Heavy rainfall since 25 March triggered floods across Herat, Badghis, Faryab, Sari Pul, Jowzjan and Balkh provinces in western and northern Afghanistan affecting 17,000 people (OCHA 02/04/2019; Reuters 30/03/2019; WV 29/03/2019). As assessments are ongoing and some of the affected areas are difficult to access, the full impact remains unclear. Available information suggests that vast areas of agricultural land have been damaged, and livestock lost, compounding already high levels of food insecurity in the affected provinces. Shelter needs are likely high as hundreds of houses have been damaged or destroyed. IDPs living in tents and makeshift camps are affected. Afghanistan has been experiencing severe floods since early March, affecting more than 143,000 people across the country (OCHA as of 29/03/2019; OCHA 19/03/2019).

Anticipated scope and scale
At least 17,000 people across six provinces in Afghanistan’s western and northern provinces have been affected by heavy rain and flash floods. A risk of floods due to forecasted rainfall persists in Herat and Badghis as well as in parts of several northern provinces and Nangarhar in the coming days (AMD 03/04/2019). A long-lasting impact on the already critical food insecurity situation may be expected as floods have destroyed agricultural land and crops in some areas. Given the dried-out soils and rising temperatures in to March and April, snowmelt is likely to increase the risk of further flooding and potentially landslides until May (CPC 04/04/2019).

Key priorities
- +17,000 people affected
- 13,000 houses damaged or destroyed
- Food and livelihoods compounding existing needs

Humanitarian constraints
Active conflict and the presence of non-state armed groups present major obstacles to humanitarian access. The road network has suffered from decades of conflict, leaving many in poor condition. Remoteness and mountainous terrain as well as inundated and flood-damaged roads limit access to affected provinces.

Limitations
As assessments are ongoing and new areas are being accessed, the real scale of the impact remains unclear and data changes quickly. Publicly available information is limited and reporting from different humanitarian actors is not consistent, particularly with regards to number of people exposed, affected and in need. Therefore, it is hard to estimate the full impact of floods.

Any questions? Please contact our senior analyst, Jude Sweeney: js@acaps.org
**Crisis impact**

Heavy rainfall since 25 March triggered flash floods on 27-29 March that affected 17,000 people across six provinces in western and northern Afghanistan and compounded humanitarian needs of affected populations (OCHA 02/04/2019; Reuters 30/03/2019, WV 29/03/2019). Balkh and Herat province are the worst affected (BBC 30/03/2019). As of 1 April, the death toll due to the latest floods has risen to 41 people and at least 10 people remain missing (Independent 01/04/2019; Afghanistan Times 01/04/2019; ECHO 01/04/2019). Flooding has had a devastating impact on houses, infrastructure and agricultural land. As of 29 March, more than 42,000 people have been displaced because of floods in 2019, around 20,000 houses have been reported as damaged or destroyed, and close to 400km of roads in Badghis province have been damaged (OCHA 02/04/2019, OCHA 19/03/2019, KI 02/04/2019, unpublished). However, as assessments in districts affected by flooding in late March are ongoing the impact remains unclear and numbers are likely to increase over the coming days. Access to affected districts is limited due to flooded and damaged roads and bridges as well as security concerns (Al Jazeera 31/03/2019; KI 02/04/2019, unpublished; KI 03/04/2019, unpublished).

**Heavy Rain and Flash Flood Forecast for 29/30 March**

The number of houses destroyed or damaged is estimated to be between 3,000 and 13,000, including up to 80% of all houses in flood-affected districts in Herat province (Independent 01/04/2019; Afghanistan Times 01/04/2019; Al Jazeera 31/03/2019; Tolo News 31/03/2019). Information on current conditions and coping strategies of affected households is limited. Displaced people are likely staying with hosting families or public buildings. Initial INGO assessments show that hundreds of families have been displaced within Maymana city, Faryab province (KI 03/04/2019, unpublished). IDPs living in tents and makeshift settlements in the outskirts of Herat city and Qala-e-Naw have been affected and are particularly vulnerable to the impact of floods (OCHA 02/04/2019). The most urgent needs include emergency shelter, food and NFI assistance. Herat and Badghis in the west, and several northern provinces including Sari Pul and Samangan, are vulnerable to further flash floods in coming days as more rainfall and thunderstorms are forecasted (AMD 01/04/2019; AMD 03/04/2019; AMD 03/04/2019).

