

Briefing Note – 16 August 2017

NEPAL

Floods in southern Terai

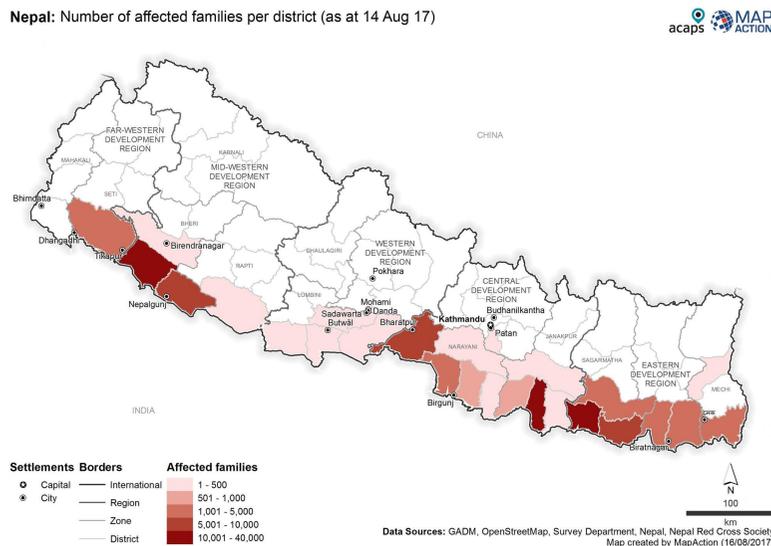


Need for international assistance	Not required	Low	Moderate	Significant	Major
Expected impact	Very low	Low	Moderate	Significant	Major

Crisis overview

Due to prolonged rainfall across Nepal from 11-14 August, 31 out of 75 districts have been affected by flooding and landslides. The southern Terai region has been particularly affected with an estimated 450,000 people affected by flooding and landslides. In this region 43 people were killed and an estimated 32,000 houses were damaged. Districts in central and eastern Terai have the highest reported impacts. Currently the impacts from flooding significantly outweigh those of landslides although the risk remains as rains persist and continue to hamper response efforts.

Nepal: Number of affected families per district (as at 14 Aug 17)



Larger version of map on page 5

Key findings

Anticipated scope and scale

The current flooding has affected 31 districts across Nepal with significant impacts currently reported in the southern Terai region. With limited access to the affected location due to the ongoing flooding and landslide, the current impact is relatively unknown but is likely currently being reported at a lower level than its true extent. The current flooding will likely surpass the 2014 flooding event that affected over 150,000 people. The impacts and response is the ongoing monsoon, with rains forecast into next week.

Key priorities

- **Shelter:** limited information is available but at least 32,000 homes have been damaged due to flooding, with the majority in eastern districts of Terai.
- **WASH:** early rapid assessments have identified access to clean drinking water as an essential need of those affected.
- **Food:** early rapid assessments have identified ready-to-eat food as an essential short-term need of those affected.

Humanitarian constraints

There are currently significant humanitarian constraints with affected districts having limited access. Major road networks across the affected areas are impassable, with rural communities completely inaccessible.

Limitations

There is an urgent need for field assessment of the affected districts to identify the sectoral impacts, with a particular focus on shelter, WASH, health, and food. There is also limited information available on the current national and international response in terms of actions taken and in which districts.

Government figures of those affected are significantly lower than that of the Nepal Red Cross Society. Government figures only indicated 37,000 affected.

Crisis impact

Due to prolonged rainfall across Nepal from 11–14 August, 31 out of 75 districts have been affected by flooding and landslides (UN, 14/08/2017). The southern Terai region has been particularly affected, with an estimated 450,000 individuals affected by flooding and landslides. In this region 43 people were killed and an estimated 32,000 homes were damaged. Districts in central and eastern Terai are the most significantly affected, as can be seen on the map on page 5 (NRCS, 16/08/2017). Currently the impacts from flooding significantly outweigh those of landslides, however it remains a constant risk as rains persist and continue to hamper response efforts. Compounding the impact of the flooding is the impact of current road infrastructure with road networks across the Terai Region and particularly in the east reported as impassable (WFP, 15/08/2017).

