



Building Community Resilience

Comprehensive Disaster Management Programme (CDMP II)
Ministry of Disaster Management and Relief



Empowered lives.
Resilient nations.



Building Community Resilience



**Impact, Experience and Lessons from Local
Disaster Risk Reduction Fund (LDRRF)**

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Building Community Resilience: Impact, Experience and Lessons from Local Disaster Risk Reduction Fund (LDRRF)

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Preface

The Comprehensive Disaster Management Programme (CDMP) under the Ministry of Food and Disaster Management (MoFDM) is a collaborative effort with the United National Development Programme (UNDP), the Department for International Development (DFID) and the European Commission (EC) to undertake a more holistic and comprehensive approach to risk reduction, which includes the processes of hazards identification, vulnerability analysis, prevention, mitigation, preparedness, coordinated response and recovery within a risk management context to address the underlying causes of vulnerability.

The approach also considers the importance of disaster risk management in poverty reduction, particularly the most vulnerable sections, i.e., among women, children, elderly people and persons with disabilities who have limited access to productive resources. CDMP thus adopts a programme approach covering all aspects of risk management that aims to build upon the ongoing trend of shifting away from a response and relief focus to a broad and more encompassing risk management framework. Based on vulnerability to different types of hazards, CDMP initially focused its field level interventions in seven pilot districts of Cox's Bazar, Faridpur, Rajshahi, Lalmonirhat, Satkhira, Sirajganj and Sunamganj.

The Local Disaster Risk Reduction Fund (LDRRF), a Grants Programme Component of CDMP provide the most vulnerable groups with resources and financial support to broaden and strengthen the coping capacities of communities to the impacts of natural and human induced hazards. To build the technical and institutional capacity of the most vulnerable to resist and cope with disaster threat, increase resilience and more sustainable livelihoods, supporting small-scale innovative and strategic interventions that attempts to foster policy development and capacity building at the grassroots level.

LDRRF Focus

To reduce the devastating impacts of natural and human induced hazards the LDRRF has provided access to micro capital grants for pilot projects with innovative ideas for empowering local communities. LDRRF supported to forge strategic partnership with NGOs and CBOs, and ensure that all risks at the local level are addressed resulting reduced vulnerability to a greater range of hazards, increased resilience and more sustainable livelihoods.

Intervention of LDRRF therefore aims to strengthen the institutional capacity of Disaster Management Committees (DMCs) at Union, Upazila and District levels, including NGOs/CBOs making significant contribution in leadership building qualities, encouraging their pro-active involvement in community risk reduction initiatives, and ensuring community participation in high-risk zones with demonstrable and sustainable positive impact on vulnerability reduction and capacity building. By involving partners in developing Risk Reduction Action Plans (RRAP) at both Union and Upazila levels through Community Risk Assessment (CRA) process involving community people, DMC members and other stake holders, LDRRF enables Disaster Management Committees to be involved in implementing risk reduction interventions at the community level. The geographic focus of the LDRRF was initially limited within CDMP's seven pilot districts selected on the basis of their vulnerability. However the ultimate objective of LDRRF intervention is to replicate best experiences in other disaster prone areas all over the country.

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Risk Reduction Interventions in Flood Prone and River Eroded Char Areas in Bangladesh

Nischintapur is an island Union of Kazipur Upazila under Sirajganj District. The total area of the Union is 35 square kilometers with a population of approximately 21,228, of which 50 percent are female. It is situated at the northeastern part of Sirajganj town, some 18 kilometers from the Kazipur Upazila headquarters. Nischintapur Union comprises 15 villages, of which 6 villages have already eroded into the Jamuna River. The people of this union have limited access to health, education and other community services; the literacy rate is 42 percent. The main communication between Upazila headquarters and Nischintapur Union is by boat. Rickshaw vans and horse carts are available as means of transportation during winter season while small boats are used during monsoon. Most community people are engaged in farming, fishing or day labour.



In October 2006, CDMP through a local NGO the National Development Programme (NDP), facilitated Community Risk Assessment (CRA) in the Union followed by development of a Risk Reduction Action Plan (RRAP) identifying risk factors and priority risk reduction strategies to address them. The process involved Union Disaster Management Committee representatives, community people and other stakeholders. The CRA process identified that around 70 percent of the total area is inundated by the river during the flood season and a large area is lost as a result of river bank erosion. The community also identified flood, river bank erosion, drought, thunderstorm, and tornados as natural hazards. On this basis, the community, in consultation with the Disaster Management Committee, proposed a number of immediate risk reduction activities including elevating height of vulnerable houses above flood level and livelihood support to the most vulnerable families.

Flood proofing measures were also undertaken by raising the community ground, consisting of 15 vulnerable families in Char Panagari Village. For improved health, 10 sanitary latrines were installed and existing 8 tubewell heads were raised with concrete platform to secure the community's source of safe drinking water year round. Livelihood initiatives were undertaken to reduce the vulnerability of extremely poor families. These included provision of 10 cows (for 10 at-risk families) and 130 chickens (among 13 at-risk families) for rearing, fruit trees with fencing and supply of seeds for homestead vegetable gardening. To reduce the impact of erosion, wood tree saplings were provided for the community to plant in areas of high risk.



On November 02, 2008 UN Secretary General Mr. Ban Ki-moon visited this community. During his brief visit to Char Panagari village, he went around and met several vulnerable families; spoke with members and children of the families. He went inside their homes, looked around to see homestead vegetable gardens and the poultry and livestock. Members of the families informed the Secretary General about their risk and vulnerability and briefed him about the Community Action Plan developed through CRA.

He reminded the people that with CDMP's support, they have safe home and reduced risk from flood inundation. He said that with livestock, poultry and vegetable seed support through CDMP, they can now improve livelihood and bring changes to their lives. He suggested sending their children to school as there is no other alternative to education.

UN Secretary General Mr. Ban Ki-moon visited these community efforts on 2nd November 2008 at Kazipara in Shirajgonj. During his short visit to Char Panagari village,

These community initiatives have increased Char Panagari Village's confidence to mitigate, prepare and manage disasters. The community has proved that "Disaster Management is Everyone's Business".





Sunamganj

Harvesting Rice before Flash Flood Strikes - Learning to cultivate an early maturing variety to help reduce risk of crop loss and damage

The people of Sunamganj district have been suffering from flash floods for a long time. Their daily life and livelihood is seriously disrupted by flash floods. Farmers are the worst victims of this hazard. Expected agriculture production, specially the production of *boro* rice is seriously affected.

In order to help local farmers to identify and undertake necessary measures to reduce risks of crop loss, knowledge on early harvesting variety of rice was helpful among the farmers community. The experience of using the early harvesting variety of rice was disseminated and promoted to practice in other areas that are affected by flash flood.

The following describe a community gathering for sharing experience and learning.

At least 25 people, all clad in lungi and shirts, suddenly converged in front of a restaurant in the small countryside town of Dharmapasha at about 9 pm on April 12 in 2008. They had come from Jamalganj, another Upazila in the Haor area of Sunamganj district. It takes about seven hours (by motorized boat) from Jamalganj to reach Dharmapasha. It was late morning when they started the journey and reached destination at night. Farmer groups were accompanied by two guides with them to stay overnight to witness and learn the process of early harvest rice variety from the following morning.



Institute of Environment and Development (IED), a partner organization of CDMP is implementing "Demonstration Plot on Early and Short Duration Rice Variety" project contributing towards identification of local risk and risk reduction options and practices.

Farmers of Jamalganj Upazila had cultivated the same early rice variety in 2007, but very unfortunately lost their crop due to prolonged cold spell this year. After being exposed to the process of learning from experience of farmers in Dharmapasha and witnessing the harvest, they now appreciate the outcome and its significance. The Center for Natural Resource Studies (CNRS) also piloted the early harvest in Jamalganj last year and now they lead the farmer group to experience the demonstration and learn from their fellow farmers of Dharmapasha.

The Upazila Nirbahi Officer (UNO) inaugurated the ceremonial function by harvesting a bunch of rice straw from the stalk. The early maturing rice variety is known as BRR1-45. The major characteristics of this variety is that it takes substantively less days to grow from planting to harvesting stage compared to other existing rice varieties. The ripening time of paddy is very important for farmers of Haor areas. If luck does not favor, the only crop may be washed away by early flash flood within hours.