Publicly available information on needs and numbers of people affected as well as on impact on agriculture, housing, and infrastructure is limited as assessments are ongoing. Reporting from different actors vary between household, family, and individual level. Estimations for the number of people exposed, affected and in need are not always available and it is unclear where terms might have been used interchangeably. Inconsistency across assessment results makes it difficult to compare data across districts and provinces and hence impedes a total impact count. The total number of people affected and in need of humanitarian assistance is likely higher than currently reported and shown in the table below.

<table>
<thead>
<tr>
<th>Province</th>
<th>Affected districts</th>
<th>People affected</th>
<th>Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herat</td>
<td>Injil, Obeh, Pashtoon Zargoone, Adraskan, Shindand, Zandajan, Rabat Sangi, Gulran, Kosh-k-e Kohna, Ghoryan</td>
<td>7,400-15,000 people in need (NRC 02/04/2019; OCHA 02/04/2019)</td>
<td>400 residential houses across three districts destroyed, 340 hectares of agricultural land damaged (CA 02/04/2019, unpublished).</td>
</tr>
<tr>
<td>Badghis</td>
<td>Qala-e-Naw, Mugur, Abkamari, Qadis, Jawand</td>
<td>124,500 people affected (KI 02/04/2019)</td>
<td>964 houses destroyed, 1551 damaged (KI 02/04/2019)</td>
</tr>
</tbody>
</table>

Source: AMD 28/03/2019
### Faryab

<table>
<thead>
<tr>
<th>Location</th>
<th>People Affected</th>
<th>House Affected</th>
<th>Affected People Needing Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maymana city, Khwaja Sabz Posh, Pashtunkot, Almar, Kohistan, Dawlatabad, Shirin Tagab, Qaysar</td>
<td>6,260</td>
<td>1,200 livestock lost, at least 2 hectares of agricultural land affected</td>
<td>Public facilities and houses destroyed, 1,200 livestock lost, at least 2 hectares of agricultural land affected</td>
</tr>
</tbody>
</table>

**Shelter:** Information on damaged and destroyed shelter is limited while assessments are ongoing. However, current reports suggest that needs are high, as up to 13,000 houses were damaged or destroyed (World Vision 29/03/2019; Tolo News 31/03/2019). Families whose houses have been severely damaged or destroyed are likely staying with hosting families or in public buildings (KI 03/04/2019, unpublished). Flooding impacted IDPs already living in dire conditions in tents and makeshift settlements in Herat and Badghis provinces. (World Vision 29/03/2019; Tolo News 31/03/2019). For example, shelter and living conditions in displacement sites near Herat city and Qala-e-Naw are poor and likely made worse by the recent flooding (OCHA 19/10/2018). Poor shelter and hygiene conditions in IDP settlements have been led to a decrease in child health conditions and a rise in child mortality. (OCHA January 2019) Needs in the parts of the affected area were already high due to previous flooding in March (ECHO 07/03/2019).

**Food:** The damaged agricultural land and loss of livestock as a result of flooding will likely exacerbate food insecurity in the affected areas, however, the total extent of damaged agricultural land and livestock lost is not clear yet (The Guardian 06/03/2019; Tolo News 31/03/2019). First assessments suggest that in Badghis province, 420 livestock have been lost (KI 02/04/2019, unpublished). In addition, many households have likely lost their food stocks (WV 01/04/2019). The food security situation in Afghanistan has worsened considerably throughout 2018 due to a severe drought that left 13.5 million people severely food insecure (IPC Phases 3 and 4), leading to crisis and emergency levels in affected areas (FAO March 2019; FEWS Net, January 2019).

**NFIs:** Flash floods have washed away shelters and personal belongings, including clothing and household items (Reuters 30/03/2019). As temperatures are below 10 degree Celsius in some affected areas, a need for warm clothing is likely (AMD 04/04/2019).

