

## The key risks Afghans face between 2024–2030 that are driven or compounded by climate change

### ABOUT THIS REPORT

This risk report outlines the main emerging risks driven or compounded by climate change with the potential to affect Afghanistan's humanitarian situation and the wellbeing of its population between 2024–2030. This report aims to inform humanitarian and development communities of the possible contextual changes and humanitarian needs in Afghanistan driven or compounded by climate hazards in order to support strategic planning, emergency response, and resilience-building programmes. Based on joint analysis and a secondary data review conducted between May–July 2024, this report also includes contributions from experts from 30 national and international organisations, who were engaged through two anticipatory analysis workshops and bilateral consultations. Unlike other ACAPS risk reports, which focus on the next 6–12 months, this report looks ahead to 2030, as some of the risks triggered or compounded by climate change are gradual and may take longer to unfold. ACAPS decided not to look beyond 2030 for this risk analysis, however, as it seeks to inform short and medium-term decision-making.

Climate change impacts do not exist in a vacuum, and climate variables interact with sociopolitical, economic, and security variables, contributing to higher exposure and vulnerability to climate change in Afghanistan. For example, inadequate institutional water and land management (especially governance and infrastructure) is a trigger that many of the identified risks have in common. It should also be noted that many risks are interrelated, and some risks trigger others. In this report, risks are intentionally separated to highlight different aspects and impacts, but should not be considered in isolation.

### Methodology

ACAPS risk analysis aims to help regional and international decision makers understand potential future changes with likely humanitarian and development consequences. Explaining how situations might develop and understanding their impact can inform planning, preparedness, and resilience building, improving overall response. This risk analysis is based on the [ACAPS Risk Methodology Note](#).

### Key principles of ACAPS risk analysis

Risk analysis requires a solid understanding of context and an investigation of the interaction between variables that could cause or resist change. An event identified as a hazard might not evolve or materialise as anticipated, or have the projected impact. Events or factors (triggers) expected to drive a shift or change in a situation may not occur, or new factors may arise that prevent the projected change or shift from happening. A risk's likelihood does not need to be high to warrant concern. A hazardous event with a low or medium probability of occurring should be of concern to humanitarians if the expected impact is medium, high, or very high.

### What is a risk

The ACAPS risk methodology defines risk as the probability of a hazard or multiple hazards materialising, combined with the estimated impact of such hazards. The associated **risk level** (low, medium, or high) is based on the hazard's probability of occurring and the severity of its expected impact.

**Impact** is the predicted overall humanitarian consequence of a hazard materialising. Impact can be an increase in the number of people needing assistance, the severity of their needs, or both. Impact is based on exposure to the hazard, the intensity of the hazard, and the population's vulnerability to the hazard and coping capacity. ACAPS classifies impact on a five-point scale: very low, low, moderate, significant, or major.

**Probability** is the chance of a hazard materialising. ACAPS assesses probability on a five-point scale: very low, low, medium, high, or very high. A hazardous event estimated to have a 50% probability of occurring should be cause for concern. In some cases, a probability as low as 25% (a one in four chance of occurrence) may be a concern depending on the hazard's potential humanitarian impact. In this report, some of the risks represent 'newly emerging crises', and others indicate a potential 'rapid and marked deterioration' in an existing crisis. A steadily deteriorating humanitarian situation that continues at the same rate is considered a trend instead of a risk. This report does not include trends.



## Key terminology

**Meteorological drought:** a period of unusual precipitation deficit in relation to a region's long-term average conditions (EU accessed 23/06/2024).

**Hydrological drought:** a decrease in the streamflow of rivers and streams alongside decreases in reservoir, lake, and groundwater levels as compared to the average (EU accessed 23/06/2024).

**Variable:** a factor with a determining influence on the future, the direction of which depends on how the factor changes (varies). Variables are neutral (e.g. glacial reserves, institutional natural resource management, and water demand).

**Trigger:** an event that signals the increased probability of a risk materialising (i.e. an event that brings about the future state). Triggers are often derived from the main variables driving change and can be adapted to specific contexts into measurable indicators that can be monitored over time.

## Limitations

The continuing deterioration of the situation in Afghanistan makes it very difficult to determine whether a new risk is emerging or whether the situation is simply gradually worsening over time. Although this analysis follows a specific methodology, risk analysis is not an exact science; information and data gaps limit the analysis. All risk impact figures provided here are estimations.

