

IOM AFGHANISTAN

RESEARCH SERIES ON RETURN AND REINTEGRATION IN AFGHANISTAN

**RESEARCH BRIEF**  
DISPLACEMENT TRENDS  
AND CHALLENGES IN  
AFGHANISTAN SINCE  
AUGUST 2021

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The International Organization for Migration (IOM) is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to: assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

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Dehsabz district, Khoja Chasht village, brick kilns (Credit: Samuel Hall 2022)

## GLOSSARY

Adaptation	Coping with the impacts of climate change that are unavoidable. Adaptive coping mechanisms serve as a protective factor and ultimately decrease the adverse impact of climate stressors, including reducing the frequency of occurrence.
<i>De facto</i> authorities	A term used to describe a person or a group that actually has control of a place, but which does not have the legal authority to do so.
Internally displaced persons	Persons or groups of persons who have been forced or obliged to flee or leave their homes or places of habitual residence, in particular as a result of or to avoid the effects of armed conflict, situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border <sup>1</sup>
Mitigation	Reducing the impacts of climate change within communities.
Negative coping mechanism	Negative coping mechanisms include responses to climate stressors that ultimately do more harm than good. This can include using contaminated water sources, selling agricultural land to factories, or being forced to move to different communities.
Returnee	International refugees who have returned to their country or community of origin.
Returned IDPs	People who have returned to their home or community of origin after fleeing as the result of or to avoid the effects of armed conflict, violence, human rights violations, protection concerns, or natural disasters <sup>2</sup>
Rural	Rural areas are defined by low population density and tend to be dominated by agricultural production.
Threat multiplier	Climate change is often referred to as a threat multiplier for both natural disasters and conflict. Climate change is a threat to security, as it “disrupts individuals’ and communities’ capacity to adapt to changing conditions, usually by multiplying existing or creating new strains on human livelihoods.” <sup>3</sup>
Secondary displacement	People experience secondary displacement when, after being displaced from their homes or place of habitual residence, they are forced to flee their area of shelter or residence to another, second location.
Urban	Areas of dense population and infrastructure, typically large cities. In the Afghan context, the main urban areas are Kabul, Herat, Jalalabad, Kandahar, Khost, and Mazar-e-Sharif.

<sup>1</sup> UN, ‘Guiding Principles on Internal Displacement’, September 2004

<sup>2</sup> IOM, ‘Afghanistan, Baseline Mobility Assessment’, Jan – Mar 2021

<sup>3</sup> Huntjens, P. and Nachbar, K., ‘Climate Change as a Threat Multiplier for Human Disaster and Conflict’, The Hague Institute for Global Justice Working Paper 9 (May 2015).

## LIST OF ACRONYMS

AFN	Afghan Afghani (currency)
ARC	Afghanistan Resilience Consortium
CANSA	Climate Action Network South Asia
CBDP	Community-Based Disaster Preparedness
CMI	Chr. Michelsen Institute
DfA	De facto Authorities
FGD	Focus Group Discussion
IDP	Internally Displaced Person
IEA	Islamic Emirate of Afghanistan
IOM	International Organization for Migration
ICMPD	International Centre for Migration Policy Development
KII	Key Informant Interview
NEPA	National Environmental Protection Agency
NFIs	Non-Food Items
NGO	Non-Governmental Organisation
SSI	Semi-Structured Interview
UNEP	United Nations Environmental Program
UNODC	United Nations Office on Drugs and Crime
WFP	World Food Programme

### WHY THIS BRIEF?

The International Organization for Migration (IOM) commissioned Samuel Hall to conduct a series of 4 briefs, focusing on the topics of mental health, urban migration, infrastructure & basic services, and climate change displacement. This is Brief 2 of the series. The purpose of the research is to provide IOM and other migration stakeholders with knowledge and learning on important aspects of forced migration. This brief is designed to inform future programming, including the development of evidence-based proposals.

# INTRODUCTION – ASSESSING THE ‘THREAT MULTIPLIER’

*“I have seen the weather getting hotter, drought becoming severe with each year, crops becoming weak, and farmers’ cultivation decreasing by the year.”<sup>4</sup>*

Climate change is worsening Afghanistan’s current humanitarian and food crisis. At the end of 2019, Afghanistan had more people displaced due to climate disasters than any other country in the world.<sup>5</sup> Two years later, the country remains unequipped to face the challenges of climate change and its impacts on households and communities – rural and urban areas alike. Respondents interviewed for this brief across Afghanistan counted on two hands the number of climate shocks and stressors that had impacted them and their communities over the last years. They felt unprepared for what had come, and reported losing the support they once counted on before August 2021. According to analysts and existing

literature, wheat production has dropped by 30% in the country over the last year, 97% of the population is living below the poverty line, with climate change playing a critical role.

In this brief, climate change and environmental degradation are inherently linked in contexts like Afghanistan. As defined by the IOM, climate change often exacerbates processes of environmental degradation, as well as the frequency and intensity of natural disasters.<sup>6</sup> This includes both slow-onset phenomena such as desertification and drought, as well as sudden onset phenomena such as flash floods.

In the long term, gradual environmental degradation in the absence of individual, household, and community level resilience will have direct impacts on people’s mi-

## VULNERABILITY TO CLIMATE CHANGE IN AFGHANISTAN

Afghanistan is one of the highest ranked countries for its vulnerability to climate change over the next three decades – ranking eighth out of 170 countries, yet it is one of the lowest greenhouse emitting countries in the world (overall and per capita). Nearly 60% of the population suffers from climate shocks, compared to only 19% who experience security-related shocks. The low levels of socioeconomic development, coupled with rising levels of insecurity, have made Afghan civilians highly vulnerable to disasters, causing loss of life, property, and livelihoods. Studies show that Afghanistan will experience rising temperatures, which will negatively impact agricultural production, water resources, and general levels of food security. This will lead to increased levels of poverty, leave more people vulnerable to climatic hazards, and increase the risk of conflict over natural resources. Since 2017, ActionAid has been active in carrying out and/or leading research on climate change within the Afghan context. The Afghanistan Resilience Consortium (ARC) – comprised of ActionAid, Afghanaid, Concern, Save the Children, and UNEP – developed a Community-Based Disaster Preparedness (CBDP) toolkit, based on their experiences of working with communities across nine of Afghanistan’s hazard-prone provinces. Afghanistan is highly prone to floods, droughts, landslides, avalanches, earthquakes, and extreme temperatures, because of its diverse geography. Model climate projections carried out jointly in 2016 by Afghanistan’s National Environmental Protection Agency (NEPA) and UNEP showed strong increases in temperature, greater levels of uncertainty for precipitation, as well as greater regional and seasonal differences. In the absence of strong national policies aimed at addressing the negative impacts of climate change within Afghanistan, conditions will continue to deteriorate, especially in rural areas where the majority of the population is dependent on agriculture for livelihood and survival.

Source: ICMPD/ActionAid/Tadbeer Consulting/CANSA, ‘Climate Change Drives Migration in Conflict-ridden Afghanistan’, 2020

4 FGD1, Male, Kabul Province, 12 May 2022

5 Internal Displacement Monitoring Centre, ‘Global Report on Internal Displacement’, 2020, Geneva

6 IOM, ‘Climate change, Environmental Degradation, and Migration. 2011

gration patterns, including their decisions on whether to return to their communities of origin.

This brief exposes the context of climate shocks and stressors that Afghan rural communities are exposed to, and the dual household and community impacts that result from these. There are solutions – but community members feel that, due to poverty, they are not within reach. Respondents deliver a sharp criticism of the current state of support, while suggesting remedies and actions, detailed in the recommendations of this brief.

## Purpose of the brief

*“What should the poor people do in years with lower agricultural yields? It is a hard question to answer when taking into account that the vast majority of us are engaged in agriculture.”<sup>7</sup>*

The impacts of climate change in Afghanistan in recent decades have been far-reaching, leading to the loss of livelihoods, food insecurity, rising tensions and conflict over decreasing resources. Climate change acts as a ‘threat multiplier’ by compounding existing vulnerabilities among the population.<sup>8</sup>

In addition to earthquakes that regularly strike the region, Afghanistan faces multiple natural disasters, including floods, flash floods, and severe, long-lasting droughts (all directly linked to climate change). Indirectly, climate change has also manifested itself in reduced spring precipitation across the country’s provinces and in the gradual melting of glaciers and high plateaus, resulting in reduced river flows, flooding from snow melt and rapid precipitation, landslides, water imbalance leading to other extreme weather events, and pest and disease infestations.<sup>9</sup>

The main sources of income – agriculture and livestock – are increasingly threatened by the direct and indirect consequences of climate change, with serious implications for health, communal living, education, and protection. The increased frequency of climate change-induced crises in the long-term will eventually lead to dry,

gullied, and mineral-depleted soils that are less productive for both crops and livestock. In Afghanistan, 85% of the population is dependent on agriculture. In a context where water systems are affected nationwide, experts have declared climate change a threat that displaces more people than conflict.<sup>10</sup> Smallholder farmers, pastoralists, and others who are highly dependent on small-scale agriculture are among those most vulnerable to climate-related income reductions. A current severe, multi-year drought has exacerbated acute food shortages experienced by more than half of Afghanistan’s population, and severely impacted their livelihoods; in rural areas, many are limited in their ability to diversify their income sources.<sup>11</sup> For example, pastoralist Kuchi nomads are experiencing increased food insecurity due to drought in the south and central highlands of the country.<sup>12</sup> In this context, the price of meat has dropped in regions where farmers and shepherds can no longer feed their animals – as a result, the price of a kilogram of meat in 2019 and 2021 decreased by 50% in some provinces.

Climate change plays an increasing role in international migration and internal displacement among rural and other marginalized populations dependent on agriculture. The tipping point comes when households and sometimes entire communities have no choice but to abandon their homes, rendered uninhabitable, and move unprepared, without assets and skills to other areas. This type of forced displacement is irreversible, as returning to land that is no longer productive is not an option. Households often adopt diversification strategies, such as sending young people to Iran and Pakistan to work in construction or agriculture. This splintering of the household nucleus, often followed by multiple displacements, can be a traumatic experience. The cycle of successive displacement occurs with no real hope of integration (until households become part of a growing contingent of IDPs on the edge of urban or peri-urban areas). This represents a type of double marginalization that is very difficult to escape: forcibly displaced from their original communities, migrants find themselves without a real base in their new urban environment;

7 FGD 5, Male Community Member, Herat Province, 25 May 2022

8 Price, R., ‘Climate Change as a Driver of Conflict in Afghanistan and Other Fragile and Conflict Affected States’, Institute of Development Studies, UK Department for International Development, 2019.

9 WFP, UNEP, Afghanistan’s National Environmental Protection Agency (NEPA), ‘Climate Change in Afghanistan - What does it mean for rural livelihoods and food security?’ 2016; Omerkhil, N., et al., ‘Climate change vulnerability and adaptation strategies for smallholder farmers in Yangi Qala District, Takhar, Afghanistan.’ Economic Indicators, 110:105863, March 2020

10 NPR, ‘Changing Climate Parches Afghanistan, Exacerbating Poverty’, December 23, 2021; WFP, UNEP, NEPA, ‘Climate Change in Afghanistan’, 2016

11 Omerkhil N. et al., ‘Climate Change Vulnerability and Adaptation Strategies, Takhar, Afghanistan’, p. 105863.

12 WFP, UNEP, NEPA, ‘Climate Change in Afghanistan’, 2016

they lack the social capital and skills that would allow them to integrate in the short or long term.

At the same time, Afghanistan’s poorest and most vulnerable have been made less mobile.<sup>13</sup> Women and children in Afghanistan are disproportionately affected by the effects of climate change, acting as “shock absorbers” by, for example, forgoing their education to bolster lower household income levels or cutting back on their caloric intake when crop yields are reduced.<sup>14</sup> Increased competition over land and resources has heightened tensions among minorities and has hindered the reintegration of Afghan returnees who must compete with members of communities for dwindling supplies of land and resources. This is despite the intended outcomes of previous Presidential Decrees (104 and 108) on the distribution of land for the housing of eligible returnees and IDPs.<sup>15</sup>

Afghans, especially vulnerable and marginalised groups like women, youths, and minorities, must adapt to a changing climate, employing strategies geared towards adaptation and resilience. This research report focuses on the prevention, preparedness, mitigation, response, coping and recovery mechanisms of communities vulnerable to climate change and how these mechanisms influence displacement, migration decisions, and experiences of return. Additionally, it will analyse the effectiveness of existing prevention and preparedness programming, mitigation strategies and response mechanisms implemented by national and international actors. Finally, it will draw on data and longitudinal analysis to present evidence-based recommendations.

