Heavy rains in October have caused flooding in several parts of Ghana. The Upper East region at the border to Burkina Faso is particularly affected. Information on the impact given by the National Disaster Management Organization (NADMO) and government officials to local media is conflicting. The death toll ranges currently between 28 and 19 people. Initial assessments indicate that at least 26,000 people have been displaced.

### Anticipated scope and scale

The flooding in Upper East region is estimated to have **displaced at least 26,000 people**. All 15 districts have been affected. The districts hit hardest include **Buiisa North**, **Buiisa South**, and **Kassena-Nankana**. As of 27 October, floodwater has **begun to recede but rains are predicted for next week** and may occur until early November. National authorities have begun assisting some of the affected populations but there are **delays in assistance**.

### Key priorities

- **26,000 people displaced**
- **Food assistance reported to be delayed**
- **Up to 6,000 houses affected**

### Humanitarian constraints

Several roads in Upper East region have been submerged and may remain impassable after floodwater recedes. Destroyed bridges can further constrain access. There are already reported delays in the provision of assistance to hard-to-reach areas. Further rain might impact road infrastructure.

**Limitations**

There are conflicting numbers regarding people killed and displaced during the flood as well as houses destroyed. Assessments of the National Disaster Management Organization (NADMO) are still ongoing. Numbers are likely to change as floodwaters have only begun to recede.
Crisis impact

Torrential rains in October have led to flooding in Ghana’s Upper East region. A joint rapid assessment by NADMO and the Ghana Red Cross Society from 8 to 12 October indicated that 13 districts were affected but more recent media reports indicate that all 15 districts of the region have been affected by flooding (IFRC 29/10/2019; GhanaFact 22/10/2019). Among the most affected districts are Bui Isa North, Bui Isa South, and Kassena-Nankana (CitiNewsroom 20/10/2019).

The reported death toll ranges currently between 29 and 19 people (IFRC 29/10/2019). The death toll may rise once the floods recede and the impact on hard-to-reach communities can be assessed. While NADMO initially confirmed a relatively low number of 2,000 people had been displaced, media reports indicate at least 26,000 people have been displaced (GhanaFact 22/10/2019). The increase in numbers is also related to the fact that many people evacuated more recently, when the flooding worsened (PrimeNewsGhana 18/10/2019). Initial assessments estimate that almost 6,000 houses were damaged, including over 2,200 completely destroyed (IFRC 29/10/2019). Detailed humanitarian needs assessments are still underway (IFRC 29/10/2019).

Food: Food is a priority need. Though NADMO started the distribution relief on 21 October, flood victims report receiving NFI but no food assistance, which is urgently needed (PrimeNewsGhana 21/10/2019). As of 27 October, some flood-affected communities are reported to have not received any food assistance, especially in hard-to-reach areas (JoyOnline 27/10/2019).

Shelter: Shelter is another priority need. Many people displaced by the flooding have no access to emergency shelters and are either forced to sleep in the open or to seek refuge in church and school buildings (JoyOnline 27/10/2019). Many displaced people are staying with relatives (PrimeNewsGhana 18/10/2019). Almost 6,000 houses were damaged, including over 2,200 that were completely destroyed (IFRC 29/10/2019).

WASH: NADMO has announced a collaboration with the Ghana Health Service to ensure access to safe drinking water (CitiNewsRoom 18/10/2019) but it remains unclear how many flood-affected people have been reached. Given the reported delays and shortages in the provision of food, there are likely also high needs for safe drinking water.

Health: There are no reports of disease outbreaks but there are concerns about increased risks of the outbreak of waterborne diseases due to water contamination (WANEP 10/2019).

Livelihoods: The total area of farmland destroyed cannot be confirmed but preliminary figures mention at least 844 hectares of farmland submerged under water in Kassena-Nankane municipal district alone (GhanaFact 22/10/2019).

