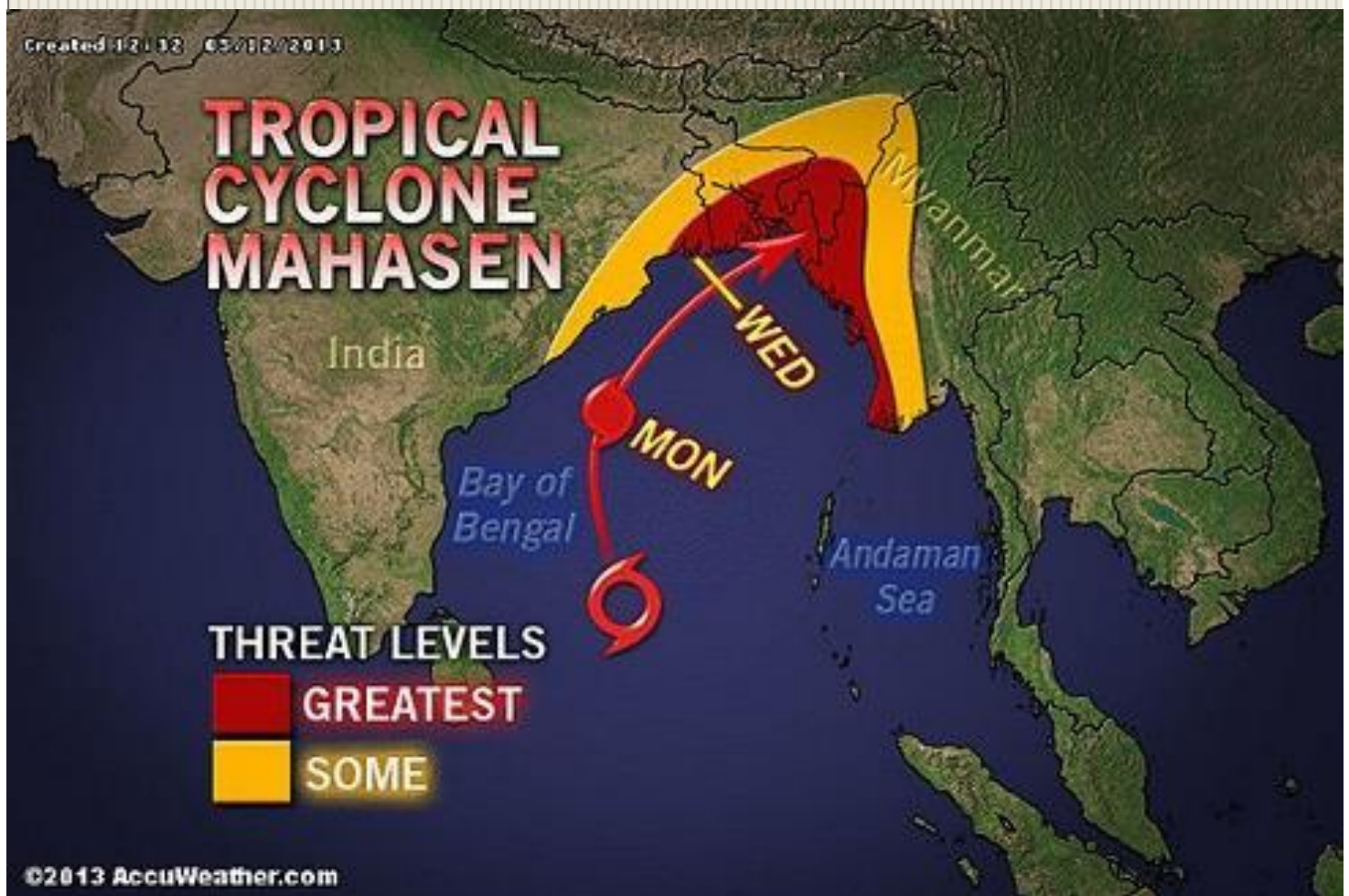


Assessing stakeholders' role in preparation for and facing the Cyclone MAHASEN



COMPREHENSIVE DISASTER MANAGEMENT PROGRAMME (CDMP II)

[JUNE 2013]

Reported by:

Amirul Islam Khan, Showkat Osman, Abdullah Al Masud Khan & Amzad Hossain, Program and Monitoring Officers, DMP II

Overall guidance by:

Ms Shantona Rani Halder, Monitoring and Evaluation Specialist (MES)- CDMP II

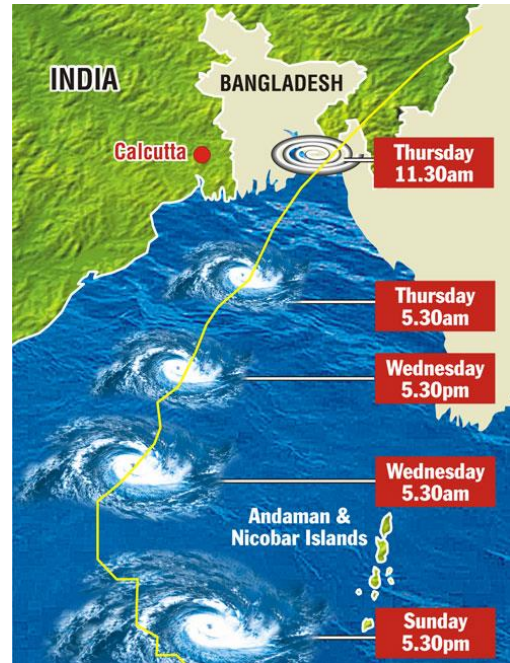
Reviewed by:

Mr. Goran Jonsson, Programme Adviser UNDP- Bangladesh

Assessing stakeholders' role in preparation for and facing the Cyclone *MAHASEN*¹

1. Introduction

Formed on 11th May in Bay of Bengal, the tropical storm *Mahasen* struck some south east coast of Bangladesh on May 16, 2013. It lashed villages with heavy rain and severe winds that crushed around 23539 mud -straw huts fully damaged and 109867 huts partially damaged, lost standing crops and caused more than 1 million residents in 13 coastal districts to take emergency shelter in the 24-hour period prior to the storm (chronology, its effect and responses of different actors are described in annex 1). Assessments by the Government indicate that 17 people died and some 1.2 million people were affected by the storm (source: <http://www.oxfam.org/en/pressroom/pressrelease/2013-05-20/cyclone-mahasen-oxfam-working-bangladesh-government-agencies-assess-needs>).



The Government and international aid agencies have started door-to-door assessments of the damage caused by the storm to support those affected.

2. Objectives and summary finding of rapid appraisal

To capture lessons learned about roles played and disaster preparedness shown by local level stakeholders (Disaster Management Committees (DMCs), volunteers and local communities), the CDMP M&E unit conducted a rapid appraisal during 21-27th of May, 2013, a week after the tropical storm *Mahasen*. Four Programme Monitoring Officers (PMOs) divided into two teams visited some affected areas of 4 (2 severely affected and 2 less affected) districts for which signal # 7 and signal # 5 were respectively issued; conducted 24 focus group discussions and consulted with a total of 270 individuals (for details please see annex 2). The specific objectives of the rapid appraisal were:

- To assess the coordination among Cyclone Preparedness Programme (CPP) volunteers, Upazila and Union level DMCs and their performance in preparedness for *Mahasen*.
- To assess the engagement of CPP volunteers during warning and evacuation phase and
- To learn about community people's preparedness in facing the tropical storm.

The performances of all stakeholders at District, Upazila and Union levels related to early warning dissemination, evacuation, emergency preparedness and other necessary initiatives were found outstanding. Good coordination between Union Administrations (UDMCs) and Upazila administration (UzDMCs), CPP volunteers and NGOs resulted in minimum injury and losses of lives. However, inevitable losses are standing crops, forest resources, pond fish and poor dwellings.

3. Shelter facilities and their use

With the traumatic experience from cyclone *Sidr* still in memory, most people spontaneously shifted their families and valuables to the nearest cyclone shelters and killas. As local administration reported, people also took shelter in government office premises such as Upazila complex, Zila Parishad buildings, NGO offices, Pourashava buildings, etc, especially in Kalapara and Barguna sadar.

Details of the cyclone shelters and killas, their capacity and use are presented in below Table:

Table 1. Status and Use of Cyclone shelters and killas in the Study Areas

Name of District	Name of Upazila	Level of vulnerability	Cyclone shelter status					Earthen Mounds (Killas)	
			Total #	Capacity	Shelters used during Mahasen	# of people took shelter	# of shelters out of order	Total #	# used during Mohasen
Barguna	Barguna Sadar	Areas with signal # 7	75	30,000	70	26,000	5	1	1*
Patuakhali	Kalapara		105	50,000	98	60,000	7	21	10
Khulna	Dacope	Areas with signal # 5	60	18,000	20-25	3,000	2	None None	None
Bagerhat	Mongla		28	10,000	20-25	4,500	2		None

* Newly constructed earthen killa with support from LDRRF, CDMPII

4 Use of Medical facilities

In each of the studied Upazilas, medical teams were formed for each union, consisting of one medical officer/representative from Upazila Health Complex and members of the union community health clinics. However, the Upazila level officers were stationed at Upazila with readiness to shift if the situation demanded.

5. Response to tropical storm *Mahasen*

5.1 Upazila Disaster Management Committees (UzDMC)

Soon after the cautionary signals were announced by Bangladesh Meteorological Department (BMD) as well as information received from Department of Disaster Management (DDM) and Deputy Commissioners' office, the UzDMCs called emergency meetings and distributed



Meeting with UzDMC, Barguna Sadar Upazila

responsibilities among the members and Technical Advisory Group (TAG) officers of the area; warned fishermen not to venture out to deep waters and alerted coastal communities. Upazila and District level CPP representatives were updating UzDMC Chairmen on the movement of storm. On hoisting warning signal #4, UzDMC opened a control room on 14 May 2013 following the Standing Orders on Disaster (SOD) and having instruction from District DMC.