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## OVERVIEW

Afghanistan is one of the lowest emitters of greenhouse gases but ranks among the ten countries most vulnerable to climate change (WPR accessed 30/05/2024; ND-GAIN accessed 09/04/2024). Above-normal temperatures and heatwaves, glacial melting, drought, flooding, and landslides are some of the main hazards associated with climate change in Afghanistan (WB accessed 17/07/2024; OCHA 01/08/2023). The country is experiencing warming rates higher than the global average, and the mean annual temperature has risen by 1.8° C since 1950 (WB/ADB 05/2021; UNFCC 12/2017). Over the past four decades, there has been a recorded decrease in precipitation in most of the northern, western, southeastern, and southern provinces, and meteorological, hydrological, and agricultural droughts have become more frequent (ACAPS 03/07/2024). Over the past 30 years, heavy rainfall events have increased by 10–25%, leading to more frequent and severe floods and landslides (WB accessed 03/06/2024; Climate Diplomacy 09/2019). Glacial loss is also accelerating. Between 1990–2015, nearly 14% of Afghanistan's glaciers disappeared as a result of global warming, and the Hindu Kush Himalayan glaciers disappeared 65% faster between 2011–2020 than in the previous decade (ICIMOD 20/06/2023; AAN 04/01/2021). Glaciers play a key role in natural freshwater storage and the regulation of seasonal river flows in Afghanistan, and more than 80% of Afghanistan's water resources originate in the Hindu Kush mountains (SWP 08/2021; UNEP 01/2009). Environmental degradation is severe in Afghanistan, which scores 5/5 on the Ecological Threat Register, indicating severe ecological threats (IEP 01/11/2023). Deforestation, land degradation, desertification, and water contamination are some of the factors contributing to Afghanistan's heightened exposure and vulnerability to climate shocks, especially flooding and drought (ACAPS 03/07/2024).

Since the Interim Taliban Authorities (ITA) took over in 2021, Afghanistan has faced restricted access to climate change funds, including UN climate funds such as the Green Climate Fund (The Diplomat 29/04/2024; Reuters 11/12/2023). Despite UN and other high-ranking efforts, Afghanistan has been excluded from the UNFCCC Conference of Parties since 2022, leaving the country out of key climate negotiations (Reuters 11/12/2023). Afghanistan's water sector, crucial to mitigating the effects of climate change, faces significant challenges, including financial constraints, lack of data, insufficient technical capacity, poor coordination, and damaged, inadequate water infrastructure resulting from decades of conflict and poor maintenance (AGWA 22/03/2023).

To address the negative impacts of climate change, especially drought, the previous administration initiated some water management projects, which have continued under the ITA. These projects include the construction of the Qush Tapa canal, which is expected to provide irrigation to 550,000 hectares of land in Balkh, Faryab, and Jowzjan provinces affected by chronic water scarcity and desertification (WP 20/08/2023; Tolo News 25/11/2022; Dialogue Earth 18/05/2023; Rumi Organization for Research 31/05/2024). The Qush Tapa canal has