Shelter & NFIs: Across the southern Terai an estimated 32,000 homes have been damaged by flooding, the majority reported as partially damaged (NRCS, 16/08/2017). The number of damaged homes nearly directly matches that of those affected. Media reports indicate that those displaced in some districts, especially in Banke district, have been living in temporary shelters for over three days now, with limited NFIs (Kathmandu Post, 15/08/2017). Although there is no information on current NFI needs, with such a high proportion of flooded homes it can be expected that a high number of essential NFIs will have also been lost or damaged.

WASH: Early rapid assessments have identified access to clean drinking water as an essential need of those affected (IFRC, 14/08/2017). Reports from the district of Dharan in eastern Terai indicated severe shortages of drinking water due to the ongoing floods (Kathmandu Post 15/08/2017).

Health: Media reports currently indicate a high number of those displaced suffering infections associated with contaminated drinking water. In Banke it is estimated 500 people fell ill due to contaminated drinking water. This is expected to be a common issue across affected districts. (Kathmandu Post, 16/08/2017)

Food: Early rapid assessments have identified ready-to-eat food as an essential short-term need of those affected (IFRC, 14/08/2017). A large area of agricultural land has been affected and food shortage can be expected in the future due to the associated crop losses (NRCS, 16/08/2017).

Impact on critical infrastructure

Power: As of 15 August, districts in eastern Terai have been without power for three days (UN, 14/08/2017).

Transport Network: Across the southern Terai region the road network has been significantly impacted and although information is currently limited, there are reports of damage to bridges in western Terai and an airport in eastern Terai (WFP, 15/08/2017).

Health facilities: Reports indicated health facilities in Aleshwor, Mahottari and Fattepur, Banke have been completely inundated (UN, 14/08/2017).

Vulnerable groups affected

Anecdotal field reports have indicated a significant number of those affected are pregnant and lactating mothers as well as disabled people (UN, 14/08/2017).

Humanitarian and operational constraints

Across the southern Terai region road access as of 15 August is significantly impacted by flooding, with major access routes reported as not passable. In the eastern districts of Terai region, which are reportedly the most affected, all the major road networks are affected, with major routes reported as not passable and alternative routes damaged but passable (WFP, 15/08/2017). Access to rural communities is overland and is currently reported as impossible (UN, 14/08/2017). Compounding the access issues in the eastern districts, the local airport in Biratnagar is currently reported as flooded and not operational. It is unlikely to be operational for several weeks (The Himalayan Times, 15/08/2017).

Landslides have blocked and damaged roads but the added risk of further landslides, particularly in eastern regions – a current landslide hotspot – will continue to hamper response efforts (PDC, 15/08/2017).

Aggravating factors

Weather Forecast

Rainfall is expected to continue into next week across all of Nepal, with particularly intensive rain expected over central regions on 17 August (Windy TV, 16/08/2017). Due to the monsoon, which traditionally lasts from June–September, adverse weather is expected

to continue over the coming months and could further compound the current situation. With already saturated groundwater levels, any further rainfall will have a fast and direct impact on water levels across the affected districts.

Social economic conditions of areas affected

Pre-existing social and economic disparities could be exacerbated by the impact of the current floods (UN, 14/08/2017). HDI across southern Terai in 2014 was 0.47, slightly higher than the national average of 0.46. However, Nepal is the one of the lowest ranking among the countries of the South Asian regional (UNDP, 2014). Those affected from poorer households are therefore more likely to turn to negative coping mechanisms sooner and require and have higher humanitarian needs in the mid to long-term.