Mukhlesur Rahman (55) of Dharmapasha village said he cultivated this variety for the first time on his rice field with support from IED. This year, Muklesh cultivated on 16 decimals of land and expects at least 10 to 12 maunds (400 – 480 Kg) of rice as production. "If we can harvest at least three days before the sudden flood, it's a big return to us. It does not matter with the quantity of rice" he said.



Farmers from both Dharmapasha and Jamalganj, local leaders, Upazila Agriculture Officer and others were present on the occasion of the early harvest programme near the rice field. Early variety rice was sown on 24th November and rice saplings were transplanted on the 26th December last year and crops are ready to harvest on the 13th April of 2008.

Upazila Nirbahi Officer Md Maksudul Haque said, "I am interested about the early harvest of BRRI 45 in Dharmapasha." He thanked the Agriculture Officer for his efforts to provide fertilizer to the farmers during the peak time. The UNO also thanked him for protecting the dyke. He said IED has done a good job. Now it has to be ascertained whether all farmers can take the lesson from this pilot project. He said it is urgent to have the paddy harvested early. He thanked farmer Mukhles for taking risks of experimenting this variety on his land. Some risk has to be taken for achieving something good, said the UNO.

About the harvest of the early variety, Dilip Kumar Odhikari, Upazila Agriculture Officer, said, "Dharmapasha being a low-lying area is highly vulnerable to flash flood". During 70s the rice variety produced by International Rice Research Institute (IRRI) was also introduced in Dharmapasha. Earlier farmers used to cultivate local rice variety rice on their own. Considering the characteristics of this area, we need to think on harvesting good quantity within the shortest possible period. The number of paddy in the sheaf of BRRI-45 is not that much. But its production rate is good. Other varieties may get pest attack but this variety is



safe from pest attack". Upazila Agricultural Officer said BRR1-5 is appropriate variety for low-lying areas like Dharmapasha. He thanked IED for introducing this seed and urged all to take it as it is certified.

Former Chairman Fakrul Islam Choudhury said, "We have to achieve self-reliance in agriculture. He welcomed the initiative of IED and said crops in this area are damaged by rain and drought. If the crops can be harvested early, it will be very rewarding. He however requested the concerned department to examine crop yields BRR1-45".

Field Facilitator of CNRS Mr. Rezaul Karim said that last year an early variety was cultivated under CNRS initiative in Jamalganj. Unfortunately crop was damaged due to prolonged cold spell. Following the loss of the previous year, farmers did not cultivate BRR1-45 this year in Jamalganj, CNRS has brought farmers from Jamalganj to show them the results. Farmers from Jamalganj have already requested CNRS to provide them with seeds of this variety, he said.

This early maturing rice variety is also been used in Shalla and Dirai Upazilas in the deep Haor areas. Cost of seed is Tk. 22 per kilogram. Mohammad Abdul Hafiz and Md Alai Uddin who came from Jamalganj said they have learnt a good lesson. Abdul Motalib, former member Siraj of Dharmapasha and Rashendra Talukder of Dakhsin Banhshikunda have already asked Mukhlesur for the seed of the BRR1 45 variety.



Cox's Bazar

School Children Learn to Prepare for Earthquake & Tsunami

In line with the global campaign of UNISDR *"Risk Reduction Begins at School"*, CDMP initiated a number of programmes involving the school students, teachers and guardians for disaster risk reduction in schools. Considering the need for school based earthquake preparedness, Civil Engineering Department of Bangladesh University of Engineering and Technology (BUET) implemented a project with CDMP support on "Development of Preparedness Programme for Earthquake and Tsunami Hazard in Cox's Bazar".

The following story shows how the school students participated in a mock drill and demonstrated their capacity to protect themselves from earthquake risks.

"At least several hundred people lost lives and received injury in an earthquake that hit Cox's Bazar, a tourists city located near the world's longest sea beach".





This is not real news and no such event struck Cox's Bazar on that day. This was a part of the simulation of two mock drills on earthquake preparedness organized by local school students.

Raising awareness on pre-disaster and post-disaster situation can reduce the risk of disaster casualties to a great extent. The people of Cox's Bazar Sadar learnt such lesson from the mock drill at the school ground of Poura Preparatory High School on May 23, 2008.

Dr. Ashutosh Sutradhar an Associate Professor in Civil Engineering Department of BUET informed that this project has two components:

- a) Academic research on tsunami, earthquake, surge and tidal bore, and
- b) Preparedness.

Early warning is a part of preparedness. A total of 10 modern equipments on early warning are procured by the project from a US based company which will be installed at different spots of Cox's Bazar district. These are four types of Addressable Satellite Radios costing from 200 up to 400 US dollars, said Dr. Ashutosh.

He said message will come from Asia Star through satellite which will be received by those radios. A siren is attached with each radio and whenever there is any message on early warning for any disaster the siren will blow automatically. He said that before this mock drill,

at least 25 workshops on awareness raising on disaster were organized at community level under this project. Participation of students including their parents and guardians were ensured to spread the messages among them.

Mock drills were held at the Paura School Ground where the DC, UNOs, DRRO, other government officials, teachers and local community people were present. Largely participated by school students and Bangladesh Red Crescent Society (BDRCS) volunteers, this was probably the first mock exercise held in Cox's Bazar on earthquake preparedness. The drills demonstrated how structural buildings collapse trapping people, casualties and many other possible damages which simulated a real disaster scene. The second part of the drill was on tsunami. BDRCS volunteers using mikes announced that a tsunami will take place and called upon the people to evacuate to safe places. Demonstration showed that many people did not pay heed to the announcement and immediately after the tsunami, there were huge damages causing human and livestock casualties. BDRCS volunteers came up immediately with rescue missions and provided first aid as medical assistance. Seriously injured were rushed to the hospital by ambulance.

DRRO of Cox's Bazar Mr. Abdul Aziz said that so far there are no equipments available for early warning on earthquake and tsunami. "There is wireless for message transmission and mikes for announcing warnings on cyclone tidal wave and we receive them from the Ministry of Food and Disaster Management through the Meteorological Department. Usually, we disseminate warning messages immediately to UNOs and UP Chairmen. Modern equipments provided by CDMP-BUET will equip local administration to be able to receive warnings on earth quake and tsunamis and save people and their assets by warning them well ahead" he said.



Dr. Mehedi Ahmed Ansari, Professor of the Civil Engineering Department of BUET said, "We have conducted an assessment on earthquake risk of Cox's Bazar examining the soil condition and structural condition of buildings using scientific method. The modern concept does not recommend vacant ground floor of cyclone shelters, he said. Such shelter will collapse first in strong Tsunami or big tidal surges. Instead lateral bracing is preferred." He said soil in Cox's Bazar is comparatively strong. BUET works with technical know-how on how to build structures keeping in mind the issues of earthquake and other hazards.

Rajan Shaha, Civil Engineer from BUET, works as the Research Assistant in the CDMP-BUET project. He also explained various aspects of their activities.

Md Omar Faruk, Assistant Teacher, Vivekananda Bidyaniketan of Cox's Bazar said that students are not aware of how to prepare or respond to any disaster. So, I brought them here to participate in the mock drill and learn lessons in the right way and spread them among their fiends, family and neighbors. Abed of BDRCS acted as the Chief Coordinator for the mock drill event.

Rumana Akter, a student of class eight, said, "Earlier I did not know about what to do in such an event of earthquake and tsunami. Now I have learned from this drill and I can inform others about what to do and help them to survive in disaster. Asha Azad of class nine of Cox's Bazar Model High School also expressed the same view. Pinki Dhar and Abida Sultana, two students, said, "If there is any tsunami we will convince people to safe places for shelter."



Renovating Temple to Serve as Shelter during Disaster

The people of Hangarghona, particularly the Buddhist community at Rajapalong union under Ukhia Upazila of Cox's Bazar were at real risk for want of a shelter in the area. During any natural phenomena like cyclone, tidal surge, flood or tornado they sought refuge at the Buddhist temple in the area.