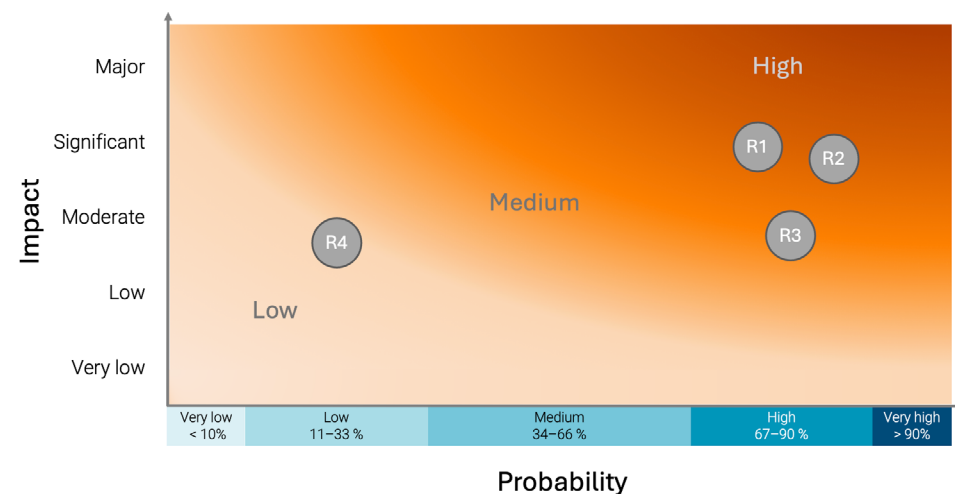
the potential to spark a ‘green revolution’, boosting agricultural production and creating livelihood opportunities in the three provinces. Some national experts, however, have raised concerns about how equitable the ITA’s distribution of future arable land will be in a region that hosts ethnic minorities and given Afghanistan’s complex legal framework around state land (ACAPS 27/02/2023; WB 12/2005). Lending credence to these concerns, in late 2021, more than 1,000 ethnic Uzbeks and Turkmen were forcefully evicted from their homes in the Darzab and Qush Tepa districts of Jowzjan province (ACAPS 27/02/2023). The northern provinces have a history of complex relationships between Pashtun returnees and indigenous Tajik, Turkmen, and Uzbek communities (Mundt et al. 01/06/2009). Cases of inter-community conflict and conflict over access to water and pastures have already been documented in Faryab and Jowzjan provinces in recent years (RFE/RL 29/01/2022; ACAPS 26/07/2023). Although information is inconsistent and there is insufficient evidence to classify this as an emerging risk, the threat of development-induced displacement needs to be monitored, as does the potential increase in inter and intra-community tensions and conflicts over land ownership and use within communities living on disputed land, especially in Balkh and Faryab provinces.

## CLIMATE CHANGE-RELATED RISKS

There are four identified risks driven or compounded by climate change.

1. Depletion of groundwater tables, resulting from insufficient precipitation and increased water demand severely reduces millions of Afghans’ access to water for agriculture and domestic use. Areas at heightened risk: the Harirud-Murghab River Basin, Helmand River Basin, and Kabul River Basin.
2. Increased frequency and intensity of seasonal and off-season flooding and landslides overwhelms Afghanistan’s institutional response capacities, causing severe short and long-term effects on the population’s wellbeing and access to services. Areas at heightened risk: northern, northeastern, and southern regions.
3. Inadequate urban infrastructure and planning, combined with water scarcity and heatwaves, reduce the population’s mental and physical safety and health in densely populated urban areas. Areas at heightened risk: Herat city, Kabul city, Kandahar city, and Mazar-e-Sharif.
4. Tensions with neighbouring countries over water increase Afghanistan’s regional isolation and threaten economic and diplomatic ramifications.

Figure 1. Comparison of the estimated levels of risk for each of the four identified risks.

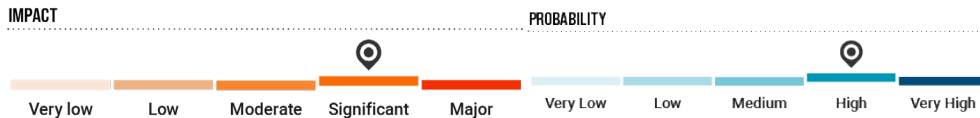


Source: ACAPS

The chart in figure 1 provides a visual summary of the estimated level of risk (low, medium, high) for each of the four identified risks. This assessment is based on ACAPS’s risk impact and probability ranking outlined in the methodology section on page 1. Impact is the predicted overall humanitarian consequence of a hazard materialising, and probability is the chance of a hazard materialising.

**RISK 1**

**Depletion of groundwater tables, resulting from insufficient precipitation and increased water demand, severely reduces millions of Afghans' access to water for agriculture and domestic use. Areas at heightened risk: the Harirud-Murghab River Basin, Helmand River Basin, and Kabul River Basin.**



**Risk level: high**

### Rationale

Reduced precipitation and unsustainable water extraction for agriculture and domestic use have led to declining groundwater tables across Afghanistan, with annual water storage estimated to have reduced across much of the country (SWP 08/2021; Karim and Sadat 11/ 2020). A recent study raised concerns about Afghanistan's groundwater levels, particularly in the Harirud-Murghab, Helmand, and Kabul river basins (Jawadi et al. 07/2024). Severe water shortages from traditional sources – including Karez irrigation systems, springs, and rivers – and insufficient rainfall for rainfed agriculture have led farmers to drill deeper wells and invest in solar pumps to extract groundwater for irrigation (HBF 06/2024). Since 2013, solar-powered deep well pumps, which have become more easily available and affordable, have replaced traditional groundwater irrigation systems to a large extent, leading to more uncontrolled groundwater extraction (Freethink 06/08/2020; Down to Earth 13/08/2021; KII 14/05/2024).