**WASH:** There is a lack of data on how recent flooding has impacted WASH needs. It is likely that water sources have become contaminated, particularly because management of WASH infrastructure in the affected area is often weak. Prior to floods, access to safe drinking water in drought affected areas and in informal settlements had already been a concern and is likely to have deteriorated since (GRFC April 2019; REACH November 2017). In addition, flooding earlier in March has compounded WASH needs in Afghanistan. As of 2 April, more than 40,000 people in Kandahar, Zabul and Helmand provinces are in need of WASH assistance (KI 02/04/2019, unpublished). Assessments following flooding in Herat province on 18 March showed that the majority of affected populations used pump wells as a primary water source (Oxfam April 2019). Contaminated water sources increase the risk of disease outbreaks. This is likely to be of particular concern in IDP settlements where living conditions are especially poor as facilities are often limited and people often live in overcrowded settings. Poor water management infrastructure and damages to dams, drainages of rainfall and sewers increase the risk of water-borne diseases in affected areas (Reuters 30/03/2019).

**Health:** Flash floods often leads to increased demand for health services and increases the risk of communicable diseases. While there is no data on disease outbreaks following floods in late March, close to 700 cases of acute watery diarrhoea were reported following floods in southern Afghanistan in early March (Health Cluster February 2019).
Livelihoods: A severe drought in 2018 affecting vast parts of the country has exacerbated the livelihood crisis in Afghanistan as 75% of Afghanistan’s population lives in rural areas and a staggering 80% of the population depend on agriculture for their livelihoods (IPC October 2018; FAO 2011). The flood impact on agriculture and livestock is likely to decrease related livelihood opportunities and increase the need for cash assistance. Drought-displaced people, many of which settled in Herat and Badghis, have not been able to find sustainable livelihood opportunities and have resorted to negative coping strategies including enforcing child labour (OCHA 19/10/2019).

Education: Access to education has likely been disrupted and damages to infrastructure may have long-term impacts on education. 144 schools across 19 provinces have reportedly closed due to floods in 2019 (Frontier Post 03/04/2019).

Impact on critical infrastructure
Initial reports and similar events in the past suggest that floods have damaged, blocked, and inundated critical infrastructure including roads, bridges and water management systems in the affected areas (Independent 01/04/2019; KI 02/04/2019, unpublished; OCHA 11/03/2019). Dug wells, irrigation canals and intake dams have been destroyed (KI 02/04/2019, unpublished, CA 02/04/2019, unpublished). At least four catchments need repairing and close to 400km of roads have been damaged. (KI 02/04/2019, unpublished)

Vulnerable groups affected
IDPs living in informal settlements and makeshift camps are particularly vulnerable to flooding. Shelter structures are often more perceptible to the impact of extreme weather and generally living conditions are poor. The sudden influx of more than 250,000 people displaced by a severe drought in 2018 between June and August in western provinces led to the emergence of 19 informal settlements in the outskirts of Herat City and Qala-e-Naw (HNO 2019). These informal settlements are often located near riverbeds, rendering them more vulnerable to flood risks. (OCHA 11/11/2018; UN Habitat assessed 12/03/2019; OCHA January 2019). First reports indicate that some informal IDP settlements in Badghis, Herat and Faryab province had been affected, although no detailed information on the number of affected people or their conditions is available (OCHA 02/04/2019; Frontier Post 03/04/2019).

Humanitarian and operational constraints
Damaged and inundated roads likely hamper assessment and response activities (OCHA 02/04/2019). In flood affected areas, the presence of IDPs and returnees likely presents a challenge for already stretched health care capacities (WHO 20/06/2018; OCHA January 2019; Guardian 25/03/2019; Health Cluster February 2019).