During the signal period, two formal meetings with UzDMC members were held in Barguna Sadar and Kalapara, while only one was held in Dacope and Mongla. Though the SOD instructed time-to-time formal meetings, these were not held, but regular informal sittings were held and verbal instructions were given to staff members. The Upazila Nirbahi Officers (UNOs) maintained regular communications with DDMCs and the Project Implementation Officers (PIO) of the upazilas were assigned to maintain communications with UDMCs. The UzDMC instructed CPP volunteers and UDMCs to disseminate early warnings using megaphone, super megaphone, hired mike and mike of the mosques. UzDMCs also deployed their staff members to announce cautionary/ warning signals in the wider communities. UzDMCs checked the food stock and found sufficient stock in local supply depot (LSD). On hoisting danger signal no. 7 in Patuakhali and Barguna districts, the UzDMCs, with instruction from DDMCs, initiated evacuation of people from the most exposed areas like char, outside of embankment, exposed to wide rivers, etc to nearby shelters. In Dacope and Mongla the signal # 5 was issued and therefore and the UzDMCs

were mostly limited within dissemination of warning messages and in some cases evacuated people (those who were unable to move) but on a very small scale.

Mahasen struck Kalapara and Barguna Sadar soon after danger signal # 7 was hoisted. Kalapara UzDMC had stockpiled 800 kg flattened rice and 100 kg molasses and these food items were distributed at cyclone shelters and among vulnerable communities. Within 72 hours of cyclone landfall, UzDMCs prepared loss and damage report and submitted to DDMCs. Till 22 May, Upazila administration (Kalapara) had distributed 100 MT rice and BDT 360,000/- cash as Gratuitous Relief and Barguna Sadar had distributed 72 MT rice and BDT 400,000/- as Gratuitous Relief.

Mahasen did not affect Dacope and Mongla, but the UzDMCs were ready to collect necessary food and water supply if required.

5.2 Union Disaster Management Committees (UDMC)

UDMCs' role for *Mahasen* preparatory work was outstanding and appreciable. UDMCs obtained early warning messages from UzDMCs and CPP representatives. The UP Chairmen as chair of the UDMC attended UzDMC meeting on preparatory activities for *Mahasen*. On hoisting warning signal #4 all UDMC chairpersons, as reported, called an emergency meeting with UDMC members, CPP representatives, NGOs and local elites to take necessary preparation for facing *Mahasen*. On instruction from UDMC chairmen all UP members began disseminating early warning messages in local communities through megaphone, hired mike and also using mikes of local mosques.

As soon as danger signal #7 was hoisted (only in Barguna Sadar and Kalapara) the UzDMC/Upazilla administration instructed UDMC to evacuate people and they began to evacuate people living in vulnerable areas, offshore areas and outside of embankments. In four unions of Dacope and Mongla, people were requested to be prepared with their valuables packed and move the elderly, sick or disabled persons, children and women to shelter after danger signal no. 5.

In most cases people came to cyclone shelters by their own arrangements. However, in *Majherchar* area of *Badorkhali* union under Barguna Sadar and Chila Union of Mongla Upazila, the UDMC arranged engine boats, rickshaw-van and locally motorized vehicle to evacuate and bring people to shelter. Some UDMCs also provided dry food (biscuits, flattened rice, molasses etc.) for the people who took shelter, while other UDMCs did not arranged any other foods (as people stayed for a very short time and brought their own food).

In some unions of Kalapara and Barguna Sadar, UDMCs also made necessary preparation of cyclone shelters, e.g. arranged light (solar, generator), engaged volunteers to maintain discipline like room allocation for male, female, aged, sick and PWD etc, whereas there was no arrangement for emergency light in any union of Dacope and Mongla. There were separate places for men and women in Kamarkhola Union Parishad shelter (Dacope) and Chila Union Parishad shelter (Mongla), but not for children, disabled and aged people. However, in all the unions of Mongla and Dacope there were volunteers for shelter management (CPP, UDMC/UP). Very close coordination between CPP units and UDMC was found in all unions during early warning dissemination and evacuation of people.



UDMC Meeting at Chila union Parishad under Mongla

None of the UDMCs had any budget allocation for emergency purposes; even they do not have any equipment, vehicle or boat for evacuation or use for early warning dissemination. In the visited 8 unions only Naltona union under Barguna Sadar had 2 megaphones for early warning dissemination. All the necessary arrangements for Mahasen preparatory activities were made by the personal donation of UP chairman and members.

5.3 Cyclone Preparedness

Programme (CPP) Volunteers

Cyclone Preparedness Programme (CPP) volunteers, in this storm event, were mainly engaged in disseminating early warnings, community awareness building and requesting people to move to shelters. CPP volunteers maintained very close coordination with UzDMCs and they helped local DMCs to maintain discipline in shelters. They also supported UDMCs in transportation and dissemination of food and water for community people.