The decline in groundwater tables is compounded by poor state and community water management, including lack of regulation of groundwater extraction, insufficient investment in watershed management and agroforestry, and inefficient use of surface water for irrigation (SWP 08/2021; Akhtar and Shah 15/12/2019). Unsustainable water extraction for agricultural use also continues to increase as a result of the 2022 ban on opium poppy production, which has forced farmers to switch to alternative crops, such as wheat, most of which are more water intensive than opium. In 2023, an increase of 160,000 hectares of cereal cultivation – largely wheat – was reported across the Farah, Helmand, Kandahar, and Nangarhar provinces, further straining these provinces' already scarce water resources (UNODC 11/2023; NIKKEI 24/07/2023). Recurrent droughts also pose challenges to cultivating opium poppy alternatives, most of which require more water and are susceptible to water scarcity (AAN 14/03/2024). Insufficient rainfall also fails to leach salts from the soil, resulting in heightened

soil salinity. This increased salinity renders the soil unsuitable for certain profitable crops, such as apricots and pomegranates, which could otherwise serve as economically viable substitutes for opium (WP 21/06/2024).

There are previous cases of critically low groundwater tables and water scarcity in Afghanistan (HBF 06/2024; IWMI 06/2002; Uhl 01/2003). The recent and rapid expansion of water pump extraction, however, threatens a more severe water scarcity in the next five years, as the country is still recovering from the 2021–2023 drought and drought-like conditions. La Niña, expected to arrive in late 2024, may also lead to below-average precipitation in 2025 and beyond (OCHA 16/05/2024). As groundwater serves as a vital water source during times of surface water scarcity, the depletion of groundwater tables may drastically reduce water availability for both agricultural and domestic use. The effects are expected to be particularly severe in the Kabul River Basin, where groundwater is the primary source of drinking water (Mack 02/06/2018). In southern provinces, groundwater depletion has already led to increasing displacement, as farmers leave their villages when borewells dry up, moving to areas – including desert areas – where groundwater tables are easier to reach in order to dig new boreholes (HBF 06/2024).

Afghanistan's rapid population growth, combined with the recent increase in returnees from Pakistan and Iran, further strains the country's resource supplies (Akhtar and Shah 15/12/2019). Groundwater and surface water contamination is also expected to further limit access to drinkable water. The extensive agricultural use of pesticides, alongside the use of chemical toxins and heavy metal in the mining sector, also further pollutes the water (AREU 30/04/2020; CEO 18/06/2018). Under the ITA, the rapid expansion of the mining sector may further aggravate water contamination, as several mining concessions have been granted to foreign companies since 2022, particularly in sites located in the Kabul and eastern Helmand river basins (Afghan Witness 26/06/2024). Water pollution compounds natural challenges, such as the presence of heavy metals (e.g. arsenic) in the Helmand and Kabul river basins and naturally high salinity in parts of the Northern River Basin (SWP 08/2021).

### Expected impacts

Reduced water availability for domestic use will have profound impacts on communities, particularly women, children, older people, people with disabilities, and people with chronic diseases and pre-existing health conditions. As water quality and quantity decrease, traditional gender roles mean that women and children will need to spend more time fetching water, exposing them to higher protection risks, including gender-based violence (GBV), child protection risks (e.g. violence and exploitation), and mine action-related risks, including risks to physical safety and wellbeing associated with unexploded ordnance (UXO). Searching for scarce water will also reduce women and children's time for other activities, including school

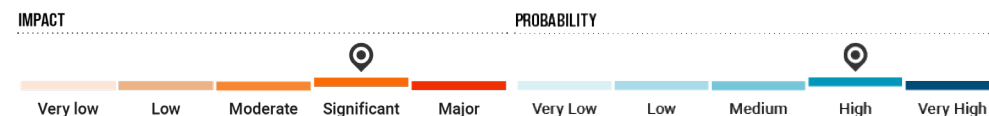
attendance and domestic income-generating activities, such as taking care of livestock or home-based businesses. Reduced water availability for domestic use will also lead to reduced access to safe drinking water and inadequate sanitation and hygienic practices. This could result in an increase in the incidence of waterborne diseases, which may expose people with pre-existing health conditions to a higher risk of morbidity and mortality, and could further worsen malnutrition in children, particularly those under five.

