

BANGLADESH

Floods in Moulvibazar and Sylhet



Briefing note – 20 June 2018

Heavy rainfall recorded in northeastern Bangladesh since 12 June exacerbated by a sudden increase of river water levels due to upstream flooding in India resulted in severe flooding in Moulvibazar and Sylhet districts. Flooding affected the majority of upazilas in both districts, leading to severe infrastructure damage and acute needs. Over 2,000,000 people live in the most affected upazilas. At least 250,000 of them have been affected, and over 12,000 reside in temporary shelters in Moulvibazar. An estimated 570,000 people have also been affected in Sylhet.

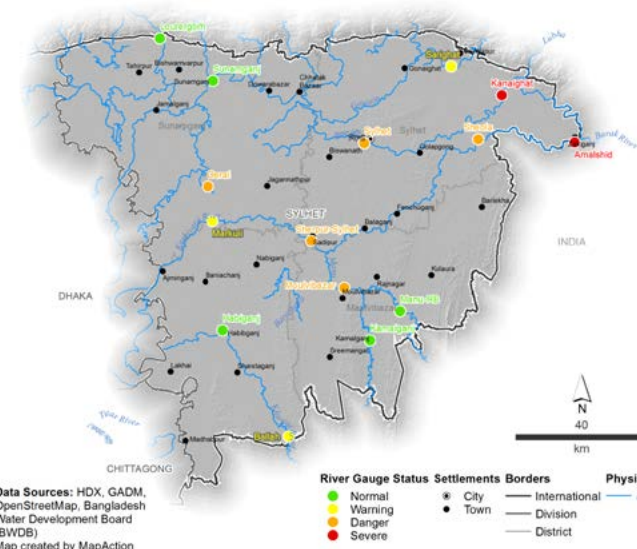
NEED FOR INTERNATIONAL ASSISTANCE



IMPACT



Bangladesh: Water level status and flood conditions in Sylhet division (as of 19/06/2018)



Anticipated scope and scale

There is **no heavy rainfall forecast** for next days in Sylhet division, however flooding might still be exacerbated by ongoing rainfall in India. The **water levels are expected to further decrease** and fall below danger levels in Moulvibazar in the coming days. However, they will remain **above danger levels in Sylhet district**.

It is highly likely that there will be **repeated episodes of flooding** in Sylhet division until the end of the monsoon season in September.

Key priorities



WASH
shortages of drinking water



Food
losses of crops, livestock



Health
risk of waterborne diseases



Shelter
homes damaged

Humanitarian constraints



Access to the affected population is difficult due to damaged or flooded roads.

Limitations

There is very limited data available on the crisis and the note is based predominantly on local media articles. More accurate figures of affected and displaced population as well as their needs might be available in Bangla.

Crisis impact

The onset of monsoon season on 12 June 2018 led to heavy rainfall in north-east districts of Bangladesh resulting in flooding reported in Moulvibazar and Sylhet districts. Flooding affected the majority of upazilas in both districts, leading to severe infrastructure damage and acute needs (New Age BD 18/06/2018). The total population living in the most affected upazilas is over 2,000,000 people.

Moulvibazar

At least 250,000 (2.5 lakh) people were affected in Moulvibazar, where the protection embankment at Boroikona (along the Manu river) was damaged, leading to water entering the Moulvibazar town. Eight fatalities have been reported since 13 June. Upazilas reported to be most affected include: Srimangal, Kamalganj, Kulaura, Rajnagar, and Moulvibazar Sadar. Total population of those upazilas amounts to about 1,176,000. At least 30 unions of the district were inundated and 25 sections of control dams of Manu and Dhulai rivers were broken by floodwater (United News of Bangladesh 18/06/2018). As of 19 June, the water level is receding and the flood conditions are improving.