### Research methodology and data used

The research is based on qualitative methods with data collected in the provinces of Kabul, Herat and Nangarhar in May 2022: a total of four key informant interviews (KIIs), six focus group discussions (FGDs), and 10 semi-structured interviews (SSIs), resulted in 51 people being consulted for this research brief. In total, six FGDs were conducted – with two FGDs held in each of three climate-change-prone communities in Kabul, Herat, and Nangarhar provinces. Gender parity was maintained for FGDs, with one female and male FGD conducted in each community. In Kabul, FGDs were carried out

in the Deh Sabz district, and in Herat and Nangarhar, FGDs were conducted in Ghorian and Kaga districts, respectively. The FGDs sought to represent members of those communities with different socio-economic backgrounds, ethnicities, household makeups, and occupations.

Table 1: Qualitative research conducted

Province	FGD Participants (5 -6 people)	SSIs	KIIs
Kabul	11 (6 male, 5 female: 2 FGDs)	5 (4 male, 1 female)	N/A
Herat	10 (5 male, 5 female: 2 FGDs)	6 (3 male, 3 female)	N/A
Nangarhar	10 (5 male, 5 female: 2 FGDs)	4 (2 male, 2 female)	N/A
TOTAL	31 (16 male, 15 female: 6 FGDs)	15 (9 male, 6 female)	3 male, 0 female
GRAND TOTAL	49 (28 male, 21 female)		

A total of 15 SSIs were conducted for this report, 5 of which were carried out in the same communities as the FGDs with community leaders (*wakil, malik*). Additionally, 11 returnees and IDPs (5 men and 6 women) from or living in climate change-prone areas in each province were interviewed. These SSIs sought to represent both male and female Afghans with varying migration and displacement histories, socio-economic backgrounds, and ethnicities.



Focus group discussion, climate change (Credit: Samuel Hall 2022)

13 UK Government Office for Science, 'Migration and Global Environmental Change: Future Challenges and Opportunities', 2011.

14 ActionAid and CANSA, 'Invisible Women: A Gender Analysis of Climate-Induced Migration in South Asia', 2021.

15 Přivara A. and Přivarová M., 'Nexus between Climate Change, Displacement and Conflict: Afghanistan Case', Sustainability 11:20, November 2019, p. 5586; National Legislative Bodies and National Authorities, Afghanistan, 'Presidential Decree N. 104 on Land Distribution for Housing to Eligible Returnees and IDPs,' 2005, Hashteh Subh, 'Government Distributes Land to Internally Displaced Persons', 13 January 2021.



## RESEARCH QUESTIONS

This report seeks to answer the below research questions:

What will be the most critical climate-related challenges faced by communities in Afghanistan in the immediate to medium-term future? In what ways do communities vulnerable to climate change cope with climate-related challenges?

What effects will these challenges have on displacement and what climate resilience measures can be deployed at a community and local level? How do these prevention and coping mechanisms influence dynamics of migration, displacement, and return?

## KEY HIGHLIGHTS

This research brief builds on data collected in Afghanistan in May 2022, by researchers at Samuel Hall, to inform stakeholders on climate change trends and challenges, including adaptation strategies, since August 2021. This research brief highlights three key findings:

1. **Climate change acts as a threat multiplier in Afghanistan** – and increasingly so since August 2021 under the *de facto* authorities (DfA). Weak government institutions, unclear policies, a dearth of international aid, and a decrease in assistance generally has led to increased competition for limited resources throughout Afghanistan, especially in areas impacted by drought, flooding, and other natural disasters, which have limited water, food supply, and destroyed infrastructure. Although ministries have been restaffed and have officially resumed work under the DfA, most respondents have not received any climate or agricultural-related help since August 2021. This has exacerbated pre-existing challenges in drought, flood, and earthquake-prone areas. Afghans interviewed have been displaced internally and forced to migrate abroad due to multi-year droughts, and the absence of a national strategy to address these. Afghan women are more negatively impacted by climate change than men – and forced marriage and levels of domestic violence increase in communities impacted by drought and other weather events.
2. The main positive adaptation strategies people have developed include planting and cultivating alternative crops, decreasing the surface area of irrigated land and improving irrigation systems, constructing greenhouses to foster a greater variety of crops grown, and repurposing failed wheat crops for livestock.
3. Key challenges that communities face in developing sustainable mechanisms to respond to climate change include outdated techniques, lack of financial resources for sufficient adaptive practices, lack of knowledge and formal training on planting crops, suspension of government and NGO assistance, and remote locations of agrarian communities impacted by climate change. Return – the preferred strategy of the DfA – is not attractive for those displaced internally due to climate change as the prevailing conditions and resource availability often have not improved to the point where it would entice them to return.

# I. THE RELATIONSHIP BETWEEN CLIMATE CHANGE AND DISPLACEMENT IN AFGHANISTAN

## PERCEPTIONS OF CLIMATE CHANGE SHOCKS AND STRESSORS

Focus group participants discussed their perceptions of the symptoms of climate change at the local level. The main impacts identified by community members were related to drought and flooding:

*“The first-grade problematic weather event or trend in our area is drought, leading to poor harvests. The second is strong winds, damaging wheat production, farming, and health. The third is flood and the fourth is rainfall. The fifth is hail, The sixth is earthquakes. The seventh is temperature, either very or very cold. The intense cold can damage the crops, and is very hard for poor people to cope with at home without wood to warm their room.”<sup>16</sup>*

While the participant confuses some direct consequences of climate change with natural disasters that cannot be attributed to it, it demonstrates that the experience of natural disasters and catastrophes has become part of the lives of Afghans with increasing frequency and recurrence, especially in rural and peri-urban areas.

Table 2. Hierarchy of participants perceptions of most and least problematic weather

Participants' views on the most problematic	Participants' views for less problematic
1- Drought	1 – Hot weather, heat
2- Floods	2 – Cold weather
3- Rainfalls	3 – Landslide
4- Hail	

Respondents also tend to establish direct correlations between deforestation and natural disasters. They report that there are no longer trees in their communi-

ties, and animals have been taken away by floods, or sold to survive. Winds often destroy gardens where fruits and other plants have been planted. Mud houses have been destroyed by either earthquakes or floods. Wells have gone dry, causing a shortage of drinking water and a rise in health problems. Participants' hierarchy of risks brings together both climate change stressors (slow-onset, happening over time), and ad-hoc shocks (such as floods and rising temperatures) that have a sudden impact.

Afghanistan's agricultural communities receive water – during the winter season in the form of snow, or during the rainy season in the form of water – but not at the time they need it the most:

*“[Rainfall] comes at the wrong time over the years. For example, it might rain when our agricultural products are growing. It hurts their growth. If the wheat gets wet, there are more changes it will deteriorate in quality.”<sup>17</sup>*

Another participant confirms that rains happen in “inappropriate seasons,” with the rains destroying the wheat, causing floods in communities with no retaining walls, where trees, entire fields, and homes are quickly destroyed. Floods have life-threatening consequences in a country that has few reservoirs. These climate change stressors are multiple and often layered. As one participant explained, “the problems occur one after another like the children born on their turns.”<sup>18</sup>

A recent study on the consequences and perceptions of multiple droughts in the western province of Herat found that while many residents attribute the weather problems to religious beliefs, they also interpret the drought to environmental problems, such as increased temperature, lowered water tables, deforestation, as well as more frequent declines in agricultural yields and livestock production, insecurity, conflict, financial weakness, and increased unemployment.<sup>19</sup> According to the same study, farmers in Herat province with several crops (wheat, barley, peas, mung bean, cotton,

16 KII3, 1 March, 2022.

17 FGD2, Female, Kabul Province, 12 May 2022

18 KII2, 25 February, 2022

19 Iqbal M.V. et al., 'Farmers' Perceptions of and Adaptations to Drought in Herat Province, Afghanistan', Journal of Mountain Science 15:8, 2018, pp 1741–56.

melons, clover) have reduced them to two (wheat and peas) and yields have decreased by 88% due to drought conditions.

This has significantly reduced livelihood options for farmers, who have developed techniques to adapt to drought conditions. Drought has had social implications in Herat province, including migration, increased conflicts over water, rising health issues including malnutrition and food insecurity, loss of employment, and higher rates of child labour and marriage. Many farmers were forced to sell their land, to meet short-term food needs, in the absence of support from the government or international organisations. Drought conditions have also contributed to many young people selecting non-farm-based careers or jobs, which will likely increase the vulnerability of the agricultural sector in Afghanistan, due to the dearth of farmers.

## Deforestation

At the subnational level, Nangarhar province in eastern Afghanistan is estimated to have lost 90% of its forests since 1989 – which has largely contributed to a rise in arid conditions, air pollution, and increased vulnerability to flash floods. In the provinces of Nangarhar, Kunar, Paktia, Paktika, and Nuristan, millions of trees have been cut down, despite a ban by Hamid Karzai, the then president, in 2006. This deforestation is the result of illegal timber exports, clearance of trees for more profitable crops, and people using trees for firewood to cook and heat their homes.<sup>20</sup> Some estimates are that more than a third of forests were lost between 1990 and 2005 and up to half between 1975 and 2015.<sup>21</sup> Other scientific contributions, using satellite imagery, are more conservative and put annual deforestation rates at 0.5 to 0.6%.<sup>22</sup>

The Taliban have, as early as 2017, made reforestation a key objective in Afghanistan (despite allegedly promoting deforestation for the cultivation of opium for export). Their current leader, Haibatullah Akhundzada, called on Afghans to fulfil their religious duty to “plant one or several fruit or non-fruit trees for the beautification of Earth and the benefit of almighty Allah’s

creations.”<sup>23</sup> Pressed to explain this point, spokesman Zabihullah Mujahid later supported this initial claim:

*“The Islamic Emirate of Afghanistan has the perfect plan for environmental protection through planting trees. Every citizen of the country should plant at least one tree a year. Also, we support all actions taken for the support of the environment, including the state’s efforts to invest in this sector. In fact, we support any action to this end.”*<sup>24</sup>

These statements seem to have gone beyond a simple political calculation on the part of the Taliban at the time, as one UNEP official explained:

*“Beyond the fact that there is no unified position or single voice of the [DfA] leadership on a large number of social or political issues, this was not simply a deceptive plan, as the Ghani government claimed at the time. On the contrary, it shows that on some issues that affect the integrity of the country and its people – such as the presence of landmines or the adverse effects of climate change – there is a real stance.”*<sup>25</sup>

Accounting for the few decrees, reforestation plans, and government resolutions, between 2002 and 2021, there is a real awareness of the problem of climate change in Afghanistan, if not by the population, at least by decision-makers. Their actions show us the following:

1. Afghanistan is a direct victim of the consequences of climate change on a global scale and is one of the countries hardest hit – via the increased recurrence of droughts and floods.
2. The uninterrupted conflicts, extension of the opium fields, excessive use of firewood, and trafficking wood to neighbouring Pakistan have accentuated the effects of climate change, by making the land more arid and less resistant.
3. Deprived of adaptation strategies, rural communities see each climate crisis reinforce their vulnerability, in a context where: i) livestock suffers, is poorly fed, and exposed to diseases and epizootics; ii) soils are less fertile, crops less diversified and productive.

20 The New Humanitarian, ‘Deforestation marches on’, March 2009.

21 NPR, ‘Afghanistan’s forests a casualty of timber smuggling’, 2013.

22 See in particular: 1) Sudhakar Reddy C. & Saranya, K., ‘Earth observation data for assessment of nationwide land cover and long-term deforestation in Afghanistan’, *Global and Planetary Change*, 155; 2) Hansen, M. C., et al., ‘High-resolution global maps of 21st-century forest cover change’, *Science*, 342:6160, 2013, pp. 850-853.

