

Briefing Note – 27 August 2014

North Bangladesh: Floods



| | Not required | Low | Moderate | Significant | Urgent |
|--|---------------|-------|----------|-------------|--------|
| Need for international assistance | | | X | | |
| | Insignificant | Minor | Moderate | Significant | Major |
| Expected impact | | | X | | |

Crisis Overview

Since 13 August continuous rainfall in north and northeastern Bangladesh, together with the onrush of water from upstream, have caused flash floods in low-lying and densely populated areas. More than 800,000 people have been affected, including 500,000 displaced. As of 25 August, humanitarian actors on the ground report nine deaths. The most affected districts include Nilphamari, Lalmonirhat, Kurigram, Rangpur, Gaibandha, Jamalpur, Sirajganj, Sunamjong and Sylhet.

Key Findings

Anticipated scope and scale

Around 810,000 people have been affected, including 500,000 displaced. Thousands of hectares of crops have been lost, and countless homes and buildings. More low-lying areas are feared to be under water in the next few days. 43 of 83 measuring points at rivers across the country showed rising trend, with falls at 32 points, seven remaining the same, one went unreported. People are living in very poor conditions, which are likely to worsen if the rains continue.

Priorities for humanitarian intervention

- Food and cooking material, safe drinking water, and emergency shelter are reported as the main immediate priority needs.
- Opening and repair of roads and access points.
- Access to healthcare and medicines for water-borne illnesses
- Response should concentrate in the districts affected by river and monsoon in the north; and the Haor basin and flash flood areas of the northeast. New areas are reportedly being affected daily.

Humanitarian constraints

- Limited access to marooned populations and restricted means of transportation due to flooded roads.
- Inconsistent information on affected population and response efforts.

Crisis Impact

- Heavy rains in the main river basins and upstream catchments of India have triggered flooding in the northern and northeastern part of Bangladesh (Bangladesh Red Crescent Society 25/08/2014). The most affected districts include Nilphamari, Lalmonirhat, Kurigram, Rangpur, Gaibandha, Jamalpur, Sirajgonj (in the northwest), Sunamjong and Sylhet (in the north-east) (ECHO 25/08/2014).
- Concerns about flooding in the northwest began around 13 August. On 19 August the key country-level coordination forum, the HCTT, requested a joint needs assessment of the affected area. Districts in the coastal south-central area including Bhola, Patualkali and Barguna have also been affected, particularly after suffering from previous floods in July.
- The total number of people affected reported by Bangladesh Red Crescent Society amounts to 810,659, including 500,000 displaced, while the Government has reported 542,000 (SitRep 26/08/2014). Humanitarian actors on the ground have reported nine deaths, which the Government is yet to confirm (Bangladesh Red Crescent Society 25/08/2014).
- Reports indicate that people have taken shelter on embankments, high ground, roads, and in flood shelters but it is very unclear how many are displaced.
- As the monsoon is not over, the situation could worsen over coming days and weeks (Muslim Aid 18/08/2014). The flooding situation is changing rapidly day to day, with water reported as receding in some areas and river levels predicted to rise in many locations.
- Although the Government has delivered aid in the form of food and cash (WSJ 25/08/2014), some flood victims have stated that no aid has arrived in hard-to-reach areas (Dhaka Tribune 24/08/2014).

| Affected district | Number of affected people | Number of deaths |
|-------------------|---------------------------|------------------|
| Kurigram | 100,000 | |
| Nilphamari | 7,500 | |
| Rangpur | 48,499 | |
| Lalmonirhat | 32,020 | |
| Gaibandha | 45,000 | |
| Sirajganj | 81,350 | |
| Bogra | 37,400 | 1 |
| Sherpur | 7,500 | |
| Jamalpur | 71,390 | 2 |
| Bhola | 380,000 | 6 |
| Total | 810,659 | 9 |

Source: Bangladesh Red Crescent Society 25.08.2014.

