100 % respondents said that the programme save their home from being flooded. About 95% and 90% respondents said that it saved their assets and costs to move to safe places. 75% opinioned that programme provide income during monga and for 80%, did not have to sell their cattle's and poultry for the lack of

places to keep them. The programme helped poor people to raise the height of the homestead from flooding. It actually saves them from the expenses of moving and losing the assets and livelihoods.

#### **Construction of flood shelter**

NGOs, as part of preparedness, mitigation, and response activity and to reduce the secondary damages of disaster, constructed flood shelter with support of local people and donors. Prior to and during disasters people move to this shelter with their belongings. Safety and security of disaster affected people are entrusted with the FS committee (as discussed earlier). Also safe drinking water, sanitation and medical services are provided to reduce the probability of secondary damages. There are also places for keeping poultry and cattle's. Other then disaster period, flood shelters are used for meeting, market and schools to earn additional income for the maintenance of the shelter and construction of shelter on threat of future erosion.

Tab 7: Respondents opinion about the advantages of flood shelter

Opinion of respondents	N=120	Percentage
1. place to take shelter during flood or river erosion or	120	100
cyclone		
2. no risk of theft and robbery	108	90
3. safety and security of adolescent girls ensured	96	80
4. outbreak of diseases reduced	90	75
5. no need to sell cattle's and poultry or other assets	84	70
6. sanitation food and safe drinking water provided	114	95
7. health services provided to pregnant women, old	78	65
people and children		

<sup>\*</sup> multiple responses

In response to question, 100 percent respondent agreed that it provides them a safe shelter while consecutively 90% and 80 % said it helped to ensure safety and security of adolescent girls. Among the respondents 75% opinioned that it reduced outbreak of diseases from water and 70% said that due to shelter they did not need to sell cattle's and poultry in lower prices. While 95% were satisfied about sanitation, food and safe drinking water in shelter and 65% received emergency treatment in shelter.

#### **Emergency store**

To response during disaster and in emergency, each char offices of the NGOs maintain an emergency store with essential equipments in the branch offices at chars. The store is equipped with hurricane, life jackets, tube well, bleaching powder, water purifying tablet, saline polythin sheet,

bleaching powder, saline, kerosene, matches, alum carbolic acid, torch, umbrella, candles, different kinds of emergency medicine, etc are stored in a considerable amount to meet up emergency rescue and relief activities in disaster. The members of the Village disaster committees appreciated the establishment of emergency store and its advantages.

Tab 8: Respondents opinion about the emergency store

Opinion	N=50	Percentage
Provide emergency response	48	96
Rescue of disaster victims	45	90
Decreased the number of causality during disaster	40	80
Outbreak of epidemic is less	35	70
Do not need wait for governmental support	39	78

<sup>\*</sup> Multiple responses

Of the total fifty respondents of different VDC and FSC, 96% said that it helped to provide emergency operation during disaster while 90 % felt rescue of victims become easier and quick.80% respondents opinioned that it reduced the number of causality and 70% said quick response results in lesser extent of outbreak of epidemic. 78% said that they do not have to wait for governmental support during disaster.

The remote nature of some chars made it difficult to provide government's emergency support and relief during disaster like flood, cyclone or river erosion. Due to the presence of emergency stores at the char offices, people can get immediate support and live savings drugs. It also reduced the probability of secondary damages like out break disease like cholera, diahiorea etc when there are crisis of sanitation and safe drinking water.

## **Clustered village**

As a part of recovery stage, clustered village project is implemented in post disaster period, to rehabilitate destitute families. Under this programme, disaster affected families are rehabilitated to a new village (set up by the NGOs). Through this activity, people got opportunity to earn to make up the losses of disaster and find a place to live. The committees formed with members' from each villages are responsible for it maintenance. They install sanitary latrines and tube-wells in the village and villagers voluntarily do the maintenance work against earth collapse and rain cut. Also living nearby in close contact, rescue operation becomes easier. It actually supported affected people to return to normal life.

#### Case study of coping and changing

Dakkhin Khatiyamari a char in Fulchari upazilla in Gaibhandha disrrict was swamped by the surging water of rapacious river Jamuna almost a decade ago. The char however restored and people began to live there once again. The population of this tiny char is over 500 and most of them are living under poverty level. NGO implemented the clustered village project and rehabilitated 30 destitute families. A total 90 female and 68 male worked for a month and received cash income. A 9-member committee maintained the village. They set up 20 sanitary latrines and six tube-wells in the village. Now they do not need to move to safe place during flood and their assets are saved.

The findings indicate that, the activities taken under the structural approach in fact increase the coping capacity of char people through income during Monga, decreasing the amount of damages, saving costs of moving, providing security and supporting to return to normal life. In this regard, Feroza Begum of Char Charita in Gaibandha district said,

"After losing everything in river erosion, I worked in the homestead raising programme and earned 1960 taka. I invested 1700 taka to start a small grocery shop and my yearly profit from the shop is around 10,000 taka. Within a year, I bought a bicycle, a cow and a radio. I am living my life again."

In short it could be said that through these strategies peoples participation has been blended with schemes which are economically productive hence directly benefit the participant and fulfill their immediate needs. Again these programmes are small enough to be within the comprehension of the beneficiaries but big enough to sustain their interest.