Darazab and Qoshtepa district in Jowzjan province are inaccessible due to security concerns (OCHA 02/04/2019). The presence of NSAGs in Almar, Pashtonkot, Dawlatabad, Kohistan districts in Faryab province and along main roads connecting the districts to the provincial capital Maymana pose security concerns (KI 03/04/2019, unpublished). Security clearances to access the affected population in Kunjak and Looden villages in Sari Pul province resulted in the delay of assessments and response (KI 02/4/2019, unpublished). Chemtal district in Balkh province is also not accessible for most humanitarian actors due to insecurity (KI 03/04/2019, unpublished).

Access via the Mazar-Sheberghan highway connecting Jowzjan and Balkh province may be limited following the Taliban attack on the highway against Vice President Gen. Abdul Rashid Dostum on 27 March (Tolo News 30/03/2019). Fighting intensified in Sholgara district in Balkh province as of early April, however, some areas have been reported to be inaccessible to humanitarian actors (Tolo News 02/04/2019; KI 03/04/2019, unpublished).

In the past, security risks for humanitarian workers and supplies were also reported from Faryab, between Herat city and Qala-e Naw and other districts within Badghis province. (OCHA 31/12/2018; AAN 30/12/2018; OCHA, 07/01/2019; WFP 31/01/2019; OCHA 14/01/2019) It is unclear how this affects current response activities. In early March it was reported that the Taliban are assisting affected families (Arab News 04/03/2019).

Attacks against aid workers have decreased since a peak in 2013, partly attributed to a reduced presence of aid workers in the most insecure areas as well as direct access negotiations with conflict parties (GPPI October 2016; OCHA 16/08/2018; OCHA 21/06/2017). Between January 2018 and January 2019 at least 35 humanitarian aid workers were killed, wounded or kidnapped in Afghanistan – all national staff, (AWSD assessed 28/02/2019; OCHA 16/08/2018). This highlights how national staff and local NGOs
are often more exposed to risks, including harassment, manipulation and attacks, as increasingly relied on in hard-to-reach and non-government-controlled areas. (ATHA December 2018; IRIN 08/02/2018; OCHA 21/06/2017)

### Aggravating factors

#### Drought and food insecurity

The food security situation in Afghanistan has worsened considerably throughout 2018 due to a severe drought that left up to 13.5 million people severely food insecure (IPC Phases 3 and 4) (FAO March 2019; FEWS Net January 2019). Severe food insecurity impacts more than 47% of the rural population, often areas affected by insecurity as the Taliban increases influence over rural areas. 75% of Afghanistan’s population lives in rural areas and a staggering 80% of the population depend on agriculture for their livelihoods (FAO 2011). Most provinces affected by flash floods in late March were already estimated to be facing crisis food insecurity levels (IPC 3) as of February 2019 (FAO March 2019). However, Badghis province was already estimated to be experiencing emergency levels of food insecurity pre-floods and is also one of the provinces with the highest acute malnutrition rates in Afghanistan (WV 01/04/2019; GRFC April 2019).

#### Previous floods and impact on agriculture

Afghanistan regularly experiences floods, however, above-average rainfall, high snowpack levels and drought conditions have led to a devastating impact in 2019. Since the beginning of the year some 163,000 people have been affected by floods in 15 of 34 provinces, including 143,000 people in March (OCHA 29/03/2019; Tolo News 31/03/2019). More than 42,000 people are estimated to have been displaced because of flooding in 2019 (OCHA 02/04/2019). In early March severe floods in 14 provinces in the south and east of the country affected 122,600 people (OCHA 19/03/2019). 63 people died as a result of the floods and 4,800 houses were destroyed and 7,500 damaged (OCHA 19/03/2019). Since the beginning of March it is estimated that 10,400 houses have been destroyed and over 10,000 damaged, it is unclear how this reflects damages following flash floods in late March (Frontier Post 03/04/2019). On 18 March, 13 people died in flash floods in Ghureyan, Rabar Sangi, Khorsan districts of Herat province, which suffered further flooding later the same month (Flood List 01/04/2019; ECHO 26/03/2019; Tolo News 19/03/2019). Natural disasters regularly take a toll on education, 144 schools in 19 provinces were forced to close due to floods since the beginning of March (Frontier Post 03/04/2019). Above-average precipitation consistent with the El Niño event forecasted for February until April, is expected to be beneficial for ongoing land preparation and spring crops. However, as a result of the drought much of the soil is very dry and therefore has limited capacity to absorb water. This led to the loss of crops during the heavy rains in March (Fews Net 19/03/2019; Fews Net 26/02/2019; The Guardian 06/03/2019). Spring wheat planting season has begun and will last until May (Fews Net 26/02/2019). However, the heavy rains and flash floods may make agricultural activity in the affected areas difficult, either due to leaching of soil, washing away of seeds, or inability to engage in any planting due to excess water and mud. The availability of seeds is already limited due to the drought and flooding and higher humidity heightens the risk of crop pests which will likely impact the wheat harvest season normally starting in June (Reuters 30/03/2019; Fews Net 25/01/2019; OCHA 20/01/2019; IPC October 2018; FAO March 2019). Above average temperatures anticipated until mid-April will likely accelerate the snow melt, thus increasing the risk of further river flooding in central and eastern Afghanistan (CPC 04/04/2019). Up to 160,000 people are currently estimated to be at risk of river flooding with a high to extreme likelihood (ASDC/IMMAP as of 04/04/2019). At the same time a high risk of flash floods persists in western Afghanistan (CPC 04/04/2019).

