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Migration in the
Context of Climate and
Environmental Changes
within Central Asia and to
the European Union and
the Russian Federation



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Migration in the Context of Climate and Environmental Changes within Central Asia and to the European Union and the Russian Federation

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Acronyms

CAI	Consolidated Act on Immigration (Italy)
CARICOM	Caribbean Community
CIS	Commonwealth of Independent States
CJEU	Court of Justice of the European Union
COVID-19	coronavirus disease 2019
DRR	disaster risk reduction
EAEU	Eurasian Economic Union
ECHR	European Convention on Human Rights
ECOWAS	Economic Community of West African States
ECtHR	European Court of Human Rights
EPCA	Enhanced Partnership and Cooperation Agreement
ICCPR	International Covenant on Civil and Political Rights
IGAD	Intergovernmental Authority on Development
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
NDC	nationally determined contribution
OECS	Organisation of Eastern Caribbean States
UDHR	Universal Declaration on Human Rights
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	(Office of the) United Nations High Commissioner for Refugees



Introduction

This report focuses on the intersection of environmental change with movements into the European Union from Central Asia. It contributes to a growing body of literature on migration in the context of climate and environmental changes,¹ including movements affected by the slow- and sudden-onset impacts of climate change. The report identifies new trends in migration affecting the European Union and Central Asia and discusses the current state of legal and policy responses to these movements. It helps countries in the European Union and Central Asia fulfil commitments made in the Global Compact for Safe, Orderly and Regular Migration (hereafter the Global Compact for Migration) related to understanding the drivers of migration in the context of climate and environmental changes. The recommendations made in the report should also help European and Central Asian governments to develop policies that will enable them to respond to these movements more effectively.

Why migration in the context of climate and environmental changes

During the past 15 years, European countries and institutions, within and beyond the European Union, have given increasing attention to migration in the context of climate and environmental changes as an issue affecting Europe as a continent. In 2009, the Parliamentary Assembly of the Council of Europe adopted Resolution 1655 entitled “Environmentally induced migration and displacement: a 21st century challenge”, which outlines the importance of the issue and makes recommendations for Member States and the broader international community (Parliamentary Assembly of the Council of Europe, 2009). In 2011, the Government of the United Kingdom released a groundbreaking report on migration in the context of climate and environmental changes, often referred to as the Foresight Project, which concluded that environmental drivers interacted with economic, political, social and demographic factors to stimulate additional movements of people. In 2013, the European Commission issued a commission staff working document on climate change, environmental degradation and migration (European Commission, 2013). It called for greater knowledge, dialogue and cooperation in addressing the intersection of environmental and migration issues. More recently, the European Parliament’s Policy Department for Citizens’ Rights and Constitutional Affairs issued a report examining legal and policy responses to migration in the context of climate and environmental changes and displacement. The report recommended that the European Parliament gather “evidence on the effects of climate change and environmental change more generally on migration and displacement. It should do this in cooperation with third countries and regions that are facing mobility issues in the context of climate change and environmental degradation” (Kraler et al., 2020:89). Finally, in July 2022, the European Commission released a new staff working document on addressing displacement and migration related to disasters, climate change and environmental degradation, where it outlines the priority actions

¹ This report endorses the definition “migration in the context of climate and environmental changes” in keeping with the Task Force on Displacement under the UNFCCC. When a specific mobility option is referred to by the cited literature, the terms “displacement”, “migration” and “planned relocation” are used.

it will pursue to complement ongoing efforts “to address this truly global challenge” (European Commission, 2022:1). In particular, it aims to strengthen existing humanitarian and development actions in third countries vulnerable to climate change, and to enhance available research and knowledge production activities. In doing so, the European Commission privileges external actions to be carried out in affected third countries. No measure of protection or legal pathway to the European Union is foreseen for migrants coming from those regions.

All in all, a clear message of all these documents is the need for European countries and institutions to work more closely with developing countries in regions in which migration in the context of climate and environmental changes was likely to increase in the future.

Why Central Asia as a source region

Central Asia is a region of particular importance to the European Union (European Commission, 2019a). Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and Turkmenistan – which make up the region – were all former Soviet Union republics. All of these five countries are also members of regional institutions relevant to the European Union, such as the Organization for Security and Cooperation in Europe. The European Union acknowledges that “Central Asia has a centuries-old tradition of bringing Europe and Asia together” (ibid.:1). A new European Union strategy on Central Asia, adopted in May 2019, gave an “impetus for the EU–Central Asia bilateral relations and further opened up new opportunities for taking the EU–Central Asia partnership forward and intensifying the EU’s engagement in the region in a way that advances the EU’s interests” (European Parliament, 2019). The aim of the partnership is, among others, to strengthen the rule of law and border management in Central Asian countries as well as to counter trafficking in human beings (European Commission, 2019b).