23 The Independent, ‘Taliban leader urges Afghans to plant trees ‘for the worldly good’, February 2017

24 Vice, ‘The Taliban want to go green’, April 2017

25 Interview with former UNEP, September 2022.

## Tipping points leading to migration and displacement

Across all interviews, respondents spoke extensively of the impacts of flood and drought and their destruction of livestock, land, and homes, leaving many with no other choice but to leave their communities. Many people have migrated from drought-impacted areas as a last resort, due to a lack of other coping mechanisms for lessening the impact of drought conditions in the community.

Studies on climate change in Afghanistan remain limited and are relatively recent. IOM's DTM data on the 2021 drought has identified 103 impacted districts of origin, with Shindland in Herat, Baghran in Helmand, Bala Murghab in Badghis, Tirinkot in Uruzgan, and Pasaband and Taywarah in Ghor as the principal districts of origin for those displaced by drought.<sup>26</sup> What data is available points to heavy declines in spring rain, which has impacted farmers and herders in northern provinces completely reliant on rain to grow crops and raise livestock. Average temperatures have risen by 1.8° (Celsius) across the country – twice the global average,<sup>27</sup> and over 2° in the southern provinces. Although rainfall in Afghanistan has been historically variable, certain farming regions in the east, north, and central highlands have received 40% less rain during the spring, when rain-fed crops – the majority of the crops grown in these regions – will need water most.<sup>28</sup>

Displacement as a coping strategy was present in all assessments in the three provinces selected for this study. Furthermore, climate change was one of many factors pushing people to migrate:

*“First, it was economic factors that forced me to migrate from Behsud district to Kabul. Second, it was the lack of natural resources, such as water. If natural resources were not in scarcity, we would not migrate at an old age. Third, the extremely cold weather and flood coerced us to migrate. Fourth, it was a community-related conflict. Out of all these factors, the most potent factor was lack of natural resources, such as water. We endured floods; therefore, we came to Kabul.”<sup>29</sup>*

There is a “tipping point” for people in areas impacted by climate change, when their only remaining strategy is to leave. Kälin defines this as the point at which communities and households shift from voluntary to forced displacement, when they have exhausted all available coping capacities and slowly fall into poverty.<sup>30</sup>

Throughout the three provinces, flooding was most likely to cause temporary displacement of entire communities. Temporary displacement then turned into protracted displacement when significant assets, such as housing and livestock, were destroyed or killed. External migration to Iran and Pakistan has predominantly consisted of youth, discouraged from farming by the incapacity of communities to respond to climate shocks:<sup>31</sup>

### THE FALL – AND FLIGHT – OF AFGHAN RURAL COMMUNITIES

*“There was no wood to warm the room. In the past, mountains had wood, but now the wood has been used up. There are many floods due to drought. Trees on the mountains also dried up, and people’s gardens dried out. Due to drought, our children have grown weak because they don’t get enough nutritious meals. We had to decrease our expenses. Drought has led to mental problems because people’s problems have increased. Therefore, people are trying to leave, to go to other countries. They are compelled to migrate. Other people including me have gone more and more into debt. People have sold their animals as they don’t have and can’t afford grass for animals to keep them. Also, if we cultivate our lands that does not even meet its seed and other costs because we usually use generators to irrigate the lands. We are a farming community with no more farming, a people with no other way out than fleeing.”*

SSI2, Male, Nangarhar, 18 May 2022

26 IOM (2022), Drought 2021: Historical Displacement Patterns in Affected Provinces; Populations Dependent on Agriculture and Livestock.

27 Arvin J., “How Inaction on Climate Change Can Worsen the Crisis in Afghanistan.” Vox, 15 September, 2021

28 Ibid

29 SSI5, Male IDP, Kabul Province, 16 May 2022.

30 Kälin, W. (2010) ‘Conceptualising Climate-Induced Displacement’, in Climate Change and Displacement: Multidisciplinary Perspectives, 81–104.

31 SSI8, Community Leader, Herat Province, 26 May 2022.

*“People have been greatly affected by drought within the past five years and the conditions we experience have made people feel helpless. There are no jobs, all people are unemployed, people who were engaged in farming in the suburbs in the past have also become unemployed, because there was drought, people have been faced with crisis.”*<sup>32</sup>

Young people engage in seasonal migration, due to financial reasons and lack of economic opportunities in drought-affected areas in Afghanistan. Many choose to migrate to Kabul for the winter to continue earning money while crops are dormant and return to their villages in the summer during the growing season. Key informants felt that these seasonal migration patterns would remain in the long-term, given people’s attachment to their native provinces.<sup>33</sup> One key informant stated that seasonal migration decreased in areas where there was investment in watershed management, which allowed people to grow crops throughout the year. In these cases, people had returned to their communities of origin from urban areas to engage in agriculture.<sup>34</sup>

People chose to migrate to locations which were perceived to be offering available employment opportunities outside agriculture. Kabul, Herat, and Ghazni provinces were most mentioned by interviewees as areas to which people chose to relocate. People also selected areas where they had relatives or similar ethnic demographics, where they could more easily build networks, access cheaper rent, and access aid distribution.

Migrants who wished to continue working in the agricultural sector tended to select locations where they felt they would have better access to water. One community leader interviewed in Nangarhar province stated that some people in the community had migrated internally to other districts in the province – Kama and Surkhrud – where there was ample water, as they were unable to cultivate their lands.<sup>35</sup>

**The majority of people who are displaced or migrate due to climate change relocate from rural to urban**

**areas in Afghanistan.** This trend is especially common in areas that prevent any agricultural expansion, such as the central and northern regions of the country, where agriculture is already limited.<sup>36</sup> In these areas, people are more heavily impacted by climate events, as the cultivation of agricultural lands is more marginal compared to other areas of the country. People in Helmand and Kandahar provinces in the south are less likely to migrate from rural to urban areas, as people use solar pumps and can expand irrigated lands.<sup>37</sup> Additionally, many people have selected areas based on information about the availability of humanitarian aid and assistance.<sup>38</sup>

**Repeated movement tends to increase debt, with money spent on new housing and land.** One interviewee was initially displaced from Bamiyan to Iran, back to Bamiyan, and then to Parwan province. After drought and flooding destroyed agricultural lands in Parwan province and led to unemployment, he moved his household to Kabul, based on assumptions that water resources would be greater:

*“During our time in Bagram district, my husband used to work the lands of other people and we enjoyed a relatively good life. However, when the flood arrived in the community a few years ago, it destroyed the agricultural lands as well as the wheat...we had to spend a lot of money to [recover the land]. The arrival of drought further damaged the agricultural process...Some people could afford to dig deep wells for coping with this issue, but it wasn’t feasible for us...We heard about better conditions in Deh Sabz, so we migrated to this community...My husband works the lands of other people [for daily wages]. He might earn something between 100–200 AFN per day, so our financial condition is very bad at the moment.”*<sup>39</sup>

## Household and community impacts

Climate change is a ‘threat multiplier,’ often exacerbating already fragile contexts, leading to increased social tension, multiple displacements, and lack of access to basic goods and services.<sup>40</sup> Over the last few decades, the majority of the Afghan national budget has been

32 FGD6, Male community members, Nangarhar Province, 17 May 2022.

33 KII3, 1 March, 2022.

34 KII2, 25 February, 2022.

35 SSI14, Community Leader, Nangarhar Province, May 17, 2022.

36 KII1, 16 March, 2022.

37 KII1, 16 March, 2022.

38 SSI15, Male IDP, Herat Province, 26 May 2022.

39 100–200 AFN is equal to approximately \$1.12 - \$2.24.

40 G7 (2016), A New Climate for Peace: Taking Action on Climate and Fragility Risks.

allocated to defence.<sup>41</sup> At the time of the takeover by the DfA in August 2021, over a third of Afghans experienced food insecurity, with many unable to plant crops during the summer of 2021 due to fighting throughout all 34 provinces. As a result of drought in western and northern provinces, harvests were poor, with the World Food Programme (WFP) estimating around 40% of total crops were lost in 2021.<sup>42</sup> If individuals and communities experience other vulnerabilities, their ability to absorb climate shocks will be much lower.<sup>43</sup>

**Climate-induced displacement from provinces impacted by drought, flooding, and extreme weather has led to increased levels of social tension over already strained resources.** In many cases, people have used available natural resources as leverage, such as preventing water from flowing downstream.<sup>44</sup> One IDP in Kabul spoke of conflicts in his village related to control over water resources due to drought conditions:

*“One tribe might say that a spring belongs to us and another one might say that the spring is their possession, thus a conflict arises over it among them. We had such conflicts among people in our village. When people have financial [security], there is harmony and peace among them. However, if there is no water for drinking and irrigation, and no animals to use for day-to-day life, conflict will certainly arise both in the household and in the village.”<sup>45</sup>*

The impacts are both at the household and community levels and often impacted by household wealth. For example, rich households could lose one harvest, such as wheat, but cultivate corn or melons which are less affected by climate change events and require less water. However, for poor households, migration, to Kandahar, Herat, Pakistan or Iran, becomes the most feasible option.

At the household level, respondents reported relying on child labour, reduced nutritional value meals (both quality and quantity), and borrowing as coping mechanisms. As a result:

- **Child labour has increased as children are sent to work for daily wages, or to learn a profession for the future to be less reliant on the land.** House-

holds in all provinces reported bringing their children into their agricultural practice, as a result of youth having left the communities.

- **Out of school children are on the rise, because of the time spent working.** Teachers interviewed reported that their children were mainly busy working in the fields. Community members identified drought as the cause of the drop in school attendance in their communities. Infrastructural damages caused by disasters, namely by floods, mean that schools have been destroyed and bridges that students used to commute to schools have disappeared. The impact of climate change on the education sector was discussed in all interviews – both a result of poverty, of infrastructural damages, and of migration abroad.
- **Medical needs have increased, as households do not consume nutritional intake comparable to pre-drought periods.** The situation has become more difficult for women who reported no longer being able to afford to visit a doctor when ill. Numerous cases of diarrhoea, vomiting, as well as one child's death, were reported in the interviews.
- **Disabilities are uncared for – respondents focused on the damages to disabled persons who are left with no one to take care of them, due to relatives' joblessness.**

Conflicts between people, demotivation, and social and psychosocial impacts were present in disaster-affected communities. Respondents reported:

- **Conflicts over lands, alongside rising levels of disappointment between people.** Conflicts were reported over issues of land irrigation, or individuals changing the direction of the water stream from one land to another. Instead of consulting each other, decisions were made individually and often, against each other.
- **Social marginalisation:** One respondent explained that the drought and poor harvest had negatively impacted his social capital. He explained being un-

41 New York Times., 'A New Breed of Crisis: War and Warming Collide in Afghanistan', 30 August, 2021.

42 Ibid.

43 Moser C., 'A Conceptual and Operational Framework for Pro-Poor Asset Adaptation to Urban Climate Change', in Cities and Climate Change, by Daniel Hoornweg et al. The World Bank, 2011, pp. 225–53

44 KII3, 1 March, 2022

45 SSI4, Male IDP, Kabul Province, 15 May 2022.

able to invite others to his house for food, or to be able to go to relatives or friends' parties. Not having funds to spend on transportation, clothes or food for household members meant a level of shame and hiding from others, and decreased participation in social activities.

A final point to mention about the negative externalities of climate-induced displacement within communities is the **loss of traditional techniques and adaptation strategies to the consequences of climate change**. Notably, and perhaps in part due to how the research questions were formulated, interviewees did not refer to purely community-driven solutions for building long-term resilience to the impact of climate change – such as community-based water management or community-based disaster risk management.

