AFGHANISTAN
Anticipated impact of delayed and extreme winter precipitation

CRISIS IMPACT OVERVIEW

Since 26 February 2024, heavy snow and rainfall have affected most of Afghanistan's provinces, resulting in casualties, widespread service disruptions, infrastructure breakdowns, and significant livestock losses. Badakhshan, Badghis, Faryab, Herat, Jowzjan, Kandahar, and Sar-e-Pul are the most affected provinces. As at 5 March 2024, 39 people had died across multiple provinces, with an additional 842 deaths associated with acute respiratory infections and 637 completely or partially destroyed residential homes (IFRC accessed 11/03/2024; RFE/RL 05/03/2024; WHO 07/03/2024). In 2023, an extremely cold winter resulted in over 160 casualties, killed at least 80,000 heads of livestock, and severely damaged buildings and infrastructure (Copernicus 30/01/2023; OCHA 12/03/2023).

The current wet weather follows a hot, dry winter characterised by record-low precipitation and above-average temperatures between October 2023 and late January 2024. The rainy season in Afghanistan typically runs between October–April (ACAPS accessed 11/03/2024). In late 2023 and early 2024, rain and snowfall were delayed, particularly in the northeastern, eastern, and southern parts of the country. As at mid-January, snow water volumes were at, or very close to, record-minimum levels across the country (FEWS NET 23/01/2024).

Seasonal forecasts anticipate above-average precipitation to persist in March, particularly in northeastern provinces. Above-average temperatures are highly likely to continue until May (WMO accessed 11/03/2023; ECMWF accessed 11/03/2024).

The combination of late and intense rainfall, lower-than-average seasonal snowfall, and higher-than-average temperatures, projected to persist until at least May 2024, is likely to lead to various hazards in the coming months. This could worsen access to essential needs and services for millions of Afghans, including food security, healthcare, and access to clean water and sanitation.

ANTICIPATED SCOPE AND SCALE

In 2024, the combination of both delayed and extreme precipitation, lower-than-average winter snowfall, and higher-than-average temperatures is likely to affect access to essential needs and services for millions of Afghans, including food, healthcare, clean water, and sanitation.

According to forecasts, extreme snow and rainfall precipitation may continue until the end of March, in a context where winterisation support has been extremely limited (WMO accessed 11/03/2023; TNH 30/01/2024). In Herat, 275,000 people are living in makeshift camps for the winter, as the 2023 earthquakes have destroyed their homes (CARE 10/01/2024).

Starting in April 2024, the risk of spring flooding will increase, as above-average temperatures accelerate the melting of snowpack, especially in flood-prone areas of the northeast, east, central, and west. Flooding may trigger livelihood losses and damage key infrastructure and sanitation facilities (FEWS NET 23/01/2024).

Between May–September 2024, several provinces might experience drought-like conditions and water scarcity, as recent snowfall may not be enough to bring the snowpack on higher mountains back to its average level for the season. This may further affect food security, increasing the number of people in need of food assistance through 2024 (FEWS NET 09/03/2024; Afghanaid 07/02/2024).

Seasonal forecasts anticipate above-average precipitation to persist in March, particularly in northeastern provinces. Above-average temperatures are highly likely to continue between March and May 2024 (WMO accessed 11/03/2023; ECMWF accessed 11/03/2024)

The ongoing severe winter condition are expected to affect thousands of Afghans, in a context where winterization support was extremely limited, and access to basic needs and services restricted for over half of the population (OCHA 23/12/2024). In Herat, 275,000 people are living in makeshift camps during the winter after their homes were destroyed by the earthquakes in 2023 (CARE 10/01/2024).

Beginning in April, there will be a higher risk of spring flooding due to above-average temperatures speeding up the melting of snowpack, particularly in flood prone areas of the northeast, east, central, and west (FEWSNET 23/01/2024).

During the summer, some provinces might experience drought-like conditions because the recent snowfall may not be enough to bring the snowpack on higher mountains back to its usual average level for the season (NOAA/FEWSNET March 2024).

HUMANITARIAN CONSTRAINTS

Afghanistan has an overall score of 4/5 on the Humanitarian Access Index, indicating very high access constraints (ACAPS accessed 13/03/2024).