Central Asian countries are already seeing signs of migration in the context of climate and environmental changes, including disaster displacement, evacuation, labour migration and planned relocation in the context of climate and environmental changes. For instance, as this report shows, the fact that most people in Kyrgyzstan are employed in few economic activities highly dependent on (worsening) climatic and weather conditions, such as agriculture, induces many to migrate both internally and across borders to find additional sources of income and as a coping strategy against the effects of climate change. In Tajikistan, local communities have been already relocated from disaster-prone areas to environmentally safer areas (Olimova and Olimov, 2012).

Central Asia is already one of the most arid regions in the world (Guo et al., 2017). Climate change will exacerbate the problem with temperatures increasing altered patterns of precipitation, more frequent heat extremes and increasing aridity. Changes in glacial and snow melt could lead to greater river run-off and decreasing water availability (Reyer et al., 2017). Water scarcity and increased temperatures will have major implications for climate-sensitive sectors, such as agriculture and energy production. The poorest countries in Central Asia – that is, Tajikistan, Kyrgyzstan and Uzbekistan – and the poorest populations among them will be hardest hit by climate change (UNDP, 2018). Central Asian countries have adopted different migration frameworks, including strongly divergent legislation on free movement and mobility. They also have different competences and objectives in relation to environmental protection. Kyrgyzstan and Tajikistan have regulated migration in the context of climate change in their domestic laws with notable difference in terms and scope as well as in the entitlements to services to recover from disasters.

Why the European Union as a destination region

Tajikistan and Kyrgyzstan, in particular, are also seeing substantial outmigration from Central Asia, a pattern likely to be exacerbated by the adverse effects of climate change. The largest number of migrants have gone to the Russian Federation, as discussed in greater detail in the section on migration patterns. Migration to Ukraine has also been significant, at least until 2017. Interregional movements and to the Russian Federation have represented one of the most stable patterns of migration, especially for migrant workers who look for better employment and income opportunities. Migration to the European Union is much smaller but has been increasing, as also discussed in the section on migration patterns.

The ramifications of the war in Ukraine and resulting sanctions imposed on the Russian Federation are not yet clear regarding overall migration in the context of climate and environmental changes from Central Asia to the European Union. The war will likely affect movements into Ukraine and has already produced return migration of Central Asian workers. Despite the projection that remittances to Central Asia would decrease due to the economic sanctions against the Russian Federation (Wheeler, 2022; ICMPD, 2022), Kyrgyzstan and Uzbekistan are likely to receive record-high amounts of remittances from the Russian Federation in 2022 (Ratha et al., 2022). Whether this confluence of issues will motivate much larger numbers of Central Asians to migrate to the European Union is unknown but may well be a logical outcome. Germany is by far the recipient of the largest number of Central Asian migrants; Czechia, Estonia, Greece, Italy, Austria, Sweden and Latvia are also current destinations. Understanding these patterns of movement and the policies in European Union countries related to migration in the context of climate and environmental changes will be useful in determining the preparedness of the European Union to receive still more Central Asian migrants, as climate change exacerbates conditions in origin countries.

A road map to the report

This report begins with a review of the literature on the impacts of climate change, including the slow- and sudden-onset effects of climate change, on human mobility. It discusses three forms of mobility highlighted in the UNFCCC adaptation framework – migration, which may be anticipatory of worsening conditions to come; displacement, which is generally reactive to already poor conditions; and planned relocation, which is often generated or supported by governments as conditions worsen. It is followed by a brief discussion of the international migration and human rights frameworks that pertain to migration – both internal displacement and cross-border migration – in the context of climate and environmental changes.

The study then focuses on three destination areas for migration in the context of climate and environmental changes from and within Central Asia – the European Union, the Russian Federation and Kazakhstan, the principal destination of migrants from other Central Asian countries. Internal migration within Central Asia is also discussed. To give context to the migration into the European Union, the study then discusses the situation in Central Asia as a whole and in individual countries. It illustrates the region's geographic, demographic and economic profile and the intersection between climate change and migration within Central Asia. This part also includes in-depth profiles of two of the principal countries of emigration to the European Union – Kyrgyzstan and Tajikistan. The final section of the study focuses on findings and recommendations for European Union institutions as well as European Union and Central Asian countries.