CPP volunteers gears and equipments

CPP is equipped with VHF & HF technology. In the visited areas of Kalapara and Barguna Sadar the CPP offices are within the local administration office compound, but in Mongla and Dacope CPP does not have any office yet. After signal #3 CPP Upazila offices hoisted signal flags and opened control rooms (no separate control room in Dacope and Mongla; they coordinated with the UzDMC control room) and led early warning message dissemination at community level. The Upazila CPP team received weather bulletins and early warning communication instructions from CPP headquarters through HF and through mobile phone, fax and email. As soon as they received CPP headquarters weather bulletins, they sent them to UzDMCs for their control room use and informing unit team leaders through VHF and mobile phone.



Meeting with CPP Upazila unit team at Kalapara

The CPP Upazila and district teams established tracking boards to display updated movement of the storm (no such information from Dacope and Mongla). As per instruction of DD/AD-CPP and local administration, the union unit team leaders started disseminating early warning messages using megaphone and super megaphone. Though the CPP units at Mongla and Dacope are newly formed and have very little experience in facing emergencies, they performed as well as the most experienced teams of Barguna and Kalapara.

CPP Volunteer status of the visited area

Upazila	Barguna Sadar	Kalapara	Dacope	Mongla
# of volunteers	1815	2100	1170	960

Most of the volunteers of Barguna and Patuakhali are over-aged. They have received refresher training around five years ago and the newly replaced volunteers had not yet received foundation training or any other training.

Most of the units of Barguna and Kalapara are not well equipped with necessary materials, as they have received them long before. Volunteers of Barguna and Patuakhali areas reported that they are working without any volunteers' gear, i.e. they have no first aid bags, rescue kits, raincoats, gumboots, life jackets, hard hats, torch lights for search and rescue operation uses. Some of them are wearing only an old vest with a logo of Bangladesh Red Crescent Society. The necessary equipment are very few in numbers and poor in condition. Only few units have mike, megaphone, super megaphone, sirens and radio. Every unit has signal flags (in poor condition)

but around 90% of the signal poles are already damaged. For maintaining time to time communication, especially in the warning period, all the volunteers are using personal mobile phones to communicate with union team leaders, unit team leaders and other volunteers as well as with UDMC members, local elites, etc, but having no support from anywhere some of the volunteers are not well connected when it is most necessary to communicate.

CPP activity in Mongla and Dacope started in 2010, after the devastating cyclone Aila, with CDMP funding. Even though the members of the CPP are very enthusiastic about their roles and responsibilities, they are a bit demoralized due to poor condition of equipment and dress, less training and absence of an office. They received basic and refresher training three years ago and after that nothing. The medical kit is almost empty (as they had to provide support to



Meeting with CPP Mongla Upazila unit

people during local hazards), the raincoat is not waterproof at all, they have no gumboots (however, the regional leader informed that gumboots are in stock and will be delivered shortly), the battery of the megaphones are of inferior quality with no replacement, as they have no office there is no specific place to hoist warning flag (no flag pole). During disaster events they need to regularly communicate with many people to disseminate warning signal, but there is no allowance for mobile, no vehicle (or allowance for vehicle).

With all these challenges, as the community people reported, CPP volunteers worked very well in this warning and evacuation event and supported UDMC and local administration.

5.4 Community response



Community consultation at Laua Union, Kalapara

Community people were informed about *Mahasen* from different sources. In most cases they received early warning messages via television and radio and these were confirmed by CPP volunteers, UDMC members and mike announcement from local mosques. IVR (Interactive voice response) dialing 10941 was active for disseminating weather advisory and

updated early warning messages so some people also got information through mobile phone calling there. On 15 May it served 29,369 and on 16 May 10,059 (as of 2.40 pm) with early Warning Messages (source: DMIC Situation Report dated 16 may 2013) and some also listen news update through calling 2010. Most of the fishermen were informed earlier through their association. Coastal people, being aware from NGO programmes, took necessary preparatory measures such as stocking dry foods, packing all the valuables, sending the elderly, women, disabled and children to shelters/safe places, at the stage of danger signal # 5.

“The cyclone shelter approach road of CDMP saved my child and my life...”

Rozina Akter, aged 25, lives in Nishanbaria village of Noltona union of Barguna Sadar Upazila. She was in advanced stage of pregnancy when danger signal no. was 7 hoisted. The weather was very rough. At that time she began to feel birth pains and family members brought her to the cyclone shelter by rickshaw-van. A room was separated for her safe delivery and a trained birth attendant was taking care of her. At 12.30 PM on 16 May, soon after the storm made landfall, she safely delivered a child. The UDMC chairman visited the shelter that night and he named the baby “Mahasen”.



Rozina’s husband said this happy ending was made possible by the brick soling approach road that was constructed by CDMP-II this year. Previously, the approach road of the cyclone shelter in this village was in poor condition and it was very difficult to use it in the rainy season. During Sidr, one of her family members died on his way to the cyclone shelter. Rozina Akter said, “I would like to thank CDMP for constructing this cyclone shelter approach road, which has saved my life and my child’s life.”

When danger signal #7 was hoisted in Barguna and Patuakhali, people, with their bitter experiences from *Sidr*, eagerly moved towards any available safe places like well protected houses of relatives and the nearest cyclone shelters. In consideration of the population of vulnerable communities the number of cyclone shelters and their capacity is still very insufficient.