Sylhet

In Sylhet district continued rainfall has led to flash flooding. About 50 unions of nine upazilas are reported as affected across the district. Most affected upazilas include Zakigajn, Kanaighat, Gowainghat, Jaintiapur, and Beanibazar (where at least 40,000 residents have been affected). Total population of those upazilas amounts to 863,000 (New Age BD 19/06/2018). An estimated 570,000 people have had their households inundated and are likely affected by waterlogging. At least one person has been reported missing (The Daily Star 15/06/2018). In Zakingajn water entered the villages after damaging embankments in at least 25 places. Breaching embankments has been reported in Beanibazar as well (New Age BD 19/06/2018). As of 19 June, water levels are receding, however the flood conditions remain unchanged.

Heaviest rainfall reported in Sylhet on 14 June (110mm), and in Moulvibazaar on 15 June (79mm) led to overflowing of major rivers Surma, Kushiayara, Manu, Dhalai, and Khowai. Water levels started rising rapidly on 12 June. As of 19 June all river water levels show a decreasing trend. However, water levels of Surma and Kushiayara rivers in Sylhet and Manu river in Moulvibazar remain at least 40 cm above danger levels. The worst conditions continue to be reported on Surma river (121 cm above the danger level) in Kanaighat station and Kushiayara river (at 141 cm above the danger level) in Amalshid station (Flood Forecasting and Warning Centre 19/06/2018, Flood Forecasting and Warning Centre 12/06/2018, Bangladesh Meteorological Department 19/06/2018). Flooding was exacerbated by heavy rain in neighbouring Assam and Tripura states in India due to increased flow of water from upstream rivers (ECHO 19/06/2018).

Rainfall in mm in Sylhet and Moulvibazar districts in last seven days (Bangladesh Meteorological Department 19/06/2018, 4PM Sylhet time, Flood Forecasting and Warning Centre 19/06/2018)

	SYLHET	MOULVIBAZAAR
13/06/2018	95	8
14/06/2018	110	21
15/06/2018	95	79
16/06/2018	43	34
17/06/2018	2	2
18/06/2018	35	4
19/06/2018	56	23
CUMULATIVE IN JUNE 2018	621.50	222.00
AVERAGE IN JUNE	841.50	484.80

Reported rainfall has been classified as 'heavy' and 'very heavy' by the Bangladesh Meteorological Department. However, cumulative rainfall in June 2018 is lower than June averages and the impact is reported to be lower than similar flooding last year in the same locations (Nirapad 20/07/2017). However, considerable information gaps pose a significant challenge to assess the scale of humanitarian needs.

Food: Acute shortages of food have been reported in Moulvibazar district. Affected population has been reportedly eating only dry foods, as drinking water and firewood shortages hamper cooking. Access to food is difficult, as markets have been inundated. Prices are likely to increase (New Age BD 18/06/2018, The Daily Star 17/06/2018).

Livelihoods: Floods damaged small local shops, crop fields, and caused losses of domestic animals. Paddy fields are likely to be damaged by the floods. Over 700 hectares of farmland were flooded and the crops damaged in Kamalganj upazila alone. Farmers are facing acute shortages of fodder (The Daily Star 15/06/2018).

Health: Waterborne diseases have emerged, because the affected population has resorted to drinking contaminated water (The Daily Star 17/06/2018). The number of people suffering acute watery diarrhoea, skin-eye-ear infections, and other waterborne diseases, is likely to increase. Shortages of medicine was reported in Moulvibazar district (New Age BD 18/06/2018).

WASH: Shortages of safe drinking water have been reported in Moulvibazar district, exacerbating health risks and poor sanitary conditions (New Age BD 18/06/2018).

Shelter: Flooding heavily impacted land and shelter. About 200,000 people in Moulvibazar have been marooned. Sleeping in open areas has been reported in the district, where over 1,000 people were reported to be sheltering on embankments. People marooned in their homes in Patanusha and Sharifpur unions and in Kamalganj. Rescue operations were ongoing on 18 June (Dhaka Tribune 13/06/2018, Dhaka Tribune 18/06/2018). An estimated 570,000 people have had their households inundated and are likely affected by waterlogging in Sylhet.

Education: Schools were likely flooded in both districts. Several educational facilities (mostly colleges and technical schools) have been used as shelters for the affected population (New Age BD 18/06/2018, Dhaka Tribune 17/06/2018).

