



Exploring the linkages between climate change and migration in the Silk Routes Countries

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About the Budapest Process: The Budapest Process is an interregional dialogue on migration with the aim to strengthen regional cooperation on migration and mobility. As part of its objectives, the Budapest Process is committed to promoting safe, orderly and regular migration along the migration routes with a specific focus on the Silk Routes Region, namely Afghanistan (until August 2021), Bangladesh, Iran, Iraq and Pakistan.

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1. Introduction

1.1 About the Budapest Process and ICMPD's Silk Routes Regional Office's work on climate-related migration

The Budapest Process is an intergovernmental dialogue in place since 1993 stretching from Europe to South Asia, gathering 50+ countries and selected international organisations. ICMPD hosts the Budapest Process Secretariat as part of the Silk Routes Regional Office. The Silk Routes Regional Office has been working on the issue of climate-related migration and has supported on-the-ground initiatives with the aim of understanding the growing importance of climate crises' impact on the economically, socially and ecologically vulnerable groups across the region.

This is most notably the case through the EU-funded project “Improving Migration Management in the Silk Routes Region” (2017-2022). One of the initiatives developed under this 12 M EUR regional project was called “**South Asia Migration and Climate (SAMAC) 2019-2021**”. SAMAC focused on the topic of climate change and migration in three countries: Afghanistan, Bangladesh and Pakistan.

The SAMAC project was implemented by ActionAid Bangladesh, Climate Action Network South Asia (CANSA), Tadbeer Consulting and Research Organization in Afghanistan and Sustainable Development Policy Institute (SDPI) in Pakistan. As its main outcome, SAMAC developed three national reports as well as a **regional roadmap for addressing climate-induced migration using a gender-sensitive approach**. This regional roadmap serves as a reference resource for continuing advocacy in the participating countries on the theme of developing gender-sensitive policies on climate change and its impact on population movements. **SAMAC contributed to and strengthened national and regional policies and institutions on climate-induced migration/displacement to better align them with international human rights principles**. The project strengthened the capacities of Civil Society Organisations (CSOs) and of their solidarity for a joint collective voice on issues of climate-induced migration.

In addition to the above work, the **Budapest Process dialogue identified climate change as one of the priority areas** for the dialogue and in this context decided to host an activity. A webinar on “Migration as a Response to Environmental Change: Examples from Afghanistan, Bangladesh and Pakistan” took place on 5th May 2021. In this webinar, the findings of the Silk Routes' Office work were shared, including the findings of the SAMAC project, its national reports and the regional roadmap. Furthermore, several aspects on climate-change related migration were discussed. The webinar presented the complex relationship between environmental change and migration, as well as global developments regarding a response to related challenges. Vulnerable groups such as women, children and those already displaced were discussed as they are particularly at risk. It was agreed that there is a need to have a strong policy framework at national and regional levels to provide support to the vulnerable communities likely to be affected by climate change through social protection measures. **Overall, the webinar helped understand the possible dimensions of environmentally induced**

migration within and from the Silk Routes Region as well as to analyse and elaborate possible interventions to address the issue in the future.

Building on the findings of the project SAMAC and the Budapest Process' activity held in May 2021, this briefing paper aims to present an analysis on the latest developments in the field of climate-change related migration and displacement in the Silk Routes Region, comprising Afghanistan, Bangladesh, India, Iran, Iraq and Pakistan. The paper intends to strengthen awareness and knowledge on the evolving vulnerabilities, and the potential policy solutions to address the challenges in the respective Silk Routes countries. The structure will follow a country by country analysis, concluding with key recommendations and areas of intervention for the region.

1.2 Conceptual overview

In the wake of devastating climate emergencies across the globe, and the slow-onset climate impacts affecting climate-sensitive livelihoods in many parts of the world, the debate on climate-related mobility has taken centre-stage in the recent years. **The general consensus confirms that there is a link between climate change impacts and the shifting patterns and trends of human mobility**, and the main pathways of impact are through worsening economic conditions and livelihoods.¹ However, the magnitude of the impact and the type of movements influenced by climate change warrant more nuance, making predictions on the scale of migration much more difficult.

Since pre-historic times, migration has been the most natural human response to changes in environmental conditions. However, as the **average global temperature continues to rise well over 1.1°C from the pre-industrial period**, its manifestations can be seen in the form of devastating impacts such as changes in ecosystem structures, rising sea level, erratic rainfall, rise in intensity and frequency of extreme weather events, including floods, droughts, and cyclones, etc.² These impacts alter human lives and livelihoods in different ways, influencing existing mobility and immobility patterns.

1 Intergovernmental Panel on Climate Change, 'Summary for Policymakers: Climate Change 2022: Impacts, Adaptation and Vulnerability' (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

2 *ibid.*

A note on terminology

It is important to differentiate between different types of human movements when discussing the phenomenon through the perspective of climate change. This paper uses the following terminologies:

1. **Human mobility** refers to all forms of human movements without distinction, and may include displacement, planned migration, or relocation. It includes reference to permanent, temporary, seasonal, cyclical migration, tourism etc.
2. **Displacement** refers to the involuntary movement of people, often triggered by and in reaction to extreme events such as disasters. It denotes to situations when people are forced or obliged to leave their homes because of risky circumstances. Displacement is most often domestic (within the borders of the country), or sometimes cross-border.
3. In this document, **climate-related migration** broadly refers to the voluntary and planned movement of people in response to slow-onset climate change impacts on lives and livelihoods. **Climate-related migration may be domestic (internal) or cross-border.**
4. **Relocation** is the planned concept of resettling people in a different location in response to an imminent climate-related threat.

In general, **sudden onset events, or extreme events such as floods, storms, glacial lake outbursts, wildfires etc., lead to displacement. Often times, displacement is of shorter distances, domestic, temporary, and also relatively easier to measure.** Of course, climate-related sudden onset events may also lead to protracted displacement when conditions for return are not feasible, which may complicate calculation. The Internal Displacement Monitoring Centre (IDMC) calculated that in 2021, about 23.7 million people across the globe were internally displaced due to disasters, of which 22.3 million were displaced due to weather-related disasters, including storms, floods, wildfires, droughts, landslides, extreme temperatures (figure 1 below presents the breakdown of estimated internal displacements by the disaster-type).³ The global estimates for 2022 are expected to be much higher considering the number of weather-related disasters witnessed globally, however they are not published at the time of developing this report.

On the other hand, **human mobility influenced by slow onset climate change impacts, such as changes in temperature and rainfall patterns over time, desertification, droughts etc., is more complicated to measure and predict.** Such slow onset climate impacts compound and exacerbate existing livelihood vulnerabilities, acting as “threat multipliers” rather than as the sole factor responsible for driving migration, making attribution not as straightforward.⁴ In addition, populations affected by the **slow onset impacts generally tend to approach migration as a planned approach to coping with the adverse effects of climate change, and thus such movements may be more permanent in nature.** The

³ Internal Displacement Monitoring Report, ‘Global Report on Internal Displacement 2022: Children and Youth in Internal Displacement’ (IDMC, 2022)

⁴ Maharjan, Amin et al., ‘Migration and Household Adaptation in Climate-Sensitive Hotspots in South Asia’, *Current Climate Change Reports* (6, pp. 1-16), (2020) <https://link.springer.com/article/10.1007/s40641-020-00153-z>

World Bank predicts that by 2050, between 44 million to 216 million people may migrate within their countries due to climate change, the former an ambitious estimate, while the latter a pessimistic estimate.⁵ Despite methodological disagreement on detection and attribution of migration due to climate change, there is a certain level of confidence that higher temperatures and associated changes in frequency and intensity of slow-onset events (such as drought and sea level rise) will increase the scale of migration in the future.⁶

This planned migration, in and of itself, does not necessarily reflect a failure to adapt to climate change. There is mounting evidence that in many parts of the world that **migration is often used as an adaptation strategy to climate impacts, and is a form of livelihood diversification.**⁷ This means that households increase the range of their source of income and livelihood to diversify their risks, including climate risks, through migration of one or more household members. Often times, it is the last resort for adapting to climate change.⁸ **Research suggests that migration as an adaptation strategy to climate change is largely domestic in nature, at least as a first step, i.e. individuals from a climate-sensitive rural area may migrate first to the nearest town or the bigger cities in the country before considering migrating abroad.**

However, even in cases of migration as a planned adaptation strategy, **outcomes of migration differ for different population groups.** For instance, while migration may be an effective adaptation strategy to climate risks, individuals may experience new and different vulnerabilities at the destination areas. Depending on the individual profile or circumstances, individuals may enter into poverty traps in the urban areas if they experience difficulty in finding work and live in precarious conditions.⁹

Between the concepts of climate-induced displacement, and climate-related migration as adaptation is the phenomenon of planned relocation or resettlement in response to a climate adversity. As reflected in the latest IPCC synthesis report, planned relocation cannot easily be termed as “adaptation” and may just be a response to the circumstances, not necessarily making the affected population more resilient to climate change impacts.¹⁰ Such responses are not very common as yet, but it is foreseen that the need for planned relocation may grow in the future.¹¹ So far, such cases are evident in coastal communities or small island states, vulnerable to sea level rising and soil erosion.

5 Clement, Viviane et al., ‘Groundswell Part 2: Acting on Internal Climate Migration.’ (World Bank, Washington, DC., 2021) <http://localhost:4000/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>

6 *ibid.*

7 Black, Richard et al., ‘Migration as Adaptation’, *Nature* (478, pp. 447-449), (2011) <https://www.nature.com/articles/478477a>


Qaisrani, Ayesha and Salik, Kashif, ‘The Road to Climate Resilience: Migration as an Adaptation Strategy’, *Pathways to Resilience in Semi-Arid Economies* (2018) <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/58563/IDL-58563.pdf>

8 Vinke, Keira et al., ‘Migration as Adaptation?’, *Migration Studies* (8:4, pp. 626-634), (2020)

9 Warner, Koko, et al., ‘Evidence from the Frontlines of Climate Change: Loss and Damage to Communities despite Coping and Adaptation,’ United Nations University Institute for Environment and Human Security (UNU-EHS): Bonn

10 IPCC, ‘AR6 Synthesis Report: Summary for Policymakers’, (2023). https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf

11 Intergovernmental Panel on Climate Change, ‘Summary for Policymakers: Climate Change 2022: Impacts, Adaptation and Vulnerability’ (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf



On the other hand, it should also be noted that while climate change may act as a driver of migration (whether forced or voluntary), it may also create conditions of involuntary immobility. Migration is an expensive process and requires resources, and not all population groups residing in risk-prone areas may have the necessary means to migrate, even if conditions of habitability deteriorate.¹² For policy discussions on climate change and migration, it is as important to discuss these **vulnerable groups who cannot manage to migrate and are ‘stuck’ in conditions of involuntary immobility**, as the population groups who are displaced, forced to migrate, or migrate as a planned adaptation approach.

For policy considerations, it is important to understand and plan ahead for the possible scenarios that climate change may create for migration patterns. While the majority of climate-related migration is domestic for now, **the relevance of the issue goes beyond the national territories of countries witnessing climate-related migration.** Among countries most at risk of severe climate change impacts, many are experiencing developmental deficits, conflict, and fragile political environments.¹³ Rural to urban migration, especially due to climate change, in such contexts often creates more competition for limited resources, further increasing vulnerabilities, and contributing to push factors responsible for migration across borders.