Impact on Access of Affected Population to Essential Services

- **Food:** Flood victims have been reported as suffering from an acute food crisis (ECHO 25/08/2014; Dhaka Tribune 24/08/2014), and are living off of dry foods like ruti, puffed rice, flattened rice and molasses. Those who are displaced are unable to cook food (Daily Star 24/08/2014). Food stocks and household items have been damaged by floodwaters, with some families fully dependent on food support (Muslim Aid 18/08/2014).
- Agriculture is the main livelihood for the majority of the affected population. Thousands of hectares of *aman* seedbed and ready-to-harvest *aus* paddy fields have been inundated (Dhaka Tribune 24/08/2014), with most farmers losing their seed stocks for the next harvest (Bangladesh Red Crescent Society 25/08/2014). Fish farms have been washed away with the onrush of water (ProthomAlo 24/08/2014).
- **WASH:** Access to safe drinking water has been the main concern expressed by humanitarian actors on the ground. In some cases, the shortage has meant that some communities have been using contaminated polluted water. The lack of latrines or proper sanitation facilities has forced some populations to defecate openly (Bangladesh Red Crescent Society 25/08/2014).
- **Health:** Open defecation and polluted waters have greatly increased the risk of diarrhoea and water-borne diseases. Most flood victims have not been able to reach government health facilities (Bangladesh Red Crescent Society 25/08/2014).
- **Shelter:** Thousands of houses have been either washed away or gravely affected. As is often the case in Bangladesh, the displaced stay on whatever high ground they can find in makeshift shelters or in temporary locations. These arrangements offer limited privacy, protection from the elements, and inadequate or no sanitation. Living conditions are likely to worsen if the rain continues. Houses in the area are typically built on mud platforms (or plinths), which can be damaged and destroyed by severe flooding (Bangladesh Red Crescent Society 25/08/2014).
- **Protection:** Flood shelters have inadequate WASH facilities, which is a concern for public health as well as protection (SC2006). Past disasters have found that this poses risks to women and adolescent girls, who resort to a range of detrimental practices to avoid exposure (including waiting until nightfall to go to the toilet, bathing in dirty water). In the past, privacy to breastfeed has also been an issue.
- **Critical infrastructure:** Numerous hand tube-wells are contaminated by flood waters (Bangladesh Red Crescent Society 25/08/2014). In Lalmonirhat, five villages in Kaliganjupazila were submerged by water as a flood protection embankment broke down at Modanpur under Tuhbandar union on 24 August (Prothom Alo 24/08/2014). More than 300 schools in flood-affected areas have been shut (TRUST 26/08/2014).

Humanitarian and Operational Constraints

- The greatest constraint to operations at present is a clear understanding of the numbers affected, the numbers and locations of people who have been displaced, and a clear understanding of worst affected areas. There are differences between estimates of the number of affected people and it is difficult to establish an overview of the situation.
- Mobility is restricted and transportation is still difficult as most of the roads are underwater (DVB 25/08/2014). River transportation is common in these areas, and local media have reported some disruption (The Daily Star 24/08/2014).

Most critical needs include access to safe drinking water, sanitation facilities, and food. Provision of cooking facilities in the absence of cooking pots and utensils (since most of them have been washed away by the floods) (Muslim Aid 18/08/2014). Safe emergency shelters for displaced populations, and medicines for water-borne illnesses. **Most vulnerable groups** include women, children, the elderly, and people with disabilities (9.07% of the population has a disability). Children in these situations are extremely vulnerable and are less likely to receive assistance than children in flood shelters as they are harder to identify and harder to reach (SC 2006).

Aggravating Factors

Bangladesh is considered to be one of the world's most hazard-prone countries, and flooding is one of the most common disasters experienced regularly by the people of Bangladesh. On average, 18% of the country floods every year. The monsoon rains typically continue well into September (TRUST 26/08/2014; Bangladesh Dept. Disaster Management 06/2014; ACAPS 26/08/2014).

The biggest concern for farmers is the impossibility of planting rice within the coming three weeks if fields are underwater, as they will lose all cultivation prospect for the remainder of the year (Bangladesh Red Crescent Society 25/08/2014) and the next harvest would not be until early November (HEWSWEB 2014).

Location and Type of Housing/Infrastructure

Population density in Bangladesh is 1,014/km², making it the eighth most densely populated country in the world (WB Indicators). Houses in the area are typically built on mud platforms (or plinths) and many of those affected by floods have camped out on roofs, roads, embankments or bamboo structures. Children in these situations are

extremely vulnerable and less likely to receive assistance than children in flood shelters, as they are harder to identify and harder to reach (SC 2006).

Critical Infrastructure

Heavy rain in the main river basins of Bangladesh as well as in the upstream catchments of India has triggered more flooding in districts adjoining the rivers that are flowing above the danger level. Many embankments are in poor shape due to lack of proper maintenance. In many places sluices and regulators no longer function properly (INTRAC 2010).

Generally in Bangladesh, critical infrastructure such as government buildings, schools, and health clinics are located in high-risk locations and will continue to be at risk unless mitigation work is undertaken (JNA ACAPS 04/2014).

Other Factors of Vulnerability

- The negative effects of frequent natural disasters, including localised floods during the 2012 and 2013 cropping seasons, which affected similar regions to those flooded this year, have affected the food security of the vulnerable households. Similarly, the relatively high domestic rice prices are limiting access to food of low-income groups of the population (FAO 16/06/2014).
- Poverty is persistent in three areas: the northwest; the central northern region; and the southern coastal zones (IFAD 06/2014). These individuals are more vulnerable to the effects of floods and crop losses, and will therefore take longer to recover.
- The lean season extends from mid-September to end of October and from the beginning of March to mid-April (HEWSWEB 2014).