For safe drinking water the only source was a tube-well at the temple compound. But the temple and the tube-well were in shambles. The temple was about 140 feet above the plain land and did not have stairs to access. The sloppy road and greasy soil made it difficult for the people to reach the temple during the rainy season, particularly during extreme weather conditions. Hangorghona is the biggest village in Rajapalong Union often affected by natural hazards. During the rainy season people used to get injured if they wanted to reach the top where the temple is located. For purposes of regular prayer, water collection, community meetings and shelter they had to go there.

Most of the Buddhist people are poverty stricken and they did not have the means to renovate the temple and construct long stairs for it. There was a hanging toilet that needs to be replaced by a sanitary latrine and the tube-well was also obsolete. Getting water in Ukhia is really difficult as it requires sinking pipes at least 500-600 feet underground which poor people cannot afford. Moreover, due to rocky soil sinking tube-well is not always possible everywhere. About twelve thousand people live in Hangarghona. Of them, two thousand people belong to the Buddhist community.

Bulu Barua (42) of Hangarghona said, "People from all walks of life come here for shelter. But we have much difficulty climbing to the top as the way is muddy and slippery. Moreover, there was no good arrangement for water and sanitation. Construction of such a big road or stairs leading to the temple and its total renovation require huge money which we together cannot afford."



The Community Risk Assessment (CRA) facilitated by CDMP's partner Hitaishi-Bangladesh revealed that people in this area prioritized the need to renovate the temple and construct the approach road and stairway

After discussion at the UDMC and subsequent meetings of the Project Implementation Committee, Hitaishi-Bangladesh constructed the stairs and installed a tube-well and a sanitary latrine in 2008 at the cost of Tk 3 lakh and 44 thousand. The job drew appreciation of the community as well as the local government authorities. They also renovated the temple building and gave a fresh look.

Under the renovation work Hitaishi-Bangladesh completed the wall and floor plaster, set up new grill in the windows and the main grill to protect the precious Buddha statues of the temple. Bulu Barua said, "We come here to pray for many years. Now our children can come and play on the temple premises. Pedestrians can take rest if they feel like when they are tired. Earlier the connecting road was not very friendly especially for women and elderly for the slippery road. Now it is easy and come for visit or to fetch water. If there is rain there is no problem now."

Sunil Barua of the same village said, "People used to take shelter here, but they did not have security. Their belongings used to be stolen. Now they are secured. There is a Temple Maintenance Committee now. The people from Kutupalong, Shilpara, Barabil, Ajkhia, Puittachuri, Lambaguna, Darkhari will take shelter here during any disaster." He further said people of all religion come here. There is no such high place in the surrounding villages.

Nirdarshi Barua of the same village said people can also keep their cattle-head in the large ground of the temple. In the past, if there were a tornado or cyclone people used to slip and fall on the muddy road leading to the temple. Many women and elderly received injury while climbing the top. Now this will not happen because of the stairway, he said. It was found that people of all ages and sex were coming

and taking water from the tube-well of the temple. The eleven-member maintenance committee is headed by Ranbir Barua and Proodorshi Barua is the Secretary. In the surrounding area people fall in severe crisis for drinking water during the dry season as the underground water level goes down. People depend largely on the tube well at the temple compound as it provides water year round.

The Bhante (religious leader) of this temple Anandapeu Vikkhu always stays in the temple and he conducts regular prayers. Dipti Barua, a woman, said, "Earlier we could not come during the rainy season. Now we can come here and take water. Ritu Barua, another woman, said, "We can now come here even in the rainy season. The temple premises are also used for immunization of children," she said.

Project Manager Abu Sadat Mohammad Maidul Islam said they have renovated another school –cum shelter at Madha Rajapalong and planted 2000 saplings of Ekashia tree for boosting ecological balance and protecting road on two sides at Parerbilnalbania in Palongkhali union of Ukhia upazila.



Reducing Risks of Indigenous People

"We have long been neglected in the society as segregated and regarded as ritually unclean. We are not allowed to visit others' house and have no access to community facilities as we considered being isolated for long time," lamented Shefali Mallick, an indigenous woman of the Roy Mallick Community at Arpara of Bausha Union under Bagha Upazila of Rajshahi district. Her husband Shitan, a day-labourer said that our Chairman of Bausha Union Ashraf Ali Malin has come forward to help us in many ways and trying his best to bring changes in our society.

"When we go to teashop and ask for a cup of tea, shop owner use a separate cup. They also use separate glass if we want to drink water. As any social events, we are not welcomed, said Shitan. But the present Chairman has advocated for removing such difference and discrimination. Now it is much better than the past", he said.

A total of 35 such families live in this village and they consider themselves as 'Adibashi' or the indigenous community. They are all landless and the cluster does not have access to safe drinking water and sanitation system. People being daily labourers, they do not have any regular income. The entire village has few livestock and poultry. "As day- labourers, whatever





we earn is not enough to buy vegetable and pulse after purchasing rice, said Krishnapada Sarker, a leader of the indigenous people at Bausha. Traditionally, people of this community go out to hunt animals in the jungle for consumption. Now there is no jungle around and hunting is now restricted. They live on others' land, he said. To remove their vulnerability and poor condition, Southern Gano Unnayan Samity (SGS) came forward conducted CRA in 2007 and subsequently implemented "Livelihood Support to the Indigenous Community" with CDMP's support.

Female Member of Bausha UP and Chairman of the Project Implementation Committee (PIC) Tahura Begum (40) said, "The situation was discussed during the routine meeting of UDMC along with SGS. The entire habitation of the indigenous people remains under knee-deep water during the rainy season.

Shibani Gain, Project Coordinator of SGS, said the demand for elevating their homestead, providing tube-well, latrines, chickens and goats came up through CRA to reduce their vulnerability and risks of their livelihood. The foundation (Bhita) of homestead of all 35 families has been elevated above the flood water level. 12 Sanitary latrines were constructed for the entire cluster and among 20 most poor families were given 2 goats each for rearing while other 15 families were supported with 13 chickens per family. To ensure safe drinking water, the project also installed 2 tube wells for 35 families in the cluster. Shibani said SGS-CDMP have contributed Tk 3, 63,000 for this project. The community contributed in the form of physical labour.

Bharat Chandra (70) of this community said, "Now we will not be affected during the rainy season. Earlier we had to go to the local school for shelter. There were no sanitation facilities. We had to use shaft for attending the natural calls. Diseases were very common among us."

Renu Bala, Alaka Rani echoed the same views. Nirmala was given 13 chickens. It has given her an opportunity to earn some extra income for her family. Her husband Tapash sells labour to others' field. They do not have land. But they have dream to prosper and develop.

Hashi, another woman, has now 25 after she had been given 13 chickens. Sukumari (60) of Srirampur and sister of Krishnapada is physically handicapped received Tk. 5,000 like other four persons with disability of her village. Sukumari has purchased a cow with the money. She passes her days in distress but she considers that she will have good time as her cow grow bigger.



Addressing Disability in Disaster Management: Fatema Embarks on a New Journey

It was in the afternoon of scorching summer of April in 2008 when Fatema was getting ready with her kettle, cups and other utensils to start selling tea. The whole environment in her vicinity at Nalgara village in Dharmapasha Upazila of Sunamganj district tells of a life of struggle amidst vulnerability and deprivation.

Born in a poor family and now mother of three children, Fatema cannot recall exactly how old she is. She appears to be in her thirties. Her father Abu Shama is quite old (approximately 85 years) and not certain about his exact age, migrated with his parents from Bhairab of Kishoreganj district due to family feud. But settling all the way at Nalgara did not change their fate, rather hardship of Abu Shama, a porter in his youth, increased.

"My father was very humble, quite and innocent; our land was grabbed illegally by local influential persons" Shama lamented. His daughter Fatema, whose fairly complexion has now faded, found her childhood in extreme poverty and hunger causing malnutrition



subsequently. The toil for survival, along with her sister and brother started. "I worked door to door as a domestic help in the town; stayed in shelter, said Fatema, who lost her mother before marriage.