Other factors of vulnerability

Recovery from the 2015 earthquake continues across Nepal, with reconstruction still ongoing. Currently five of the flood-affected districts are still reportedly recovering from the earthquake (UN, 14/08/2017).

The 2014 floods affected over 150,000 people across 21 districts, with western and central districts in Terai region the most affected (Government 03/09/2014). Four of the current flood-affected districts have yet to fully recover. (UN, 14/08/2017).

Key characteristics

- **Demographic profile:** Population (2011 census): 26,494,504. Ethnic groups: Chhetri is the largest ethnic group with 16.6% of the total population followed by: Brahman-Hill (12.2%); Magar (7.1%); Tharu (6.6%); Tamang (5.8%); Newar (5%); Kami (4.8%); Musalman (4.4%); Yadav (4%); and Rai (2.3%). The remaining 116 ethnicities together comprise around 30% of the population.
- Rural population: 83% (2012) (UNFPA). Population below poverty line: 25.2% (2010) (WHO 2012). HDI (2014): 0.540 (145 out of 187) (Human Development 2014).
- **WASH:** Population with access to improved water: 88% (2012) (WHO 2012).
- **Lighting and cooking:** 62.8% of houses in Nepal have electricity. The majority use wood for cooking.
- **Health statistics:** People per physician: 13,777. Maternal mortality rate 190 per 100,000 (2012), Under 5 mortality rate: 42 per 1,000 live births (2012) (UNFPA). Leading

diseases and illnesses include diarrhoea, gastrointestinal disorders, intestinal parasites, leprosy, and tuberculosis (Nepal Times 2011).

- **Nutrition:** One in three children under five in Nepal were moderately or severely underweight, with 9% classified as severely underweight. More than one-third are moderately or severely stunted, with 16% severely stunted, and 11% were moderately or severely wasted, with 3% severely wasted. (MICS, 2014)
- **Literacy** rate average: 65.9% (populstat).
- **Weather:** Nepal has a typical monsoonal, two-season year. The dry season runs from October to May and the rainy (monsoon) season from June to September (Visit Nepal).
- **Location and Type of Housing/Infrastructure:** In the valleys, burnt or sun-burnt brick walls are used, with thatch or brick roofing. In the Terai, houses are built with bricks or mud. Higher in the mountains, stones are the primary materials used. Poorer populations use bamboo-reinforced mud walls (UN Habitat Nepal).

Response capacity

National response capacity

Ministry of Home Affairs (MoHA) is leading the response efforts and has activated the cluster system and the Emergency Response Preparedness plan. MoHA has instructed all districts to activate the Initial Rapid Assessment process, and assessments are ongoing in at least three districts. District Disaster Relief Committees have been activated and are meeting regularly to coordinate response in all affected districts. District Lead Support Agencies (DLSAs) are supporting district level coordination (UN, 14/08/2017). MoHA has been offering CASH assistance to those affected by the floods in a number of districts (Kathmandu Post, 15/08/2017).

International response capacity

The Humanitarian Country Team (HCT) has been activated in support of the government, and the Resident Coordinator's Office is coordinating (UN News, 15/08/2017). INGOs are responding but information on to what extent is limited. The Nepal Red Cross society is currently responding to basic shelter and NFI needs in a number of affected districts.

Information gaps and needs

Although rapid assessments are ongoing, until their publication there are significant gaps on the current impact of the flood and landslide across Nepal. Detailed sectoral information is required, particularly focused on shelter, WASH, food and health needs.

With no access to rural communities via road there is also a current information gap on the specific needs of rural communities in the affected districts. Based on the access constraint it can be expected that the number of those affected across Nepal is currently under reported.

Lessons learned

- Flood risk management, readiness for response, and community preparedness is only effective when carried out in an integrated manner.
- 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 systems and preparedness measures have helped to reduce the number of lives lost as well as impact on livelihoods by floods.

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

Families affected by monsoon flooding in districts across Nepal

Nepal: Number of affected families per district (as at 14 Aug 17)