An example mentioned in individual interviews conducted by the research team before the present study shows the loss of traditional resilience mechanisms: in particular, it is well established that maintaining the water value chain requires frequent updates. Techniques, knowledge and skills require transmission between individuals: for example the Karez irrigation system is a traditional irrigation method in Afghanistan,

beyond surface water-based irrigation (via canals) or groundwater-based irrigation, which had been lost and revived by NGOs. In the 1980s, the system was able to supply more than 170,000 ha of land and more than half of the irrigation system in some provinces, providing resource-efficient and low-cost access to water.<sup>46</sup> This system is both an efficient means of irrigation that does not require any energy source, by using gravity to bring water from underground to the surface, through a succession of horizontal tunnels:

*"In our village we used this technique which worked very well, provided by a Danish NGO. They did a good job. But the villagers left because of the conflict, others came, then there were droughts, conflicts. And we are here now. We have lost the skills and I think Karez is not working anymore because of mud and lack of maintenance."<sup>47</sup>*

### Interruption of expenditures and programs since August 2021.

*"Aid packages have not arrived in this community ever since the arrival of the Islamic Emirate [DfA]. There hasn't been any progress against natural disasters. There was an ongoing dam construction project, but it has been suspended for quite some time now. The residents of this township are*

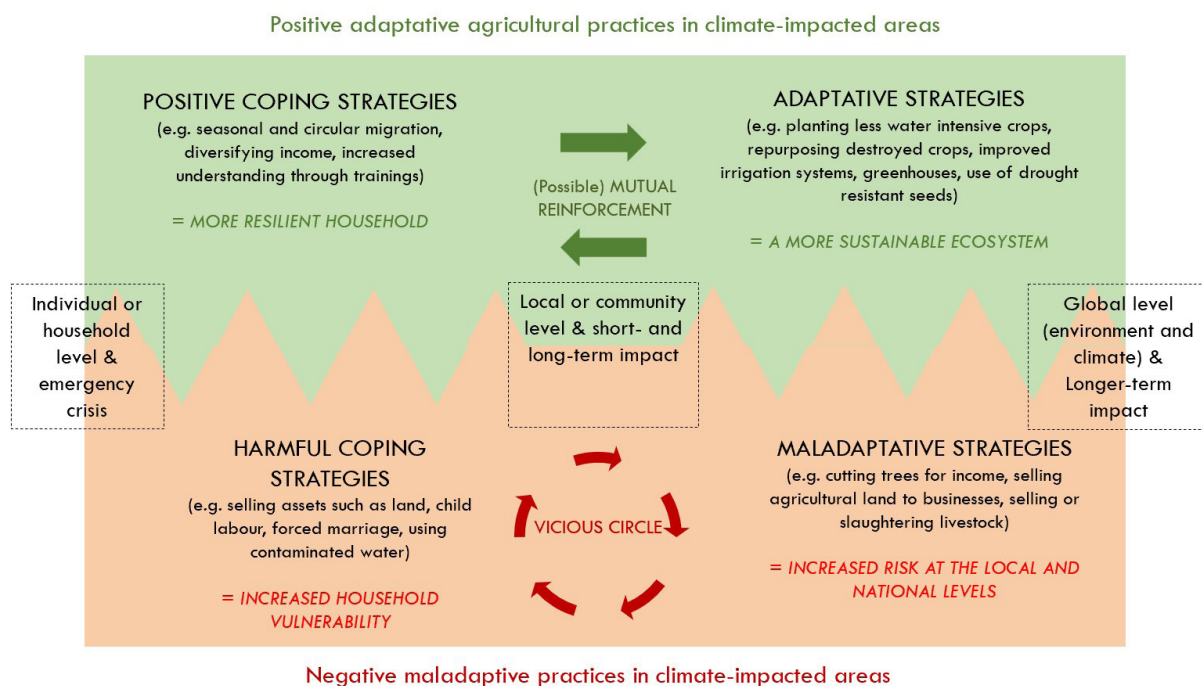


Figure 1. Climate adaptation (based on qualitative findings in Kabul, Herat, and Nangarhar Provinces)

<sup>46</sup> See: 1) Azami, A. et al., 'Sustainable Irrigation: Karez System in Afghanistan. Central Asian Journal of Water Research, 6:2, 2020, pp. 1–18. and 2) Macpherson G., 'Karez Systems of Southern Afghanistan—Adaptation to Environmental Change', Quarterly International. 2012 pp. 279–298.

<sup>47</sup> Case study in Hilmand for FCDO-funded R3 programme, January 2022.

*all IDPs who have not received any assistance since August 2021.*<sup>48</sup>

Although climate factors lead to displacement, the lack of preparedness, adequate response from and lack of capacity of the DfA, and the lack of knowledge about appropriate prevention and mitigation measures have deepened the climate crisis in Afghanistan. The unrest and upheaval of summer 2021, combined with the impacts of climate change have created a feedback loop of vulnerability. The secondary impacts of decades of war and conflict in Afghanistan have also compounded worsening climate conditions. Additionally, efforts to mitigate the effects of climate change often negatively impact households' financial situations. Many interviewees reported having to reduce expenses in other areas, such as health, education, and nutrition, to afford increasingly expensive responses to negative weather outcomes. The prevailing economic crisis under the DfA has driven up the cost of many items which farmers depend on to reduce the impacts of climate change.<sup>49</sup>

*“Since August 2021, my ability to respond to negative weather events has decreased. Before, other members of my household had worked in government and small businesses. They helped me in the mitigation of weather events. Now, all of them have become unemployed...the cost of fertilizers, diesel, solar panels and agriculture tools rose up. For example, the black fertilizer was 3,000 AFN and the white one was 1,300 AFN. Now the black one is 7,000 AFN and the white one is 3,500 AFN.”*<sup>50</sup>

One of the biggest changes since August 2021 under the DfA has been the suspension of previous projects led by the former Afghan government dedicated to reducing the effects of climate change in Afghanistan. The sole exception to this is the DfA's ban on cutting forests and selling timber, (despite reports of excessive deforestation and smuggling wood to sell illegally outside Afghanistan).<sup>51</sup> National drought programmes implemented under the former Afghan government are no longer running. Given the weakness of government institutions under the DfA, the ability of people to adapt to conditions such as droughts, floods, extreme

weather, and their secondary effects such as poor harvests, have significantly decreased. One community leader interviewed in Nangarhar province spoke about the retaining wall the previous Afghan government had constructed in his community, which protected houses and lands from floods:

*“A retaining wall, about 1,035 metres long, was built by the previous government to protect the [community] from floods and weather-related events, and it cost about 35,000,000 AFN.<sup>52</sup> [T]he areas which were exposed to floods are now safe. Other people [whose land isn't protected by the retaining wall], try their best to protect themselves and their assets, lands and houses against floods. For example, they plant trees or put stones or other bunches by the side of their land or house. They try their best. They can protect their lands and houses temporarily but not permanently. They use generators for watering their lands.”*<sup>53</sup>

Other temporary fixes include planting trees and creating small barriers of stones and sticks next to their land and homes.<sup>54</sup> Food for work programmes to combat drought conditions were also implemented under the previous government in Kandahar province. Individuals engaged in this programme dug holes in the hills to catch rainwater – in return, they were given 5kg wheat. The men and boys who participated in this programme were mostly from poor households. Although this programme has not been continued under the DfA, it could be a potential way to reintegrate returnees to drought impacted areas sustainably.<sup>55</sup>

Additionally, even under the former government, assistance for droughts tended to be concentrated in certain areas – such as the northern provinces that had better connections to government leaders. Security reasons also played a significant role in decisions to develop projects, as they were often unable to implement work in areas controlled by the Taliban. Even within provinces, aid often differed between districts, as it was highly dependent on networks and representation in parliament. One interviewee from Nangarhar province spoke about the inequalities between his district and Kaji district; the latter were able to mitigate drought

48 SSI9, Community Leader, Kabul Province, 24 May 2022.

49 FGD1, Male farmers, Kabul Province, 12 May 2022.

50 1300 AFN is equal to approximately \$14.53; 3000 AFN is \$33.53; 3500 AFN is \$39.12; and 7000 AFN is \$78.23. Prices have increased 2.5 times under the DfA

51 Xinhuanet, 'Afghanistan takes measures to protect forest', 15 October 2021.

52 35 million AFN is equivalent to approximately \$389,388.79 USD.

53 SSI14, Community Leader, Nangarhar Province, 17 May 2022.

54 Ibid.

55 FGD2, Female host, Kandahar Province, 12 May 2022.



conditions due to the construction of dams and wells, as well as the provision of seeds, livestock, water and fertilizer:

*“Because of natural disasters like drought the farms are dried out this year. I told you before that I have spent 30,000 AFN on farming, but I get 20,000 AFN in return.<sup>56</sup> Neither anyone in the [previous] government nor anyone in this government [DfA] asked us yet.”<sup>57</sup>*

Furthermore, under the DfA, the distribution of aid in areas hit hardest by droughts, flooding, and other natural disasters has decreased significantly for those who have been internally displaced due to weather-related events. One IDP interviewed in Herat province spoke about being discriminated against due to his IDP status within his host community – with aid being distributed in a discriminatory way by community leaders who prioritized their household members and those belonging to the same ethnic group:

*“There was equal treatment and no discrimination among different ethnic groups [in my place of origin], but here we experience unequal treatment. The community leaders only assist their people, not to the people of other tribes or IDPs. It has been five months since I have moved here but no one has assisted me.”<sup>58</sup>*

Although this practice is not specific to climate change, it demonstrates the cycle of vulnerability of Afghans living in areas impacted by extreme weather events, within a context of humanitarian and economic crisis.

The lack of public expenditure on climate change – highlighted by the fact that programmes implemented under the former Afghan government have been discontinued – has increased vulnerabilities and risks of climate change displacement throughout the country. Mayar, a water resource management expert, highlighted the severity of the drought in Afghanistan in 2021–2022, more widespread and severe compared to the last major drought in 2018. Although humanitarian assistance will alleviate some of the immediate concerns, Mayar calls for a need

to rebuild Afghanistan’s national disaster mitigation and management infrastructure, with a focus on the creation of effective watershed management mechanisms. The ability to harvest rainwater during the rainy season, to be stored in groundwater aquifers could significantly reduce water shortages during future droughts.

Table 3. Reported aid distribution before and after August 2021

Before August 2021	After August 2021
Cold storage for potatoes and onions	Sources of support are gone and in some places replaced by cash-based assistance
Augmented seeds distribution	
Springs and culverts through the National Solidarity Programme	
Training courses for plant nurseries and aviculture cash-based assistance.	
Plant medicines	
Microcredit and loans through banks	
Building of retaining walls and bridges	
Provision of manual water pump	
Construction of a main road (60% completed)	



Dehsabz district, Khoja Chasht village, water pump (Credit: Samuel Hall 2022).

56 30,000 AFN is approximately \$333.76; 20,000 AFN is approximately \$222.51.

57 SSI12, Male IDP, Nangarhar Province, 18 May 2022.

58 SSI15, Herat Province, 26 May 2022.

## II. ADAPTING TO CLIMATE CHANGE: PREVENTION, MITIGATION, AND RESPONSE MECHANISMS

*“The ability to cope has decreased since August 2021. Before, other members of my household helped me in the mitigation of weather events. Now all of them have become jobless. The cost of fertilizers, diesel, solar plates and agricultural tools has risen by at least 50%, and oftentimes more.”<sup>59</sup>*

Afghan civilians’ capacity to respond to climate change has decreased. Their asset portfolio – that is, the physical, financial, human, social, and natural capital available to them in their communities – impacts their inability

to adapt to climate shocks. Adaptation measures vary, depending on the capacities and context of communities and countries – ranging from planting drought-resistant crops to building flood defence systems. Successful adaptation depends on governments, active, long-term engagement of regional, national, and international stakeholders, as well as knowledge sharing and capacity building.<sup>60</sup> Traditional adaptation strategies include implementing water-saving techniques, or changing planting times.<sup>61</sup> These adaptation measures have decreased, turning into maladaptive strategies, such as using con-

### ASSESSING PEOPLE’S VULNERABILITY AND ADAPTATION CAPACITY TO CLIMATE SHOCKS

Although there is no universally accepted definition of vulnerability, the prevailing literature highlights both its circumstantial and unpredictable nature, which is closely linked to levels of capacity. The International Federation of the Red Cross (IFRC) defines vulnerability as “the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. The concept is relative and dynamic.” Research Samuel Hall conducted on climate adaptive solutions in Somalia used Moser’s asset-based vulnerability and adaptation framework, where communities, households, and individuals have an asset portfolio, which ultimately determines their levels of adaptive capacity to reduce risk and adapt to increased risk in their environment. Moser distinguishes the most important assets to absorb and adapt to climate shocks as follows:

**Physical capital:** Equipment, infrastructure, livestock, and other productive resources owned by individuals or households in a community.

**Financial capital:** Financial resources available to people (income, remittances, savings, credit).

**Human capital:** Investments in education, health and nutrition of individuals, linked to people’s capacity to work and generate income.

**Social capital:** The prevailing rules, norms, obligations, reciprocity and trust embedded in social relations, social structures, and societies’ institutional arrangements within a given community.