Impact on critical infrastructure

Critical communication routes have been disrupted due to flooding including the road to Shamshernagar airport and its connection to Kulaura, roads to Sylhet City and Chatlapur Land Port (Bdnews24 19/06/2018, Dhaka Tribune 18/06/2018).

Road links between Bangladesh and Tripura (India) have remained cut off since 16 June as the bridge connecting Kailashahar to Moulvibazar collapsed due to the onrush of flood waters.

The government has reported, that up to 600 tonnes of rice are likely to waste, as flood water entered four of the governmental warehouses (BD News 24 19/06/2018).

Vulnerable groups affected

Children are at risk of exploitation and abuse. Parents may be busy collecting relief items and restoring livelihoods therefore children are often left unattended for long periods which risks increasing their vulnerability.

People with disabilities and older people find leaving their shelters challenging. Difficult terrain acts as a barrier to accessing relief shelter or aid.

Humanitarian and operational constraints

Access to the affected population is difficult due to damaged or flooded roads. Moulvibazar – Sylhet road has been flooded leading to disruption in transport and communication between two districts.

Communication between affected upazilas in both districts has been disrupted. Dams along the Monu and Dhalai rivers collapsed at several places, submerging roads to

Sylhet City, Kulaurha, Barhalekha, Rajnagar, and Kamalganj Upazilas (Bdnews24 19/06/2018, New Age BD 19/06/2018).

Aggravating factors

Monsoon Season

Southwest monsoon has begun in Bangladesh on 12 June and will last until September/October. Repeated episodes of flooding are likely to occur in both affected districts and neighbouring areas during the monsoon. Regional impact of monsoon rains affects Bangladesh as well. Moulvibazar and Sylhet flooding has been exacerbated by heavy rainfall reported in India (Assam and Tripura states). The Indian Meteorological Department (IMD) has predicted heavy to very heavy rains in Assam state till 23 June, which might further aggravate the situation in Bangladesh (ECHO 19/06/2018).

Location and type of housing/infrastructure

Poorly constructed housing in high-density settlements increases the severity of the impact of flooding. In flood-affected areas, a large percentage of the housing is kutcha, made of corrugated iron roofing, walls made of timber planks or corrugated iron, and bamboo frames, earth floors and clay plinth foundations; these are particularly vulnerable to heavy rains and flooding.

In Moulvibazar, over 18% of structures are classified as pukka, over 32% as semi-pukka, over 46% as kutcha, and about 3% as jhupri.

In Sylhet, over 22% of structures are classified as pukka, 34% as semi-pukka, over 41% as kutcha, and over 1% as jhupri (Bangladesh Bureau of Statistics 2011).

Rohingya refugee crisis

About 915,000 Rohingya refugees from Myanmar are currently residing in Cox's Bazar in Chittagong division. Up to 1.3 million people in Cox's Bazar are in need of humanitarian assistance, and the response capacities are limited. It remains to be seen how the national disaster management mechanisms and their ability to respond to have been impacted by the Rohingya crisis.

Response capacity

Local and national response capacity

National Disaster Response Coordination Center (NDRRC) of the Ministry of Disaster Management and Relief is coordinating response activities and publishing daily situation alerts in Bangla.

Deputy Commissioners have been broadcasting information about further risks to the affected populations, which allowed for evacuation process.

Over 60 shelters have been opened in Moulvibazar district with around 12,000 people residing in the area. At least six shelters were opened in Moulvibazar Sadar, while a few others were opened privately (Dhaka Tribune 18/06/2018).

Fire fighters and the army have been involved in response efforts by rescuing stranded people, protecting the dams and flood protection embankments (Dhaka Tribune 16/06/2018). 74 medical teams are working in the flood affected areas.

Cash, NFI, and food assistance is ongoing, with over 1100 tonnes of rice, 5,000 packets of dry foods, 1,000 corrugated iron sheets, and over 1,300,000 BDT in cash distributed among the affected population (New Age BD 18/06/2018, UNB 18/06/2018).

However, as of 19 June there were emerging reports of considerable unmet needs, both in Moulvibazar and Sylhet (The Daily Star 19/06/2018). This could have been caused by access constraints, as the local administration announced that there was no shortage of relief items. Moreover, the government made statements promising assistance in reconstruction process after the flood.