Local conflicts and tensions within and between communities over access to limited water sources may intensify, potentially destabilising and undermining community cohesion. Reduced water availability for agricultural purposes may lead to tensions over access to irrigation water and upstream land, reduce agricultural output both in quantity and quality, and lead to a decline in livelihoods for agriculture-dependent households, who account for over 80% of the population (FAO 19/11/2021). This reduction in agricultural productivity is likely to cause staple food prices to rise and reduce the availability of fodder, which may cause a deterioration in livestock conditions and a drop in livestock prices. These impacts will increase dependency on food imports and place added stress on food and nutrition security. As a result, the adoption of potentially harmful coping strategies, such as the selling of productive assets, and migration will likely increase. More people are expected to move towards urban areas, or rural areas where water is more available. Land degradation is expected to worsen, as an increasing proportion of land will remain uncultivated, leading to further land erosion and a decline in soil fertility. This degradation of arable land will make it even more challenging for farmers to resume productive agricultural activities in the future.

To save their livelihoods, some smaller farmers may resume growing opium poppy, which requires less water and is more lucrative than traditional crops, as the poppy trade continues despite the ban and prices are expected to remain high. If significant numbers of farmers feel compelled to resume illicit poppy cultivation, violent confrontation with the ITA is a likely outcome. At the same time, farmers continuing to grow alternative crops will need to invest in deeper wells and pumps, increasing production costs and further depleting groundwater levels.

## RISK 2

**Increased frequency and intensity of seasonal and off-season flooding and landslides overwhelms Afghanistan's institutional response capacities, causing severe short and long-term impacts on the population's wellbeing and access to services. Areas at heightened risk: northern, northeastern, and southern regions.**



**Risk level: high**

### Rationale

Afghanistan is facing an increasing frequency and severity of flooding and landslides, as heavy rainfall events have risen by 10–25% across the country over the past three decades (Climate Diplomacy 09/2019). This trend is aggravated by rapid snow melting caused by above-average temperatures and extended summers, heightening the risk of spring floods (Climate Centre 04/2021). Studies also show that, in recent decades, the South Asian monsoon is having an increasing influence on southeastern provinces, particularly the Kabul River Basin, where the monsoon has triggered more frequent flooding (UNDRR 02/10/2023; Baig and ul Hasson 21/12/2023).

A recent flood risk assessment based on hazard frequency, population exposure, and population vulnerability analysis highlighted that the northern, northeastern, and southern provinces experience the highest risk of flooding (Ikram et al. 15/04/2024). Other regions are also experiencing frequent and severe flood events. In 2024, Afghanistan was hit by historically severe, extended, and lasting flooding and landslides, affecting the central, eastern, northern, northeastern, and western provinces between May–July (UNHCR 17/07/2024).

Deforestation, overgrazing, and over cultivation have significantly degraded the land, amplifying the severity of both flooding and landslides. Recent years have seen widespread flooding affect large parts of the country, further aggravated by more frequent droughts that reduce soil absorption capacity and increase runoff during heavy rains (WWA 13/06/2024; OCHA 01/08/2023). Lack of adequate water management systems, poor road networks, and traditional houses built from fragile materials (such as mud and wood) increase communities' exposure and vulnerability to flooding (UNDP 29/05/2024). The High Commission of Disaster Management, currently chaired by the First Deputy Prime Minister, continues to operate under the ITA (DPMEA 23/05/2022). Institutional assistance to affected communities



is currently limited, however, by the lack of resources. Both central and provincial authorities support disaster-affected communities through mechanisms such as seed and food distribution, but, similar to under previous administrations, emergency relief continues to rely heavily on INGOs, UN organisations, and community-led initiatives funded by private citizens (ACAPS 03/07/2024). Low community awareness of flood risk and limited institutional flood risk monitoring and early warning capacity contribute to avoidable injuries, fatalities, and damage during flood events (AAN 15/05/2024; UNDRR 02/10/2023).

Mobility restrictions and exclusionary policies mean that certain population groups and their dependents – including women, children (especially girls), older people, and people with disabilities – are more vulnerable to the adverse effects of flooding. In May 2024, women and girls remained inside their homes during heavy rains while men were able to seek shelter in mosques and sturdier, safer buildings. This may explain the higher number of flood casualties among women and children (UN WOMEN 16/05/2024). Cultural norms and current restrictions on women and girls, including on their mobility, education, and work, also inhibit their access to preparedness and early warning information, impeding their ability to evacuate quickly (UN WOMEN 16/05/2024).