**Natural capital:** Environmental assets such as soil, atmosphere, forests, minerals, water and wetlands. This is a crucial asset for the poor, including in urban areas.

Sources: IFRC, ‘What Is Vulnerability?’; Caroline Moser, ‘A Conceptual and Operational Framework for Pro-Poor Asset Adaptation to Urban Climate Change’, in *Cities and Climate Change*, by Daniel Hoorweg et al., The World Bank, 2011, 225–53; Samuel Hall, IOM, & UNEP, *Identifying Climate Adaption Solutions to Displacement in Somalia*. 2021

59 FGD1, Male, Kabul Province, 12 May 2022.

60 UN Climate Change, ‘What do adaptation to climate change and climate resilience mean?’

61 Neil Adger W. et al., ‘Adaptation to climate change in the developing world’, *Progress in Development Studies* 3:3, 2003 pp. 179-195.

taminated water, selling assets and expanding debt levels, as reported in Kabul, Herat and Nangarhar.<sup>62</sup>

This section also highlights the secondary impacts that climate change has – on women and children, on mental health and education – as they often are more vulnerable to disasters. Lastly, the report outlines challenges that households and communities face in developing long-term, sustainable responses due to a lack of capacity and financing.

## Adaptive strategies developed for climate change conditions

In response to the increased frequency of drought, flooding, natural disasters, and extreme weather conditions, **some communities have developed responses to adapt, and cope with the impact of climate change.** The strategies outlined in this section include both positive adaptation and maladaptation approaches.

**Planting and cultivating alternative crops was a primary adaptation strategy developed by interviewees in response to climate change.** Poppies require much less water than wheat and melons and are much more profitable for farmers – any attempts the DfA may use to quell production will likely be met with resistance. Growers, including those interviewed for this study, have limited options, while poor national policymaking does not allow sufficient benefits to farm alternative produce. For many interviewees, it was the only available solution to them outside of migration to another province or city. However, this solution may be in jeopardy, as one of the DfA's key promises was to eliminate opium poppy cultivation. At the time of writing, poppy farming is estimated to employ 120,000 Afghans, bringing in \$300-400 million annually, according to UNODC.<sup>63</sup> Growers, including those interviewed for this study, have limited options, while poor national policymaking does not allow sufficient benefits to farm alternative produce. One potential crop – which grows across Afghanistan and does not require much water – is ferula, a plant used in modern herbalism to treat conditions such as asthma, bronchitis, and whooping cough. Its root can be eaten as a form of porridge.<sup>64</sup> In

cases where harvests were poor, wheat was used as fodder for livestock, to minimise waste and ensure that crops generated income even if harvests were of lower quality:

*“Extreme heat in the community...damaged the wheat crops [so] we had no harvests. We decided to [use] the damaged wheat crops for straw. We sold the straw to other people, as [there used to be] some market during the drought years.”<sup>65</sup>*

Although not commonly mentioned, some interviewees mentioned planting trees in their communities to stop strong dust winds, which destroyed crops.<sup>66</sup> Other interviewees mentioned planting trees next to rivers, in order to act as barriers to prevent flooding and damaging the area.

In areas experiencing water shortages, farmers decreased the surface area of land used for irrigated cultivation, to reduce water usage. Others dug deeper wells and powered them with solar panels – however, it should be noted that this strategy was not available to most people, given the high cost associated with this practice. In flood-prone communities, some people dug ditches and canals to prevent destruction of homes and land.

**The sale of assets was also frequently used to mitigate lost income due to droughts, flooding, and other weather events.** Many people sold livestock and other assets such as gold, silver, and cars to purchase tools and water supplies that could sustain livelihoods after climate events. This was mentioned by many interviewees, who purchased generators, dug deeper wells to access groundwater, and installed solar panels. Selling and leasing agricultural lands was also used by many – however, this had the potential to do more harm than good if businesses operating on the land contributed to worsening conditions for the climate and future growing of crops. Once people had exhausted assets to sell, many turned to asking for loans from relatives or banks to fund adaptation and/or mitigation strategies. Others also spoke of taking loans from shops with high interest rates, which contributed further to the cycle of poverty they experienced:

62 Magnan A., 'Avoiding maladaptation to climate change: towards guiding principles', S.A.P.I.E.N.S, 2014: "Maladaptation is a process that results in increased vulnerability to climate variability and change, directly or indirectly, and/or significantly undermines capacities or opportunities for present and future adaptation."

63 UNODC, 'Afghanistan Opium Survey', 2020.

64 Mahendra P. and S. Bisht, 'Ferula asafoetida: Traditional uses and pharmacological activity', Pharmacogn Rev 6:2, 2012:141-146.

65 SSI6, Male IDP and Returnee, Nangarhar Province, May 25, 2022.

66 FGD3, Male Community Members, Herat Province, May 26, 2022.

*“Flour and rice became very expensive due to the absence of farming. We had no income; therefore, I had to sell items from our home to save [our] children from starvation. Some shopkeepers used to lend food in return for considerable interest at the payback time. For example, if a sack of flour was 1,000 AFN, then he would charge 2,000 AFN from us.<sup>67</sup> We could repay our debts slowly from the income from grazing the cows.”<sup>68</sup>*

Others also took jobs outside of the agricultural sector, due to the volatile nature of employment, often outside of their community, to provide for themselves and their households. Those who were unable to plant other crops as a failsafe were engaged in circular, seasonal migration from rural to urban areas in order to supplement their income in years where yields were low, or crops failed. This largely was used by lower-income farmers, as richer people were able to afford to plant multiple kinds of crops:

*“Whenever farming wouldn’t suffice, I would come to the city [for] daily work. I [used to] earn 4,000-5,000 AFN<sup>69</sup> and returned to the community with cooking oil and flour for my household...However, the same wasn’t true for the wealthier people. It wouldn’t matter much to them if it rains, or not. If one of their crops didn’t yield enough harvests, then they could switch to another crop. There are many expenses attached to diversions from one crop to another.”<sup>70</sup>*

Interviewees mentioned **maladaptive strategies** developed in response to climate change conditions in their communities. This included:

- Using contaminated water due to limited options or shortages – resulting in destroyed crops and water-related diseases due to drinking unsafe water.
- Cutting down forests for their resources was also used to generate income. However, this often had negative consequences for communities later on, as many people interviewed – especially in Herat province – spoke of stronger winds due to the loss of trees. This has produced a negative feedback loop, under which drought conditions make

growing trees difficult, contributing to higher levels of wind, which cause damage to the remaining trees in the community. Under the former government, the department for agriculture planted trees within the community to prevent winds – however, the majority of the trees did not survive the drought.<sup>71</sup>

- People also used pesticides and medicine to combat animal and plant diseases – however, this was not possible for those in drought-impacted areas, as these solutions are highly reliant on water.

**Community-based and locally led solutions were hampered by poverty:** those with economic capabilities could dig wells, purchase fertilizers, use generators for irrigation and switch crops. While some households were able to spray their harvests and provide medicine to livestock to boost production, and other communities were making water reservoirs for rainwater to reserve water for irrigation, none of the communities surveyed were able to build flood defences due to a lack of resources.

## Gender and intersectionality as relevant prisms

Although climate change creates vulnerabilities for all civilians, women, children, and groups often face specific vulnerabilities in their communities. The prevailing literature demonstrates that slow-onset disasters impacting agricultural livelihoods often force people to engage in seasonal or temporary economic migration, followed by permanent migration if conditions do not improve. Unprepared displacement to urban centres, typically leads to long-term negative impacts on the lives of IDPs, especially women.

Research conducted by Samuel Hall for the IOM and UNEP in Somalia found that IDP women displaced due to climate shocks were more vulnerable, with higher rates of unemployment, and greater likelihood of living in makeshift shelters.<sup>72</sup> Multiple interviewees stated that **gender was often the most common signifier of vulnerability within the Afghan community generally.**<sup>73</sup>

67 1,000 AFN is \$11.13 USD; 2,000 AFN is \$22.25 USD.

68 SSI13, Female IDP, Herat Province, 28 May 2022.

69 4,000–5,000 AFN is approximately \$44.50–\$55.63 USD.

70 SSI6, Male IDP and Returnee, Nangarhar Province, 25 May, 2022.

71 FGD3, Male Community Members, Herat Province, 26 May, 2022.

72 Samuel Hall, IOM, & UNEP, ‘Identifying Climate Adaptation Solutions to Displacement in Somalia’, 2021

73 KI2, 25 February, 2022.

Generally, displacement affects Afghan women differently than men, as social norms often dictate that male education and livelihoods are prioritised, especially within households who cannot afford to educate all their children. Within the majority of displacement-affected communities visited for this study, the majority of women (up to 90%) were uneducated and unemployed. Those women that were employed had previously carried out tasks such as sewing and tailoring, however, women's participation in economic life has become increasingly difficult since August 2021 following the restrictions imposed on women by the DfA.<sup>74</sup>

**Climate change acts as a threat multiplier for Afghan women's vulnerabilities.** Typically, in Afghanistan, men are responsible for field agriculture, and women are in charge of small dairy animals or poultry, as these tasks do not require them to leave their homes or property. Whenever there are droughts, small livestock are often sold or eaten first, once people are no longer able to afford sufficient water and food supplies to raise them, thereby affecting women agricultural workers first.<sup>75</sup>

Additionally, when communities are impacted by water shortages, women and children – who are commonly responsible for fetching water – face increased risk, as they often have to travel longer distances to find it. One male IDP interviewed in Herat province, who had been displaced from Badghis province due to drought, said that women in his household worked out of the home, cleaning seeds and nuts, and doing hand-beaded work. With this work, they brought in between 50–100 AFN (\$0.56–\$1.12) per day, which was enough to purchase flour and survive.<sup>76</sup>

**With households struggling to support themselves, the possibility of forced marriage (of young girls to more wealthy men) increased, to alleviate financial strain:** one key informant spoke of farmers in northern provinces being forced to sell their daughters for marriage. This was used as a last resort, to ensure that the rest of the household could survive, given the lost income and food supply.<sup>77</sup> Additionally, many participants reported that **domestic violence increased because of the loss of livelihoods and destruction of property as**

**a result of climate events:** one IDP interviewee in Kabul province spoke of her husband's increasing violence, which began to appear after drought and flooding in their community of origin forced them to sell assets and take out loans to survive. Her husband became increasingly stressed due to his inability to provide for his household, which manifested in increased domestic violence toward his wife and children. This was reported by several women interviewed for this study in all three provinces:

*"We used to manage animals, such as sheep and chickens in Parwan province. Drought and flood-related economic challenges forced us to sell them...we reduced our daily expenses, my children's nutrition was impacted, we became indebted to others, and the male members of our household became unemployed. This caused men to become more violent in the house. [When] my husband feels like he can't cover the basic expenses and he borrows money from other people, he might strike his head against the wall at times. He might break objects in the house or beat younger people present around him. This has also impacted my mental health."<sup>78</sup>*

Women interviewed for this study also spoke about the **secondary impacts of climate change on children.** Decreased nutrition, child labour, and reduced levels of education were the most prevalent effects mentioned. In areas dependent on agriculture for livelihoods, when crops fail and yields are reduced because of drought, flooding, or other climate issues, children's ability to access education is often negatively affected, as a household's reduced income means that they are no longer able to afford school fees, and the child must work. For example, one interviewee spoke of their twelve-year-old daughter collecting trash and producing embroidery to earn 150–200 AFN (approximately \$1.67–\$2.23) per day.<sup>79</sup>

In cases where natural disasters have destroyed infrastructure in the community such as roads, children are unable to physically access education. When the routes do reopen, many of these children do not return to school immediately or ever – as they become discouraged and no longer wish to continue their studies, or

74 SSI2, Community Leader, Kabul Province, May 15 2022.

75 KII3, 1 March, 2022.

76 SSI15, Male IDP, Herat Province, 26 May 2022.

77 KII3, 1 March, 2022.

78 SSI3, Female IDP and Returnee, Kabul Province, 12 May 2022.

79 SSI13, Female IDP, Herat Province, 28 May 2022.

they delay their education for the start of the next school year.<sup>80</sup>

## Developing responses in a context of precariousness and societal atomization

As highlighted above, analysing the links between climate change and displacement in Afghanistan is challenging, largely due to the scarcity of data and a lack of capacity to collect and measure these links. The lack of data impacts how to target and tailor responses for people who have migrated or been displaced because of climate events, and climate change.