#### Political stability and security

Fighting intensified in 2019 ahead of the usual spring fighting season amid ongoing peace negotiations between the US and the Taliban (Reuters 01/04/2019). In 2019, conflict displaced close to 40,000 people with particularly intense fighting reported in Kunduz in

### Food Insecurity of the rural population in affected provinces (August-October 2018)

<table>
<thead>
<tr>
<th>Province</th>
<th>Rural population</th>
<th>IPC 2</th>
<th>IPC 3</th>
<th>IPC 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herat</td>
<td>1,437,637</td>
<td>431,291</td>
<td>575,055</td>
<td>215,646</td>
</tr>
<tr>
<td>Badghis</td>
<td>514,413</td>
<td>77,162</td>
<td>154,324</td>
<td>231,486</td>
</tr>
<tr>
<td>Faryab</td>
<td>936,311</td>
<td>280,893</td>
<td>327,709</td>
<td>93,631</td>
</tr>
<tr>
<td>Sari Pul</td>
<td>551,495</td>
<td>193,023</td>
<td>193,023</td>
<td>27,575</td>
</tr>
<tr>
<td>Jowzjan</td>
<td>453,207</td>
<td>158,622</td>
<td>135,962</td>
<td>45,321</td>
</tr>
<tr>
<td>Balkh</td>
<td>892,684</td>
<td>267,805</td>
<td>312,439</td>
<td>46,437</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>22,567,065</td>
<td>6,877,624</td>
<td>7,255,036</td>
<td>2,583,371</td>
</tr>
</tbody>
</table>

Sources: GRFC April 2019; IPC Info October 2018

The table does not reflect IPC info projections until February 2019 that estimate the number of people facing IPC 3 or above to increase from 9.8 million to 10.6 million.
the north, Badghis in the west and Helmand in the south (Reuters 01/04/2019, Reuters 25/02/2019, OCHA 31/03/2019). At the same time conflict displacement has been largely concentrated in the northern provinces of Sari Pul, Faryab and Takhar (OCHA 24/03/2019; UNCS 28/02/2019). In March, heavy fighting in Badghis flood-affected district of Bala Murghab resulted in heavy casualties. (NYT 17/03/2019; NYT 17/03/2019; ICRC 17/03/2019) As of early April, fighting intensified in Sholgara district in Balkh province that was also affected by flooding in late March (Tolo News 02/04/2019). The volatile conflict situation and areas contested or controlled by non-state armed actors in flood-affected areas hampers assessment and response activities.