1.3 Climate change and migration in the Silk Routes Regions

While the impacts of climate change can be witnessed globally, some regions are at a higher risk of climate-related migration due to their specific geography, which influences their level of exposure to climate risks. **Particularly in the geographic region where the Silk Routes countries are located, i.e., South and West Asia, including Afghanistan, Bangladesh, India, Iran, Iraq and Pakistan, the impacts of climate change are becoming increasingly visible, and the region is considered one of the hardest hit in the world by climate change impacts.**¹⁴ Heatwaves, floods, cyclones, and droughts have become yearly phenomena in the region, in addition to the slow onset changes of rising average temperatures, sea level intrusion, soil aridity, desertification, and changing rainfall patterns.¹⁵ The IPCC report further highlights the delays and changing intensity of the monsoon rains in South Asia, droughts in West and South Asia, and glacier melting in the mountainous terrains of the Himalayas. In densely populated countries such as those in the Silk Routes Region, such calamities can prove to be catastrophic. **The combination of geography, climate, socioeconomic, and demographic factors, thus, make this region highly vulnerable.**

12 Vinke, Keira et al., ‘Migration as Adaptation?’, *Migration Studies* (8:4, pp. 626-634), (2020)

13 Clement, Viviane et al., ‘Groundswell Part 2: Acting on Internal Climate Migration.’ (World Bank, Washington, DC., 2021) <http://localhost:4000/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>

14 Wazir, Zoya, ‘Why South Asia Is Among the Hardest Hit Regions by Climate Change’, (USNews, 30th June, 2022) <https://www.usnews.com/news/best-countries/articles/2022-06-30/why-south-asia-is-so-vulnerable-to-climate-change-related-disasters>

15 Intergovernmental Panel on Climate Change, ‘Summary for Policymakers: Climate Change 2022: Impacts, Adaptation and Vulnerability’ (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

Table 1 Climate Risk Index Ranking

Country	Climate Risk Index Ranking 2019	Climate Risk Index Ranking (2000-2019)
Afghanistan	6 th	17 th
Bangladesh	13 th	7 th
India	7 th	20 th
Iran	18 th	97 th
Iraq	94 th	157 th
Pakistan	15 th	8 th

Source: Germanwatch¹⁶

Countries included in the Silk Routes Region already have strong migration patterns, including seasonal migration due to environmental factors.¹⁷ However, climate change is intensifying the factors that adversely affect livelihoods. **A significant proportion of population in South Asia, for instance, relies on agriculture as a source of income, and the sector also fulfils the food requirements of the respective countries.**¹⁸ Climate impacts such as increased temperatures, changing rainfall patterns, and rising soil aridity have altered agriculture productivity, while extreme events such as floods and drought often destroy standing crops, not only crippling the livelihoods of farmers, but also putting the whole country's food security at stake.

Table 2 Percentage of population employed in agriculture sector

Country	% of Population in the Agriculture Sector
Afghanistan	43%
Bangladesh	38%
India	43%
Iran	17%
Iraq	18%
Pakistan	37%


Source: World Development Indicators (2019)¹⁹

16 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

17 Menon, Nidhi and Bhatia, Pooja, 'Climate change, migration, and South Asia: A way forward', (Eco-Business, 2023) <https://www.eco-business.com/opinion/climate-change-migration-and-south-asia-a-way-forward/?sw-sig-nup=true>

18 *ibid.*

19 World Development Indicators, 'Employment in Agriculture (% of total Employment) ', (World Bank, 2019) <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS>



There is growing evidence that increased climate variability and **extreme weather events** are already driving displacement and the region is emerging as a global hotspot for disaster displacement.²⁰ Asia in general, and **South Asia in particular experiences the largest number of climate-related displacements in terms of absolute number of people.**²¹ Regional estimates on expected climate-related migration in South Asia range between 40.5 million²² to 62 million²³ by the year 2050. The past few years have been especially difficult for the Silk Routes Region. Bangladesh has witnessed multiple cyclones, wreaking havoc on human lives and livelihoods. In 2019, Cyclone Bulbul displaced about 2.1 million and in the summer of 2020, Cyclone Amphan internally displaced about 100,000 people in the country.²⁴ In June 2022, the floods in Pakistan killed more than 1700 people, displaced about 8 million people and caused financial damages to the tune of USD 30 Billion.²⁵ The same year, Afghanistan witnessed heavy rains and flash floods, killing more than 180 people, and displacing 8000 individuals.²⁶

Besides these extreme events, **slow onset changes in the climate** have been gradually eroding away livelihoods, pushing millions relying on climate-sensitive livelihoods further into vulnerability. In Pakistan's Sindh province, coastal communities who were displaced over the past decades from locations submerged by the sea, are still living on hazard-prone land where they are at significant risk of losing their livelihoods and being displaced again.

Moreover, there are also disproportionate effects of climate change and migration based on gender, which require special policy attention. Climate change impacts generally amplify pre-existing gender vulnerabilities of women due to cultural norms and the inequitable distribution of roles, resources, and power.²⁷ The Silk Routes countries have low rankings on global gender inequality index, already reflecting the discrimination experienced by women in different aspects of life.²⁸ Evidence suggests that women displaced due to disasters are more susceptible to gender-based violence, trafficking, and forced marriages.²⁹ Even as a planned approach to climate change, migration is often a male-

20 Sarkar, Soumya, 'Cyclone Amphan Puts Focus Back on Millions Displaced by Climate Disasters' (25th May, 2020). <https://www.preventionweb.net/news/cyclone-amphan-puts-focus-back-millions-displaced-climate-disasters>

21 Intergovernmental Panel on Climate Change, 'Summary for Policymakers: Climate Change 2022: Impacts, Adaptation and Vulnerability' (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

22 Clement, Viviane et al., 'Groundswell Part 2: Acting on Internal Climate Migration' (World Bank, Washington, DC., 2021) <http://localhost:4000/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>

23 Singh, Harjeet et al., 'Costs of Climate Inaction: Displacement and Distress Migration' (December, 2022) <https://actionaid.org/news/2020/climate-migration-south-asia-set-treble-2050-due-political-inaction-global-warming>

24 UN OCHA, 'Asia and the Pacific Weekly Regional Humanitarian Snapshot (19-25 May)' (2020) <https://reliefweb.int/report/india/asia-and-pacific-weekly-regional-humanitarian-snapshot-19-25-may-2020>

25 World Bank, 'Pakistan: Flood Damages and Economic Losses Over USD 30 billion and Reconstruction Needs Over USD 16 billion - New Assessment', (28th October, 2022). <https://www.worldbank.org/en/news/press-release/2022/10/28/pakistan-flood-damages-and-economic-losses-over-usd-30-billion-and-reconstruction-needs-over-usd-16-billion-new-assessme>

26 Hussain, Abid, 'Afghanistan reels from deadly flash floods and landslides', (Al Jazeera, 30th August, 2022) <https://www.aljazeera.com/news/2022/8/30/afghanistan-reeling-from-deadly-flash-floods-and-landslides>

27 Rao, Nitya et al., 'A qualitative comparative analysis of women's agency and adaptive capacity in climate change hotspots in Asia and Africa', *Nature* (9, pp. 964-971), (2019) <https://www.nature.com/articles/s41558-019-0638-y>

28 World Economic Forum, 'Global Gender Gap Report 2022', (Geneva, 2022) https://www3.weforum.org/docs/WEF_GGGR_2022.pdf

29 CARE, 'Evicted by Climate Change: Confronting the Gendered Impacts of Climate Induced Displacement', (The Hague: 2020) <https://careclimatechange.org/evicted-by-climate-change/>

dominated phenomenon in the Silk Routes countries. Often times men of the household migrate, putting additional responsibilities on women who stay behind. At the same time, some women may experience increased autonomy with the migration of certain male household members, and these women may play a more active role in decision-making.³⁰ Such nuances should be taken into account when devising gender-sensitive policy responses on migration and climate change.

The Silk Routes countries address migration and climate in varying degrees, with links between the two not always so well established. In countries such as Bangladesh and Afghanistan, climate-induced migration is addressed in terms of both awareness and policy discourse. Yet there remains room to translate the policies into action. For countries like Pakistan, several policies exist which are targeted towards the uplift of the poor as well as policies and plans on climate change and disaster risk reduction. However, efforts have to be made to draw a link between the three and highlight the issue of climate-related migration.

30 Rao, Nitya et al., 'A qualitative comparative analysis of women's agency and adaptive capacity in climate change hotspots in Asia and Africa', *Nature Climate Change* (9, pp. 964-971), (2019)
<https://www.nature.com/articles/s41558-019-0638-y>

2. Country Snapshots: Understanding the climate-migration nexus and policy responses in the Silk Routes Countries

This section presents snapshots of the interplay between climate and migration in selected Silk Routes countries and discusses the existing policy landscape. The following countries are discussed in this section: **Afghanistan, Bangladesh, India, Iran, Iraq, and Pakistan** which hold either participant or observer status in the Budapest Process dialogue. The objectives are to highlight the specific climate related vulnerabilities experienced in these countries for understanding expected influence on mobility patterns, and for assessing the policy landscape in this area. Diving into national specificities can allow for a more regional outlook and recommendations, taking into account similarities and complementarities in approaches from each country in how they tackle the challenges they face.

2.1 Afghanistan

Figure 1 Map of Afghanistan regions



Source: <https://www.un.org/geospatial/content/afghanistan>

Climate vulnerabilities and their interplay with migration patterns

Afghanistan is one of the lowest emitters of greenhouse gases, but among the most vulnerable countries in terms of experiencing the impacts of climate change.³¹ In 2019, it ranked at number 6 on the list of countries most affected by climate change, and averaged over 2000-2019 it was ranked at 17th on the Climate Risk Index.³² The country is highly prone to natural disasters, whose frequency and intensity are exacerbated by the effects of climate change. The country is most susceptible to droughts in certain regions and heavy rainfalls and ensuing flash floods and landslides in other regions.³³ Climate change projections for Afghanistan show a temperature increase of around 1.4°C until 2050 and stabilisation at the end of the century at around 2.6°C.³⁴ The rising temperature shift has intensified glacier and snow melt and led to an increase in the number of flash floods, glacial lake outburst floods and river flooding. In addition, **the impacts of climate change in Afghanistan will be witnessed in the form of warmer winter months, increased off-season precipitation, and decreased groundwater.**³⁵

Afghanistan witnesses compounding risks that act as drivers of migration and displacement. **With high rates of multidimensional poverty, high dependence on agriculture as means of livelihood, and chronic food insecurity, the country's susceptibility to climate risks is severe, and its capacity to adapt is limited.** Political instability, decades-long conflict and economic pressures have already pushed many Afghans from their homes, forcing them to migrate both internally and internationally. As of 2021, about 4.3 million Afghans are already internally displaced, pushed by a combination of conflict and disasters.³⁶

There is mounting evidence that **climate change, along with conflict, has increased internal displacement in Afghanistan**, along with changes in migration patterns.³⁷ The drought in 2018-19 affected more than two-thirds of the country's population, displacing over 260,000 people.³⁸ On average, 400,000 people are affected by recurrent natural disasters each year, with about half of Afghanistan's districts considered hazard-prone.³⁹ **It is anticipated that the number of people affected each year by floods could more than double by 2050 because of the combined effect of climate change and poor socio-economic growth.**⁴⁰ Such shifts in patterns increase the risk of