But her problems were not end here. It turned into worst when her right eye started to itch with dropping water. With no treatment, Fatema lost her vision of one eye and that affected the other eye as well. As common belief they considered this as an impact of 'bad air'. Her father was old and felt anxious with an uncertainty of his family with his two daughters and one son. He could do nothing but got her almost visually impaired daughter married to Abdul Jalil, also having disability in one leg with leprosy. Jalil came from Patgram of Rangpur in search of livelihood.

The extent of distress continued. They gave birth of two sons and one daughter. Efforts of Fatema and her husband could do little for the increased family members in changing their fate. "At that time, I went to Mohanganj hospital for treatment of my eye. I received primary treatment, but it did not sustain as prolonged treatment was necessary, which I could not afford to continue," Fatema narrates with no complain. The kinship of Fatema was not in a position to help her. Her brother works on others' land and he also became busy maintaining his wife and three children. With three children and a disabled husband, Fatema became helpless absolutely. She had no food and shelter. "I live in my brother's room that is thatched and risky and can easily collapse by wind," Fatema said. Despite all this, Fatema finally have a sigh of hope. Fortune smiled at last on her to a great extent. Constructing a grocery-cum tea stall with capital worth Tk 10,500 brought great solace for Fatema and her family.

"I continued as the domestic help in the Upazila Sadar in different houses of officers. They (IED) gave me the capital, a kettle worth Tk 550 and also a calculator and khata (ledger book). My husband can operate and maintain account with it in the shop," said Fatema.





"We provided her with the money to set up the shop under a project titled *Rehabilitation of the Disabled with Small Business*. We supported 20 such families in this area under the partnership project of IED and CDMP," said Sheikh Shahidul Islam, Associate Field Coordinator at Dharmapasha Upazila.

Fatema said, "This shop gave me a new life as it earns us on an average Tk 3,000 per month." She has sent her eldest son and the daughter to school and plans to send the younger one too. Fatema and her husband sell rice, pulse, soap, oil and other essentials along with tea.

"We start selling tea for Tk 3 per cup from 10 am and continue till noon. After lunch break, we start again in the afternoon and continue until 10 pm." She sells at least 40 cups of tea per day. Fatema and her father repeatedly expressed their gratitude to IED and CDMP (although they cannot spell out exactly). It was a sustainable solution to reduce vulnerability of a poor family like Fatema and her husband. Fatema now dreams to improve her business, build her own room and probably treat her eyes in future.

Shahidul Islam said this project started on 17th of September in 2007 and ended in 2008 with a cost of Tk 221,910. Md Liakat Ali, Chairman of Dharmapasha Union Parishad, said if IED and other NGOs come forward along with government efforts, the disabled persons in the society can contribute to improve their livelihood without depending on other's help.

Elevating School Ground to Provide Shelter during Flood

Faridpur is a flood-prone district of the country. River Erosion has taken an alarming turn in some upazilas. The rainy season is often accompanied by floods and river bank erosion which uproot people from their homes and settlement. Flood-hit people are used to live in distress with their belongings and cattle-heads. Movements become disrupted. Students cannot attend schools as their school premises are inundated with flood water. Children cannot play for over six months in a year. These are the common scenario caused by flood every year. Traditionally our relief focused disaster response addresses problems requiring emergency action such as distribution of relief items, health care service and special agricultural rehabilitation.



Risk Reduction Initiatives to keep schools functional during flood

Hakimnagar Junior High School at Durbatek in Chamasirpur Union of Sadarpur Upazila stands by the river Brahmaputra. The school has a large ground but every year, the ground goes under water during the rainy season and unusual flood. The school was established in 2004. Students from Baliahat, Durbatek and Hakimnagar village are enrolled in this school. When the school ground goes under water, the school does not function and students stop coming to school. Every year academic activities of this school are disrupted due to flood.

The ground was identified as a strategic point for establishing shelter by the community people during CRA and was clearly specified in the RRAP. After several meetings at the UDMC, it was decided that RISDA, a local NGO and CDMP Partner, would elevate the school ground to keep the ground free from flood. The initiative was named as "Institutional Ground Raising to be use as Killa for temporary shelters"

'Implementation of the project started on December 02, 2007' said Md Zahir Hossain Mia, Supervisor of RISDA.. The ground has been elevated by six feet above the base level. LDRRF contributed Tk 320,000 and community contributed Tk 67,000 through physical labour for earth filling. Fifty persons worked regularly for 40 days, said Zahir.

Torab Fakir, Assistant Teacher of Hakimnagar Junior High School, said this has set a good example. People of this area will be benefited. They now can take shelter and can keep their cattle-head safe during flood.

Haji Abul Kashem Sheikh (80), who resides adjacent to the school, said, "In the past, water did not drain properly from the ground during the rainy season. Now it will not happen."

Rozina Akter, a student of class X of Hakimpur High School, also expressed her satisfaction. Earlier the ground would get muddy and they could not play. Now sports events can be held here even during rainy season, she said. If flood takes place, the students will be able to continue attending school.





Coconut trees have been planted surrounding the elevated ground to protect soil erosion. Md Golam Mostafa and Nuruzzaman of Baliahati, Nehar Begum, student of class VII of this school, said during flood, people will take shelter here. Abul Kalam Matobbar of Durbatek expressed the same view. Member of the Union Parishad Suruj Matobbar said RISDA has done a very good job by elevating the school ground. He said Chairman Md Mojibur Rahman and Upazila Nirbahi Officer Md Nasir Uddin were also present during the inauguration programme.

RISDA has also constructed an evacuation road-cum shelter from Piajkhali Bridge up to Bepari Bari in Dheukhali union LDRRF support. Community people participated with 20 percent of the total expenses. The height of the road is seven feet. Ekhlas Mrida of Akut and Hossain Hawlader of Munshirchar said it will be useful for the local people. But it would have been better if the entire road was elevated.

Alauddin of Bepari Gram and Ainal Khan of Dabraddi dangi said communication has improved by this elevated road. If there was a bridge connecting the new road with the approach road it would be better. Former UP member Abdul Barek Bepari said if the road was extended inside the village it would be good. It would reduce the time to go to Dhaka from here. During flood it will not go under water. Crop harvest will be easier. Earlier trawler was used through a distant road taking much time.

The Member of the Union Parishad appreciated the project. Former UP Chairman, Abdul Malek Bashar said it would improve communication. People can take shelter with their livestock during flood. Farmers can carry their produces to market easily. But the main challenge is to protect and maintain the road now.

Hope in the Haor: Community people build Gazaria Dyke in Bhimkhali to Save Crops from Flash Flood Inundation

The lifestyle, livelihood and climate of the Haor region are quite distinct from the plains. Haors constitute vast open low land that remains under water for six months (June –November) during the rainy season and emerges during the dry, lean period (Jan-May). More often than not, whatever Boro farming the people do in a year could be washed away by early flash floods. The people living in the plains may be surprised to learn the level of hardship the Haor people face throughout the year. The cattle-head and poultry are also used to the cycle and people have to consider disaster risk in their daily life. Ignorance due to illiteracy and poverty is mostly responsible for their large family, in particular, devoid of safe drinking and sanitation facilities. They earn their meager livelihoods from fishing and farming not on their own plan, but as per the whims and caprice of the nature that often turns cruel to the vulnerable and marginal farmers of Haor like one at Pakner in Bhimkhali Union under Jamalganj Upazila of Sunamganj district.



Haor region is spread over Sunamganj, Habiganj, Sylhet, Moulavibazar, Brahmanbaria, Netrakona and Kishoreganj districts in Bangladesh. As rainy season sets in, the Haor goes under water. Although all farmers are supposed to have the right to catch fish, but they are deprived of it due to some complexity arisen out of the existing government leasing system.

Some influential musclemen in the Haor take lease of Khas (Government) land for fishing, but virtually they take control of other areas driving the poor fishermen and farmers away. On the other hand, a large number of the Haor people do not have their own land. They sell labour to others in the area or have to migrate to other districts for seasonal job. So the flash floods, *monga* (famine like situation) and joblessness are some disaster-related risks they confront but can hardly overcome. There has been no alternative.