### Expected impacts

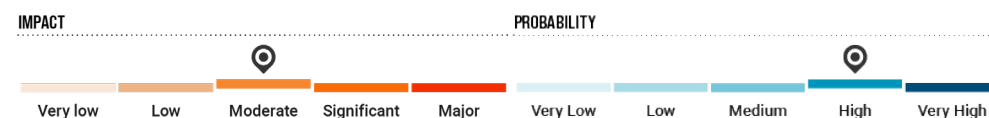
More severe and frequent flooding and landslides in Afghanistan will aggravate humanitarian and development challenges. In the most affected areas, key infrastructure – such as schools, health centres, and WASH facilities – will face increased risk of destruction and damage, severely limiting short and long-term access to essential services. Long-term economic impacts will deepen, with increased land erosion and loss of fertile soil further compromising agricultural productivity. This will disrupt economic activities and prolong recovery efforts in affected regions. Displacement could increase significantly, straining resources and disrupting social cohesion in host locations, intensifying the urgency for shelter and basic needs support. The agricultural sector will endure heightened crop losses and livestock destruction, amplifying livelihood stresses and pushing affected communities towards potentially harmful coping mechanisms. There will likely be a heightened risk of GBV and child protection threats as a result of flood-related displacement and increasing stress among flood-affected households.

Reduced production will drive food and nutrition insecurity, aggravated by sanitation risks from water contamination and destruction of WASH facilities during floods. The slow disposal of animal carcasses could also increase the risk of epidemics in flood-affected communities. Human casualties and injuries will continue to occur amid very limited institutional capacity for flood response and early warning systems, especially in communities not accustomed to flooding, where risk awareness may be lower. Injuries and casualties among women, children, older people, and people with disabilities will remain high as a result of mobility restrictions.

Limited institutional response capacities may also lead to discontent and tensions between affected communities and the ITA. As communities struggle with inadequate relief efforts and delayed assistance, frustration can escalate, particularly in remote and marginalised areas where infrastructure and communication networks are already weak.

### RISK 3

**Inadequate urban infrastructure and planning, combined with water scarcity and heatwaves, reduce the population's mental and physical safety and health in densely populated urban areas. Areas at heightened risk: Herat city, Kabul city, Kandahar city, and Mazar-e-Sharif city.**



Risk level: medium

### Rationale

Urban areas in Afghanistan face significant demographic pressure from accelerating urban-rural migration driven by drought, floods, and other hazards, as well as the arrival of refugee returnees and protracted conflict and disaster-induced IDPs (ODI 11/2022; IIED 05/02/2024; WB 05/2011). At the same time, cities are also increasingly exposed to water shortages, heatwaves, and dust storms, which, combined with air and water pollution, pose a threat to the urban population's health and wellbeing (Climate Centre 04/2021; WB/ADB 05/2021; Tolo News 16/07/2023; ESCAP 08/2021). Groundwater tables are becoming critically low in Herat city, Kabul city, and Kandahar city, the three main urban centres, threatening water access for millions of urban inhabitants (Pajhwok 04/06/2022; Hasht e Subh 13/11/2023; HPN 13/03/2024). As a result, severe water shortages are becoming more frequent, even during winter, a trend that is expected to continue. Water shortages are also compounded by poor urban sanitation systems, leading to widespread faecal contamination (SWP 08/2021). Inadequate urban planning and infrastructure, and the limited provision of basic services, particularly in peri-urban areas and informal settlements, increase urban dwellers' exposure and vulnerability to water scarcity and heatwaves. In peri-urban areas, water is often not provided through the government supply network, forcing people to rely on limited or contaminated groundwater from wells and handpumps, private supply networks, or bottled water and water trucking when they can afford the cost. In Kabul, trucked water costs 33 times more than piped water (Hamidi et al. 26/06/2024). Housing, especially in informal settlements and IDP camps, does

not provide protection from heat, exposing people to dangerously high temperatures (Climate Centre 04/2021; MSF 22/07/2019). The combination of increased exposure to climate hazards, water scarcity, and substandard infrastructure and housing means that, by 2030, Afghan cities are expected to increasingly struggle to provide adequate services and protection for their populations, which will have severe health and protection impacts.