31 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

32 *ibid.*

33 Mayer, Assem Mhd, 'The Climate Change Crisis in Afghanistan: The Catastrophe Worsens – What Hope for Action?' (Afghanistan Analysts Network: 6th June, 2022). <https://www.afghanistan-analysts.org/en/reports/economy-development-environment/the-climate-change-crisis-in-afghanistan-the-catastrophe-worsens-what-hope-for-action/>

34 *ibid.*

35 SIPRI, 'Climate, Peace and Security Factsheet: Afghanistan', (2022).

https://www.sipri.org/sites/default/files/Fact%20Sheet%20Afghanistan_february2022_FINAL.pdf

36 IDMC, 'Country Profile: Afghanistan', (2021) <https://www.internal-displacement.org/countries/afghanistan>


37 SIPRI, 'Climate, Peace and Security Factsheet: Afghanistan', (2022).

https://www.sipri.org/sites/default/files/Fact%20Sheet%20Afghanistan_february2022_FINAL.pdf

38 UNOCHA, 'Humanitarian Needs Overview Afghanistan 2020', (Kabul, 2020) <https://www.unocha.org/afghanistan>

39 UNEP and UNOCHA, 'Environment and Humanitarian Action, Country Study Afghanistan', (Geneva, 2016) <https://www.unep.org/resources/report/afghanistan-country-study-environment-and-humanitarian-action>

40 World Bank, 'Afghanistan Disaster Risk Profile' (Washington D.C., 2017) <https://documents1.worldbank.org/curated/en/284301491559464423/pdf/114097-WP-P155025-PUBLIC-afghanistan-low.pdf>



further conflict based on resource scarcity and competition, pushing the country into a vicious cycle of poverty and deprivation.⁴¹ The latest estimates reveal that nearly 20 million Afghans are facing acute food insecurity as of March 2023, and on top of that, 28.3 million require multi-sectoral humanitarian assistance.⁴² Evidence from 2022 shows that even humanitarian outreach/distribution gets affected due to untimely rain and heavy snow in the country.⁴³

A report released by ActionAid and Climate Action Network South Asia with support from ICMPD 'Climate Change drives Migration in conflict-ridden Afghanistan' delves into detail on the complex situation faced by vulnerable communities in Afghanistan.⁴⁴ The study finds that **the phenomenon of climate-related migration is particularly prominent in rural Afghan communities that are experiencing declining agricultural productivity**, and destruction of agricultural and pastoral land due to recurring natural disasters. However, these factors alone do not cause migration. Rather a complex interplay of socioeconomic factors acts in unison to influence the decision to migrate. Moreover, findings of this report revealed that the overall context under which migration takes place matters in determining the outcome of migration. Participants of the research included those who migrated or were displaced internally. **In an overall vulnerable landscape, with prevailing conflict and limited access to improved services even after migrating, the outcome of migration was found to be negative.** Participants of the study shared that migration had not improved their wellbeing and access to livelihoods.

Policy response

The institutional setup in Afghanistan has direly suffered as a result of the change in power and the Taliban takeover of Kabul in 2021. While the newly established Afghan regime is attempting to maintain the institutional structures of the previous government, the lack of human and financial capital is severely impacting its capacity to implement existing plans and policies, let alone improving them. **Afghanistan did not have a formal delegation at the annual Conference of Parties in Paris (2021) and Marrakech (2022), and thus the country did not get a chance to present its case to garner international support in the area of climate change.**⁴⁵

In terms of a policy framework, Afghanistan has a number of relevant policy documents. The following table presents a brief overview of how climate change and migration are considered in the respective policy documents:

- 41 SIPRI, 'Climate, Peace and Security Factsheet: Afghanistan', (2022).
https://www.sipri.org/sites/default/files/Fact%20Sheet%20Afghanistan_february2022_FINAL.pdf
- 42 World Food Programme, 'WFP Afghanistan: Situation Report', (4th March, 2023)
<https://reliefweb.int/report/afghanistan/wfp-afghanistan-situation-report-04-march-2023>
- 43 UNOCHA, 'Humanitarian Needs Overview Afghanistan (3-9th January 2022)', (2022)
https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/afghanistan_humanitarian_weekly_9_january_2022.pdf
- 44 Spink, Pete, 'Climate Change Drives Migration in Conflict-Ridden Afghanistan', (Action Aid, 2020) https://actionaid.org/sites/default/files/publications/Climate%20change%20induced%20migration%20in%20Afghanistan%20Final_0.pdf
- 45 Hakimi, Hameed, and Brown, Oli, 'Climate Change Must Become Part of the Global Agenda on Afghanistan', (Chatham House, 16th March, 2022)
<https://www.chathamhouse.org/2022/03/climate-change-must-become-part-global-agenda-afghanistan>

Table 3 Policy framework in Afghanistan

Title	Consideration of climate-related migration and/or displacement
National Adaptation Programme of Action (NAPA) (2008)	Mentions migration resulting from insecurity, poverty, drought and desertification that has led to overexploitation of natural resources and disruption of local practices
National Disaster Management Plan (2010)	Focuses on disaster related displacement but not on long-term climate migration
Law on Disaster Response Management (2012)	Focuses on appointing the Afghanistan Natural Disaster Management Authority as the lead agency responsible for addressing the short-term, emergency needs of those affected and displaced by natural disasters.
National Policy on Internally Displaced Persons (2013)	Includes focus on IDPs displaced as a result of natural disasters.
National Disaster Management Strategy (2015)	Focuses on disaster displacement but not on long-term climate migration.
Policy Framework for Returnees and IDPs (PFRI) (2017)	There is no mention or consideration of people displaced by climate-induced natural disaster.
National Adaptation Plan (2019)	The plan acknowledges that climate change can exacerbate existing vulnerabilities and that migration can be a coping mechanism for communities facing climate-related impacts.
Comprehensive Migration Policy (CMP) (2019) – draft not adopted	Has a special section that focuses on climate-related migration.
Afghanistan National Peace and Development Framework II (ANPDF) (2021-2025)	Replaced the Afghanistan National Peace and Development Framework (ANPDF) (2017-2021). Acknowledges climate change as a serious and present threat, which aims to be addressed in a stronger way than before.

Source: Spink (2020).

As observed from Table 3, focus on climate as a driver of displacement and migration has varied in various policy documents. **A clear progression can be observed in the policy rhetoric from a narrow focus on displacement in earlier policies, towards a broader outlook on climate-related migration in the newer policy documents.** CMP and ANPDF-II adopt a relatively holistic approach towards the issue. **The CMP acknowledges that climate impacts are leading to higher levels of rural to urban migration** and specifies several policy responses to address climate change impacts, migration and displacement, including a more thorough assessment of climate-related migration and displacement in Afghanistan. The policy also commits to strengthening the capacities of relevant departments for environmentally sustainable migration governance.

While these policies acknowledge the increasing significance of the issue in the national context, implementation of the plans is hindered by restricted funds and limited international cooperation received by the current regime to undertake developmental planning. Afghanistan depends heavily on loans and foreign development assistance for implementation of its policies and plans, and climate impacts, including its effects on migration in the context of Afghanistan often get overshadowed by the focus on conflict and the current political situation since August 2021.

2.2 Bangladesh

Figure 2 Provincial map of Bangladesh



Source: <https://www.un.org/geospatial/content/bangladesh-0>

Climate vulnerabilities and their interplay with migration patterns

Bangladesh's population of 163 million people is one of the most vulnerable in the world to climate risks and natural hazards, and faces severe floods, cyclones, droughts, cyclones, heatwaves and storm surges on a regular basis.⁴⁶ According to Germanwatch's Global Climate Risk Index (CRI) averaging 2000-2019⁴⁷, **Bangladesh ranks seventh on the list of countries most vulnerable to climate devastation.** In 2019 alone, it was ranked 13th on the Climate Risk Index.⁴⁸

46 Intergovernmental Panel on Climate Change, 'Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change: Climate Change 2022', (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

47 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

48 *ibid.*

Bangladesh's unique topography make it highly sensitive to climate change. It is a sub-tropical, low-lying nation, with more than 130 rivers flowing through it, some which are prone to serious flooding. Erratic weather conditions, caused by climate change, are changing the patterns of monsoon rains, which usually run from June to October. Such changes are in turn affecting the course of rivers, leading to floods that engulf villages and infrastructure on their way.⁴⁹ The country is also subject to devastating cyclones, mostly through April-May and September-November. **UNDP has ranked Bangladesh first of all countries in the world in terms of vulnerability to tropical cyclones.** The country is hit by a severe cyclone on average every three years.⁵⁰ Internal Displacement Monitoring Centre (IDMC) reports that cyclones displace about 110,000 people every year in Bangladesh.⁵¹

Most recently, the summer floods of 2022 have devastated the country's north east districts. The International Federation of Red Cross (IFRC) reported that torrential rain and incessant downpours from upstream regions since mid-June 2022 caused the worst flooding in living memory in north-eastern districts of Bangladesh. An estimated 7.2 million people have been affected, with a further 3.7 million people affected by monsoon flooding in northern districts. In addition, there has been a widespread damage to infrastructure, homes, water and sanitation facilities, croplands, and fisheries.⁵²

In terms of **slow onset changes, it is estimated that in southern Bangladesh, sea level rise could displace 0.9–2.1 million people by direct inundation by 2050.**⁵³ Water salinisation brought about by sea level rise is expected to impact the availability of freshwater fish in southwest coastal Bangladesh with adverse implications on poor communities.⁵⁴

Studies on internal migration in Bangladesh have found that a large number of people are displaced or forced to migrate due to climate events such as droughts, river erosion, floods, and cyclones.⁵⁵ **Drought and shrinking freshwater resources are pushing those in the southern parts of the country to relocate to the north;** landslides are forcing people to take refuge in the hill tracts, while riverbank and coastal erosion have displaced people all around the country.⁵⁶ Between 2008 and 2021, about 15.5 million have been internally displaced in Bangladesh because of disasters such as floods, storms, tropical cyclones, and landslides.⁵⁷

49 Garjon, Al-Emrun and Alam, Julhas, 'Climate Migration: Flooding Forces Bangladesh Family to Flee', (18th August, 2022) <https://apnews.com/article/floods-bangladesh-dhaka-jewel-420620595a7e5229ef539f6e27ea085f>

50 Sharmin, Rumana et al., 'Climate-Induced Migration and Displacement in Bangladesh: A Case Study of Riverbank Erosion from Naria Upazila, Shariatpur', (CANSAs, 2020) https://cansouthasia.net/wp-content/uploads/2021/02/River-Erosion-and-Migration-Nexus_Naria-Bangladesh.pdf

51 IDMC, 'Country Profile: Bangladesh', (2021) <https://www.internal-displacement.org/countries/bangladesh>

52 International Federation of Red Cross (IFRC), 'Bangladesh: Floods', (24th June, 2022) <https://www.ifrc.org/emergency/bangladesh-floods> <https://www.ifrc.org/emergency/bangladesh-floods>

53 Intergovernmental Panel on Climate Change, 'Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change: Climate Change 2022', (Switzerland, IPCC, 2022) https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