Restrictions imposed by the Interim Taliban Authority (ITA) continue to hinder humanitarian organisations' ability to operate freely in the country. Relief responders in Afghanistan reported 137 incidents that disrupted humanitarian access in January 2024, 113 of which resulted from ITA-imposed impediments (OCHA 15/02/2024).

Heavy snowfall has blocked critical routes in several provinces, including the Kunar-Nuristan highway. Salang highway reopened on 4 March 2024 (Mint 05/03/2024; Amu TV 05/03/2024).

CRISIS IMPACTS

Shelter

As at 20 February 2024, heavy snow and rainfall caused a landslide in Nuristan province, killing 25 people and damaging or destroying over 40 houses (ARCS/IFRC 26/02/2024; ECHO 20/02/2024). As per media reports, heavy snow and rainfall have destroyed or damaged 637 homes in affected provinces (ET accessed 14/03/2024).

WASH and health

Afghanistan's healthcare system is facing a severe crisis resulting from a sharp reduction in international financial and technical support. ITA restrictions on women's freedom of movement and employment have gravely impeded women and girls' access to health services (TNH 25/09/2023; HRW 12/02/2024). The continued heavy snowfall is triggering widespread road blockages, further limiting movement and access to health services (ET accessed 14/03/2024; HRW 12/02/2024). Acute respiratory infection cases are expected to rise between March and April 2023 as a result of the cold weather. From January–March, there have been 360,470

acute respiratory infection cases reported across 34 provinces, with 842 associated deaths. Over 60% of all cases affected children under five (WHO 07/03/2024).

From April, spring flooding may affect water and sanitation infrastructure. This, in conjunction with above-average temperatures, may increase the incidence of waterborne and vector-borne diseases, such as cholera, acute watery diarrhoea, and malaria (WHO accessed 11/03/2024). In summer, below-average snowpack may trigger water scarcity, further increasing the risk of epidemics (FEWS NET 23/01/2024). Lack of access to water particularly affects women and girls, who are exposed to enhanced health risks from poor menstrual hygiene, stigma, and exclusion (Afghanaid 07/03/2024; UNICEF 27/04/2021).

Food security and livelihoods

IPC projections anticipate over 15 million people facing Crisis (IPC Phase 3) or Emergency (IPC Phase 4) acute food insecurity levels between October 2023 and March 2024 (IPC 14/12/2023). Extreme winter conditions may further reduce food access. As at 5 March 2024, fuel and food were among the most urgent needs of affected communities (Amu TV 05/03/2024). Heavy snow and rainfall have also claimed the lives of over 30,000 cattle in Balkh, Faryab, Kandahar, Panjshir, Samangan, Sar-e-Pul, and Takhar provinces (Daryo 04/03/2024). This may affect smallholder livelihoods in particular, as the early depletion of pasture and grazing areas has already depleted their livestock's physical condition (FEWS NET 09/03/2024).

Record-low precipitation between October 2023 and January 2024 triggered a water deficit and low soil moisture, with the potential to lead to a poor winter wheat harvest (FEWS NET 23/01/2024). March–May rainfall may support spring planting and improve pasture conditions, but high temperatures may affect the germination of irrigated spring wheat and lead to moisture stresses in rain-fed crops and rangelands (FEWS NET 09/03/2024).

Drought, overgrazing, limited locust control, and forecasted above-average temperatures provide suitable conditions for a locust outbreak. Such an outbreak would further affect wheat production, posing an additional threat to food security (Eco-Business 04/01/2024). Northern and northeastern Afghanistan are particularly susceptible to Moroccan locust outbreaks (FAO 10/05/2023).

DRIVERS OF THE CRISIS

El Niño

In Afghanistan, El Niño typically brings above-average late winter and spring precipitation, particularly in northern and northeastern provinces, and above-average temperatures (OCHA 11/12/2023). The phenomenon is anticipated to persist throughout the first quarter of 2024, gradually decreasing in strength before transitioning to neutral conditions from April–July (NOAA 08/02/2024).