## Expected impacts

Urban dwellers' high exposure to heatwaves increases the likelihood of severe physical health risks, including heatstroke, cardiovascular diseases, and respiratory diseases, the latter compounded by air pollution. The urban population will also likely face higher mental health risks, as international studies have indicated a correlation between heat stress and mental disorders, including mood disorders and higher suicide rates (Rony and Alamgir 04/12/2023; Thompson et al. 07/2023). The effects of heat stress on social dynamics and individual behaviour mean that protection risks can also be expected to rise, as global studies have identified an increase in GBV and domestic violence during heatwaves (ADB 04/05/2024). The combination of water scarcity, water contamination from poor sewage systems, and heatwaves could also trigger epidemics of waterborne diseases, as the quality and quantity of clean drinking water will be insufficient to meet high demand. Inadequate health services and poor epidemic control heightens the risk of epidemics in population-dense urban areas.

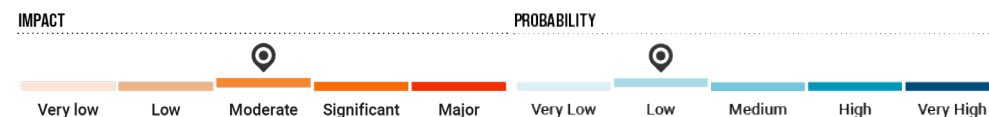
The heavy water collection burden on women and girls will increase their exposure to protection risks, including violence and exploitation, particularly in informal settlements and peri-urban areas where water points can be distant or crowded. Children are particularly vulnerable to forms of violence that occur during water collection and selling, including physical, psychological, and verbal abuse (Hamidi et al. 26/06/2024). This heightened exposure can lead to physical and psychological harm, disrupt children's sense of safety and security, and impede their ability to thrive and lead healthy lives.

Increasing water scarcity will aggravate economic and social exclusion. Economically vulnerable households will see their limited incomes further eroded by rising water costs, increasing poverty levels. Combined with the reduction in employment opportunities resulting from economic crisis, households' ability to access and afford food and water will diminish, heightening the risk of increasing urban food insecurity, disease, and malnutrition rates. Less economically vulnerable households will be able to move towards better-serviced neighbourhoods, leading to an increase in housing prices in these areas. This will force more economically vulnerable households to move to or stay in peripheral urban areas where public services, such as water provision and health services, are scarcer, increasing their exposure and vulnerability to climate hazards (heatwaves and flooding). As pressure over scarce urban resources and housing increases, the security of tenure for poor urban dwellers may further decline, increasing the likelihood of forced evictions. In June 2024, more than

800 families were evicted after authorities began demolishing informal IDP settlements in Kabul (NRC 04/06/2024). In peripheral urban areas, competition over access to water and other basic services may also lead to a rise in local tensions and conflicts, including conflicts between host communities, IDPs, and refugee returnees.

## RISK 4

**Tensions with neighbouring countries over water increase Afghanistan's regional isolation and threaten economic and diplomatic ramifications.**



Risk level: Low

## Rationale

By 2030, more frequent meteorological droughts (below-normal precipitation), unsustainable water demand, and reductions in the Hindu Kush Himalaya's snowpack will further reduce water availability in Afghanistan and neighbouring Iran, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. The Central Asia region is already grappling with a water crisis (AA 19/06/2024; Astana Times 31/01/2024; The Diplomat 04/01/2024; CAN 17/06/2023). Evidence shows that countries party to water governance agreements are better able to manage conflicts over resources and cooperate on water projects (Northumbria University 19/04/2023). The lack of basin-wide institutionalised cooperation between Afghanistan and its neighbours persists, however, as countries seem focused on short-term and domestic issues (DW 06/01/2023). It has been argued that the ITA has a 'high tolerance for conflict over water', as it prioritises the urgent need for water for agriculture and the pursuit of hydroelectric projects to reduce the country's dependence on food and electricity imports, which may mean the continued diversion of water from major rivers, further aggravating tensions with downstream neighbours (ICG 30/01/2024). The Qush Tepa canal – designed to divert the Amu Darya River's water across northern Afghanistan's Balkh, Faryab, and Jowzjan provinces, which may be finished by 2028 – is one example of such water infrastructure projects that are raising concerns over water security in neighbouring Turkmenistan and Uzbekistan (The Diplomat 05/07/2023; AA 11/10/2023; New Security Beat 18/08/2023).