But for the first time in the history of the Haor, the community members of Bhimkhali Union in Jamalganj Upazila, with support from CDMP and IDEA, have been able to build resistance against the early flash floods that generally hit the standing and ripe Boro crop during May-June every year.

"The nature of such flash floods is that they come suddenly and may stay for some days. But the irony of fate is that by then the standing crop is damaged and sometimes washed away by the flash flood within a few days. So during the peak harvesting time, two or three days is a great factor for local farmers in haor areas," said Azizul Huq, Project Coordinator of IDEA in Jamalganj.



"Consulting the concerned community members, the dyke has been built at such a strategic point of the Haor that it will protect a large area of crop land from the flash flood inundation" he said, adding that the farmers of the villages to be benefited are from Bisna, Mirzapur, Kalipur, Jangalbari, Noagaon, Bahadurpur, Natunchanbari, Moulinagar, Puranchanbari, Hasnaganj and Kirtanpur. There are five unions in Jamalganj- Sachnabazar, Jamalganj Sadar, Beheli, Fenarbak and Bhimkhali.

"The dyke known as Gazaria Jangal (dyke) in Pakner Haor has brought blessings to farmers and day-labourers of several villages of Bhimkhali Union in Jamalganj Upazila," said Abu Bakar of Puranchanbari, who is 35 years old, having two sons. He has no land of his own and is ready to harvest paddy as labour for others in the Haor. He said, "Harvesting of rice and planting saplings in this Haor have been equally difficult and risky before construction of this dyke. There was no passage in the vast Haor through which farmers could move and carry their harvests home. As a result, they could not put the sheaf of paddy in bunch on any comparatively high place after harvest. So, if water comes we are helpless. Moreover during the plantation there was problems of both shortage and stagnancy of water in the field."

Md. Rahim Ahmed aged 17 having two acres of land inside the Jangal said, "Earlier it was really difficult to carry our crops home as there was no road here. So it used to cost more, but now it is easier and safe. We do not need to pay more for carrying crops home." Shah Alam aged 20 has six brothers and owning two acres of land inside. He also listed the benefits of the dyke in the Haor. Apart from the advantages of transportation, Shah Alam also informed that the tender plants used to be destroyed for rampant movements of farmers all over the land. During plantation of rice, regulation of water is mandatory as per requirement. At the time of harvest if there is flash flood, harvested paddy bunches can be stored on the high dyke and then carry them home by boats. Fish cultivation is also possible in the mini-canal that are created after earth cutting to raise the Jangal.





Mohammad Abdul Mannan Talukder (65) of Noagaon, who was passing through the Jangal along with some other villagers, said he has one acre of land inside the Jangal. Mannan said, "This Jangal would be of very useful to us." He urged for constructing more Jangals to benefit more farmers of this haor area. He said, "In this Nidan (lean period) the project of raising the Jangal has provided employment for many poor and landless people of this area." Asked about the maintenance of this dyke after the rainy season he said, there is a supervisory committee to look after it. The mini-canals beside the dyke will be leased for fishing during the harvesting season and the income from this will be used for maintenance purpose in future.

Anwar Hossain (35), the member of the Bhimhkali Union Parishad and Chairman of the PIC said the idea of this Jangal came one year back in 2007 through Community Risk Assessment carried out by IDEA among the vulnerable people of the area. As UDMC member, Anwar said, "It was discussed in our meetings and a joint decision was made with the IDEA-CDMP to implement the project at the community level." He said the cross section of people have welcomed the project. Starting from April 2008, this 5,700 feet long Jangal is being implemented, which is 6 feet wide and 3 feet high from Barokhola to Parkata. The project cost was Tk 2,12,000 and the community contributed 20% of the total costs by their physical labour. The UDMC member said that the people have participated in the initiative and worked spontaneously for this project. Even many of them gave their land for this by cutting tender rice plants. He said the plantation timing has a critical linkage with water. So this Jangal will help people retain necessary water in the field during cultivation. If water is available, cultivation costs will be reduced considerably leading to less expenditure for farmers.

Shah Mohammad Faisal, Field Facilitator of IDEA, said about 400 labourers worked everyday during the project implementation. At least 16,000 people of 1,300 families in 10 villages are beneficiaries of the project implemented by IDEA.

When contacted, Chairman of Bhimkhali Union Parishad Md Tajuddin said, this has been a great step forward in community participation to resolve the problems by themselves. He termed it as "community empowerment".

Helaluzzaman of IDEA, who works in Sylhet Sadar, accompanied this correspondent throughout the visit to the Pakner Haor. He said the Haor people practice Jirati (travel to other places). They go to Haor with their cattle-head and build makeshift houses there during October and then after farming, harvest the paddy during May and come back home through new water by boat. But this happens if everything goes normal, he cautioned.





Sunamganj

Coping Mechanism for Disaster Risk Reduction in Water-logged Areas

Water-logging is identified as one of the major hazards in Bangladesh considering its negative impact on agriculture, livelihood and disruption of the economy and society - creating setback in achieving livelihood security.

Sunamganj district is in the Haor region where water logging is a common phenomenon. More than 120 acres of fertile land in Haor at Inatnagar in Beheli of Jamalganj Upazila under Sunamganj district remains abandoned even during the dry season for year after year stagnant water. This water logged site is known as Kosmar Haor. The Kosma has been a boon to many farmers situated on the right side of the dividing road. But on the left, it is a bane for many poor farmers who cannot cultivate their fertile lands only because of stagnant water even during the dry season when most of Haor is dry and ready for rice cultivation.



At least 40 families of Inatnagar, Radhanagr, Beheli and Alipur villages had to shed tears for years together as in the dry peak season of cultivation, they kept sitting idle seeing their fellow farmers engaged in cultivating rice across the earthen road. Flood water is logged because of a dam constructed by the Water Development Board hindering the passage of draining water out.

The village people were desperate to resolve the long-standing problem. But there was no way-out as they are extremely poor and have no resources to excavate canal and construct a box culvert on the road to allow passage of water. People are so poor that they even cannot contribute Tk.200 each for this purpose. During the CRA, participants from this area discussed the problem and identified this to be the only risk reduction option to reduce their risks. Chairman of the Beheli UDMC, Dharmaraj Chowdhury discussed in a meeting with IDEA over the issue providing the reference of the RRAP. Community people never realized until Institute of Development Affairs (IDEA), who conducted CRA in their Union came forward to implement the project on "Construction of Box and Ring Culvert to Protect Inundation of Crop Fields by Controlling Water Flow" with support from the Local Disaster Risk Reduction Fund of CDMP.

Abdul Hashim (45) a member of the UDMC and PIC Chairman for Box Culvert Project Implementation said that he was also an affected farmer by water-logging. He said since the project implementation started, local people came forward to participate in constructing the culvert and excavating canal. About 150 people worked for two days to erect the culvert while for digging 450 feet long canal, 40 persons were involved for continuous 10 days. The canal excavated at 8 feet deep.



Azizur Rahman, Project Manager of IDEA, said through this culvert water flow can be regulated. Excavation of the Canal along with construction of the culvert was completed in March 2008. He said that at least 30 acres of land from among the water logged area have been brought under rice cultivation during this season.

Md Shahed Ali (30), another affected farmer said, "After long 6 years I have been able to cultivate rice on my own land this year. This is really good news for me and my family. Our days were very uncertain and now it will be bright and full of hope." Shahed Ali has 1 acre of land freed from stagnant water.

Md Joynal Abedin (35) owns 1 acre of land but he was not able cultivate this time. He is hopeful that he can cultivate from next year. Rajtika, step mother of Joynal Abedin lives separate, who owns some land inside the water logged area. Project Manager of IDEA said during winter season, Rajtika sits beside her water-logged vacant land and look ahead. People saw tears' dropping from her eyes as this was a real tragedy for her. With two daughters she starved day after day as her only agricultural land was under water for years. This time Rajtika was able to cultivate rice on her land and people say that she is waiting for a good harvest.

Abul Kalam is another beneficiary who said that he has 1 acre of land and cleared but could not cultivate this year as he could not arrange rice saplings in time. Aina Mia, Lal Mia, Aftab Mia, Mertoza Ali, Laous Mia, Tara Mia, Abdul Rafiq, Abdur Rahim of Inatnagar and Nurul Amin of Harinagar and Faruk Mia of Beheli were in utter distress although they all have some lands under water. They were all compelled to carry sand in Sachna Union as alternative livelihood. They now plan to come back to their village and start cultivation.