54 *ibid.*

55 Sharmin, Rumana et al., 'Climate-Induced Migration and Displacement in Bangladesh: A Case Study of Riverbank Erosion from Naria Upazila, Shariatpur', (CANSAs, 2020) https://cansouthasia.net/wp-content/uploads/2021/02/River-Erosion-and-Migration-Nexus_Naria-Bangladesh.pdf

56 IOM, 'Bangladesh Redoubles Efforts to Include Migration and Human Mobility in Climate Change Discussions', (25th October, 2022) <https://bangladesh.iom.int/news/bangladesh-redoubles-efforts-include-migration-and-human-mobility-climate-change-discussions>

57 IDMC, 'Country Profile: Bangladesh', (2021) <https://www.internal-displacement.org/countries/bangladesh>



While internal migration, often seasonal, is a common livelihood strategy in Bangladesh, climate change is acting as an additional eroding factor on rural livelihoods, pushing many to seek opportunities in the cities. People in the coastal areas of Bangladesh were traditionally engaged in cropping rice. As rice production started to suffer due to seawater intrusion, people adopted shrimp farming and fishing since the late 1990s. However, with further soil salinity, shrimp cultivation has also become unprofitable, pushing many to migrate to urban areas, and the majority head towards the capital city Dhaka to escape the devastating impacts of sea-level rise, water erosion, and increasing soil salinity caused by climate change. Similar effects are also observed on riverine communities, where riverbank erosion often resulting from floods pushes many people out. **However, high population density and inadequate infrastructure in the sprawling city of Dhaka does not make it much safer either where migrants often live in squatter settlements in very precarious circumstances.**⁵⁸

Moreover, Bangladesh hosts more than 1 million Rohingya refugees, who are settled in some of the most climate-vulnerable locations in the country, contributing further to their precariousness. **A smaller proportion of climate-related migrants also moves across national borders, onto neighbouring India, sometimes through irregular pathways. However, the recent fencing of the border and armed border patrol makes that move more difficult and treacherous.**⁵⁹ While recognising the increase in migration from rural areas, it is also important to note that migration costs are often prohibitive as well. Many population groups find it difficult to migrate and often find themselves trapped in embankment areas along the coast with dwindling livelihood prospects.⁶⁰

Policy response

Bangladesh has a number of policies, programmes and projects that focus on climate change, with varying focus on climate-related migration. Some of these policies are summarised in Table 4 below:

Table 4 Policy framework in Bangladesh

Title	Consideration of climate-related migration and/or displacement
National Adaptation Programme of Action (NAPA) (2005 – updated in 2009)	NAPA (2005) mentions migration as an undesirable outcome of climate change and suggests measures to improve people’s resilience in coastal areas to avoid migration. This was later not mentioned in the updated version. ⁶¹

58 Sun, Yazhou, ‘Climate Migration Pushes Bangladesh’s Megacity to the Brink’, (Bloomberg, 28th June, 2022) <https://www.bloomberg.com/news/features/2022-06-28/bangladesh-flooding-fuels-climate-migration-to-dhaka>

59 Darby, Megan, ‘What will become of Bangladesh’s Climate Migrants’, (14th August, 2017) <https://www.climatechangenews.com/2017/08/14/will-become-bangladeshs-climate-migrants/>

60 *ibid.*

61 Martin, Maximilian, et al., ‘Policy Analysis: Climate Change and Migration Bangladesh’, Working Paper 4 (University of Sussex, 2013) <http://www.migratingoutofpoverty.org/files/file.php?name=wp4-ccrm-b-policy.pdf&site=354>

Title	Consideration of climate-related migration and/or displacement
Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (2009)	Suggests monitoring of climate change related internal and external migration. The action points include a monitoring mechanism, a protocol to support resettlement, and capacity building.
Poverty Reduction Strategy Programme - 2 (2009)	More focus on international migration, Mention of the BCCSAP and its action points for climate-related migration.
National Plan for Disaster Management (2010)	Does not mention climate-related displacement or migration.
Bangladesh Climate Fiscal Framework (2020)	Mentions the objective to focus research on monitoring of Internal and External Migration and providing support of capacity building for rehabilitation.
Bangladesh Delta Plan 2100 (2018)	The document does not provide any policy recommendations to address the issue of climate induced displacement and migration by affected communities.
8 th Five Year Plan (2020-2025)	Less attention to climate-related migration, more focus on international migration. It mentions climate-related displacement as a major threat. ⁶²
National Adaptation Plan of Bangladesh (NAP) (2023-2050)	The NAP does not categorically refer to addressing the overarching issues of displacement, although internally displaced persons (IDPs) and potential IDPs will certainly benefit from some of the initiatives included in the NAP.
National Strategy on Internal Displacement Management (2021) and Action Plan (2022)	The Strategy and Action Plan focus solely on internal displacement caused by disasters and climate change-related events.


In view of the long-term challenges presented by climate change and natural hazards, **the Government of Bangladesh has formulated a long-term Bangladesh Delta Plan 2100 (BDP 2100)**. The BDP 2100 seeks to integrate the medium to long term aspirations of Bangladesh to achieve upper middle income status and eliminate extreme poverty by 2030 and being a prosperous country beyond 2041 with the longer-term challenge of sustainable management of water, ecology, environment, and land resources in the context of their interaction with natural disasters and climate change.⁶³ It is essentially **an adaptive techno-economic plan involving the interaction of water, land use, ecosystem and climate change with development outcomes**.

62 General Economics Division, '8th Five Year Plan (July 2020- June 2025): Promoting Prosperity and Fostering Inclusiveness', (Bangladesh Planning Commission, 2020)

<https://www.ircwash.org/sites/default/files/2021-02-03-17-04-ec95e78e452a813808a483b3b22e14a1.pdf>

63 General Economics Division, 'Bangladesh Delta Plan 2100 - Bangladesh in the 21st Century (Abridged Version)' (Bangladesh Planning Commission, 2018)

<https://oldweb.lged.gov.bd/UploadedDocument/UnitPublication/1/756/BDP%202100%20Abridged%20Version%20English.pdf>



One Specific Goal of BDP 2100 is to ensure safety from floods and climate change disasters.⁶⁴ The Delta Plan further identifies strong positive correlation between incidence of poverty and the intensity of natural hazards by describing how the poverty rates in 16 districts (identified as most exposed to natural disasters) is higher than the national average. However, climate-related displacement and migration is not prominently correlated with the vulnerabilities. More direct linkages of policy recommendations could be provided to address **the issue of climate-related displacement and migration by affected communities.**

Moreover, more effort is also required to ensure the effective return of climate-displaced persons to their homes or places of habitual residence. **There has been an increased and much needed interest in ensuring relocation of climate-affected population groups to other parts of Bangladesh.** The Government of Bangladesh with support from the Asian Development Bank (ADB) is working to strengthen the climate resilience of vulnerable coastal towns, thereby enhancing their ability to anticipate, absorb, accommodate, and recover from the effects of climate shocks and stresses.⁶⁵ The project will support selected coastal towns in pursuing sustainable development and enhancing the quality of life of all residents. It will also help in strengthening rural resilience, as these small towns often act as service centres for surrounding rural areas.⁶⁶ The plan, conceptualised by the research institute International Centre for Climate Change and Development (ICCCAD), is part of a broader **scheme to alleviate pressure on Dhaka by redirecting climate migrants away from the crowded capital, and instead toward smaller towns and cities. Working with mayors, locals and NGOs, ICCAD is helping these new “migrant-friendly” cities to build capacity so that they can collectively absorb around 10 million migrants over the coming years.**⁶⁷

In 2021, Bangladesh introduced its first rights-based framework approach to climate and disaster related displacement called National Strategy on Internal Displacement Management. **The policy sets the foundation for mainstreaming human mobility in Bangladesh’s climate change policy framework.**⁶⁸ It adopts a three-pronged approach to the issue: i) prevention of displacement; ii) protection during displacement; and iii) durable solutions. The policy draws on international frameworks available on the topic, including the Sendai Framework for Disaster Risk Reduction, Guiding Principles for Internal Displacement, and the Sustainable Development Goals. Overall, Bangladesh has introduced and started implementation on many initiatives to tackle climate related migration and its new action plan adopted in 2023 with a focus on displacement.

64 *ibid.*

65 Asian Development Bank, ‘Bangladesh: Coastal Towns Climate Resilience Project’ (2022) <https://www.adb.org/projects/55201-001/main>

66 *ibid*

67 Mongla, Catherine Davison, ‘Bangladesh: ‘Migrant-friendly’ Cities Offer Hope for Climate Refugees’, (Deutsche Welle, 8th November, 2022) <https://www.dw.com/en/bangladesh-migrant-friendly-cities-offer-hope-for-climate-refugees/a-62781441>

68 Siddiqui, Tasneem, Islam, Md. Ekhtekharul, and Billah, Tamim, ‘Policy Architecture to Address Disaster and Climate Change Induced Displacement in Bangladesh’, (9th March, 2023) https://researchinginternaldisplacement.org/short_pieces/policy-architecture-to-address-disaster-and-climate-change-induced-displacement-in-bangladesh/

2.3 India

Figure 3 Map of South Asia including India




Source: <https://www.un.org/geospatial/content/south-asia>

Climate vulnerabilities and their interplay with migration patterns

Due to its diverse geography and high reliance of the population on climate sensitive livelihoods, India is also among the most vulnerable countries to climate change impacts. It ranks 20th on the list of countries most vulnerable to climate change based on the Climate Risk Index (2000-2019), and in 2019, it was the 7th most affected country by climate change.⁶⁹ With about 67% of the country living in rural areas, and about 43% reliant on agriculture as a source of income, the population of India faces a range of climate risks and vulnerabilities.⁷⁰

69 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

70 Garg, Rishu et al., 'Climate-induced Displacement and Migration in India: Case Studies from West Bengal, Maharashtra, Odisha, Uttarakhand and Bihar', (Climate Action Network South Asia, 2021) https://cansouthasia.net/wp-content/uploads/2021/02/Migration_India_20_02_2021.pdf



The last two decades have been particularly exhibiting serious climate change impacts, from recurring droughts, sea level rising, heavy rains causing landslides to extreme weather events such as floods, heat waves, cyclones, and storms.⁷¹ Increasing frequency and intensity of heatwaves are testing the limits of human survival – heat strokes have been the cause of death for about 26,000 people in India in the last 30 years.⁷² Prolonged and erratic monsoon patterns have become common.⁷³ **India has a volatile climate landscape, with risks shifting along different geographic landscapes as climate impacts become more intense.** A district level analysis of climate risks in India concludes that more than 80% of India’s 1.4 billion population lives in areas at high risk of water-related disasters, with the northeast of the country highly vulnerable to floods, while the southern and central parts of India are more vulnerable to droughts.⁷⁴ The southern and coastal areas of the country are also increasingly experiencing high risks of cyclones and floods as well, along with regular droughts. **Impacts such as heatwaves have dire consequences on India’s health, agriculture, and water availability, whereas floods have devastated infrastructure, standing crops, and led to huge economic losses.**⁷⁵ The deltas and the coastal areas reflect increasing rates of salinisation, sea level rise, coastal erosion, and flooding.⁷⁶ Between 1990 and 2016, India lost 235 square kilometres of land due to coastal erosion, leading many villages to disappear and forcing their residents to search for new abodes.⁷⁷