Climate change

Afghanistan ranks among the countries most vulnerable to climate change, scoring 5/5 (high risk) on the Ecological Threat Register, a composite index measuring the impact of ecological threats (ND-GAIN accessed 11/01/2024; Vision of Humanity accessed 12/01/2024). Since 1900, average temperatures have increased by more than 1.5º C, with central and southwestern regions experiencing the most significant warming. While average precipitation has changed little since 1900, rain and snowfall have become more erratic and unpredictable, triggering frequent dry spells and flooding (WB accessed 19/11/2023). Changing weather patterns and rising temperatures are also accelerating the melting of snowpack and glaciers in Afghanistan's mountains, posing an additional threat to water security in the country. One study found that Afghanistan lost 14% of its total glacier area between 1990–2015 (AAN 05/01/2021). In recent decades, water has become an increasingly scarce and contentious resource, particularly in southern and western provinces. Kabul is also facing a sharp decrease in underground water levels, which is affecting water supply (IPS 14/12/2023). Reports indicate an increase in drought-related incidents in 15 of Afghanistan's 34 provinces in 2023, with the most significant rises noted in Baghdis, Baghlan, Kunar, Parwan, and Samangan compared to 2022 (OCHA 23/12/2023).

AGGRAVATING FACTORS

2023 earthquake

In October 2023, four magnitude-6.3 earthquakes, along with multiple aftershocks, hit Herat province, affecting 1.6 million people and leaving 114,000 in need of humanitarian assistance (OCHA 16/10/2023). The earthquakes destroyed or damaged 10,000 homes, leaving over 55,000 people in need of shelter assistance (OCHA 16/10/2023; IPC 14/12/2023). The earthquakes also affected schools, health facilities, and other essential infrastructure, damaging an estimated 21,300 buildings. Damage to healthcare facilities disrupted services for around 580,000 people (OCHA 16/10/2023). As a result, affected populations in Herat province have become more exposed and vulnerable to severe winter weather conditions.

Forced return from Pakistan

In October 2023, Pakistan launched a plan to repatriate foreigners without valid documents, primarily Afghans. As at 7 March 2024, over 500,000 Afghans had returned from Pakistan to Afghanistan, 80% of whom were women and children (UNHCR 08/03/2024; NRC 14/12/2023). Struggling to meet basic shelter, food, water, and protection needs, these returnees are highly exposed to the impacts of extreme weather events (UNICEF 23/02/2024). Prior to reaching their destination, returnees live in temporary shelters in camps on the border area. Conditions in these camps are dire, with limited drinking water access, no heating except for open fires, no lighting, and insufficient toilet facilities, leading to open defecation and poor hygiene (Health Cluster 23/11/2023; AJ 08/11/2023).

### Socioeconomic vulnerability to climate shocks

Afghanistan shows high socioeconomic vulnerability to climate shocks, particularly among women, IDPs, and people with disabilities (OCHA 01/08/2023; Afghanaid 19/10/2023). Decades of conflict have led to significant environmental degradation, affecting livelihoods and diminishing the population's ability to cope and adapt. Soil erosion, desertification, overgrazing, deforestation, and inadequate natural resource management have aggravated the country's vulnerability to climate-related stressors (NUPI/SIPRI 03/02/2023). Agriculture, which both directly and indirectly supports the livelihoods of about 80% of the Afghan population, is particularly susceptible to temperature and precipitation variability and extremes (FAO 16/10/2022). The 2022 poppy ban greatly affected the livelihoods of smallholder farmers, who have long relied on the crop for income, further depleting their coping strategies (UNODC accessed 14/03/2024; AJ 05/11/2023). Millions of Afghans are still recovering from three

years of consecutive drought, which severely affected food security in the country (OCHA accessed 13/03/2024). The 2023 earthquakes highlighted the ITA's limited hazard response capacities, demonstrating a significant reliance on international assistance (DW 20/10/2023; ACAPS 02/01/2023). The freezing of aid since the ITA takeover in 2021 has affected climate adaptation programmes, further heightening vulnerability to climate hazards (Context 27/11/2023).

FUNDING AND RESPONSE CAPACITY

In 2024, over 23 million people (around half the population of Afghanistan) are estimated to require humanitarian assistance. Key priorities include food, safe drinking water, sanitation, hygiene, healthcare, and education (OCHA 23/12/2023). At the beginning of the cold season, international aid organisations raised concerns about their capacity to provide assistance during the winter months, as the global economic downturn is reducing aid budgets (TNH 30/01/2024). In 2023, only 46% of humanitarian funding requirements were met. As at 13 March 2024, the 2024 Humanitarian Needs and Response Plan was only 6% funded (OCHA accessed 09/03/2024).