Red Cross and many local organisation are involved in the response activities (BD News 24 19/06/2018).

International response capacity

There is no information on international response efforts or planning. Local or national authorities have not requested international assistance so far.

Population coping mechanisms

In Moulvibazar district, where severe drinking water shortages have been reported, people reportedly resorted to collecting flood water for drinking and household purposes (The Daily Star 17/06/2018)

Information gaps and needs

- No confirmed number of population affected / in need available in English.
- No information concerning detailed figures and needs of displaced populations and the conditions in collective shelters.
- No information on specific health problems that emerged as a result of the crisis.
- No information on specific needs of vulnerable populations affected.

Key characteristics

Key indicators	Moulvibazar	Sylhet
Total population (2011)	1,919,062	3,434,188
Gender distribution of population (2011)	M: 944728, F: 974334	M: 1726965, F: 1707233
Population in urban areas (2011)	144,843	485,138
Population density/km ² (2011)	625	732
% Extreme poverty headcount ratio (2016)	21	20
% Primary employment: Agriculture (2016)	49.8	38.1
% Average source of drinking water tube well (2011)	69.93	62.57
% Average non-sanitary toilet facilities (2011)	33.78	31.83
% Severely underweight children (2016)	9	9
% Disability rates	1.51	1.39
Literacy rates (2011)	51.1	51.2