Key characteristics

- Total population in country: 34,125,000 (CIA 2018)
- 3.2 million people are estimated to be deprived of health facilities due to direct and violent attacks against health workers and facilities (Health Cluster February 2019).
- Gender distribution: 1.03 male(s)/female (CIA 2018)
- Age distribution (CIA 2018):
  - 0-14: 40.92% (male 7,093,980/female 6,869,737)
  - 15-24 years: 22.22% (male 3,859,696/female 3,723,679)
  - 25-54 years: 30.35% (male 5,273,969/female 5,082,972)
  - 55-64 years: 3.92% (male 659,635/female 678,942)
  - 65 years and over: 2.59% (male 407,437/female 474,764)
- Infant mortality rate: 52 per 1,000 live births (UNICEF 2018)
- Under-five mortality rate: 67.9 per 1,000 live births (UNICEF 2018)
- Maternal mortality rate: 396 deaths/100,000 live births (CIA 2018)
- Access to improved sources of drinking water: 31.9% of population (CIA 2018)
- Access to basic sanitation facilities: 32% (UNICEF 2018)
- Literacy levels: 38.2% (CIA 2018)

Response capacity

Local and National Response Capacity

The Afghanistan National Disaster Management Authority (ANDMA) and local authorities are coordinating the information gathering and operational response with humanitarian agencies, including IOM and WFP (WV 29/03/2019; OCHA 02/04/2019; Tolo News 28/03/2019). There is limited information available on local and national response to floods in late March.

International Response capacity

Joint government and humanitarian assessment teams have been deployed to all affected provinces (IOM 29/03/2019; OCHA 26/03/2019). Organisation such as ARCS, WV, SCI, IRC, UNICEF, NRC and CA are involved in assessments and response (OCHA 02/04/2019; KI 02/04/2019, unpublished). Since 31 March, relief items including household items, blankets, emergency shelter kits, solar lanterns, clothing, hygiene kits and food items are being distributed to affected populations in Balkh, Faryab, Jowzjan and Herat provinces (OCHA 02/04/2019). Insufficient shelter response capacity reported following floods in early March are likely to persist (OCHA 07/03/2019; ECHO 07/03/2019). Meanwhile, assessments and relief activities in response to earlier floods are ongoing, inter-agency assessment teams including ANDMA and IOs (IOM, WFP, IRC, DACAAR) were deployed on 19 March, following floods in early and mid-March (OCHA 19/03/2019).

IFRC launched an emergency appeal in late March following the devastating effects of floods during March, parts of which include disaster risk reduction activities and directed at underlying vulnerabilities (water, sanitation, healthcare, agricultural climate adjusted activities) (IFRC 28/03/2019).
Information gaps and needs

- Information on affected households, impact and needs is limited as assessments are ongoing and access remains limited to some affected areas due to flooding and security concerns (WV 29/03/2019; OCHA 02/04/2019; KI 02/04/2019, unpublished).

- Often information collected by different agencies does not show coherence, making it difficult to determine the total number of people affected, people in need and damages to houses, agriculture and other infrastructure across districts and provinces.

- Data on the affected population disaggregated by sex and age is not available. There is a lack of information on the specific needs of the affected population and potential response gaps.

Lessons learned

Flooding is the most frequently occurring natural hazard in Afghanistan. Steep slopes in headwaters cause rivers to overflow when there is heavy rainfall whether or not in combination with rapid snow melt during spring. Deforestation of mountain areas and the general lack of vegetation contribute to the flooding risk. Despite the high risk of flooding, the country has poorly built flood protection infrastructure and a lack of early warning systems (GFDRR 2017). The World Bank and the GFDRR have advocated for the need to develop a comprehensive and inclusive national strategy for disaster risk management, hydrometer monitoring and analysis, and early warning. However, the ongoing violence and insecurity in the country take away attention and resources from long-term development plans (World Bank & GFDRR December 2018). The protracted crisis context in Afghanistan also underlines the importance of nexus coordination and sustainable livelihood support. Agricultural interventions improve food security and can contribute to peaceful co-existence among IDPs and host community members.

To reduce the impact on livestock, there is a need for investments in more effective water management systems during drought limiting the negative implications for soil conditions and allowing for more water to be absorbed during rainfall, as well as improved irrigation systems. Strengthening dikes and improving shelter situations, especially for people living in informal displacement sites, could improve flood protection (GFDRR 2017). This is particularly relevant as the flood risk remains high over the coming months.