Kaliganj, Satkhira

Plantation of Trees in saline areas - a move for Climate Friendly Environment

Increasing salinity in the water is leading to multi-prong problems in Kaliganj Upazila of Satkhira district. This has direct impact on both human health and environment. People opt for shrimp cultivation that triggers salinity in water all over the area. In such a situation, developing greenery has become vital to protect the environment and soil in different areas, particularly on river side roads to reduce risks of erosion.

Most people of Kaliganj upazila are engaged in any form of shrimp trade and cultivation and the area being saline prone, they suffer from safe drinking water scarcity. However they are concerned about their hazards and subsequent consequences. Baburabad is such a village in Nalta Union of Kaliganj upazila. More than 1,200 landless families have been allotted government khas land under a rehabilitation programme in Nalta and Noapara unions. Water crisis is in an alarming state in both unions. While visiting the area a woman was found to carry sweet water in containers by tying with her waist from a narrow canal. She was swimming to proceed ahead as she was unable to walk with such heavy load of containers with water.



Md Abdul Bari Gazi (53) hails from Bacrabad leads a community of several hundred people who received land from concerned department of the Government. The project implemented by Dhaka Ahsania Mission under Local Disaster Risk Reduction Fund of the CDMP includes construction of Pond Sand Filters (PSF), Culverts, Plantation of Tree and Pipeline extension for supply of safe sweet water to the community in different unions of Kaliganj upazila.

All such interventions were identified through the Community Risk Assessment (CRA) process. Md Abdul Bari is a CRA participant and PIC member for Tree Plantation and PSF projects implemented at Baburabad. In October 2007, DAM undertook the tree plantation project on 2 bigha land inside the premises of a mosque to reduce environmental risks. Under this project, 200 saplings of Mehgani and Shirish were planted.

Mohiuddin Molla, Union Parishad and PIC member said this has been discussed in the UDMC. Chairman of Nalta Union Parishad, Ansar Uddin requested DAM for undertaking the project. Noor Hossain, teacher of Dhepukhali High School said that tree plantation on premises of the mosque will facilitate prayer under tree shed in future apart from its impacts on the overall environment. This will also provide fresh air and protect the people and area from various natural disasters. He also said that the education level is improving in this area. Local people have formed a committee to ensure maintenance of planted trees.

Nurul Islam (50) is a shrimp trader who earns approximately Tk. 200,000 per year. He is also a PIC member for this plantation project. He said the planted trees will become assets of the mosque. The community people have arranged fencing with bamboo. DAM has provided the saplings with bamboo stems for holding the saplings.



Reducing Risks of Flood and Robbers – Sona Mollar Dangi is Safe and People United

People of Sona Mollar Dangi, named after the septuagenarian Sona Molla, were in severe vulnerable situation. Although close to one another, houses are separated and get detached when the area gets flooded. Boats were the only means to go from one to another in rainy season. During flood the sufferings get triggered.

In addition, robbery was a regular incident in char lands during high flood. Robbers come by trawler and take away belongings and cattle-head. Houses being scattered and separated, people were helpless and face the consequence. Most inhabitants have settled here in Sona Mollar Dangi from other char areas after being displaced by river bank erosion.

Sona Molla (70) said, "My ancestral home was in Taluker Char and I have shifted my house 10 times so far due to river erosion. When I was in Tepurakandi, I had 30 Bighas of land. Shifting from one place to another, I have lost all my property and finally settled here having nothing with me. The mighty river Padma has eroded all land that I had. Even after settling down at Kabirpur, I have suffered a lot for frequent flood every year and robbery that took away my belongings". "Our risks are two folds" Nurjahan, wife of Sona Molla said. She also said that "We did not have sanitary latrine or tube-wells earlier when our children suffered from water borne diseases every now and then."



In such situation, Faridpur Development Agency (FDA) with the support of CDMP conducted CRA in the area involving the community people and identified the extent of vulnerability of the char people in the North Channel Union under Faridpur Sadar Upazila.

Member of the Ward 4 of North Channel Union Parishad and UDMC, Md Hossain Sheikh said, people of our Union are very poor and the area is vulnerable to disaster. UDMC in consultation with FDA has selected this village for the intervention against RRAP. He said, "Our Union Parishad Chairman Abdus Salam worked hard to support FDA for implementing this project. Sharing his experience regarding the role of UDMC to reduce disaster risk, he said we receive minimum support from the Government under VGD and VGF, which is insufficient to fulfill the required task for disaster risk reduction". The UP member himself is a victim of river erosion and shifted his house four times.

Project Coordinator of FDA Shaer Alam said that 25 houses in a single stretch have been elevated by six feet above the highest flood level. For safe drinking water, the project has installed 13 tube-wells and each family now have ring latrine to use. At the cost of Tk 599,000 the project began its implementation on 17th January and the activities were complete on the 16th February in 2008. The community contribution was 15 per cent amounting to Tk 66,600 by their physical labour



Sheikh Asad (70) of this Char said that the houses here previously were on the lower elevation and used to get inundated even during any minor flood situation. Now it will not happen again. "We now can visit neighbours from one part to another on foot. Houses being connected in cluster, we feel strong and united to resist attacks by robbers. During flood earlier, we were compelled to evacuate our homes and belongings. After elevation of our homestead by FDA, we stay here. Our children can walk and play, women go and gossip in their leisure time. Children go to school set up by FDA on foot even during high flood. Sheikh Asad said North Channel was named during the British era. This Union is situated on the channel that separates Faridpur from Dhaka". Sheikh Ibrahim (35) migrated here from Degreer Char as a victim of river bank erosion. "I have lost every thing by river erosion", he said. Answering to a question, he said that each of 25 families have at least eight members per family on an average.

Another resident of the village Sheikh Bablu (40) said, "We could not sleep during rainy season fearing attack of robbers. Our children could not go to school and play. Raised elevation has resolved those problems." Hajera Khatun (60) said all people here are landless. "My family moved from Degreer Char due to river bank erosion". Praising FDA's support, she said that "we (women) have freedom to visit our neighbours even during high flood, earlier – which was impossible".



Member of the PIC, Md Yunus said that we hope our house will not be inundated even during high flood and for any reason if this village is flooded, the district town of Faridpur shall also be submerged too. Yunus informed that he has 5 children (2 sons and 3 daughters) and his eldest son has passed MA from Jagannath University Begum said, "Earlier we could not store required firewood for cooking during the rainy season. Now after elevation, we have enough room to store firewood and we have also planted tree saplings and grass around our raised homes to protect them from erosion. In future when trees will grow bigger, we will get firewood from the plants and trees. During ground elevation, women also worked for earth filling".

Head Master of Char Natakola Government Primary School, Abdul Motaleb Mia said that his house used to float on water during flood every year. He said that his school does not have adequate benches and chairs. Assistant teacher of the same school, Lutfunnesa said, "We spent most of our time for traveling by trawler/boats to go to school in Char areas."

In an interview Executive Director of FDA, said the beneficiary of the cluster elevation can now cultivate vegetables on their homestead premises, plant trees of their choice and above all, they are united being in a cluster to fight any adversities. "We work to raise such instinct among the vulnerable so that they can work together to fight and reduce their vulnerability and cope with disasters by themselves. Self-help initiative is sustainable and it should be practiced through different programmes, he said.



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Durgapur, Rajshahi

Dug-well renovation: A model under LDRRF at Durgapur

Durgapur Upazila is comprised of 7 Unions and a Pourashava (municipality). They are Deluabari, Nowpara, Pananagar, Joynagar, Kismatganokoir, Maria and Jhaluka unions, and Durgapur Pourashava. The major risk identified here through CRA is drought that leads to lack of safe drinking water.