People in Dacope and Mongla, soon after they heard warning from CPP and UDMC members (from 13 May), started to prepare moving to shelters if the situation got worse. They tightened the house with rope, stocked dry food, packed their valuables, freed all the



Community consultation at Panpatty, Dacope

livestock and sent some of their elderly and disabled persons, women and children to shelter. Even when the signal was raised to danger #5 most people decided to stay at home and observe the situation. People who went to shelter did so by themselves (with minimum support from CPP and UDMC).

"CPP volunteers helped Morium Bibi to survive but could not save her only asset"



Moriam Bibi, aged 60, lost her husband a long ago. Nowadays she is passing her days alone in a small cottage made of polythene and jute-bags near the 'Jora' (twin) bridge of Ulokatha (Chila Union, Mongla). She earns her living by catching and selling crabs, which gives a small income of Tk. 500-800 per month. To earn some extra money, she has been rearing chickens.

When she heard about the cyclone Mahasen she was very worried, because she was washed away during the cyclone Aila and was injured badly, not to mention the loss of all her belongings.

But this time she received warning from CPP volunteers, as well as from her neighbours. CPP was introduced in Mongla by CDMP as part of extended activities in coastal districts. Moriam Bibi told that "*Halud genji para lokgular kach theke sunchi jahr astache, shelter-e jaite haobo*" (people in yellow T-shirts told me that the cyclone is coming and I need to go to shelter). When she heard that the danger signal was raised to 5, she moved to the nearest shelter. But she could not take the chicken with her as there was no place to keep it in the shelter or any other safe place. The shelter was over-crowded. When she returned to her house she found her chicken in very poor condition and it died after three days. She feels that if there is a *killa* or some kind of shelter for livestock she won't lose her only assets which gave her a dream of slightly better living. Construction of a *killa* is also the popular demand of the community. Moriam Bibi said: "*CPP er janna ami baicha gelam kinto amar sapno moira gelo*" (through warning by CPP I saved my life, but I have lost my dream).

Some of the shelters were overcrowded while some had a low 15/20 people. However, the numbers of shelters are not enough for such disaster prone areas. Above all, there are no *killas* (shelters for livestock) in these Upazilas. Some of the existing shelters need renovation/reconstruction. The water supply facilities in the visited shelters (Dacope and Mongla) are situated on the ground floor and would not be usable if there is a storm surge.

Sanitation facilities in Dacope are also situated on the ground floor, but in Mongla they are situated on upper floors. None of the shelters had any medical facilities.

6. The general features in facing *Mahasen* are as follows:

In response to *Mahasen* all the wings of administration, BMD, DDMCs, UzDMCs, UDMCs and Local Government representatives with their limited resource and equipment managed their responsibilities well to face *Mahasen* and this resulted in minimum loss and injury.

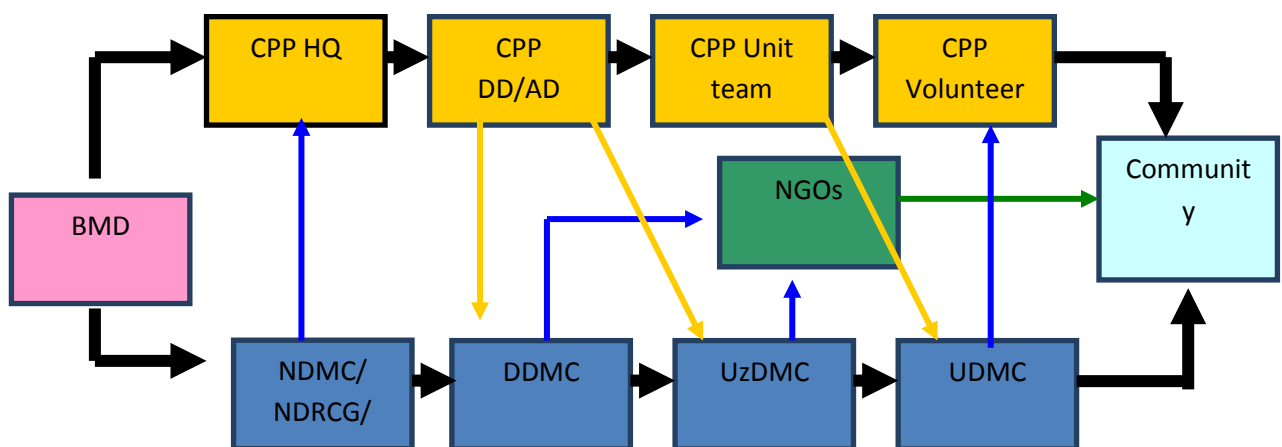
Coordination:

Good coordination among DMCs, NGOs, CPP Volunteers, local elites and the community people was established in preparation for Mahasen.

Communication:

The communication channel between DDMC, CPP, BMD, UzDMC was found to have been very effective. BMD properly delivered weather bulletins from time to time to its respective wings and CPP , UDMCs also disseminated early warning messages to the community with sincerity.