Impact on critical infrastructure

There are no official reports detailing the overall extent to which the flooding has affected infrastructure and public facilities across the country but the poor state of Ghana road infrastructure and lack of all-weather roads is an ongoing national concern (GhanaWeb 22/10/2019; GhanaWeb 24/10/2019). At least one bridge in Bui Isa North district that connects Jansa with the district capital Sandema has been washed away (JoyOnline 16/10/2019).

Vulnerable groups affected

Key groups of people affected by the flood cannot yet be identified as NADMO currently lacks disaggregated information on the population affected (CitiNewsroom 17/10/2019).

According to the Human Development Index sub-national breakdown, Upper East region was among those regions with the lowest HDI value in 2017 (Global Data Lab). Much of the region depends on agriculture (WANEP 10/2019). Due to the destruction of farmlands, people whose livelihoods depend on farming are especially vulnerable. Some have already reported fears of food insecurity due to destroyed crop and farm produce (PrimeNewsGhana 21/10/2019).

Humanitarian and operational constraints

According to the Upper East regional director of NADMO, some roads are not passable with motorised vehicles, delaying access to hard-to-reach communities (JoyOnline 27/10/2019). Damage to bridges could impact access to affected areas further. At least one bridge in Upper East region is reported washed away (JoyOnline 16/10/2019).

Aggravating factors

Recurring flooding

Ghana frequently experiences flooding. In 2018, northern Ghana, including Upper East region, was affected severely when over 30 people died and 100,000 were displaced between August and September 2018 (Floodlist 21/08/2019). Recurrent flooding leads to a protracted risk of negative impacts on livelihoods of farmers and local populations’ capacity to rebuild and repair their home.

In addition, response to recurring flooding seems to have strained the capacity of NADMO and limits its response. Several areas in Ghana experienced flooding between March and June 2019, including Western Regions and Accra (Floodlist 19/10/2019). In neighbouring
Eastern region, the regional NADMO office could not dispatch any relief items to flood victims in early October as it was out of stock (Citinewsroom 06/10/2019).

**Rainy season**

While Southern Ghana experiences two rainy seasons, Northern Ghana, including Upper East region, experiences one single rainy season annually (Graphic 08/09/2019). Though the major rainy season in Northern Ghana was expected to end in October, the Ghana Meteorological Agency warned that rains across the country could last into November this year (Citinewsroom 18/10/2019; Graphic 08/09/2019). Rain is expected for the Upper East region in the coming week (NOAA 24/10/2019).

**Delay of contingency measures**

Despite warnings from the Ghana Meteorological Agency of heavy rains, regional officials in Upper East region have admitted that the torrential rains surprised them and that necessary contingency measures had not been put into place in time (Citinewsroom 17/10/2019).

**Food insecurity**

The government has declared that the flood will not impact food security in the Upper East region (GhanaWeb 20/10/2019). Nevertheless, there remain strong concerns that the destruction of farmland and farm produce will increase the food insecurity of flood-affected populations. People have reported that their ready-to-harvest produce and stored food items has been destroyed and that they lack food (PrimeNewsGhana 21/10/2019).

**Dam spillage**

Dam spillage is a recurrent factor aggravating flooding in Northern Ghana (Phys 29/10/2018). Spilling water from Bagra Dam in Burkina Faso was a key factor worsening the 2018 flood crisis in Northern Ghana (GNA 19/10/2019; Watson Institute). So far, no spillage from Bagra Dam has been reported. There has been spillage, however, from the Tono Irrigation Dam (Kassena-Nankana district) that led to farmland being flooded (GhanaFact 22/10/2019).