Most people use dug-wells (Idara) as only source of drinking water in different parts of Durgapur Upazila as during dry season, other water sources dry up and those are not considered to be safe. Dug-wells being old enough, their condition were also not very good. That is why in the RRAP, renovation of existing dug-wells received the highest priority to reduce community risks of drinking water scarcity as a result of drought, identified as a major risks. Being influenced by the RRAP developed through CRA, the Dhaka Community Hospital came forward to implement two projects at Union level in Durgapur Upazila with support of Local Disaster Risk Reduction Fund (LDRRF) of CDMP. One is on renovation of 7 existing dug-wells in Joynagar, Maira, Nowapara and Kismotganokoir Unions and the other is on roadside plantation of tree saplings in Deluabari and Pananagr Unions.





Project Coordinator of Dhaka Community Hospital, Altaf Elahi said that crisis of drinking water was the main problem for local people here. Immediately after completion of the RRAP, DCH in consultation with Joynagar UDMC decided to repair the unused dug-well at Reazuddin's land in Joynagar village. Reazuddin has earlier donated the land for the dug-well for community use. The condition of the dug-well was not good enough and people were not using its water any more for drinking. Altaf Elahi said, "As per the RRAP developed through CRA, DCH in consultation with Joynagar UDMC decided to repair the well to make it usable and attached hand tube-well for convenience of people. The project also provided a covering on the Idara to protect dug-well water from outside contamination. We purified the water and assisted beneficiaries to form a committee take the responsibility of day to day maintenance of the well. These decisions were taken at the meeting with UDMCs."

Chairman of Joynagar Union Parishad, Karim Molla said that water level of this idara is so deep that local poor people were not able to sink tube-well. He praised DCH for their initiative and help. Replying to a question, the Chairman said at least 20 families now use water from each of the renovated dug-wells.

Rehana (30) along with Kohinoor, Shahijon and Parul of Joynagar village said, "We can now drink safe water from this dug-well". Others of the village also expressed the same views.

Azad Rezaul Karim, Chairman of Nowpara Union Parishad said that renovated dug-well are now being used by 150 families. He said 90% of the tube-wells in his Union do not work in the dry season when water level goes down.

Chairman of Deluabari Union, Abdul Khaleq Mantu also expressed his satisfaction and said that people of his Union are benefited by repairing old and unusable dug-wells as they are the only source of drinking water in the community. Field Facilitator of DCH Ratan Kumar said that the allocation for renovation of each dug-well was Tk. 40,000. Beneficiaries from among the community people contributed in the form of their physical labour, he said.

Project Implementation Officer of Durgapur Upazila, Md Amjad Hossain said the DCH intervention was a response to the needs of community that was identified through CRA. Project on renovation of dug-well has been very successful and was able to meet community requirements for safe drinking water to some extent. He however emphasized that existing ponds should be re-excavated to resolve water crisis in Durgapur Upazila as extracting underground water is gradually getting difficult, which is more than 365 feet underground, he noted.





Horipur is a six month's seasonal village of Sunamganj district

"This year, our raised and extended cluster ground, protection with bamboo and Chaila (a weed that protects land erosion) saved our village from monsoon flood" expressed his reaction by Abdul Mottalib, a 70 year old beneficiary from Haoria Alipur Village.

Haoria Alipur is a six month's seasonal village of Beheli Union under Jamalganj Upazila of Sunamganj district situated in a remote and hard-to-reach having no communication. This village is inhabited by 126 people comprising 18 families, of which 18 are male, 18 female, 18 adolescence (Male-9 & Female-9) and 44 children. Apart from the lack of communication and the existing vulnerability to different hazards, villages here are long been ruled by land leaser and water lords keeping away all development efforts of the government.

To reach this village from the district head quarter by engine boat crossing *Haliar Haor* takes almost 10 hours. Most people living in village are from low income group. Fishing in Haor water is their main profession, some people also work as agriculture labour during *Boro Season* (March-May). Remembering the past of the village aged Abdul Mottalib says in local dialect *"this village had an image of its wealth, reputation, control and image within Jamalganj, but every year the Afaal (flood waves) has damaged people's houses and households and turned to this condition of the village"*. One can imagine the elderly man's remarks by seeing the adjacent Government Primary School established in 1942, roots of old matured *Hizal* tree and broken concrete wave protection wall.



Haoria Alipur used to be a six month's village. Every year in the month of Ashwin (September), people come and built their homes. Thatched houses are built with bamboo, *binnah* and *chaan* (plants used as partition and roof of houses respectively). After staying for about six/seven months, inhabitants destroy their houses and take their poultry and livestock and take shelter for the rainy and flood season either with their relatives in some other places or establish houses beside the main roads of Jamaniganj. After rainy season, they go back with their belongings and build their house again on their old paternal village. Their life style of breaking and making houses continues.

With support from UNDP and DFID and under the Ministry of Food and Disaster Management, IDEA-CDMP Partnership Project started to work with the communities of Haoria Alipur to reduce community risks in flood prone areas. When asked about who and how the project is implemented, Joj Banu, a widow of Haoria Alipur replied, *"IDEA-CDMP has invited us in a meeting, asked us about local hazards, risks and also asked to explain the possible measures to save ourselves from those risks. We told them, if our village ground is up-raised and surroundings are protected from wave erosion, we can save us from the erosion risks. Then they came forward and involving the community people raised the ground height of the village and protected the entire village with bamboo and Chaillya. IDEA-CDMP has identified this work through Community Risk Assessment (CRA)"*.





Ataur Rahman is one who knows about the entire process of the project. When asked about the implementation of the work, he said, *“IDEA officers along with people from this village and other villages around the Haor, members, local leaders and elites arranged a meeting under a tree near Hati (cluster). In the meeting, a Project Implementation Committee (PIC) was formed. Members of the PIC with the help of village people have implemented the project. Committee members supervised all steps of the activities from earth cutting, leveling, accounts of earth cutting, labour payments up to bamboo purchase and completion of protection.”* (For better implementation of the project, the PIC was formed to supervise the activities). Among the beneficiaries, Afia (30 years) said that *“under this programme, IDEA has taught us how villagers with their skill and initiatives can face risk of any hazards with little assistance.”*

In this project, what is community’s participation? In reply to this, Khalil Miah (38 Years) said, *“We have contributed 20% of the total cost by physical labour in collecting Chaillya, ground leveling, supervision and fixing bamboo for protection.”*

Other beneficiary Bashira Begum (35 Years old women) compared the past and the present after implementation of the project expressed *“I was married 15 years ago with poor day labourer Monir Uddin. Within one year, we had a puri (daughter). Oldest puri is now 14 years old. Her father cannot work due to illness. Since then, our puri is managing the family by fishing and collecting left over rice from the field. Now she is getting older and I am afraid when she is out. With our 4 pula/puri (son/daughter), we used to live in this village from Kartik (October) to Boishak (April). During Baishya (rainy season), we lived with relatives at Tajdharpur like a shameless. No one knew about other families, who use to migrate to other places. With up-rising of ground level and ensured wave protection, we now have a permanent place to live. Allah has now looked at us and taking care of poor. Who else helped us, let Allah bless them too.”*

Inhabitants of Alipur village are now able to live in the village during the rainy flood season after the village ground is raised and wave protection ensured by IDEA-CDMP project

IDEA-CDMP Project to Save Haripur Village

Episode – 1 (20 years ago)

Consider a Union map on your canvas. The map shows some haors. On haor banks, there are 12 villages. They are all floating on haor water like a kingdom of islands. In this kingdom, there are fishes, trees, mosque, temples, small play grounds, have livestock, homes for livestock, poultry, fodder for livestock, have boats, boatman, have places surrounded by Karach plant, have women, men, have small children, restive youths, have rice fields and have lives.

Episode – 2 (after 20 years)

Now consider you have the same 20 year old map. The map has all haors. Eleven villages are not there, no people, no school, no houses, no trees, no mosques, no temple, no play grounds, no livestock, no trace of homes for livestock, no poultry, no fodder, no boats and boatmen, no trace of hijol/karach trees around, no women, no men, no children and youths, no rice and no lives and their exhilaration.

Readers, the story of the village before 20 years that I narrated is not a hypothetical canvas of an artist, but it is a real picture of a seasonal village of Jamalganj Upazila under Sunamganj district situated in a remote and very hard-to-reach location. The name of the village is Haripur. Total population is 237, of them, 90 are male, 82 female and about 65 are children. Majority of the habitants are livestock farmer, some are fishermen and some earn their bread by selling labour.