## Diminishing access to aid

IDPs who have been displaced since August 2021 mentioned struggling with accessing aid in their host communities. Although this was not linked explicitly to those displaced because of climate change, displacement from provinces impacted by drought and other natural disasters is likely to increase under the DfA. People's ability to adapt, prevent, and respond to climate change has been significantly curtailed, due to weak and unclear governance and institutions under the DfA; rising unemployment and poverty due to the financial and economic crisis; and rising humanitarian needs across the country. IDPs interviewed stated that although they had moved locations as a response to drought conditions or flooding in their home provinces, their lives had not improved, as they often struggled to find decent and consistent work and often competed with other community members – both IDPs and hosts – for limited resources and available assistance. In many cases, due to shortages, aid was restricted to members of the host community:

*“It has been five months since I have [been] living here. People have been provided with assistance cards –[they] show those cards and receive assistance. I also asked them to provide me with such cards as well because I am also a migrant, but they told me this is not for you, because this is only for hosts. My life has [gotten worse] since I have moved here because there is no work, no food and no assistance here.”<sup>81</sup>*

80 FGD4, Female Community Members, Nangarhar Province, May 17 2022.

81 SSI15, Male IDP, Herat Province, 26 May 2022.

82 SSI9, Community Leader, Herat Province, 24 May 2022.

83 SSI12, Male IDP, Nangarhar Province, 18 May 2022.

84 Former NGO Deputy Country Representative in Afghanistan, June 2022.

Overall, aid has decreased under the DfA, with only the most vulnerable provided support. This is largely linked to the decline in foreign assistance and reduced presence of humanitarian organisations. Interviewees in Herat province spoke about the unequal and inconsistent amount of assistance they had received under the DfA. Reportedly, neighbouring communities had received higher than average aid packages. However, the interviewees stated that the same organisation only distributed aid once in 2022, and only brought aid packages for 30 out of the 100 households in the community, despite all residents of the community being IDPs.<sup>82</sup> Another interviewee in Nangarhar province stated that only 20 out of 200 households were given aid.<sup>83</sup> Beyond the subjective nature of these individual opinions, the feeling – real or exaggerated – of misunderstanding and favouritism is shared.

Additionally, some interviewees stated that although aid packages increased within their communities during periods of drought or after natural disasters, their perception was that they were distributed to those who were related to community elders or DfA members, with others receiving the bare minimum. Again, while this view is anecdotal and subjective, it is nevertheless corroborated by the assessments conducted by the research team in Afghanistan since August 2021. The situation of generalized humanitarian crisis as well as the difficulty for aid agencies to find an interlocutor within the new government (nationally or locally) has made assistance more complex in terms of targeting, vulnerability criteria and access:

*“We are in a situation where security is certainly better, which everyone repeats over and over again in the newspapers, but we forget that the generalized humanitarian crisis and the lack of means make targeting impossible. The needs are everywhere. Our vulnerability criteria were questionable before, ethically and practically; they have become indefensible because they are open to nepotism and favouritism within the communities. And we can't control anything. Nothing.”<sup>84</sup>*

Since August 2021, assistance and relief packages (be they NFIs, hygiene kits, dignity kits, shelter kits, as well as more traditional food items) tend to be given pri-

marily by the WFP – not the authorities.<sup>85</sup> Interviewees in all three provinces generally agreed that assistance in response to drought, flood, or other climate-related incidents was non-existent in their communities since August 2021:

*“I don’t know [why] this year there is no assistance. This year, there [was severe] drought and we could not get enough from the wheat crops...no one has assisted us in this regard. How can we avoid the loss of the crops? Except WFP’s assistance, we did not witness any other sort of [aid].”<sup>86</sup>*

## Education and training

One key informant interviewed emphasised the lack of awareness and training at the individual and community level regarding prevention, mitigation, and adaptive measures in response to climate change as one of the key challenges to be addressed at present. Under the previous government, there was a practice of sending experts to the field to support farmers to develop and implement adaptive strategies in regions impacted by drought, flooding, and other climate-related events. However, any previous interventions developed at the community or household level have been severely impacted and diminished due to a lack of financial capacity, and reduced support from the DfA, international organisations, and NGOs.

Although people have developed response mechanisms to climate events within their communities, the majority of those highlighted by interviewees were predominantly survival methods, few of which were environmentally friendly measures:

*“[We] did not provide them with the proper education to address climate change and its impacts. Now, they are on their own. They will do anything to survive. [...] [T]here are other natural resources like forests, fisheries [that are being exploited unsustainably]. [T]he way they are catching fish in the river is absolutely wrong. [T]hey are dropping bombs in the river to catch fish.”<sup>87</sup>*

Many of these strategies (such as cutting down trees, and digging new and deeper wells) ultimately caused more harm in the long term and created additional challenges that people had to address, often when they were more vulnerable economically. **Many respondents**

**began construction of new or deeper water wells to cope with climate shocks.** However, unregulated and non-standard wells are not sustainable and can cause further depletions of already limited groundwater levels.

Interviewees stated that levels of awareness about climate change and adaptive mechanisms were limited, due to lack of education and capacity building, as well as lack of financial means to fully implement techniques, even when community members were aware of them. Certain areas of the country experience greater vulnerability to climate shocks, due to a combination of geographic location, climate change, and lack of adequate irrigation systems, which leads to drastic disparity in water distribution between provinces and districts. Once farmers are impacted by climate change, they often fall into a vicious cycle of expenses to better adapt to the changing climate within their community. Increased negative climatic events, such as flooding, or drought, decrease the capacity of people to cope and adapt as they lack the chance to fully recover from climate shocks: they lack the financial means to afford preventative and adaptive measures that would assuage the effects of climate change in the long-term, increasing future vulnerabilities.

Additionally, climate change events often reach farther than environmental problems, as they deeply affect the social fabric. Physical, financial, social, education and health of residents are deeply affected by the changing climate. The negative effects of climate change often span multiple seasons and impact not just landowners, but those dependent on the land, including workers and household members. For example, drought that occurs in summer will prevent people from making necessary preparations for winter. Climate change events can also be more drastic and sudden – floods destroy lives, land, and homes quickly and often without much warning. After floods, people are often unable to use previously fertile arable land and are forced to migrate elsewhere.

85 SSI13, Female IDP, Herat Province, 28 May 2022; SSI11, Male Returnee, Nangarhar Province, 17 May 2022.

86 SSI11, Male Returnee, Nangarhar Province, 17 May 2022.

87 FGD6, Male community members, Herat Province, 17 May 2022.

## COPING MECHANISMS

### Positive mechanisms

**Improved irrigation systems** have been successful in helping communities to adapt to climate change and require further support and scaling up.

**Establishment of greenhouses** have generated profit in the long run, given the ability to grow a greater variety of crops over a longer period of time.

**The use of drought resistant seeds by farmers**, with one interviewee making it clear that the distribution of these seeds was essential to farmers affected by climate change.

**Repurposing failed wheat crops as fodder for livestock** to ensure that the crops can be used in some capacity.

Increasing understanding through training and capacity building on climate change and management of resources. The UNDP funded a Climate Change Adaptive Project (CCAP) in Afghanistan (2014-2019), which was implemented by the Ministry of Agriculture, Irrigation, and Livestock (MAIL). Government officials were trained on climate trends and adaptive measures, and climate scenarios were mapped for Afghanistan. At the household level, over 1000 people were trained on resilient livelihood techniques, such as greenhouse cultivation.

### Negative mechanisms

**Selling or slaughtering livestock due to poor harvest and necessity to sustain livelihoods**, which reduces food security and leads to the loss of potential income derived from livestock from the sale of milk, yogurt, meat, and skin. Selling livestock also has resulted in the loss of capacity to use dung as fertilizer, which weakens the capacity to mitigate climate issues, creating a vicious cycle of reduced productivity, harvest, and income.

**Selling land to local factories**, whose business practices have the potential to alter land in ways that negatively impact the climate and crops of the neighbouring community.

**Using contaminated water; when local rivers dried up in greater Kabul province**, the authorities directed contaminated water from Kabul city, the airport, and the industrial park to the river. Exposure to contaminated water resulted in destroyed crops and health conditions.

Dehsabz district, Khoja Chasht village, tomato crops. (Credit: Samuel Hall 2022).





# III. EFFECTS OF CLIMATE CHANGE ON (RE)INTEGRATION

## SUSTAINABLE REINTEGRATION

This section outlines the impacts of climate change on sustainable reintegration in Afghanistan, focusing on:

- i) how IDPs and returnees feel about the prospects of (re)integrating within their communities of origin;
- ii) potential support for areas impacted by climate change; and
- iii) challenges to (re)integration.

### Prepared for return? How IDPs and returnees feel about (re)integration

Generally, IDPs and returnees interviewed for this research study did not feel positively about returning to their communities of origin. Natural resource shortages (such as water and land for agriculture and housing) and food insecurity are widespread across Afghanistan, with many agrarian communities requiring external assistance for the survival of their households and their crops. There is a need for stronger management of the agricultural sector and natural resources – otherwise, levels of food insecurity and poverty will continue to increase, especially in rural farming communities.<sup>88</sup> However, at the time of writing, this assistance is not being provided at a strategic or institutional level, which has made return impossible for the IDPs and returnees interviewed for this report.

When asked about their intentions to migrate again, many interviewees mentioned the possibility of secondary migration soon, given the lack of basic services and employment in their host communities. Several interviewees mentioned the climate and limited natural resources of their host communities as a barrier to remaining long-term. Improved access to shelter, education, health clinics, and employment were the most common reasons IDPs would consider remaining in their current host communities. Many IDPs stated that they did not wish to migrate again, but often had no choice, if their basic needs were not met.<sup>89</sup> One IDP interviewed in Herat suggested that if organisations were

to provide IDPs originating from areas impacted by climate change and/or natural disasters with shelter in the location of arrival, this would help reduce their vulnerability, as well as the chances of secondary displacement to another province.<sup>90</sup> One female IDP interviewed in Herat province highlighted the deteriorating quality of services throughout Afghanistan under the DfA, including the closure of schools, declining quality of healthcare and medicine, and the rising price of food and basic goods since August 2021.

Returnees interviewed for this study had not received targeted assistance, other than general assistance for the entire community delivered by aid agencies. For them to consider staying within their communities of return, there was a need for further support for livelihoods, construction of dams and retaining walls, infrastructure (roads and bridges), and improved basic services (schools, health centres). Returnees stated that if these improvements were not made, they would be forced to migrate again.<sup>91</sup>

### The potential of support for (re)integration in climate-impacted areas

The general lack of assistance in climate-impacted areas since August 2021 was highlighted by nearly all interviewees. Overall, the construction of infrastructure that would prevent or mitigate the effects of droughts and flooding was the most recommended support for climate-impacted areas. Many interviewees also highlighted the importance of providing seeds and training

88 SSI8, Community Leader, Herat Province, 26 May 2022.

89 SSI10, Female IDP, Herat Province, 25 May 2022.

90 SSI9, Community Leader, Herat Province, 24 May 2022.

91 SSI11, Male Returnee, Nangarhar Province, May 2022.

to farmers in these areas, to ensure that crops planted did not exacerbate drought conditions or lead to further environmental damage.

IDPs from drought-impacted areas emphasised the need for the construction of dams and pools alongside supplying drought-resistant seeds to farmers. Augmented seeds allow for better and more abundant harvests, thus allowing farmers to progressively be more financially secure, and increase their future adaptation capacities. They also suggested that farmers should be helped to grow crops that best match the resources available and the prevailing climate within their district, to ensure that the crops planted thrive, and do not cause further environmental damage to the community:

*“If the organisations assist us in the construction of shelters, then we wouldn’t leave the community. It is mainly because we don’t have any employment, house, [arable] land, livestock, or other assets in our original community. We lost [the] very little [of] our possessions due to drought in the previous years.”<sup>92</sup>*

Community leaders interviewed in Herat province underlined the need for planting trees and constructing standardised walls to control strong winds. Lastly, some interviewees spoke about labour shortages in their

community – namely in the agricultural sector – as the majority had migrated to other provinces or neighbouring countries such as Iran.<sup>93</sup> However, the lack of data on climate-affected migrants makes developing targeted reintegration responses for this category of IDPs and returnees challenging, especially as the majority of migrants, particularly those who migrate outside of Afghanistan, will not give climate change as their reason for displacement.