Sources: Bangladesh Bureau of Statistics

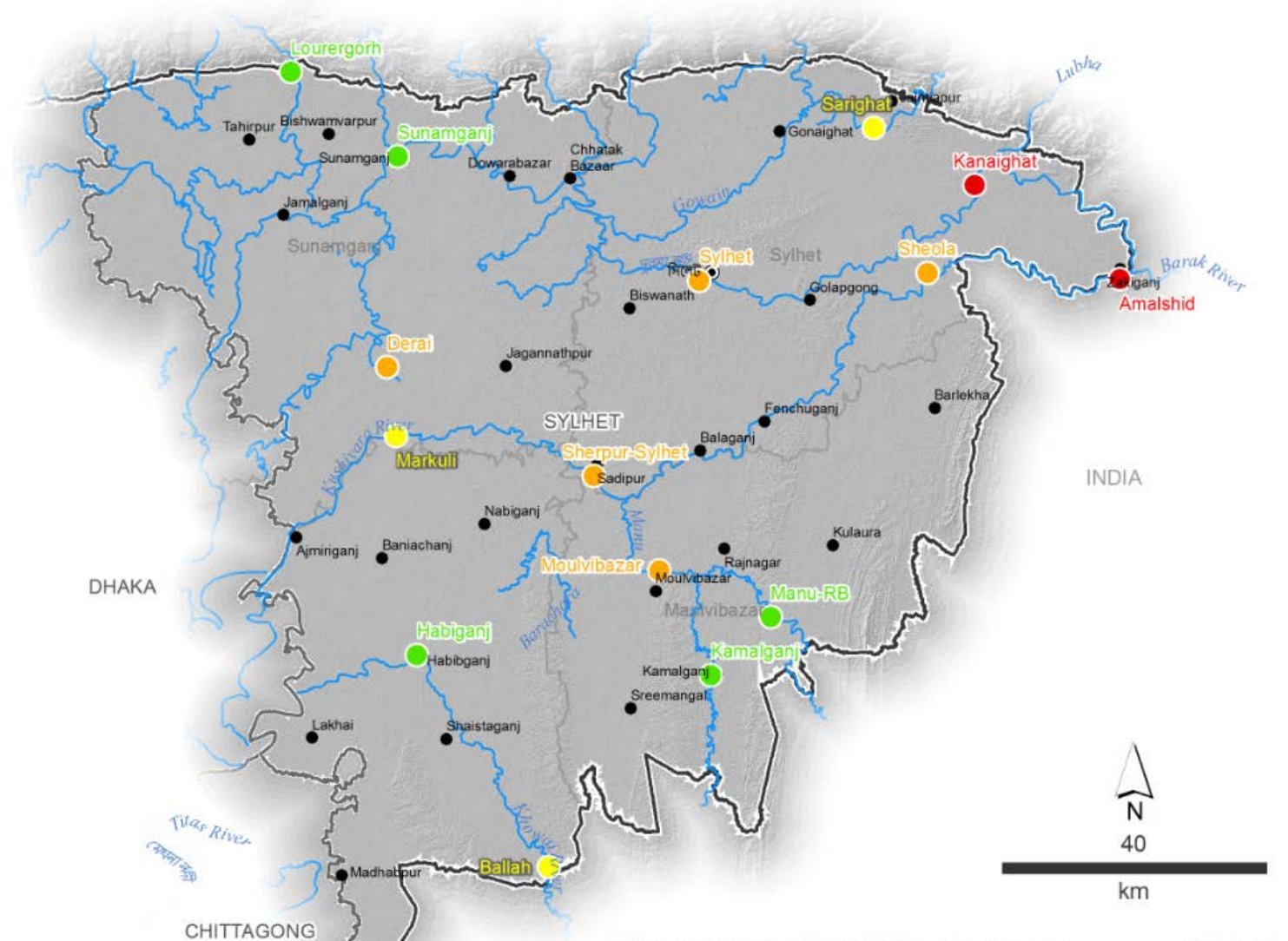
Lessons learned

- Cooking fuel is usually a priority after natural disasters, particularly floods.
- In 2012, after the flash floods in Sylhet, all the markets were functional. This implies that if affected households are given cash grants, they can access all the survival materials (Sylhet JNA 2012).
- Reconstruction of shelters/houses damaged in the pre/early monsoon months needs to take place quickly to prevent increased vulnerability throughout the monsoon period.

Use trusted information sources to share key messages about what to do in the case of a flood. Receiving information through friends/family, religious leaders, and community leaders are some of the highest trusted sources of information.



Bangladesh: Water level status and flood conditions in Sylhet division (as of 19/06/2018)



Data Sources: HDX, GADM, OpenStreetMap, Bangladesh Water Development Board (BWDB)
 Map created by MapAction

Water levels at river gauges			Observed water level (m)			Predicted water level (m)			
River Name	River Gauge	Danger Level	18 Jun	19 Jun	20 Jun	21 Jun	22 Jun	23 Jun	24 Jun
			06:00	06:00	06:00	06:00	06:00	06:00	06:00
Kushiyara	Amalshid	14.95	16.73	16.4	15.82	15.55	15.43	15.32	15.22
Khowai	Ballah	21.4	21.29	20.98	NP	NP	NP	NP	NP
Surma Old Course	Derai	5.8	6	6.08	6.11	6.13	6.18	6.24	6.3
Khowai	Habiganj	9.05	6.15	5.9	5.96	5.9	6.05	6.29	6.29
Dhalai	Kamalganj	18.85	17.66	17.07	NP	NP	NP	NP	NP
Surma	Kanaighat	12.25	13.63	13.49	13.19	12.93	12.81	12.75	12.68
Jadukata	Lourergorh	8	5.93	5.95	5.99	6.03	6.23	6.49	6.75
Manu	Manu-RB	17.15	16.93	16.22	15.74	15.28	14.84	14.41	14.07
Surma-Meghna	Markuli	7.45	7.14	6.96	6.95	6.95	6.95	6.95	6.95
Manu	Moulvibazar	10.7	11.71	11.15	10.57	10.2	9.95	9.78	9.66
Sarigowain	Sarighat	11.75	10.82	10.56	10.32	10.43	10.67	10.92	11.2
Kushiyara	Sheola	12.5	13.57	13.43	13.17	13	12.91	12.83	12.77
Kushiyara	Sherpur-Sylhet	8.05	8.45	8.4	8.38	8.38	8.37	8.37	8.36
Surma	Sunamganj	7.2	7.12	7.06	7.16	7.19	7.28	7.41	7.56
Surma	Sylhet	10.15	10.58	10.56	10.5	10.41	10.39	10.42	10.47

Source: Bangladesh Water Development Board made by MapAction