From Upazila head quarter, going and returning from this village takes 6 hours. The only communication is 'nao' (boat) during the monsoon and 'pao' (on foot) during dry season. This village has never been considered for development because of its difficult communication arrangement, seasonality, vulnerability to natural hazards and lack of responsibility of concerned government authority. The village has remained deprived from all basic services. Every year, flood water, regular water waves and various other natural hazards including 'Afals' (high water waves) causes their existence in stake. Unlike 11 villages of Gobindapur, Krishnapur, Mokmudpur, Nathnagar, Herar Kandi, Boali, Kukur Mara, Sundarpur, Bajna Ura and Rajabaj, Haripur village should have also drowned under the river water.

IDEA-CDMP project with support from UNDP and DFID came forward to reduce risk of erosion by raising plinth heights of houses, extension of the cluster size and protect soil erosion using bamboo and chaillya. The trace of neighboring 11 villages of Gobindapur, Krishnapur, Mokmudpur, Nathnagar, Herar Kandi, Boali, Kukur Mara, Sundarpur, Bajna Ura and Rajabaj are no more exist as they have been drowned under water. The only witness is Haripur village. About the implemented project, an eighty year old Haridas Roy of the village said that, *"IDEA-CDMP partnership project has saved home of our fore fathers. Otherwise within a year or two, we might have to abandon our village."*

What villagers have learned from the IDEA-CDMP Partnership Project? Answering this question, Ms. Bhojona Roy said, "From this project we have learned how to prepare ourselves to face risks." Old member of the village Haridas Roy (80 years) said, *"We did not have money and means to survive. We lived under anxiety. Now we can live with peace and work for prosperity."*



During monsoon, inhabitants of Haripur village spent sleepless night with nightmare as water waves can destroy and drown their houses, households, furniture, rice, livestock and even small children of the family. But after the project being implemented, Ms. Shandhya Rani Roy said; *"Now we can sleep in peace without anxiety of loosing our homes."*

Villagers of Haripur usually fix bamboo and chailya for protection only when water starts pouring in. Under IDEA-CDMP project, this year villagers have jointly worked together to raise and extend the ground height and fixed bamboo and chailya for protection well ahead of monsoon. In this respect, Ms. Jhunu Rani Sarker said; *"Now we are not afraid as we have built the protection before monsoon."*

Haripur village functions as watchmen for risk mitigation of early flood in Haliar haor. Haripur village occupy some part of the Haliar Haor Protection Dam. In the months of March-April, they regularly inform the status of early flood to the Union Disaster Management Committee (UDMC) to save crops in haor areas from flood risks. On this, the ex-Chairman of Beheli Union Mr. Sirajul Islam said; *"the project implemented by IDEA-CDMP Partnership Project have not only saved the people living in Haripur village from water waves and flood but also saved the the inhabitants of all haor area from early flood."* He said that the community is optimistic that the role of Haripu village will be further enhanced in mitigating early flood.

Differentiating between the previous picture and the present scenario after the project being implemented, Mr. Khalil Miah (40 years) of Alipur said, *"It is difficult to identify Haripur now. Looks like that I am seeing Haripur as I saw during Pakistan time."*

By seeing the changes of Haripur village, other villages of the Union are also considering measures for reducing their flood risks. This project shall act as a milestone in this Union.







Block spur project saves over 2000 acres of cropland 50 families protected from river erosion

The Eidgah, Matamuhuri and Bakkhali rivers in Cox's Bazaar look very quite during the dry season. But the level of their fury during the rainy season following the hilly onrush is unbelievable, said Faridul Alam, Chairman of Jalalabad Union in Cox's Bazar Sadar thana.

He hails from Miazipara and has been Chairman for three terms. He said Eidgah river is a cause of pain to people of Hindupara where most of the inhabitants are Hindus.

CODEC after CRA has constructed two block spurs with ICC pillars in the Eidgah river. These are aimed at diverting the wave of the river to other parts so that the habitation and cropland do not flooded during the rainy season.

Faridul Alam said this project has benefited three unions—Jalalabad, Eidgah and part of Pukkhali. This year, pacca roads of three unions and 40 villages have been saved from erosion.

The villages are Hindupara, Sathipara, Idrispur, Uttar Maizpara, Madham Maizpara, Dakhsin Maizpara, Battalipara, Uttar Palakata, Dakhsin Palakata, Theuripara, Moahanbhila, Purba Larabagh, Dakhsin Larabagh, Pachapara, Gulpara, Baharchara, Khamarpara, Miazipara etc. Mamtazul Islam, Chairman of Thana BNP, Abdul Hai of Sathipara and UP Awami League Chairman, Pizushkanti Dey, Hindupara Samaj Leader said this Hindupara village is the first





beneficiary of this block spur project. This village is very risky and might be devoured by the river anytime. Maulana Rashid Ahmed, retired primary headmaster, hails from Sathipara. He said more such blocks are needed in this river. Sunil Baran Dey of Hindupara said earlier we used to be flooded and had to take shelter elsewhere. Now we can stay at our own house during flood. Anwara Begum, PIC chief and UP member explained the process of this project.

Azizul Hoque, Project Coordinator, and Nurul Azim, Upazila Coordinator, said the members of the community are very cooperative here. Abdul Gafur(60) of Meherghona, Bidhuranjan Dey of Hindupara, Sanjit Kumar Dey, Bikash Kumar, Mialn Kanti, Jhama Dey, Runu Bala Dey and NURul Islam, an ex-navy member said before people could not use this road. Now it is safe. We need more such blocks in this river, they demanded.

LDRRF supported removable school house ensures children's education in char land where river bank erosion is common



Raised school ground to use as shelter during flood in Sunamganj district of Bangladesh



Renovation of cyclone shelter with the water well provides children to attend school with safe drinking water



In many parts of Bangladesh, particularly during the monsoon when the crop fields are inundated, vegetable hanging gardens can provide supplementary income and nutritional support. In the South-western districts of Bagerhat, Jessore, Khulna and Satkhira, where water logging is a major phenomenon, hanging gardens protected by concrete rings are now accepted risk reduction option.



Abbreviations

BDRCS	Bangladesh Red Crescent Society
BRRl	Bangladesh Rice Research Institute
BUET	Bangladesh University of Engineering Technology
CBO	Community-based Organization
CDMP	Comprehensive Disaster Management Programme
CNRS	Centre for Natural Resource Studies
CRA	Community Risk Assessment
DAM	Dhaka Ahsania Mission
DC	Deputy Commissioner
DC	Deputy Commissioner
DCH	Dhaka Community Hospital
DFID	Department For International Development
DMC	Disaster Management Committee
DRRO	District Relief and Rehabilitation Officer
EC	European Commission
FDA	Faridpur Development Agency
GoB	Government of Bangladesh
Hitoishi	Hitoishi-Bangladesh (a local NGO)
IDEA	Institute of Development affairs
IED	Institute for Environment & Development
IRRI	International Rice Research Institute
KG	Kilo Gram
LDAP	Local Disaster Action Plan
LDRRAP	Local Disaster Risk Reduction Action Plan
LDRRF	Local Disaster Risk Reduction Fund
MA	Master of Arts
MoFDM	Ministry of Food and Disaster Management
NDP	National Development Programme
NGO	Non Government Organization
PIC	Project Implementation Committee
PSF	Pond Sand Filter
RIC	Resource Integration Centre
RISDA	RISDA-Bangladesh (A local NGO)
RRAP	Risk Reduction Action Plan
SGS	Southern Gano Unnayan Samity
UDMC	Union Disaster Management Committees
UN	United Nations
UNDP	United Nations Development Programme
UNO	Upazila Nirbahi Officer
UP	Union Parishad
US	United States
UzDMC	Upazila Disaster Management Committee
VGD	Vulnerable Group Development
VGf	Vulnerable Group Feeding



Ministry of Food and Disaster Management
Government of the People's Republic of Bangladesh
Comprehensive Disaster Management Programme (CDMP)