Many IDPs interviewed for this study refused to return to their communities of origin because of the lack of employment opportunities or availability of livestock through which to earn money. If conditions in areas of origin do not improve, as seen in areas of Afghanistan that have experienced drought over multiple years, people are unlikely to return. Since August 2021, people’s ability to implement adaptive strategies to mitigate the impacts of climate change events has reduced considerably, due to the prevailing economic and humanitarian conditions. Furthermore, most people interviewed who had been displaced because of climate-related issues had sold their possessions – land, livestock, farming equipment – to fund their journeys or for temporary income. This made returning impossible, as there was nothing for them to return to. Finally, if available resources remain the same or continue to decrease in

This research shows a rapid decline in the ability of Afghans to prepare, prevent, mitigate, and adapt to climate shocks within their communities. The shocks and stressors are high frequency, multiple and layered.

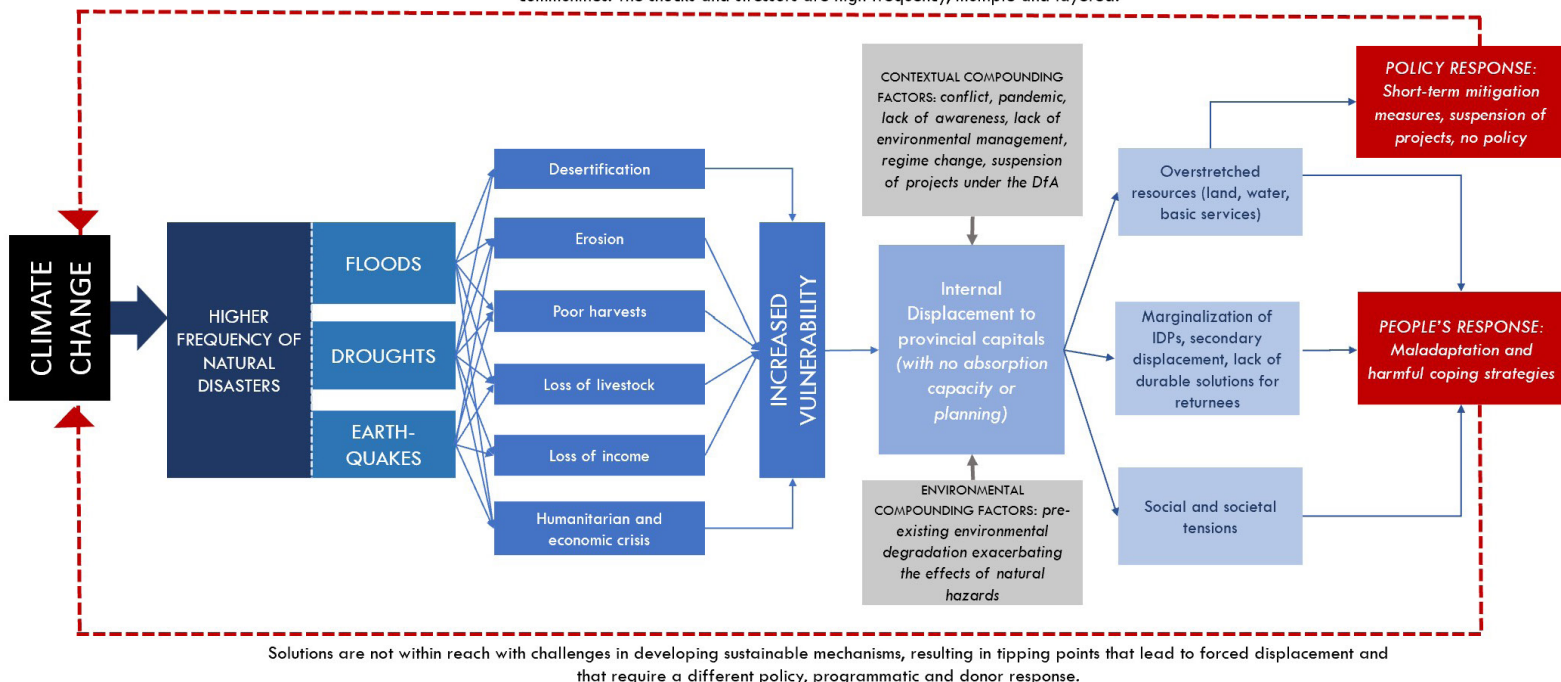


Figure 2. Climate change, vulnerabilities, and policy and community responses to climate migration

92 SSI9, Community Leader, Herat Province, 24 May 2022.

93 SSI8, Community Leader, Herat Province, 26 May 2022.

areas impacted by climate change, the likelihood of violence remains high for returnees, as conflicts over resources and assistance will grow in the absence of targeted solutions and adaptive strategies for droughts, floods, and natural disasters.<sup>94</sup>

Returnees interviewed in support of this study, who had initially fled due to conflict often returned home to destroyed or damaged homes. In areas impacted by severe droughts or prone to flooding and earthquakes, preventative measures or rebuilding irrigation systems were often impossible for them, given their cost and the prevailing economic and humanitarian conditions under the DfA. One household interviewed for this study was forced to return to their community of origin due to their deteriorating economic condition under the DfA. When they were no longer able to afford rent in their host community, they were forced to return to their community of origin.



Dehsabz District, Khoja Chasht village wheat crop (Credit: Samuel Hall 2022)

## NO DURABLE SOLUTIONS WITHOUT SUPPORT FOR CLIMATE-IMPACTED COMMUNITIES

Multiple climate factors have contributed to the displacement landscape in Afghanistan. As demonstrated by the findings outlined in this report, the prevailing humanitarian and economic context in Afghanistan since August 2021 has created the potential for future conflicts over limited resources to arise in areas most impacted by climate change and other environmental stressors.

**Support to the agricultural sectors will be crucial, if it is implemented holistically, and incorporates strong economic and social cohesion components.** Social cohesion has decreased significantly in Afghanistan since August 2021. Accessibility is paramount – women, persons with disabilities, and minority groups should be given special attention to ensure they can access any reintegration support provided.

**Durable solutions for those displaced due to climate events cannot be achieved in the short-term.** Reintegration success in communities impacted by years of drought, more frequent flooding, and labour shortages due to large-scale migration depends on implementing long-term solutions. This requires initiatives such as capacity building, training, and provision of crucial equipment to construct environmentally friendly infrastructure. Durable solutions programming related to climate change must be evidence-based and culturally sensitive to assure that the strategies respond to the needs of the communities they serve.

94 KII1, March 16, 2022.

# CONCLUSION

This research shows a rapid decline in the ability of Afghans to prepare, prevent, mitigate, and adapt to climate shocks within their communities. Both host communities and displaced populations have been impacted by the deterioration of the Afghan economy and corresponding humanitarian crisis, especially those areas experiencing multi-year droughts, or destruction of property due to flooding and other natural disasters. Although IDPs and cross-border returnees are particularly impacted by the current situation, the shared needs of the Afghan population regarding climate change present an opportunity to provide assistance to host and displaced communities alike. This would contribute to improved environmental management at the community level in a country where the lack of environmental protection and adaptive strategies, and the risk of overreliance on short-term assistance, has the potential to exacerbate instability, competition for resources, and displacement.

According to respondents, previously experienced environmental difficulties, such as drought and floods, have paled in comparison to the daily struggle for survival which they have faced since August 2021, under the current humanitarian and economic crisis, and in the absence of environmental management and support from the DfA. Men are no longer able to fulfil their socially constructed role as providers for their households in agrarian communities, which has led to increased stress for themselves and their households. Households have turned to negative coping mechanisms to survive, such as child labour, and forced marriage. In the absence of effective community-based mitigation and response measures, and targeted aid and assistance from the DfA and humanitarian organisations, the situation is unlikely to improve.

In a context where climate change and environmental protection are not prioritized and often poorly understood at the grassroots level, strategies developed in response to the poverty conditions experienced by many Afghans, especially those dependent on agriculture, do not result in long-term solutions. Targeted support via training on sustainable agriculture and environmental practices is scarce and other well-known mitigation strategies are rendered inaccessible due to prohibitive costs or lack of (or loss of) knowledge. **As environmental conditions worsen and society becomes increasingly fractured due to concerns over dwindling resources, (re)integration will become increasingly difficult to achieve in Afghanistan.**



Dehsabz district, Khoja Chasht village, tomato crops (Credit: Samuel Hall 2022)

## RECOMMENDATIONS

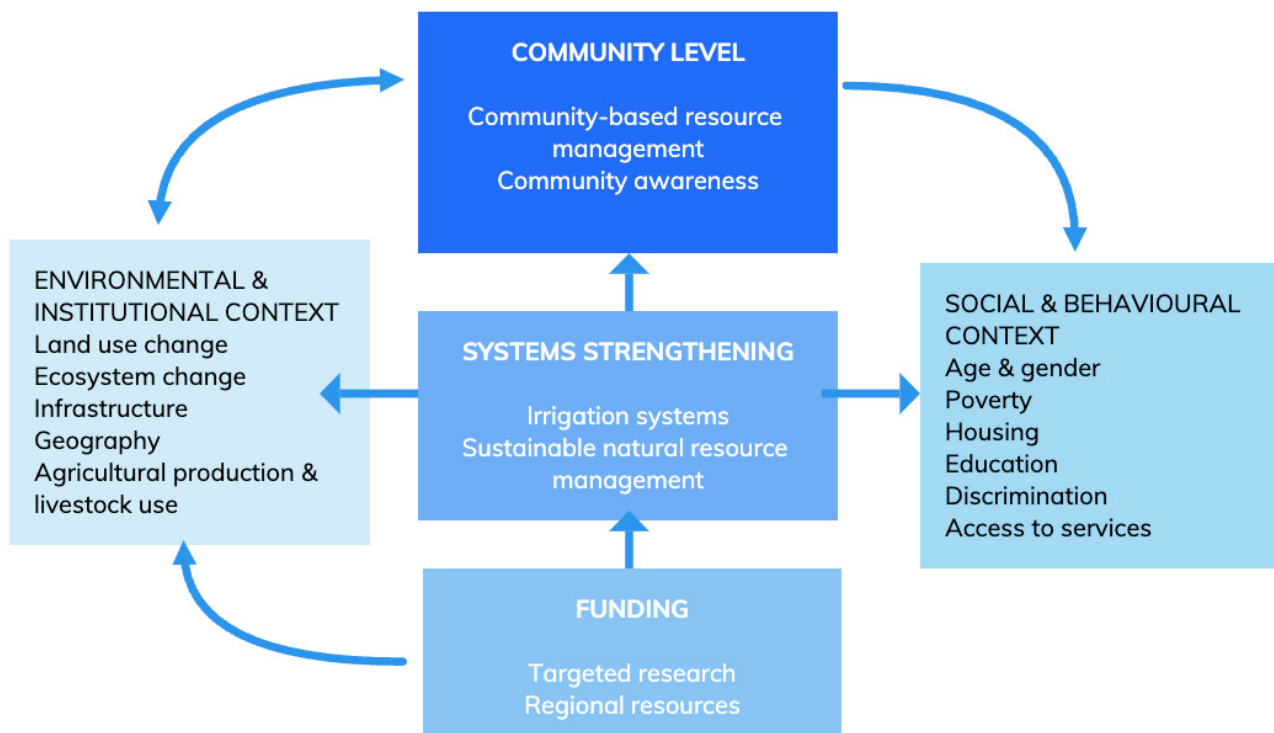


Figure 3. Recommendations for durable solutions to mitigate the impact of climate change on displaced communities

Afghans are in dire need of support; however climate conditions and lack of cohesive and managed responses have exacerbated the current humanitarian crisis: the authors of this study consider that the challenge between climate change and forced displacement, in the Afghan context, is to be able to give back to communities and households a form of agency, a capacity to choose and determine their future. This implies both identifying virtuous and localized adaptation strategies to climate change and reviving the fragile and fragmented social fabric. Such an approach requires sustainable steps toward capacity building, poverty alleviation, as well as social cohesion initiatives. They are detailed below:

1. **Strengthen sustainable, community-based resource management.** Resource management must go together with improved mechanisms for community-based dispute resolution. There is increased potential for the weakening of social bonds and a significant increase in intra- and inter-community conflicts, due to the scarcity of resources, which weakens the societal fabric overall. The development of a logic of the commons at the local level is the sole viable solution in the short and long term: in the short term, to avoid tensions and because the government is not able to manage resources technically and equitably, and to avoid the depletion and pollution of natural resources in the long term.