Impacts of climate change on human mobility

According to a recent study, the number of people affected by extreme weather events has increased over the past decades, while the risk of being killed in the aftermath of such a disaster is drastically reduced compared to earlier times, resulting in much smaller absolute numbers of deaths. Whereas in 1900–1950, around 520,000 people lost their lives annually due to disasters; in 2010–2020, 60,000 people per year were killed (0.33%) (Czaika and Münz, 2022).

Threats to life are not the only consequence of climate change; rather, it has intertwined, complex, direct and indirect impacts on mobility. People affected by climate change may respond in different ways, including different mobility options, according to their assets and levels of vulnerability. Migration can be anticipatory of worsening conditions or reactive to stresses already experienced as a result of a changing environment.

The UNFCCC recognizes eight slow-onset effects of climate change, namely desertification, glacial retreat, increasing temperatures, land and forest degradation, loss of biodiversity, ocean acidification, salinization and sea level rise (UNFCCC, 2012). Each of these gravely impacts people's livelihoods, access to and enjoyment of human rights, as well as access to related services, facilities and opportunities. Both sudden-onset and slow-onset events can trigger migration as can their compounding and cascading repercussions (Kouchak et al., 2020). According to the IPCC, "there is a strong link between sustainable development, vulnerability and climate risks. Limited economic, social and institutional resources often result in high vulnerability and low adaptive capacity, especially in developing countries" (European Union, 2023).

Today, approximately 80 per cent of the world's poorest populations live in degraded rural areas affected by drought and desertification, which have been officially recognized as drivers of forced migration, while more than 2 billion people are estimated to be currently living in countries with high water stress, which could affect almost twice as many by 2050 (United Nations, 2017b). Data suggest therefore that environmental factors have been constantly contributing to shape migration in the past and will continue to do so, even more strongly, in the future (United Kingdom, The Government Office for Science, 2011; United Nations, 2018). In fact, the complex interactions between macrodrivers (i.e. socioeconomic, political, demographic and environmental factors) and microdrivers, given by personal characteristics and contextual barriers or enablers, can lead to different mobility outcomes, including migration,² displacement,³ planned relocation⁴

² Although there is no legal definition of migrant in international law, IOM defines a migrant as "a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons". Migration refers to the movement of persons away from their place of usual residence, either across an international border or within a State. See IOM, 2019.

³ Displacement refers to "the movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters". See IOM, 2019:55.

⁴ IOM provides the following definition of "planned relocation": "In the context of disasters or environmental degradation, including when due to the effects of climate change, a planned process in which persons or groups of persons move or are assisted to move away from their homes or place of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives". See IOM, 2019:157.

and immobility⁵ (United Kingdom, The Government Office for Science, 2011). Although it is easily deducible that personal and contextual characteristics shape migration in the context of climate and environmental changes, little research has been done to explore to what extent and how they interact with the decision (not) to leave an adverse environment. Immobility in the context of climate change is therefore influenced by a number of intertwined factors, including the individual's migration status or identity (i.e. sexual orientation, gender identity and expression, sex characteristics, or age, ability, race or class) that may develop in the country of origin, transit or destination (Diab and Scissa, 2023). Pre-existing vulnerabilities and resilience mediate the extent to which climate change causes movement as well as the types of mobility that occur (Zickgraf et al., 2016).

Vulnerability tends to limit migration opportunities and the ability to move safely and through regular pathways. In fact, migration requires financial, social and political resources and assets that some people simply do not have. For instance, it has been argued that the poor are twice as likely to work in sectors highly susceptible to climate impacts, live in fragile housing in risk-prone areas and tend to receive less recovery support after disasters (Hallegatte, 2017; Smit, 2006). For example, farmers, herders, pastoralists, fisherfolk and others who rely on natural resources and the climate for their livelihoods are deemed to be the least able to move very far away (Betts, 2010). The most vulnerable to climate change, therefore, are subject to being trapped in increasingly precarious rural or urban environments. Immobility can therefore be involuntary, meaning that people wanting to move are unable to do so because of a lack of resources, or voluntary. Voluntary immobility implies that some individuals, households or communities may prefer to stay and attempt to adapt to environmental pressures where they are. Some authors argue that when people who do not possess the assets to migrate eventually do so, they are likely to end up in very vulnerable situations where they are exposed to social and financial exploitation, or may move to unsafe locations (Geddes, 2015; Black et al., 2013). Therefore, depending on the different levels of individual vulnerability and resilience as well as on the type of climate change impact at stake, migration can be adaptive, for survival, or erosive, both for those who actually move and for their family members and host communities (Warner and Afifi, 2014; Martin and Bergmann, 2017). When people in vulnerable situations move to deal with hazards, their migration is often only for survival and can even erode resilience. For example, some who migrate during shocks or hunger seasons can remit little or nothing, while the migration lowers labour supply for food production at home.