Key Characteristics of Host Population and Area

- **Demographic profile:** Urban population: 28.4% (2011) (CIA WorldFactbook 2014). The majority of the northern region is rural. A World Bank study conducted in 2007 revealed that 12.3% of rural population or 50% of all rural households have access to water transport.
- **Administrative division:** Bangladesh is divided into seven divisions and 64 districts, which are further divided into upazilas (also known as thanas). A 2012 estimate from the Local Government Engineering Department reported 518 upazilas in Bangladesh (JNA ACAPS 04/2014). Upazilas are further broken down into unions, wards and villages.
- **WASH:** Access to improved sources of drinking water: 83.2% (2011); access to improved sanitation facilities: 54.7% (2011) (UNICEF 12/2013). Water quality in

Bangladesh is compromised by the presence of arsenic, detected in 61 of 64 districts of Bangladesh. Of the affected areas, arsenic contamination is of particular concern in parts of Kurigram, while most of the area is not subject to arsenic contamination. It is at dangerous levels for at least 20 million people (UNICEF 2009).

- **Lighting and cooking:** Population using solid fuels for cooking: 99% rural/59.9% urban (Global Alliance for Clean Cookstoves).
- **Health:** Infant mortality rate: 33/1,000 live births; under-five mortality rate: 41/1,000 live births; maternal mortality rate: 240/100,000 pregnancies (UNICEF 12/2013).
- **Food insecurity:** Food insecurity is rising due to frequent natural disasters and civil unrest. An estimated 40% of the population is considered food insecure (ACAPS 26/08/2014).
- **Nutrition:** 3.5% are acutely malnourished, with 3.4% of these children suffering from severe acute malnutrition (ECHO, 19/02/2014). Pre-existing high malnutrition rates could increase vulnerability of children under five in the event of a disaster, and in light of the high prevailing rates of malnutrition, the nutrition situation could easily and quickly deteriorate after a major flood (ACAPS 26/08/2014).
- **Literacy:** Adults (total population over 15): 57.7%; Youth (18–24 years): 77.1%; Male: 80.4% (UNICEF 12/2013).

Response Capacity

Local and National Response Capacity

In Bangladesh, Disaster Management is the responsibility of the Ministry of Disaster Management and Relief. Bodies which support disaster management include: the National Disaster Management Coordination Council (responsible for implementing policies), the National Disaster Management Advisory Council, the National Platform Disaster Management for Risk Reduction (coordinating and providing facilitation to relevant stakeholders), the Focal Point Operation Coordination Group of Disaster Management (reviewing and coordinating activities carried out by different departments), the NGO Coordination Committee of Disaster Management and the Committee for Speedy Dissemination of Disaster Related Warning/Signals (SOD 2010). Disaster Management Committees (DMC) exist at the district, upazila, and union level, although the level of activity of these DMCs varies (JNA ACAPS 04/2014).

All INGOs and NGOs require government approval to undertake projects in Bangladesh. Approval in non-emergency situations takes a minimum of 45 days, while if a disaster has been declared, approval can be granted in 24 hours (JNA ACAPS 04/2014).

International Response Capacity

ACAPS, UN OCHA, ECHO Humanitarian Country Task Team, and other INGOs, with support from the Government of Bangladesh, launched a Joint Needs Assessment (JNA) on 20 August. JNA teams are currently assessing the situation and findings are expected by the end of the week. WFP, the Bangladesh Red Crescent Society and other international NGOs have delivered food and non-food items (ECHO 25/08/2014).

Information Gaps and Needs

Needs in Bangladesh can sometimes be difficult to assess; the humanitarian impact of frequent low-profile events is chronically underreported (ACAPS 26/08/2014, JNA ACAPS 04/2014).

- **Information gaps** include current population coping mechanisms, desegregated data on populations in north and northeastern areas. Damages on river transportation.

Lessons Learned

- Resilience to natural disasters includes a home safe from flooding, the knowledge and skills to prepare for and cope with disasters, and the financial security to recover and rebuild in the aftermath of a shock.
- Flood control measures and policies should be directed to the mitigation of flood damage rather than flood prevention.
- Resources should be allocated to help people adopt a lifestyle that conforms to their natural environment. Solutions such as changing housing structures and crop patterns can help reduce flood damage.
- Good governance, appropriate environmental laws, acts, and ordinances will be necessary to achieve sustainable economic development and to reduce any environmental degradation.
- Implementation of an improved real-time flood and drought control warning system can reduce the damage caused by floods. Improved forecasting and early warning system and preparedness measures have helped to reduce the number of lives lost and impact on livelihoods by flood.

Sources: (WFP 19/20/2014, JNA ACAPS 04/2014)