In this context, conflict-sensitive programming involving all elements of the community in the discussion, decision-making process and implementation – without any exception of gender, ethnicity, or community belonging – is a possible way of prevention. In the longer term, a polycentric governance model,<sup>95</sup> would allow for balanced and sustainable communal resource management.

<sup>95</sup> Ostrom E., 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems', *The American Economic Review*, 100:3, 2010 pp. 641–672. The term 'polycentric governance' connotes a complex form of governance with multiple centers of decision making, each of which operates with some degree of autonomy. Given the de facto atomization of Afghan society, this could preserve and strengthen the social fabric while promoting better management of common pool resources (soil, pasture, water, wood, etc.). Multiple anthropological studies in the Afghan context actually describe similar approaches in the Hazarajat, in Badakhshan or in Southern areas.

2. **Develop community campaigns to bolster preparedness and response capacities at the grassroots level.** Lack of awareness about climate change, including community-based preventive and adaptive strategies within the agricultural sector, represents a significant problem for hardest hit provinces and districts.

- Local-level community campaigns are required to dismantle misconceptions and enhance communities' capacities to effectively prepare for and respond to droughts, floods, and extreme temperatures.
- Community and religious leaders should be consulted as part of this process and encouraged to participate.
- Messaging should be adapted to be culturally and politically sensitive, for example, framing environmentally friendly agricultural practices as an issue of community sustainability in the long-term.
- These campaigns should be used to ask vulnerable communities what kinds of adaptation measures they would take.

3. **Identify and train community members and stakeholders to address local (root) causes of natural disasters.** Capacity enhancement will require training on potential adaptation actions, building knowledge at the grassroots level to empower communities to develop new skills and strategies to prevent, adapt, and mitigate the most severe impacts of climate change.

- Options that could be further explored include sustainable forestry; crop rotation to optimize soil nutrients; improved upstream watershed management to reduce flash floods; water-efficient technologies such as drip and sprinkle irrigation that can be locally procured, operated and maintained; and nature-based solutions for environmental disaster risk reduction.

4. **Invest further in the traditional Karez well system (and other cost-effective modern irrigation systems).** The development of irrigation systems using traditional Afghan systems can help drought-affected communities by providing them with low-cost water-saving technologies to mitigate the impact of drought and avoid progressive (and often irreversible) soil depletion and complete destruction. In Afghanistan, Karez wells are traditional water systems that draw groundwater via a horizontal tunnel, where vertical wells are placed every 5-6 meters. When not properly maintained, they are highly vulnerable to earthquakes and floods – and of the 6,000+ canals in Afghanistan, only 10% remain operational, as many have dried up due to droughts, tunnel closures, mudslides, and/or lack of monitoring.<sup>96</sup> Historically, management of these systems has been informal in nature – and public participation in their cleaning and maintenance is often based on the distribution of water use, which has led to conflicts in the past. Additionally, other cost effective modern irrigation technologies could be supported, such as drip sprinkler water systems or water surface technologies. However, this will require financial support within communities - as many farmers interviewed were aware of these conservation technologies but lacked the money in order to implement them, especially under the DfA as many projects have been halted.

- Pilot projects, in order to gain community buy-in and government approval at local levels, would create an opportunity to gain knowledge and skills of effective water management.
- Further investment should be made in the future to restore these wells and have them effectively managed by local stakeholders.

5. **Increase capacity building and training of government officials on sustainable natural resource management.** Under the former Afghan government, capacity building was carried out with government officials on sustainable forest management, climate change trends, and adaptation measures. There is a need to ensure that the DfA receive this training, to facilitate responsibility within the government and ensure that previous gains made can be built upon. One key informant emphasized the urgency that these efforts begin as soon as possible, to negate

96 Mayar M.A. 'Global warming and Afghanistan: Drought, hunger, and thirst expected to worsen', Afghanistan Analysts Network, 6 November 2022.

the risk that the government will focus solely on project implementation with UN agencies or other implementing partners – rather than building this knowledge within government ministries and the broader population.

6. **Adopt a localised and pragmatic approach to (re)integration support in Afghanistan to incorporate climate change within reintegration programming.** Climate and environmental factors should provide the flexible and adjustable analytical and implementation framework.

- Additional components should focus on learning and implementing adaptive strategies to planting crops, irrigation, and forestry management.
- The approach should promote social cohesion to jointly manage shared resources, such as water, via the development of conflict resolution mechanisms.

7. **Carry out community consultations to determine the best means of delivering support** that would help people adapt to changing climate conditions in their communities.

- **Women particularly should be consulted** – particularly regarding the particular vulnerabilities they face.
- Consultations should not only focus on the perspective of community representatives on what they need through external support, but also on what they have to offer in terms of internal, community-wide capacities, capabilities and resources.
- As part of the consultation process, it should be established whether there is the will and intent within the community to push through a mitigation-focused, resolatory strategy.

8. **Raise awareness in the donor community concerning the need for long-term commitment to community development and capacity building on climate change and key adaptation and mitigation strategies in Afghanistan.** As highlighted earlier in this report, Afghanistan is one of the most vulnerable countries to climate change, but is one of the lowest greenhouse gas emitting countries in the world. This commitment requires multi-year funding from donors which incorporates long-term, rather than short-term indicators for measuring progress.

- This step requires awareness raising and knowledge building at the local and national levels on the impacts of climate change, as well as the importance of developing adaptive measures.
- Capacity building for adaptation requires greater levels of observations, predictions, and projections of weather and climate events, including desertification, loss of biodiversity, and rising temperatures.

9. **Fund targeted research on the links between displacement and climate change in Afghanistan.** There is a need to build stronger evidence about the frequency of environmental displacement, as well as the capacities of households and provinces to develop appropriate responses to manage drought conditions, flooding, and other natural disasters, especially within the context of increased financial security and humanitarian concerns under the DfA. This should include research on how communities govern communal resources, including access to water and grazing lands.

10. **Address regional factors impacting the use of transboundary water resources and the construction of dams on rivers in Afghanistan.** Although Afghanistan and Iran entered into an agreement in 1973 – where the Afghan government agreed to release 850 million cubic meters of water from the Helmand river to Iran annually, years of conflict prevented ratification and therefore, implementation of this agreement. In January 2022, the opening of the Kamal Khan Dam on the Helmand River in Nimroz province created friction with Iran, as the water was only released on the Afghan side of the dam for irrigation of agricultural land. The dam – and use of transboundary water resources – remains a highly political issue between the two countries.

## REFERENCES

- ActionAid. ['Invisible Women: A Gender Analysis of Climate-Induced Migration in South Asia'](#), 2021.
- Adger, W.N., Huq S., Brown K., Conway D., and Mike Hulme, 'Adaptation to climate change in the developing world', *Progress in Development Studies* 3:3, 179-195, 2003.
- Afghanistan Resilience Consortium (ARC). ['Community-based Disaster Preparedness \(CBDP\) Toolkit'](#), 2017.
- Arvin J., ['How Inaction on Climate Change Can Worsen the Crisis in Afghanistan'](#), Vox, September 15, 2021.
- Azami, A., Sagin J., Sadat, S. H. et al., 'Sustainable Irrigation: Karez System in Afghanistan', *Central Asian Journal of Water Research*, 6:2, 1–18, 2020.
- The Central Asia-Caucasus Analyst. ['Afghanistan clashes with Iran over dam construction'](#), 2 May 2017.
- G7. ['A New Climate for Peace: Taking Action on Climate and Fragility Risks'](#), November 2020.
- Hansen M. C., Potapov P. V., Moore R., Hancher M., Turubanova S. A., Tyukavina, A., & Townshend, J. R. G., 'High-resolution global maps of 21st-century forest cover change', *Science*, 342:6160, 850-853, 2013.
- ICMPD, ActionAid, Tadbeer Consulting, CANSA. ['Climate Change Drives Migration in Conflict-ridden Afghanistan'](#), 2020.
- IOM (2011), ['Climate change, Environmental Degradation, and Migration'](#), 2011
- IFRC. ['What Is Vulnerability?'](#), 2020.
- The Independent, ['Taliban leader urges Afghans to plant trees 'for the worldly good''](#), February 2017.
- Iqbal, M.W., Donjatee S., Kwanyuen B., and Liu S-y., 'Farmers' Perceptions of and Adaptations to Drought in Herat Province, Afghanistan', *Journal of Mountain Science*, 15:8, 1741–56, 2018
- Kälin, W., 'Conceptualising Climate-Induced Displacement', in *Climate Change and Displacement: Multidisciplinary Perspectives*, ed. Jane McAdam, 1st ed. (London: Hart Publishing), 81–104, 2010.
- Macpherson G. 'Karez Systems of Southern Afghanistan', *Adaptation to Environmental Change. Quaternary International*. 279-298. 2012.
- Magnan A., 'Avoiding maladaptation to climate change: towards guiding principle', *S.A.P.I.E.N.S.*, [Online], 7.1, 2014.
- Mahendra P., and S. Bisht, 'Ferula asafoetida: Traditional uses and pharmacological activity', *Pharmacogn Rev* 6:12.: 141-146, 2012.
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3459456/>
- Mayar M.A. ['Global warming and Afghanistan: Drought, hunger, and thirst expected to worsen'](#), Afghanistan Analysts Network, 6 November 2022.
- Moser C., 'A Conceptual and Operational Framework for Pro-Poor Asset Adaptation to Urban Climate Change', in *Cities and Climate Change*, by Daniel Hoornweg et al. The World Bank, 225–53. 2011
- National Legislative Bodies, National Authorities, Afghanistan. ['Presidential Decree N. 104 on Land Distribution for Housing to Eligible Returnees and IDPs'](#), 6 December 2005. Available at: [accessed 23 March 2022]
- NPR, ['Afghanistan's forests a casualty of timber smuggling'](#), 2013.
- NPR, ['Changing Climate Parches Afghanistan, Exacerbating Poverty'](#), December 23, 2021.
- The New Humanitarian, ['Deforestation marches on'](#), 17 March 2009.
- Omerkhil N., et al., 'Climate Change Vulnerability and Adaptation Strategies for Smallholder Farmers in Yangi Qala District, Takhar, Afghanistan', *Ecological Indicators* 110, 2020, p. 105863.
- Ostrom E., 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems', *The American Economic Review*, 100:3, 2010, 641–672.
- Price R., 'Climate Change as a Driver of Conflict in Afghanistan and Other Fragile and Conflict Affected States', *Institute of Development Studies, UK Department for International Development*, 2019.
- Přívara A. and Přívarová M., 'Nexus between Climate Change, Displacement and Conflict: Afghanistan Case', *Sustainability* 11, no. 20. November 2019.
- Ramachandran S., ['Afghanistan-Iran Disquiet Over the Helmand River'](#), *The Diplomat*. 15 February 2022.
- Samuel Hall, IOM, & UNEP, 'Identifying Climate Adaptive Solutions to Displacement in Somalia', 2021.
- Sengupta S., ['A New Breed of Crisis: War and Warming Collide in Afghanistan'](#), *New York Times*. 1 September 2021.
- Sudhakar R. and Saranya K., 'Earth observation data for assessment of nationwide land cover and long-term deforestation in Afghanistan', *Global and Planetary Change*. 155:2, 2017
- UN Climate Change, ['What do adaptation to climate change and climate resilience mean?'](#), [undated]
- UNODC, ['Afghanistan Opium Survey 2020: Cultivation and Production – Executive Survey'](#), 2020.
- Vice, ['The Taliban want to go green'](#), April 2017
- World Food Programme (WFP), United Nations Environment Programme (UNEP), Afghanistan's National Environmental Protection Agency (NEPA). ['Climate Change in Afghanistan - What does it mean for rural livelihoods and food security?'](#) 2016.
- UK Government Office for Science, ['Migration and Global Environmental Change: Future Challenges and Opportunities'](#), London, 2011.



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