Communication flow chart:



Learning for future programmatic action:

UDMCs had performed very good role for Cyclone MOHASSEN preparatory activities; the traumatic experiences from SIDR and AILA inspired them to do so. Most of them are not well aware of their SOD appointed roles and responsibilities. To have better and organised performance UDMC members required orientation on UDMCs roles and responsibilities during normal period, warning phase and disaster-post disaster phase.

None of the UDMC had any budget for emergency preparedness, early warning dissemination or response activities, so Union Parishad (UP) representatives had made the early warning dissemination, evacuation related expenses by their own. It needs to work for the capacity strengthening of UDMC to prepare emergency contingency plan and required budget.

CPP volunteers are found spontaneous and enthusiastic to work for their community; they are maintaining very good communication with Union Parishad representatives and most of them are well known to their community people. All the volunteers are working with out necessary safety measures; some of the volunteers have not yet received any formal training and volunteers' gears and some of them are using very poor quality gears and equipments, communicating with UDMC, community people and other volunteers through using their personal mobile phone. Considering the CPP volunteers' performance and acceptance to the coastal community, CDMP may think for extending support to CPP with proving necessary training, volunteer's gears and equipments.

Cyclone shelters approach roads and kills are contributing important role for taking shelter for the vulnerable community people; soon after the SIDR under Emergency 2007 cyclone recovery and Restoration Project (ECRRP) a good number of cyclone shelters had repaired and government has taken initiatives to construct more multipurpose use cyclone shelter in coastal areas. So from our ends (CDMP II) much importance may be given for constructing cyclone shelter approach road and earthen killas.

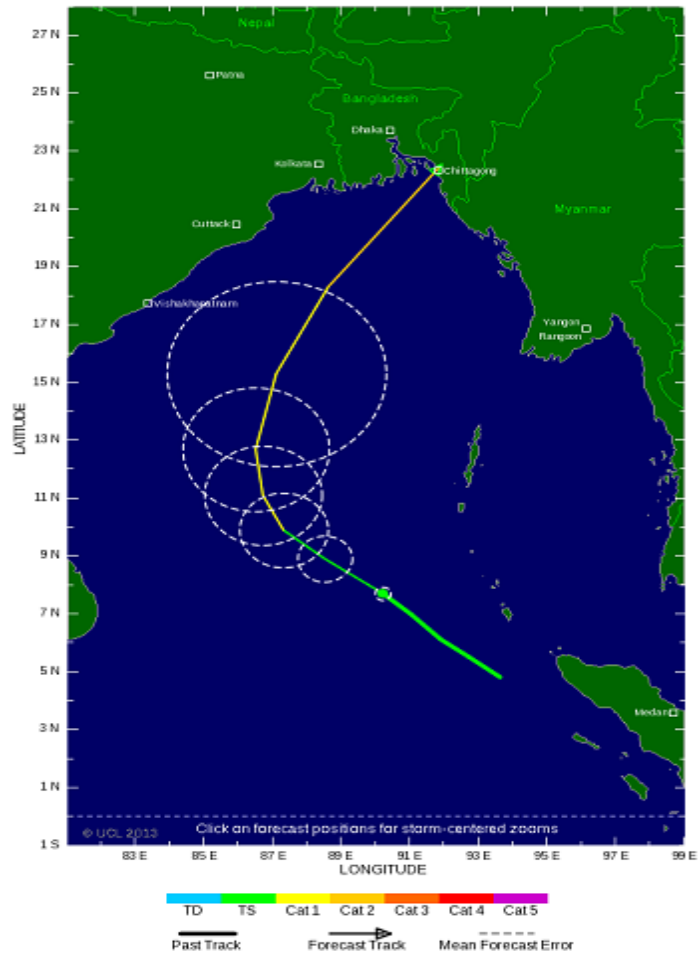
Government, donors and humanitarian community are working for joint needs assessment after Cyclone *Mahasen*. We pray for the families, who lost their lives in Cyclone *Mahasen*, and for the quick recovery of those who have lost their livelihoods and assets.

Annex 1

Chronology of Mahasen

Development of the cyclone:

⇒ On 11 May 2013 (at about 9 AM) a deep depression over southeast Bay of Bengal and adjoining area moved slightly north-westwards over the same area and intensified into cyclonic storm “Mahasen”, centred at about 1700 km south southwest of Chittagong port, 1610 km south southwest of Cox’s Bazar port and 1705 km south southeast of Mongla Port. It was deemed likely to intensify further and move in a north northwesterly direction. Maximum sustained wind speed within 54 km of the storm centre was about 62 kph, rising to 88 kph in gusts/squalls. *Maritime ports of Chittagong, Cox’s Bazar and Mongla were advised to keep hoisted local cautionary Signal No. 3 (three).*



⇒ On 13 May 2013 (about 12 noon) the cyclonic storm “Mahasen” was centred about 1300 km south-southwest of Chittagong port, 1230 km south-southwest of Cox’s Bazar port and 1220 km south of Mongla port. Maximum sustained wind speed within 54 km of the storm centre was about 62 kph, rising to 88 kph in gusts/squalls. *Maritime ports of Chittagong, Cox’s Bazar and Mongla were advised to hoist local warning Signal Number 4 (four).*