## 3.2. Problems of disaster management in char lands:

There are several constraints to establishing a more robust disaster management system in char. Physical mobility of char and people make it hard to maintain continuity of any programme either of NGOs or governments. The lack of sufficient resources in char makes it difficult to implement anything without external assistance. Also lack of profound sense motivation and participation of people affects the decision making of disaster management in chars.

Unfortunately there are FS and VD committees which failed to perform their duties accordingly. The reasons as identified by the members and NGOs officials are lack of motivation, dispersion of members, poverty, lack of incentives, leadership and proper guidance and training.

#### Case study of Committees, which failed to stand by

The village disaster committee in Ujanteura village and Flood Shelter Committee in Deluabari in Gaibhandha district have not been able to perform their duties due to the absence of members. Only 9 out of 13 members were present in the committee without any savings or activities. The meetings become irregular. The reason identified by leader and NGO staff is river erosion that dispersed their members and withdrawn of savings during disasters. However, profound sense participation, motivation and leadership quality also lack on the part of the members as well.

Again the members of the committees face problems in rescue and relief activities due to lack of financial, logistic and technical capacity during disasters. The voluntary fund they generate is not enough to strengthen the committee to perform their duties accordingly.

#### The VDC that needs support

The members of village disaster committee in Char Gander alga in Roumari Upazilla, faced difficulties during rescue operation due to lack of transportation and communication facility. The committee had no rain coat, torchlight, cell phone and boat/bicycle to conduct rescue or relief operation. The fund is not adequate to support the overall activities of the committee.

# **3.3.** Conclusion and Recommendations to strengthen Disaster Management in Charlands

It has been observed that Traditional development approach has failed to reduce the vulnerability of char people due to frequent nature of disasters in chars. In this context, some sort of intervention both by the government and non government organization was prime necessity. Unfortunately the government intervention is almost absent in this areas. Even in the Poverty Reduction Strategic Paper there is no area specific plan targeting the poverty and vulnerability of char areas and no strategies have been outlined to reach and support these excluded char people.

In this backdrop the study reveals that existing NGOs approaches in char areas has brought a change in disaster management from conventional response and relief practices to a more comprehensive and participative risk reduction culture. The strategies incorporate set of activities to strengthen the capacity of char people especially women to reduce unacceptable risk and improve response and recovery management at all levels.

Besides through these activities women are encouraged to participate in disaster management activities which was earlier only prerogative for men. Women participation and leadership become an institutional requirement. Moreover, different disaster management activities support women headed household to reduce their losses and earn during monga and other disasters.

To reduce huge losses and impact of disaster, we need to take in to consideration this extreme group of poor and strategies need to be developed to reach the unreachable through extending support and cooperation to people and NGOs working in these chars. This would be possible through proper institutionalization of disaster management backed by adequate and regular provision of resources for preparedness against hazards.

And to make disaster risk management effective in char areas it is recommended that.

- 1. Local government institutions, NGOs and committees need to work in close cooperation to design and implement an efficient disaster management programme in char lands,
- 2. Committees formed with women members of the community should be backed by adequate financial, logistic and other technical supports as necessary,
- 3. The members of the committees should have provisions of incentives for their contribution and it can be initiated both by GO/NGOs
- 4. The members and chairman of the VDC and FSC should be provided more training on disaster and leadership to enhance their capacity and skill to manage disaster,
- 5. Effective participation of people need to be increased in decision making in all phases of disaster management ranging from formulation to evaluation to develop their sense of ownership and belongingness. There appears the need to make people's participation an institutional requirement.
- 6. NGOs should be encouraged and supported to initiate such integrative programme of disaster management and steps should be taken for replication of successful programme in other disaster prone areas,
- 7. Lastly initiatives to share the disaster management experiences among different organization and groups can be way towards institutionalize disaster management strategies within community, nations and state.

#### **Endnotes**

- Districts of the Riverine chars are amongst the poorest in Bangladesh. Findings show that extreme poverty rate and poverty rate in Gaibandha district is 39.3 and 59.3 and 61.1 and 78.4 in Kurigram district. Source 1995 -1996 HES: BBS, quotes in "Targated food assistance programme in Bangladesh" World Bank 2000.
- The geographical terrain makes it difficult to provide essential services to the chars. Decision on location of schools and health centres are made with reference to the density of population. Since each char settlement has less than a thousand people, they are often by-passed al together.
- viii The common term in rural areas of lean season is monga or "mara kartik". The period between cultivation and harvesting period when there is acute shortage of work and income in char areas.
- The condition determined by physical, social, economics and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. The term has been defined as the lack of capacity to withstand the shock and stress.
- According to a findings 95 % male of char areas migrate to other regions for work. Statistics of Vulnerable people, Solidarity a local NGO in Kurigram, September 2006,

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<sup>&</sup>lt;sup>iv</sup>. Chars is areas of new land formed through the continual process of erosion and deposition in the major rivers and coastal areas.

<sup>&</sup>lt;sup>v</sup> Erosion is a largely unpredictable catastrophic livelihood shock through which household lost their land, shelter and other assets which they have insufficient time or resources to move

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