At present, Afghanistan and Pakistan do not have a water cooperation agreement or mechanism to manage shared water resources. Data on the status of the environment, hydrology, and water resources, which could be used as a starting point for dialogue on

transboundary water coordination, is also very limited (IWMI 25/10/2023). The planned hydroelectric dam on the Kunar River, in western Afghanistan, has recently raised concerns in Pakistan around an anticipated reduction in downstream water. The provincial information minister of Pakistan's southwestern Balochistan province has already warned of "severe consequences", including "escalating tensions and potential conflict" (RFE/RL 22/12/2023). The decades-long dispute between Iran and Afghanistan over rights to the Helmand River seems unlikely to be resolved in the next few years. The 1973 water sharing treaty signed by the two countries has never been ratified or implemented, and negotiations remain tense, aggravated by Afghanistan's construction of dams, reservoirs, and irrigation systems along the river (DW 06/01/2023). In 2021, the previous administration inaugurated the Kamal Khan dam. In 2023, ITA officials announced new construction work on the Bakhshabad dam, situated on the Farah River that flows into Iran (ICG 30/01/2024). Despite Afghanistan's advantageous geographical position upstream, and its richness in mineral resources, the country's economy is still heavily dependent on neighbouring countries, particularly for food and electricity imports (WB 02/2024; UNDP 26/01/2024; AA 23/08/2021).

## Expected impacts

Future droughts will have severe impacts on food and energy production in the Central Asia region and may lead to a rise in political tensions between Afghanistan, Iran, Pakistan, and other Central Asian countries over water. This could increase Afghanistan's regional isolation, threatening negative diplomatic and economic consequences. By 2030, Afghanistan may face increased commercial and diplomatic pressure from its neighbours aimed at gaining leverage in water-sharing negotiations, potentially deepening the country's international isolation and worsening its economic crisis. Neighbouring countries might limit the export of essential goods – such as fuel, electricity, and food – upon which Afghanistan heavily depends, especially in the eventuality of production shortages.

Afghanistan imports over 80% of its electricity from Uzbekistan and Tajikistan and most of its oil from Pakistan (Eurasia Net 19/05/2022; OEC accessed 19/07/2024). Afghanistan has recently resumed cooperating with some of its neighbours on large energy and transport projects (The Times of Central Asia 27/02/2024; Intellinews 25/02/2024). Previous energy cuts from neighbouring countries have also already occurred, however, leading to widespread electricity shortages in several Afghan provinces (Daryo 20/02/2024; RFE/RL 27/01/2023; Kabul Now 30/05/2023). Any significant reduction in oil and electricity imports in the future would lead to severe power shortages in Afghanistan, with cascading effects on the country's economy and critical services such as health centres and hospitals.

Afghanistan's food market depends on wheat flour, pulses, oil, and sugar imported from Iran, Kazakhstan, Pakistan, and Tajikistan (Logistics Cluster accessed 19/07/2024). In the past, severe droughts have already prompted these countries to reduce their exports to Afghanistan (FAO 25/10/2001). As droughts in the region are becoming more frequent, and Afghanistan's neighbours may partially attribute their water scarcity to Afghanistan's water diversion projects, national and international experts have warned that future export cuts may be likely, potentially leading to shortages in basic food commodities and price increase, worsening the food security crisis. Diplomatic pressure may also involve an increase in the forced repatriation of Afghan nationals from Pakistan and Iran, increasing the number of people in need of humanitarian assistance. Repatriated women-headed households are, in particular, likely to struggle to access basic services and livelihood opportunities in host communities as a result of mobility and employment restrictions. Restrictions on Afghan nationals' freedom of movement, including visa and work permit regulations, could further reduce overseas remittances, which remain crucial to the Afghan economy.

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## ANNEX 1. MAP OF KEY CLIMATE-RELATED VARIABLES OF CHANGE IN AFGHANISTAN

This map, developed by ACAPS based on a literature review, presents the main climate-related variables of change and their interactions in Afghanistan. For simplicity and readability, only the primary interactions are included. The map was used as a basis for the joint anticipatory analysis workshops with regional and international experts. Some variables are very broad and encompass several sub-variables, including triggers of the identified risks. For example,

‘institutional natural resource management’ includes factors such as lack of awareness-raising on sustainable water consumption, the absence of regulatory frameworks for water extraction, and poor water management infrastructure, all of which drive unsustainable water demand in the country, a trigger of both risk 1 and 2.