These climate impacts create conditions for large-scale displacement in many densely populated areas in the country. The IDMC estimates that in 2021, about 4.9 million disaster-led displacements took place in India, with floods and cyclones featuring as the main triggers for displacement.⁷⁸ A forecast by the Climate Action Network South Asia (CANSAs) concludes that by 2050, climate change would displace about 45 million people in India.⁷⁹ **The 2021 CANSAs report “Climate-induced Displacement and Migration in India” presents five case studies which depict how climate change in different geographic zones in India introduces different vulnerabilities for local populations, pushing many to leave their homes.** For instance, many people from Kendrapara, Odisha migrated because of losing agricultural land to sea level rise, people from Sundarbans were forced to migrate because of cyclones

71 *ibid.*

72 Al-Jazeera, ‘India’s heat action plans exclude the most vulnerable: Report’, (29th March, 2023) <https://www.aljazeera.com/news/2023/3/29/indias-warm-weather-plans-exclude-the-most-vulnerable-report>

73 Internal Displacement Monitoring Centre, ‘India: Country Profile’, (2021) <https://www.migrationpolicy.org/article/climate-change-displacement-managed-retreat-india>

74 Wadhavan, Shreya, ‘Mapping India’s Climate Vulnerability: A District Level Assessment’, (Council on Energy, Environment and Water, 2021) <https://www.ceew.in/publications/mapping-climate-change-vulnerability-index-of-india-a-district-level-assessment>

75 Choudhary, Kamya, ‘How is India Tackling Climate Change’, (London School of Economics and Political Science, 2nd November, 2022) <https://www.lse.ac.uk/granthaminstitute/explainers/how-is-india-tackling-climate-change/>

76 DECCMA, ‘Climate Change, Migration, and Adaptation in Deltas: Key Findings from the DECCMA Project’, (CARIAA, 2017) https://generic.wordpress.soton.ac.uk/deccma/wp-content/uploads/sites/181/2017/02/online-version_small_Climate-Change-Migration-and-Adaptation-in-DeltasKey-findings-from-the-DECCMA-project.pdf

77 Panda, Architesh, ‘Climate Change, Displacement, and Managed Retreat in Coastal India’, (Migration Policy Institute, 20th May 2020) <https://www.migrationpolicy.org/article/climate-change-displacement-managed-retreat-india>

78 Internal Displacement Monitoring Centre, ‘India: Country Profile’, (2021) <https://www.migrationpolicy.org/article/climate-change-displacement-managed-retreat-india>

79 Garg, Rishu et al., ‘Climate-induced Displacement and Migration in India: Case Studies from West Bengal, Maharashtra, Odisha, Uttarakhand and Bihar’, (Climate Action Network South Asia, 2021) https://cansouthasia.net/wp-content/uploads/2021/02/Migration_India_20_02_2021.pdf

and riverbank erosions, whereas in Maharashtra and Uttarakhand, climate change adversely affected agricultural productivity due to erratic rainfalls and decreasing groundwater, leading many people to consider migrating to cities.⁸⁰

With an already high rate of domestic rural to urban migration due to social inequities and high rates of unemployment in rural areas, **climate-related movements pose further complications and pressures on the urban centres when not managed well.** Currently, major destinations for internal migrants are the megacities of Mumbai and Delhi, where the majority of migrants are engaged in the informal sector.⁸¹ These cities are also witnessing increasing frequency of climate impacts, the brunt of which is experienced disproportionately by many migrants living in precarious circumstances.⁸² A World Bank report predicts that cities like Bengaluru and Chennai will receive more climate-related migrants in the future due to their more temperate climates and livelihood opportunities.⁸³

Policy response

The following table provides an overview of the relevant policy framework in India:

Table 5 Policy framework in India

Title	Consideration of climate-related migration and/or displacement
Mahatma Gandhi Rural Employment Guarantee Act (MGNREGA), (2005)	The Act is the basis for introducing provisions for guaranteed wage labour as to curb climate-related rural to urban migration.
National Disaster Management Act, (2005)	National Disaster Management policy primarily addresses the short-term and sudden onset of climatic disasters. It does not consider slow onset climate change, and losses caused by the same.
National Action Plan on Climate Change and State Action Plans (2008; updated in 2014)	It is the main guiding strategy for India's plan of action against climate change. The plan includes eight missions, including the National Solar Mission, National Mission for Sustainable Agriculture, and National Mission on Enhanced Energy Efficiency. Migration or displacement is not focused in the Action Plan.
National Cyclone Risk Mitigation Project (Phase I in 2011)	It is being implemented in 8 cyclone prone coastal states, and focus on early warning dissemination system, cyclone risk mitigation infrastructure, and technical assistance for capacity building. It does not directly refer to climate-related displacement or migration.

⁸⁰ *ibid.*

⁸¹ Hari, Vittal et., 'Climate Hazards are Threatening Vulnerable Migrants in Indian Megacities', *Nature Climate Change* (11, pp. 636-638), (2021) <https://www.nature.com/articles/s41558-021-01105-7>

⁸² *ibid.*

⁸³ Rigaud, Kanta Kumari, et al., 'Groundswell: Preparing for Internal Climate Migration', (World Bank, 2018) <https://openknowledge.worldbank.org/entities/publication/2be91c76-d023-5809-9c94-d41b71c25635>

Title	Consideration of climate-related migration and/or displacement
National Rural Livelihoods Mission (2011)	It provides financial and other forms of assistance to vulnerable households in rural areas. An assessment study of the programme findings was that due to the programme's interventions in certain areas, distress migration has reduced to some extent due to livelihood diversification and increased employment opportunities.
National Adaptation Fund for Climate Change (2015)	The Fund was designed to meet the cost of adaptation to climate change for the State and Union Territories of India that are particularly vulnerable to the adverse effects of climate change. In Tamil Nadu, the Fund financed a project called Management and Rehabilitation of Coastal Habitats and Biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar, Tamil Nadu, India.
Housing for All (Urban) (2015)	The Policy aims to promote affordable housing and rehabilitate dwellers of slum settlements, but does not refer categorically to climate-related migrants.
Pradhan Mantri Fasal Bima Yojana (PMFBY) (2016)	The scheme offers agricultural and crop insurance to farmers who have taken loans from banks. It aims to provide financial security to farmers suffering crop loss/damage arising out of unforeseen events and ensure income stability. While migration is not the main focus, indirectly it aims to reduce push factor for climate-related migration.

Source: Garg et al., 2021

Internal migration is a regular aspect in the development process of India, with the national census of 2011 estimating that India has over 450 million internal migrants, of which 54 million have migrated within the state.⁸⁴ The Inter-State Migrant Workmen Act of 1979 governs internal migration aspects in the country, however, it does not have a separate category for climate-related migrants.

Regarding climate-related migration, India does not have specific policies that address this issue. **The national and state disaster management responses cover displacement caused by climate-related disasters, but migration caused by slow onset climate impacts are not covered under these responses.** Nevertheless, the country has taken steps to address the impacts of climate change on vulnerable populations, including those who are at risk of displacement or migration due to sea-level rise, floods, and other climate-related disasters. The Government of India has been implementing various flagship programmes to ensure social welfare of poor communities especially in rural areas, a few noteworthy examples are – employment guarantee, crop insurance, rural livelihoods mission etc., as summarised in table 4. Relief programmes are usually supported through National Disaster Relief and State Disaster Relief funds. **However, in the absence of any mapping of disasters and required relief support, funds are generally inadequate and more as an immediate response to the crisis.**

⁸⁴ Rajan, Irudaya S, and Bhagat, R. B, 'Internal Migration and the COVID-19 Pandemic in India', *Migration and Pandemics* (pp.227-248), 2021 https://link.springer.com/chapter/10.1007/978-3-030-81210-2_12

2.4 Iran

Figure 4 Map of Iran



Source : <https://www.un.org/geospatial/content/iran-islamic-republic>


Climate vulnerabilities and their interplay with migration patterns

Iran is exposed to serious climate change risks based on its particular geography – more than 80% of the country is arid to semi-arid, 20% is desert, and 9% is forest land.⁸⁵ The specific ecological makeup of the country makes it particularly sensitive to the changing precipitation rates and rainfall patterns, making it susceptible to alternate periods of floods and droughts.⁸⁶ According to Germanwatch's Global Climate Risk Index, Iran ranks at 18th on the list of most vulnerable countries in 2019, and 97th on the long-term index of 2000-2019.⁸⁷

85 Shiva, Mehdi, and Molana, Hassan, 'Climate Change Induced Inter-Province Migration in Iran', (American Economic Association, 2018) <https://www.aeaweb.org/conference/2019/preliminary/paper/Si3reN4D>

86 WHO and UNFCCC, 'Health and Climate Change: Country Profile Iran', 2022 <https://apps.who.int/iris/rest/bitstreams/1415290/retrieve>

87 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf



The IPCC predicts higher average temperatures across the already dry region, predicting an increase in the occurrence of water scarcity, droughts, and dust storms for Iran and the Persian Gulf.⁸⁸ The resulting impacts are dire: lakes and rivers are drying up, temperatures are reaching record-high levels, and strong winds and lack of vegetation are giving rise to strong dust storms. In 2018, average annual rainfall was 25% lower than previous precipitation rates.⁸⁹ **In fact, the World Resource Institute ranked Iran as the 4th most water-stressed country in the world in 2019.**⁹⁰ Increasing temperatures and water scarcity has serious consequences for crop productivity and food availability by adversely impacting the production of Iran's four major crops – wheat, barley, rice and corn.⁹¹

The past few years have been a testament to the strong relation that exists between climate impacts and changing migration patterns in Iran. **While internal migration is a common feature in Iran, stronger heatwaves are leading to a reported increase in seasonal and more permanent migration, with people moving from rural areas and settling in the outskirts of big towns.**⁹² The provinces of Alborz, Isfahan, Gilan, Yazd, and Mazandaran are receiving more migrants because of their more temperate climates, while some regions within the country are getting depopulated because of the harsh living conditions exacerbated by climate change.⁹³ From drought-affected southern part of the country, there are reports of migrants heading towards the north of the country, while those from the central desert area, which is vulnerable to sandstorms, are moving towards the Caspian Sea region and Tehran.⁹⁴

Between 2008 and 2021, Iran witnessed 986,151 displacements due to disasters, about 372,000 of which were due to earthquakes, but the rest were attributed to a combination of extreme temperature, floods, and storms.⁹⁵ Moreover, the 2019 floods affected 25 out of 31 provinces in Iran, destroying many villages especially in the Khuzestan province displacing more than half a million people, half of whom were children.⁹⁶ The floods triggered more internal displacement than any other event at the regional level during that period and have been described as the worst to hit the country in more

88 Intergovernmental Panel on Climate Change, 'Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change: Climate Change 2022', (Switzerland, IPCC, 2022)
https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

89 ICRC, 'Country Factsheet: Iran', (2021)
<https://www.climatecentre.org/wp-content/uploads/RCCC-ICRC-Country-profiles-Iran.pdf>

90 World Resource Institute, 'National Water Stress Rankings', (6th August, 2019)
<https://www.wri.org/insights/17-countries-home-one-quarter-worlds-population-face-extremely-high-water-stress>

91 *ibid.*

92 Keynoush, Banafsheh, 'Iran's Growing Climate Migration Crisis', (The Middle East Institute, 30th January, 2023)
<https://www.mei.edu/publications/irans-growing-climate-migration-crisis#:~:text=While%20available%20data%20is%20limited,a%20result%20of%20SDSs%20alone.>