Humanitarian response funding through the years
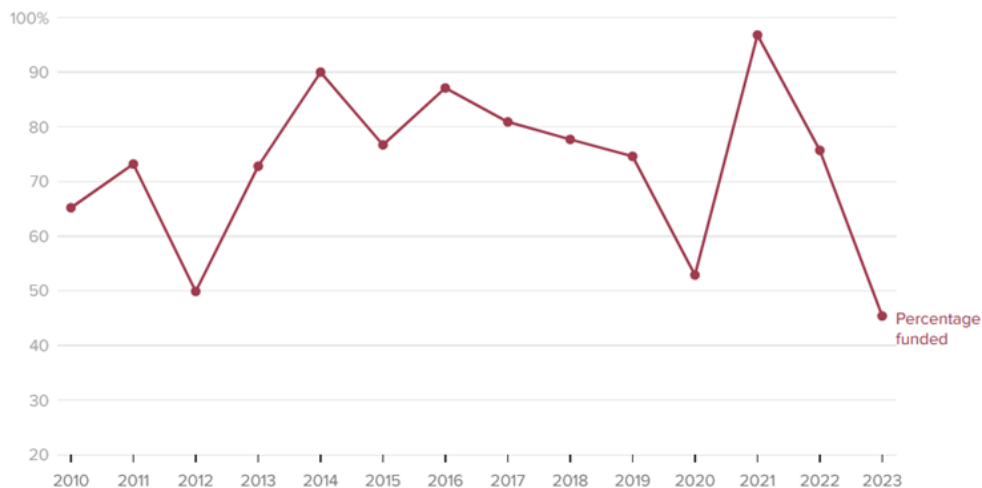
Sources: TNH (30/01/2024)

Afghanistan hazards outlook
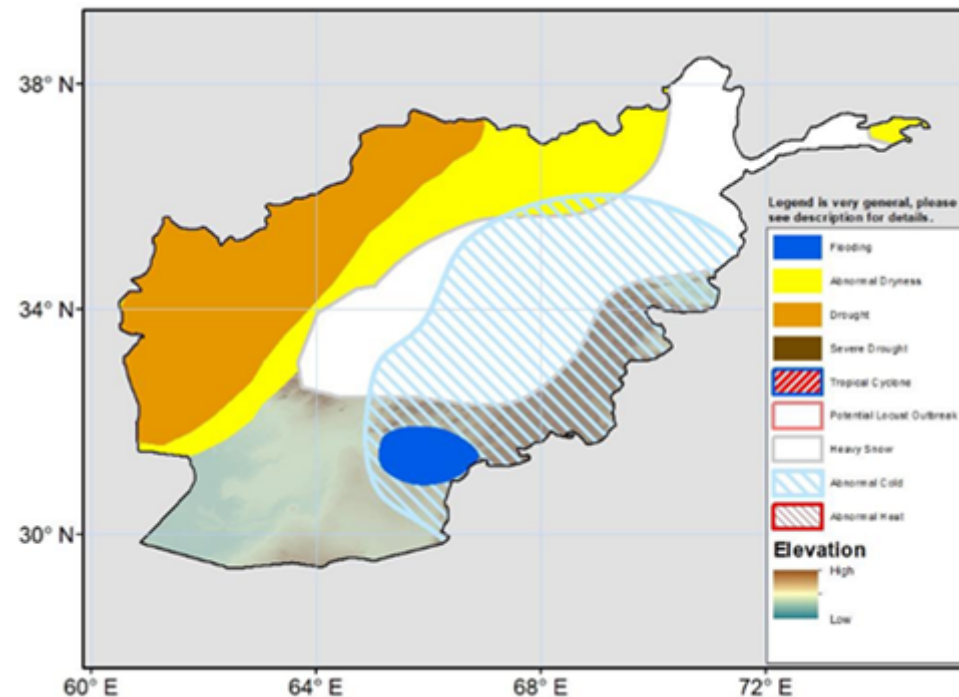
Source: NOAA et al. (accessed 14/04/2024)