❖ Shifting of the cyclone:

⇒ On 15 May 2013 (at about 9 AM) the cyclonic storm “Mahasen” was centred at about 875 km southwest of Chittagong port, 815 km southwest of Cox’s Bazar port and 760 km south southwest of Mongla port. It was forecasted to intensify further and move in a north-northeasterly direction and may cross Khepupara-Teknaf Coast near Chittagong by early morning of 16 May, but its peripheral gusty/squally wind may affect coastal regions of Bangladesh from 10 PM, 15 May. Maximum sustained wind speed within 54 km of the storm centre was about 62 kph, rising to 88 kph in gusts/squalls. *Maritime ports of Chittagong and*

Cox's Bazar were advised to hoist danger Signal Number 7 (seven). Maritime port of Mongla was advised to hoist danger Signal Number 5 (five). The coastal districts of Cox's Bazar, Chittagong, Noakhali, Laxmipur, Feni, Chandpur, Bhola, Barguna, Patuakhali, Barisal and their offshore islands and chars will come under danger Signal Number 7 (seven). The coastal districts of Pirozpur, Jhalokathi, Bagherhat, Khulna, Satkhira and their offshore islands and chars came under danger Signal Number 5 (five). Under the influence of the storm the low-lying areas of the coastal districts of Cox's Bazar, Chittagong, Noakhali, Laxmipur, Feni, Chandpur, Barguna, Bhola, Patuakhali, Barisal, Pirozpur, Jhalokathi, Bagherhat, Khulna, Satkhira and their offshore islands and chars were likely to be inundated by storm surge of 5-7 feet height above normal astronomical tide. The coastal districts of Cox's Bazar, Chittagong, Noakhali, Laxmipur, Feni, Chandpur, Barguna, Patuakhali, Barisal, Bhola, Pirozpur, and their offshore islands and chars were likely to experience wind speed up to 80-90 kph in gusts/squalls with the passage of the storm.

❖ **End/landfall of the cyclone:**

⇒ On 16 May 2013 (at about 4 PM), the cyclonic storm “Mahasen” weakened to a tropical storm by giving precipitation, moved north-eastwards and crossed Noakhali-Chittagong coast and stayed over Sitakunda, Feni, Khagrachari region of Bangladesh and adjoining Tripura of India as a land depression.

Mahasen struck the southern coast of Bangladesh, lashing remote fishing villages with heavy rain and fierce winds that flattened mud and straw huts and forced the evacuation of more than 1 million people. The main section of the storm reached land on Thursday, 16 May 2013 and immediately began weakening.

It moved further inland in a northeasterly direction and weakened gradually by giving precipitation. Under its influence steep pressure gradient lay over the north bay, with squally weather over coastal regions of Bangladesh and maritime ports.

Maritime ports of Chittagong, Cox's Bazar



and Mongla were advised to hoist local cautionary Signal No. 3 (three).

Highlights of Mahasen:

Date	Signal No.	Signal for
11 May 2013	Local cautionary Signal Number 3 (three).	Maritime ports of Chittagong, Cox's Bazar and Mongla
13 May 2013	Local warning Signal Number 4 (four).	Maritime ports of Chittagong, Cox's Bazar and Mongla
15 May 2013	Danger Signal Number 7 (seven)	Maritime ports of Chittagong and Cox's Bazar
	Danger Signal Number 5 (five)	Maritime port of Mongla
	Danger Signal Number 7 (seven)	Cox's Bazar, Chittagong, Noakhali, Laxmipur, Feni, Chandpur, Bhola, Borguna, Patuakhali, Barisal and it's offshore islands and chars
	Danger Signal Number 5 (five)	Pirozpur, Jhalokathi, Bagherhat, Khulna, Satkhira and their offshore islands and chars
16 May 2013	Local cautionary Signal Number 3 (three)	Maritime ports of Chittagong, Cox's Bazar and Mongla

Effect of Mahasen:

Though Mahasen did not hit Bangladesh severely, life loss and damage of property occurred in many areas of the coastal districts of Bangladesh.

A summary table of Loss and Damages provided by the District Commissioners is given below.

Sl. No.	District	Affected Upazilas (#)	Affected Unions (#)	Deaths	Affected population	Houses Damaged (Full)	Houses Damaged (Partial)
1	Chittagong	4	28	2	54,295	50	2,005
2	Cox's Bazar	5	33	0	35,127	1,710	4,968
3	Bhola	7	64	4	167,500	6,760	14,730
4	Barguna	6	38	7	60,000	6,856	61,812
5	Pirozpur	7	46	1	60,690	448	5,641
6	Noakhali	5	33	0			
7	Patuakhali	6	72	3	70,409	7,540	18,238

8	Satkhira	2	5	0			
9	Laxmipur	4	15	0	9,890	120	359
10	Jhalokathi	4	30	0	5,392	55	1,934
		50	364	17	463,303	23539	109,687

Source: CDMP (Cyclone Mahasen update, 20 May 2013)

Response to Mahasen:

Government of Bangladesh: Ministry of Disaster Management and Relief (MoDMR) and Department of Disaster Management (DDM)

To mitigate loss and damage of people and assets in the coastal area, concerned District Commissioners were on 13 May 2013 requested to arrange meetings with Union and Upazila Disaster Management Committees for advance preparedness according to "Disaster Management Act-2012" and "Standing Order on Disaster".