93 Financial Tribune, 'Increase in Climate Migrants Across Iran', (4th December, 2016)
<https://financialtribune.com/articles/people/54651/increase-in-climate-migrants-across-iran>
Keynoush, Banafsheh, 'Iran's Growing Climate Migration Crisis', (The Middle East Institute, 30th January, 2023)
<https://www.mei.edu/publications/irans-growing-climate-migration-crisis#:~:text=While%20available%20data%20is%20limited,a%20result%20of%20SDSs%20alone.>

94 Keynoush, Banafsheh, 'Iran's Growing Climate Migration Crisis', (The Middle East Institute, 30th January, 2023)
<https://www.mei.edu/publications/irans-growing-climate-migration-crisis#:~:text=While%20available%20data%20is%20limited,a%20result%20of%20SDSs%20alone.>

95 Internal Displacement Monitoring Centre, 'Iran: Country Profile', (2021)
<https://www.internal-displacement.org/countries/iran>

96 Brussels International Centre, 'Iran and Climate Refugees: An Alarming Situation', (22nd May, 2019)
<https://www.bic-rhr.com/research/iran-and-climate-refugees-alarming-situation>

than 15 years.⁹⁷ Many people were forced to find shelter in other provinces, such as Lorestan, Chahar Mahal, Bakhtiari and Isfahan.⁹⁸ IDMC estimates that 180,000 remained in displacement at the end of the year.⁹⁹ In addition, **the Khuzestan province in the south-west of the country, bordering Iraq, holds about 30% of the country’s freshwater resources.** Development of dams and water reservoirs on these resources are leading to further drying up of natural water resources, leading to tension between the two countries over shared water resources.¹⁰⁰

Policy Response

To address the rising evidence of climate change strongly influencing migration patterns, Iran has taken some measures but holistic policies addressing the issue are yet to be developed. **Rural to urban migration is considered a significant policy challenge in Iran, largely due to the formation of informal settlements in the peripheries of larger cities,** low quality of housing, infrastructural inadequacies, environmental deterioration, eradication of agricultural lands and gardens, air/water/soil pollution, etc.¹⁰¹ These issues lead to the marginalisation of the urban poor. Informal settlements in climate-risk areas prove to be an additional challenge to the authorities.

Table 6 Policy framework in Iran

Title	Consideration of climate-related migration and/or displacement
Tehran Metropolitan Region Plan (2002)	The plan was the first step toward the regionalisation of metropolitan planning in Iran and focused on (1) modulating the location of activities and population in the future and (2) controlling and conducting the use of land. The focus of the Plan is on one region of the country.
Five Year Development Plans (2010-2015; 2017-2021)	The 5th FYDP (2010-2015) adopted an environmental assessment of strategic policies and plans as well as an ecosystem-based approach to the management of wetlands and biodiversity. It also incorporated climate change considerations. No direct reference to climate change and migration is made.

97 Internal Displacement Monitoring Centre, 'A Decade of Displacement in the Middle East and North Africa', (2019) <https://www.justice.gov/eoir/page/file/1387131/download>

98 Mohammadi, Mostafa, and Ghaedi, Sohrab, 'Climate Change and Ecological Migration: A Study of Villages in the Province of Khuzestan, Iran', *Environmental Research Engineering and Management*, (2020) https://www.researchgate.net/publication/340277501_Climate_Change_and_Ecological_Migration_A_Study_of_Villages_in_the_Province_of_Khuzestan_Iran

99 Internal Displacement Monitoring Centre, 'A Decade of Displacement in the Middle East and North Africa', (2019) <https://www.justice.gov/eoir/page/file/1387131/download>

100 *ibid.*

101 Asadzadeh, Asad, et al., 'Urbanization, Migration, and the Challenges of Resilience Thinking in Urban Planning: Insights from Two Contrasting Planning Systems in Germany and Iran', *Cities* (125), (2022) <https://www.sciencedirect.com/science/article/pii/S0264275122000816>

Title	Consideration of climate-related migration and/or displacement
National Strategic Plan on Climate Change (2017)	Offers a blueprint of Iran’s strategies on water management, climate change mitigation, agriculture, food security, natural resources, biodiversity and health. No direct reference to climate change and migration is made.
National Disaster Management Law (2019)	It provides a comprehensive and holistic approach with regard to short- and long-term aspects of disaster management and bridges disaster risk reduction and management with development planning and programming in the country.
National Disaster Management Strategy (2021)	Mentions prioritising the adoption of the in-situ policy rather than the policy of relocation of residential complexes during risk reduction and reconstruction phases, and refers to rural to urban migration as a factor increasing urban vulnerability.
United Nations Sustainable Development Cooperation Framework (2023-2027)	Focuses on Five strategic priorities for coordination between the United Nations System in Iran and the Iranian government: (a) socio-economic resilience; (b) public health; (c) environment; (d) disaster risk reduction and management; and (e) impacts of drug use and drug trafficking. The document mentions “effective management of habitats and biodiversity supported” as a goal but does not directly refer to climate-related migration or displacement.

Iran developed its **National Strategic Plan on Climate Change in 2017, and national level action to manage climate change is generally encompassed in the five-year development plans.** Much of the focus of these policies is on mitigation and reducing emissions, largely through reforms in the energy sector, and adaptation needs require more policy attention.¹⁰² **The country has a well-rounded disaster management strategy, however, experience from the 2019 floods highlighted some gaps that could be filled with better coordination and swift response.**¹⁰³

One major issue resulting in the less pronounced focus on climate-related migration in Iran is that at the national level, policy planning is mandated to different ministries according to their theme. The development plans at the sub-national level, including land-use plans, infrastructure development, and development plans of metropolitan areas, etc. are designed based on the national-level plans and contribute to the local level plans. However, coordination challenges impair efficient implementation in this regard.¹⁰⁴

102 Gabbatiss, Josh, ‘The Carbon Brief Profile: Iran’, (Carbon Brief, 20th February, 2020) <https://www.carbonbrief.org/the-carbon-brief-profile-iran/>

103 Internal Displacement Monitoring Centre, ‘A Decade of Displacement in the Middle East and North Africa’, 2019 <https://www.justice.gov/eoir/page/file/1387131/download>

104 Asadzadeh, Asad, et al., ‘Urbanization, Migration, and the Challenges of Resilience Thinking in Urban Planning: Insights from Two Contrasting Planning Systems in Germany and Iran’, *Cities* (125), 2022 <https://www.sciencedirect.com/science/article/pii/S0264275122000816>

2.5 Iraq

Figure 5 Map of Iraq




Source : <https://www.un.org/geospatial/content/iraq>

Climate vulnerabilities and their interplay with migration patterns

Climate change is a serious threat in Iraq. Climate Risk Index for Iraq ranked it at 94th position in 2019, while the long-term ranking averaging scores between 2000 and 2019 place it at 157th ranking in the list of countries.¹⁰⁵ While this ranking may depict lower exposure to climate risks than the other Silk Routes countries studied in this brief, Iraq experiences some of the most dire consequences of the climate change. This is reflected by the fact that in 2019, the United Nations Global Environmental Outlook 6 (GEO-6) ranked it the 5th most vulnerable country to water and food shortage caused by elevating temperatures.¹⁰⁶

¹⁰⁵ Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

¹⁰⁶ United Nations Environment Programme, 'Global Environment Outlook 6', <https://wedocs.unep.org/handle/20.500.11822/27539;jsessionid=7573AAF6E89CB6ADB3695D64DA48B8E5>



Iraq's geography largely comprises drylands with marshlands in the southern region, which due to decreasing precipitation rates and soaring temperatures are particularly vulnerable, with serious implications for the lives and livelihoods of the people of Iraq. In fact, **2021 was the second driest season that Iraq has experienced over the last 40 years due to extremely low levels of rainfall, and water availability in the two main rivers sourcing Iraq's water requirements have acutely declined, while many lakes have dried up completely.**¹⁰⁷ The country has experienced a persistent drought since the 1970s, and future predictions show that precipitation rates are expected to fall by 17% even during the rainy season by 2050.¹⁰⁸ Desertification, sea level rising, and soil salinisation are also common problems arising in the southern part of the country due to climate change.

On top of these slow-onset changes, extreme weather events such as floods, and sand and dust storms, are becoming more regular. While there is an ongoing drought, flooding in different parts of the country is also increasing in frequency, especially in the Tigris-Euphrates river valleys.¹⁰⁹ In 2022 alone, nine dust storms hit Iraq within eight weeks, bringing the country to a standstill and creating a health crisis. **Forecasts by the country's environmental ministry warn that over the next two decades Iraq could experience an average of 272 days of sandstorms a year, rising to above 300 by 2050.**¹¹⁰ The rising intensity and frequency of sand and dust storms is attributed to the interplay of drought, urbanisation, and agricultural practices.¹¹¹

In addition, environmental degradation, aggravated by climate change especially in the past 10 years has severely damaged Iraq's agricultural sector, with serious consequences for the country's food security. Acute water scarcity and worsening water quality has left the sector unable to support sufficient and sustainable livelihoods, particularly in rural areas, where it has long been the main source of employment.¹¹²

Such climate vulnerabilities are already leading to displacement and climate-related migration in the country. As arable land and its productivity decreases, there is a growing trend of rural to urban migration in Iraq. The highest number of movements caused by water shortage are from the southern

107 United Nations Sustainable Development Group, 'Climate Change is the Biggest Threat Iraq has Ever Faced, but there is Hope to Turn Things Around', (15th November, 2022)

<https://unsdg.un.org/latest/blog/climate-change-biggest-threat-iraq-has-ever-faced-there-hope-turn-things-around#:~:text=Over%20the%20last%2040%20years,%C2%B0C%20recorded%20in%20Basra.>

108 IOM, 'Migration, Environment and Climate Change in Iraq', (IOM Iraq, 2022)

<https://iraq.iom.int/sites/g/files/tmzbd1316/files/documents/Climate%20Migration%20in%20Iraq%20-%20Report.pdf>

109 *ibid.*

110 The Guardian, 'Ninth Sandstorm in Less than Two Months Shuts Down Much of Iraq', (23rd May, 2022)

<https://www.theguardian.com/world/2022/may/24/ninth-sandstorm-in-less-than-two-months-shuts-down-much-of-iraq>

111 IOM, 'Migration, Environment and Climate Change in Iraq', (IOM Iraq, 2022)

<https://iraq.iom.int/sites/g/files/tmzbd1316/files/documents/Climate%20Migration%20in%20Iraq%20-%20Report.pdf>

112 IOM, 'Migration into a Fragile Setting: Responding to Climate-induced Informal Urbanisation and Inequality in Basra, Iraq', (IOM Iraq, 2021)

<https://iraq.iom.int/sites/g/files/tmzbd1316/files/documents/IOM%20Iraq%20Migration%20into%20a%20Fragile%20Setting-Responding%20to%20Climate-Induced%20Informalization%20and%20Inequality%20in%20Basra%20%281%29.pdf>

part of the country.¹¹³ **Urban areas of Basra, Nassiriya and Amara are already receiving many migrants from rural areas due to increasing climate vulnerability in the rural areas.**¹¹⁴ Migration due to water scarcity and soil salinisation is also high from the central part of the country, largely from the north and south of Baghdad. Most drought-led migrations and displacements in Iraq are of full households, rather than individuals, and are more permanent in nature. Migrants from the wetlands of Iraq are also found to be moving more permanently as their livelihoods get affected by the limited rains.¹¹⁵

Amid tense political and social atmospheres, such movements if not planned properly tend to add pressure on existing services, creating a scenario of further competition and uprising.¹¹⁶ There is also evidence that many people migrating to cities in conflict countries continue to be exposed to new layers of vulnerability once in the city. An IOM and Social Inquiry study conducted among climate-related migrants residing in urban areas and found that these migrants settle in informal settlements that are prone to eviction. They work in precarious situations in the informal sectors, struggle to afford food and basic items, and are not covered by social safety nets.¹¹⁷

Policy Response

The following table presents an overview of the policy framework in relation to climate-related migration and displacement in Iraq:

Table 7 Policy framework in Iraq

Title	Consideration of climate-related migration and/or displacement
The National Strategy for Adaptation to Climate Change (2012)	This strategy was developed in 2012 and outlines the key priorities for climate change adaptation in Iraq, including improving water management, promoting sustainable agriculture, and enhancing public awareness and education. Migration is not considered as a key priority for adaptation. However, the strategy acknowledges that climate change can have significant impacts on the population and the environment, and that these impacts may increase the risk of displacement and migration.