### Key characteristics of Upper East region

<table>
<thead>
<tr>
<th></th>
<th>Upper East region</th>
<th>Country level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Surface</td>
<td>8,842 square kilomtres</td>
<td>238,533 square kilomtres</td>
</tr>
<tr>
<td>Total population</td>
<td>1.0 million people</td>
<td>24,7 million people</td>
</tr>
<tr>
<td>Number of Households</td>
<td>135,690</td>
<td>2,417,698</td>
</tr>
<tr>
<td>Av. Household size</td>
<td>5.8 persons</td>
<td>4.4 persons</td>
</tr>
<tr>
<td>Pop. Density (persons per square kilometre)</td>
<td>118 people/km²</td>
<td>103 people/km²</td>
</tr>
<tr>
<td>Urban population (% of total population)</td>
<td>21.0%</td>
<td>50.9%</td>
</tr>
<tr>
<td>Sex ratio (males per 100 females)</td>
<td>93.8</td>
<td>95.2</td>
</tr>
<tr>
<td>Population under 15 years</td>
<td>41.5%</td>
<td>38.3%</td>
</tr>
<tr>
<td>over 60 years</td>
<td>9.2%</td>
<td>6.7%</td>
</tr>
<tr>
<td>with a disability</td>
<td>3.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Literacy rate</td>
<td>47.5%</td>
<td>74.1%</td>
</tr>
<tr>
<td>Houses constructed with mud-based outer walls</td>
<td>80.7%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Wood used as main fuel for cooking in household</td>
<td>60.4%</td>
<td>40.2%</td>
</tr>
<tr>
<td>No toilet facility used by household</td>
<td>82.4%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Borehole/pump/tube well as main source of drinking water in household</td>
<td>57.3%</td>
<td>23.2%</td>
</tr>
</tbody>
</table>

Source: 2010 Census Ghana Statistical Service; GoG Census National Analytical Report 2013
**Response capacity**

**Local and national response capacity**

The government of Ghana has not declared a state of national disaster (GNA 19/10/2019). The response is led and coordinated by the National Disaster Management Organisation (NADMO) and its regional offices. The vice president has promised a cash donation of GEH 50,000 on behalf of the government, an equivalent of USD 9,000 (Citinewsroom 20/10/2019).

The response capacity of NADMO has been criticised as insufficient. Politicians (GNA 23/10/2019) and local populations (JoyOnline 27/10/2019) have been concerned that NADMO was overwhelmed with the response and delivers relief too slowly or not at all. One reason the effectiveness of NADMO is limited is severe financial constraints. In April 2019, NADMO indicated they faced high debts and were unable to purchase relief items (JoyOnline 15/04/2019). The local NADMO office has also stated that logistical constraints delayed the initial response to the flood (Citinewsroom 17/10/2019). NADMO has made appeals to the public to donate relief items (GhanaFact 22/10/2019).

NADMO collaborates with national services and the Ghana Red Cross Society which has provided relief items in addition to NADMO (IFRC 29/10/2019). Apart from the Ghana Red Cross Society, there is no information on local and national NGOs responding to the flood-affected population.

**International response capacity**

On 29 October, the IFRC announced the start of an emergency plan of action in Upper East region that is intended to last until 26 February 2020 (IFRC 29/10/2019). The operation will be carried out in coordination with NADMO, the Ghana Red Cross Society, and the Swiss Red Cross. The plan targets 4,333 households (26,083 individuals) who are supposed to receive water, shelter and household items as well as WASH, and health assistance.

**Information gaps and needs**

There are conflicting numbers regarding people killed and displaced during the flood as well as houses destroyed. Assessments of the National Disaster Management Organization (NADMO) are still ongoing and data available initially has not yet allowed for disaggregated information on needs (Citinewsroom 17/10/2019). Data for the joint assessment of NADMO and the Ghana Red Cross Society was collected from 8 to 12 October (IFRC 29/10/2019). As floodwaters have only begun to recede, displacement numbers are likely to change. A detailed needs assessments is underway (IFRC 29/10/2019).
Upper East region and its districts including Bolgatanga Municipality

Ghana administrative regions following Dec 2018 referendum

* Newly created regions announced in February 2019

Sources: Alhassen, Hadwen, 2017; Ghana Embassy Denmark