Officers of DDM (of districts on the possible pathway of the cyclone) were assigned to communicate closely with coastal districts and to monitor and coordinate the overall situation. Also Project Directors and Directors from this Directorate were instructed to monitor and coordinate the overall situation.

Department of Disaster Management (DDM) allocated the following for the affected people:

S.L.	District	GR Rice (MT)	GR Cash (BDT)
1	Chittagong	550	1,400,000
2	Coxs bazar	298	832,852
3	Lakshmipur	226	752,000
4	Barisal	183	327,000
5	Barguna	123	360,000
6	Patuakhali	168	317,000
7	Pirojpur	199	500,000
8	Khulna	205	792,000
9	Bagerhat	147	873,000
10	Satkhira	271	883,000
11	Bhola	186	291,000

12	Feni	210	982,000
13	Noakhali	167	248,000

[Source: DDM, 19 May 2013]

Comprehensive Disaster Management Programme (CDMP) provided Situation Reports on Mahasen on regular basis through DMIC, including location, direction and status of the cyclone. The SitReps also contained contact number of National Disaster Response Coordination Centre (NDRCC), MoDMR, which was open 24 hours to exchange information with round-the-clock situation monitoring. The situation reports also had information on preparedness measures to be taken. Starting from 11 May 2013, totally 13 Situation Reports were prepared and disseminated (the last report prepared on 17 May 2013).

IVR dialling (10941) was active for disseminating weather advisory and updated early warning messages. On 15 May it served 29,369 and on 16 May 10,059 (as of 2.40 PM) early warning messages.

Directorate of General of Health Services, DGHS, Ministry of Health and Family Welfare (MoHFW) took the following actions:

- All the health & family planning service providers in 13 coastal districts remained on standby.
- In 13 districts, totally 1,327 Emergency Medical Teams were constituted for Emergency Health Care Service.
- All the required medicine & other medical logistics were kept ready in different health facilities in 13 coastal districts.
- All leave of health service providers of the coastal belt was cancelled.
- National Crisis Management Centre and Control room of the DGHS was open on 24/7 basis.

Bangladesh Armed Forces:

Bangladesh Navy put 22 vessels and ships on standby for emergency operations and response. Bangladesh Air Force put 20+ aircraft on standby for air drop and transportation of emergency relief goods. Bangladesh Army kept its resources and manpower on standby for response operation. It also kept 2 vessels on standby for mobilizing relief goods in case of need. Armed Forces Division has opened up an emergency monitoring cell.

Humanitarian Agencies:

World Food Programme (WFP) and Oxfam conducted a joint need assessment of the situation with support from INGOs and local NGOs. Preliminary assessment showed damage and loss at medium scale with ***no requirement of immediate food items***. However, assistance is required for shelter, WASH and tree plantation.

World Health Organization (WHO):

- WHO closely monitored the overall situation with DGHS and assured providing necessary technical support.
- A SHOCK room was established in the WHO Country Office to communicate and operate activities at national and regional level.
- 2 IEHK (Inter-agency Emergency Health Kits) kits having 20 basic and 2 supplementary kits were prepositioned for Chittagong and Barisal division. Emergency drugs, dressing materials, water purification tablets were sent to Chittagong and Barisal by 15 May 2013 evening.
- A team from WHO went to Chittagong to strengthen health sector preparedness mechanism for coordinated response to upcoming cyclone as well as enhanced surveillance and monitoring system.
- WHO has field based officials such as Divisional Coordinators and Surveillance Medical Officers stationed at Divisional Director Health Offices and District Civil Surgeon Offices. They were ready to provide medical support needs assessments and closely maintain liaison with them.

Annex 2

Assessment procedure

Two teams, each comprising two Monitoring Officers, visited affected Upazilas and collected information from UzDMC, CPP, UDMC and local communities through Focus Group Discussion (FGD), community consultation, interviews and physical observations. The teams visited 8 unions of 5 Upazilas under Barguna, Patuakhali, Khulna and Bagerhat districts and discussed with community people at Lalua, Noltona, Badorkhali and Sarikkhali unions of Kalapara, Barguna Sadar and Taltoli Upazila. Stakeholders and affected people were consulted through Focus Group Discussion to extract information on the Mahasen preparatory efforts. The table below shows details of participants in these group discussions.

Agency/ entity	Barguna		Patuakhali		Khulna		Bagerhat		Total	
	FGD #	Participant #	FGD #	Participant #	FGD #	Participant #	FGD #	Participant #	FGD #	Participant #
UzDMC	1	12	1	5	1	5	1	4	4	26
UDMC	3	46	1	15	2	25	2	20	8	106
CPP	2	21	1	14	1	12	1	10	5	57
Community	2	28	1	7	2	30	2	26	7	81
Total	8	107	4	41	6	72	6	60	24	270