113 IOM, 'Migration into a Fragile Setting: Responding to Climate-induced Informal Urbanisation and Inequality in Basra, Iraq', (IOM Iraq, 2021)

<https://iraq.iom.int/sites/g/files/tmzbd11316/files/documents/IOM%20Iraq%20Migration%20into%20a%20Fragile%20Setting-Responding%20to%20Climate-Induced%20Informalization%20and%20Inequality%20in%20Basra%20%281%29.pdf>

114 IOM, 'Migration, Environment and Climate Change in Iraq', (IOM Iraq, 2022)

<https://iraq.iom.int/sites/g/files/tmzbd11316/files/documents/Climate%20Migration%20in%20Iraq%20-%20Report.pdf>

115 *ibid.*

116 Younis, Nussaibah, 'Early Warning: How Iraq can Adapt to Climate Change', (European Council on Foreign Relations, 19th July 2022)

<https://ecfr.eu/publication/early-warning-how-iraq-can-adapt-to-climate-change/>

117 IOM, 'Migration into a Fragile Setting: Responding to Climate-induced Informal Urbanisation and Inequality in Basra, Iraq', (IOM Iraq, 2021)

<https://iraq.iom.int/sites/g/files/tmzbd11316/files/documents/IOM%20Iraq%20Migration%20into%20a%20Fragile%20Setting-Responding%20to%20Climate-Induced%20Informalization%20and%20Inequality%20in%20Basra%20%281%29.pdf>

Title	Consideration of climate-related migration and/or displacement
National IDP Policy (2014)	This policy was developed to address the needs of internally displaced people in Iraq due to conflict and violence. It does not specifically focus on climate and disaster displacement but it acknowledges the potential impact of natural disasters on displacement, and calls for addressing the needs of all IDPs, including those who may be displaced as a result of climate-related events.
National Adaptation Plan (2015)	The NAP provides a framework for identifying and addressing the priority areas for climate change adaptation in Iraq, including water scarcity, desertification, and increasing temperatures. Overall, the NAP does not specifically address migration, but acknowledges that climate change can have significant impacts on the population and the environment, including the risk of displacement, migration, and relocation.
Strategy for Water and Land Resources of Iraq (2015)	The strategy focuses on sustainable management and conservation of water and land resources. It does not specifically address climate-related migration and displacement.
National Disaster Risk Reduction Strategy (2018)	The strategy outlines a framework for disaster risk reduction, emergency preparedness, and response in Iraq, and covers a wide range of hazards, including natural disasters, technological disasters, and public health emergencies. It emphasises the importance of preparedness and effective responses to disasters in general, but does not directly focus on climate-related displacement.
National Strategy for Migration Management (2020)	This Strategy serves as migration policy framework for implementing the Global Compact for Migration in Iraq. The strategy recognises the need for a planned response to climate-migration. It also includes in its objective managing migration as a source of development.
Iraq's Green Paper (2022)	This document presents a blueprint for Iraq's mitigation efforts and journey towards net-zero emissions. At the moment, the Green Paper does not recognise climate migration as a risk or identify actions to prepare for, mitigate, potentially benefit from, or leverage the contributions of migrants themselves.

Iraq has an extensive policy framework that directly or indirectly acknowledges the need for managing climate-related migration and displacement and finding solutions to leverage migration as a source of development. Existing policies and strategies that relate to climate change and migration separately provide some basis for designing more targeted strategies addressing climate-related displacement and migration.

The complex and multifaceted nature of the issue create further layers of difficulty in addressing the issue in a holistic manner in a country where protracted displacement is a key policy challenge. **There is growing data availability on the trends and patterns of climate-related migration in Iraq which should be used to inform specific and actionable policy objectives.** The gravity of the issue for the case of Iraq also calls for a more streamlined and integrated approach to address climate-related migration with strong inter-departmental coordination among government authorities.

2.6 Pakistan

Figure 6 Map of Pakistan




Source : <https://www.un.org/geospatial/content/pakistan>

Climate vulnerabilities and their interplay with migration patterns

In 2022, Pakistan made headlines as one of the most catastrophic floods hit the country during the monsoon season, reflecting the country's grave vulnerability to climate change. The floods affected more than 33 million people, displaced about 8 million, and killed more than 1700 people.¹¹⁸ While clearly the most devastating environmental episode, 2022 was not the first time Pakistan experienced floods in the recent history. **Since 2010, the country has experienced higher intensity and frequency of floods during the summer.**

118 World Bank, 'Pakistan: Flood Damages and Economic Losses Over USD 30 billion and Reconstruction Needs Over USD 16 billion - New Assessment', (October 28, 2022) <https://www.worldbank.org/en/news/press-release/2022/10/28/pakistan-flood-damages-and-economic-losses-over-usd-30-billion-and-reconstruction-needs-over-usd-16-billion-new-assessme>



Ranking 8th on the list of most vulnerable countries to climate change according to the Climate Risk Index averaged over the period of 2000-2019, Pakistan is exposed to a range of slow and sudden onset climate impacts due to its diverse geography and high reliance on climate sensitive economy.¹¹⁹ In 2019, it had a Climate Risk Index ranking of 15.¹²⁰ The most prominent climate impacts include rising average temperature, changes in patterns of rainfall throughout the country, desertification in the drylands, sea level rise and soil erosion in the coastal areas, heatwaves across the semi-arid and coastal areas, droughts, floods, and melting glaciers in the northern parts of the country, etc.¹²¹

Such impacts, with projections for a worsening situation with higher than global average annual temperatures and more uncertain precipitation frequency and intensity, present a worrisome future, unless a proactive approach is adopted urgently.¹²² **The consequences of these impacts are already being experienced across the country on lives and livelihoods.** Long spells of droughts and frequent floods have led to a decline in farm productivity, increased livestock mortality, and large-scale unemployment. **While floods are regularly displacing people from their homes, drought and water scarcity are increasing people's vulnerabilities, compelling them to migrate.**

As in other South Asian countries, migration is a common livelihood strategy in Pakistan. Pakistan has a high urbanisation rate, and rural to urban migration due to the changing composition of the economy and the shift from agriculture to industry and services sector is one of the prime factors. In the recent years, climate change has also emerged as a prominent factor contributing to people's decision to migrate.¹²³ **Most of climate-related migration is internal, with people migrating to the nearest or the larger metropolitan cities in the country in search of economic opportunities.** Migration from the rural areas as a planned adaptation strategy to climate change is also highly gendered, often with one or more younger, male members of the household migrating, while the female members, children, and the elderly stay behind in rural areas.¹²⁴

Research supported by ICMPD in Pakistan has unveiled that **climate-related migration in Pakistan has led to possibilities of both positive and negative outcomes for those who migrate.** Those who could not find meaningful work in the city after migrating were compelled to reside in vulnerable living situations, and entered into vicious debt traps. On the other hand, many migrants were also able to improve their household's wellbeing by finding work in less climate-sensitive sectors, and diversifying their sources of income.¹²⁵

119 Eckstein, David, Kunzel, Vera, Schafer, Laura, 'Global Climate Risk Index 2021', Briefing Paper (GermanWatch, 2021). https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

120 *ibid.*

121 Chaudhry, Qamar uz Zaman, 'Climate Change Profile of Pakistan', (Asian Development Bank, 2017) <https://www.adb.org/sites/default/files/publication/357876/climate-change-profile-pakistan.pdf>

122 *ibid.*

123 Mueller, Valerie et al., 'Heat stress increases long-term human migration in rural Pakistan', *Nature Climate Change* (4, pp. 182-185), 2014 <https://www.nature.com/articles/nclimate2103>

124 Salik, Kashif Majeed, et al., 'Migration Futures in Asia and Africa: Economic Opportunities and Distributional Effects – the Case of Pakistan', (PRISE, 2017) <https://think-asia.org/bitstream/handle/11540/7572/migration-futures-in-asia-and-africa-economic-opportunities-and-distributional-effects-pakistan-low-res.pdf?sequence=1>

125 Salik, Kashif Majeed, et al., 'Climate-induced Displacement and Migration in Pakistan: Insights from Muzaffargarh and Tharparkar Districts', (CANSAs, 2020) <https://think-asia.org/bitstream/handle/11540/13884/CLIMATE-INDUCED-DISPLACEMENT-AND-MIGRATION-IN-PAKISTAN-Insights-from-Muzaffargarh-and-Tharparkar-districts-pr.pdf?sequence=1>

Policy response

Pakistan's policy framework in response to climate change and migration is summarised below:


Table 8 Pakistan's policy framework

Title	Consideration of climate-related migration and/or displacement
National Adaptation Plan (2023)	This seven-year plan aims to integrate climate adaptation and will address several climate change issues in various sectors such as water, agriculture, forestry, coastal areas, biodiversity, and other vulnerable ecosystems to ensure water, food, and energy security for the country. The plan aims to limit the impacts of natural disasters on the economy, human life, health and property.
National Climate Change Policy (2012)	Refers to the mounting risks on rural livelihoods and increasing migration of rural population toward urban areas of the country.
Pakistan's National Disaster Risk Reduction Policy (2013)	The policy mentions climate change hazards and their link to migration and displacement (in its preamble). There's room for more focus on ensuring safe relocation of vulnerable rural populations during early period of disasters (such as floods).
Framework for Implementation of National Climate Change Policy (2014)	Recommends that rural to urban migration be curbed through rural development. The framework does not recognise the potential of (rural to urban) migration as an adaptation strategy to climate change.
The National Food Security Policy (2018)	Considers internal migration as a contextual factor for rural transformation (in terms of land use change), urbanisation and food insecurity, but could offer more specific policy suggestions regarding migrants or displaced populations.
National Emigration and Welfare Policy for Overseas Pakistanis (draft 2018 – pending approval)	It mainly caters to international migration issues and does not cover any social, economic, environmental, cultural, and demographic aspects of internal migration.
National Climate Change Policy (2021) (update of 2012 policy)	Approaches climate-related migration as a policy challenge, and aspires to develop policy measures to diversify livelihood opportunities for the local coastal to limit rural to urban migration.

Source: Salik et al. (2020)¹²⁶

As the policy overview reflects, there is room for addressing migration and displacement in Pakistan's policy discourse. The most recent 2023 National Adaptation Plan is a good document to discuss climate adaptation within a broader context. The five objectives of the plan include: 1) Mainstreaming sustainable land management into ecosystem resilience; 2) Promoting integrated watershed management; 3) Improving water quality through better wastewater management; 4) Investing in

126 *ibid*



coastal and marine resources; 5) Investing in the air pollution-climate change nexus¹²⁷. Dedicated policy frameworks on climate change tend to focus more on mitigation and technological adaptation, however migration as an adaptation strategy is an area of increased importance. Where included in policy narrative, climate is understood as a driver of rural-urban migration and mentioned as a “threat” that should be curbed. **There is also a need for developing a dedicated internal displacement policy framework, or better integrating this aspect in the existing disaster risk reduction policy.**

Internal migration issues can also be more directly addressed in public social protection schemes and programmes. There is, however, **a growing interest amongst policymakers on the issue of climate-induced displacement and migration, to understand who is likely to migrate and where, what are the potential impacts on areas of origin and destination**, and how to plan and manage such migratory movements.¹²⁸ There is considerable opportunity in tapping this interest and pursuing further work in the country.

127 National Adaptation Plan Pakistan, 2023

128 Chaudhry, Qamar uz Zaman, ‘Climate Change Profile of Pakistan’, (Asian Development Bank, 2017)
<https://www.adb.org/sites/default/files/publication/357876/climate-change-profile-pakistan.pdf>



3. Areas of intervention and key recommendations




As evidence across the Silk Routes countries suggests, climate is strongly impacting existing migratory patterns and creating new trajectories for those affected. **Although the bulk of climate-related mobility, including planned migration, relocation and/or displacement, remains internal for now, there is a need for more coordination on the topic across the region, to not only learn from each other's promising practices, but also to proactively devise responses to scenarios where climate-related migration may take place across national boundaries.** There are **growing tensions already over shared natural resources**, such as water flows in drying up rivers, between neighbouring countries and a greater focus on fenced borders with the risk that that climate-related mobility would further the climate-security nexus. Additionally, large-scale inequalities, as well as economic and political turbulences in the countries add further layers of complexity to manage resource allocation required to manage climate-related migration.

Considering the complexity of the subject of climate-related migration, the absence of data around it and varying degrees of policy action across the target countries of the Silk Routes region, **it is important to design a long-term intervention that attempts to develop a more comprehensive and proactive plan, rather than a reactionary approach to the topic.**

3.1 Building evidence of linkages between climate change and migration

Country snapshots, as presented in Section 3, **reveal the varying degrees of policy attention given to climate-related migration in the Silk Routes Countries.** This variation of focus in certain country contexts may also be because of the lack of adequate evidence base that presents the case for policy action. It is well understood that the scale, intensity and magnitude of displacement due to disasters is rising in these countries, and that other patterns of human mobility are also being influenced. However, in-depth understanding of what these changing patterns are, who migrates, to which destinations, and a closer analysis of the wellbeing outcomes for those that migrate and those who stay stuck in vulnerable places is not fully available for the different contexts in each of the countries. **The vulnerabilities of impacted and migrating communities vary depending upon their socio-economic conditions, gender, ethnicity, race, access to financial security and adaptive capacities etc.** Thus, there is a need for more robust studies that further validate the linkage between climate change impacts and resulting displacement/migration as the phenomenon is multidimensional and complex in nature.

Better data is required to develop evidence-based policy in this area, and challenge the policy priorities. **Data on internal mobility in Silk Routes countries is sparingly available, making it difficult to track the trends of migration as driven by slow-onset climate changes.** While there are projections



predicting the scale of climate-related migration in South and West Asia, in most cases they are developed without taking into account the existing scale of internal migration. When the existing scale of migration is not fully known, projecting the scale of climate-related migration is often based on estimates of all population living in risk-prone zones, and present a scenario that seems disconnected with the already existing patterns of internal mobility in these areas. **Therefore, countries in the Silk Routes Region require more support to strengthen their capacities for measuring and documenting internal migration, and to assess how climate change is influencing these existing patterns.** This would help in devising actionable plans to manage the movements for the wellbeing of both migrants and the host communities.

3.2 Better informed policies and more effective implementation frameworks

As understood from existing discourse on the topic, climate-related migration is a multi-faceted phenomenon, with different factors affecting the vulnerabilities of people, leading them to take different mobility/immobility decisions and circumstances. Vulnerabilities of people are not just a function of the exposure to a climate hazard, rather other factors such as economic wellbeing, health, education, social capital, etc. all define an individual or household's vulnerability, and thereby migration decision-making. Even in case of displacement, access to services such as shelter, health, education, social safety, and economic opportunities etc., all play a pivotal role for the displaced population. **This reflects that management of mobility in general, and climate-related mobility in particular, requires a more coordinated, multi-stakeholder approach through a cross-cutting policy framework.** This also requires that **welfare programmes and social security nets should also be reflecting the needs of climate vulnerable groups, including the displaced, migrants, and those that are stuck in vulnerable situations.** While recognising the need of a multi-stakeholder approach to managing climate-related mobility, care needs to be taken that focus is not de-prioritised and responsibility lines are clearly defined, and resource allocation is adequate to fulfil the objectives of the framework.


Moreover, international cooperation is also required to develop frameworks for setting policy standards for migration management in response to climate change. These frameworks should be aligned with existing frameworks and tools that are used to track progress on climate action such as the National Adaptation Plans and Nationally Determined Contributions. Such frameworks will offer the chance to countries to measure the strength and quality of their response to climate-related migration in a more comprehensive way.

3.3 Steps forward

In addition to the broader policy recommendations above, the following short, medium and long-term actions are suggested for the Silk Routes countries.

Immediate actions

- National data collection measures, including surveys and census, should develop comprehensive modules for documenting internal migration patterns, including those arising or influenced by climate change. Regular research studies should be funded to conduct analysis of how climate change is influencing migratory patterns within and across national borders. Such findings should further inform their policies and programmes for immediate relief and medium-term benefit to affected people and avert the incidence of forced migration. Moreover, investing in, and collecting, high-quality and gender-disaggregated data is critical to enabling a better understanding of climate-induced vulnerabilities and various push factors that result in forced migration. This will be critical to informing interventions that improve life and livelihood of all sections of vulnerable groups.
- While understanding the characteristics of climate-migrants is important, equally important is to know who are the people who are at-risk but do not have the capacity to move away from the risk. Identification of barriers to mobility in relation to the factors of vulnerability are crucial to decide whether sufficient support can be provided to these groups to adapt in their current locations or assist them in relocating to safer, less risky places.
- In some countries, national policy frameworks should be reviewed to incorporate focus on climate-related migration, including in adaptation planning, national development plans, and emergency and crisis management strategies. Care should be taken to provide a nuanced perspective on climate-related migration based on the realities of the context, rather than presenting an overly pessimistic or optimistic picture.
- Disaster management authorities should be proactive and conduct assessments of areas most prone to climate-related disasters, and the population dynamics in those areas. These assessments should feed into national policy-making on housing, land-use, as well as agriculture.
- Inter-ministerial coordination mechanisms should be developed for managing climate-related migration. Policy making platforms should be inclusive and engage for participation of community-based groups, social sector organisations, local government representatives, women and child protection groups, etc. to develop context-specific and targeted plans for addressing the infrastructural gaps, social welfare needs and lapses at the service delivery level.
- Communities in climate-sensitive areas are generally aware of the risks they are experiencing currently, and many adapt to the best of their capacities. However, what they do not know too well is how the impacts would be in the future, and how they would alter livelihood options,



health and living standards in their areas, and what would be the most efficient, and affordable adaptation options for them. Hence, tailored awareness campaigns in local languages are suggested to ensure informed decision-making, and increasing the participation of communities in local policy planning.

Medium term actions

- On the national scale, a closer analysis is required to understand the local socioeconomic dynamics in climate-sensitive areas to support through appropriate adaptation responses. Country development plans should incorporate focus on creating green jobs and prioritising introduction of green employment in climate-sensitive areas to offer alternative livelihood opportunities to people who are most at risk.
- There should also be a focus on skilling, re-skilling, and up-skilling youth and labour force, especially those in climate sensitive areas. Green jobs require new and often technological skills. Skilling schemes should be introduced in areas where climate risks are high to prepare youth for more climate-resilient economic opportunities, as well as improving their capacities for finding work in urban areas should they decide to migrate.
- Countries that are experiencing soaring urbanisation rates, especially towards a handful of mega-cities, should devise plans for developing intermediate cities for receiving migrants. Plans for such cities are already in the making in some countries e.g. in Bangladesh.¹²⁹ Lessons learned from such promising initiatives should be shared across the region to inspire timely action.
- Development planning should be more participatory and inclusive with relevant communities, and interest groups adequately represented, including migrants, women's groups, and youth leaders.
- In general, there is a need for developing, reviewing and upscaling social security nets in the Silk Routes countries. Cases where social security frameworks already exist, introduction of immediate relief schemes are easier in case of emergencies.

Long term actions

- With the intensity of climate change impacts increasing, there is a heightened risk that some population groups may be forcibly displaced across neighbouring national borders. A proactive approach should, thus, be developed between the Silk Routes countries, through multilateral or bilateral agreements on frameworks developed for managing those forcibly displaced or migrating due to climate change. A framework with mutually agreed upon principles, definitions,

¹²⁹ Global Centre on Adaptation, 'Global Center on Adaptation Joins Forces with BRAC to Scale Up Locally-Led Adaptation to Build Climate Resilient Migrant-Friendly Towns', (10th December, 2022) <https://gca.org/news/global-center-on-adaptation-joins-forces-with-brac-to-scale-up-locally-led-adaptation-to-build-climate-resilient-migrant-friendly-towns/>

and understanding of climate vulnerabilities across common geographical terrains between neighbouring countries is also required. In this regard, international cooperation can be directed towards establishing an inter-governmental task force, aimed at analysing the regional outlook on climate change and migration and devising appropriate response strategy for the region.

- Such regional cooperation should also work towards jointly addressing the climate vulnerabilities of the region like effective cross border water management, collaborate to help each other in building climate resilience and jointly raise the demand for climate finance at international forums.
- Existing regional frameworks and inter-governmental forums such as the South Asian Association for Regional Cooperation (SAARC), Budapest Process, Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), UN Economic and Social Commission of Asia and Pacific (UNESCAP), etc. should be leveraged to increase coordinated policy focus on the topic of climate-related migration. must increase their engagement on the issue of climate-induced migration by undertaking joint research, dialogues and action to address the vulnerabilities of displaced or migrated people as per the international human rights framework.
- Most of the countries in the Silk Routes have less capacities to cope with the multifaceted challenges imposed by climate change. Moreover, the majority of the countries have limited carbon emissions, but are disproportionately experiencing the impacts of climate change. As per the principles of climate justice, and within the purview of the seminal agreement on the Loss and Damage Fund in COP27 and other relevant frameworks, the governments of Silk Routes countries should be supported by international cooperation for developing adequate response strategies for managing climate-related displacement and to develop capacities to minimise the risks of displacement and forced migration.