Scholars envisage four paths by which climate change may affect human mobility either directly or, more likely, in combination with other factors: (1) weather-related changing patterns; (2) rising sea levels, desertification, permafrost melt and other climatic changes; (3) increased frequency and magnitude of weather-related extremes, such as heatwaves, floods, cyclones and storms; and (4) competition over potentially diminishing or changing resources that may exacerbate tensions leading to conflict, which in turn precipitates movements of people (Warner et al., 2013).⁶

⁵ The *Foresight* report distinguishes between “trapped” and “immobile” populations. According to the report, trapped populations are populations that are unable to move away from environmental change, while immobile populations are people who voluntarily choose to remain. See United Kingdom, The Government Office for Science, 2011.

⁶ Other conceptual frameworks have been however advanced. See Black et al., 2013; Carter et al., 2021; Warner and Martin, 2012.

The first two scenarios, in making land progressively uninhabitable, have the potential to create conditions that contribute to large-scale population movement. For instance, a 2020 Asian Development Bank Institute study reveals that the climate change effect on agricultural household could trigger migration. More specifically, the long-term climatic shocks, including increasing temperatures and altered precipitation, could dampen agricultural productivity, which in turn would increase migration (Murakami, 2020). In statistical terms, the study finds that a 1°C increase in winter air temperature from the long-term average is likely to increase emigration by 5 per cent, while winter precipitation increases emigration until the precipitation level is 10 cm over the long-term average. Furthermore, the IPCC has already highlighted that drought threatens food security, aggravates humanitarian conditions, which could trigger displacement and cross-border migration, and exacerbates conflicts in already fragile regions with ethnic minorities such as Central Asian countries (Mbow et al., 2019). Moreover, the combined results of the two World Bank's *Groundswell* reports suggest that climate change and environmental degradation may result in the displacement of 216 million people by 2050 due to slow-onset events (Viviane et al., 2021). The exposure to slow-onset events, such as sea-level rise or desertification, may significantly trigger cross-border migration in the context of climate and environmental changes in the future (United Nations, 2018).

The third and fourth scenarios, associated with sudden-onset events and resource depletion that destroy infrastructure and livelihoods, can potentially cause temporary migration and may require anticipatory or planned relocation (Warner et al., 2013). In south-western Tajikistan, for example, some inhabitants denounced the impact of the increasing salinity of the water on growing kidney problems, which they considered one of the main challenges related to climate change effects they were facing (Khakimov and Mahmadbekov, 2007). In 2022, 107,000 cases of disaster-induced internal displacement occurred in Europe and Central Asia particularly related to sudden-onset events, such as wildfires, storms and floods (IDMC, 2023).

Climate change has a clear impact upon the environmental drivers of mobility, triggering a wide range of different human mobility patterns that include internal and cross-border, voluntary and forced, temporary and permanent migration as well as displacement and planned relocation. Indeed, while disasters may generate disaster displacement, forcing or obliging people to flee, migration can cover different degrees of voluntariness, ranging from totally voluntary migration to totally forced migration (Hugo, 1996). When planned, migration can offer an escape from climate-affected areas, related poverty and lack of opportunities. Yet, it is hard to quantify migration flows, particularly in response to slow-onset impacts of climate change, as they depend on direct and indirect intricated factors (Martin, 2015; Zickgraf, 2019; Ferris, 2020). Moreover, climate change can also affect mobility indirectly. As highlighted in the *Foresight* report, climate change can influence other drivers of migration as well as personal and contextual circumstances (United Kingdom, The Government Office for Science, 2011).

Finally, planned relocation is recognized in policy and practice as a solution-oriented measure for DRR and climate change adaptation. When adequately planned, and relocated persons are able to maintain similar livelihoods in sites of destination, relocation can both succeed in moving people out of harm to environmentally safer areas and in providing them with the conditions for rebuilding their lives (Ferris and Weerasinghe, 2020; Bower and Weerasinghe, 2021). This in turn would avoid the need to migrate, within or beyond national borders, to find better socioeconomic opportunities. However, when relocation occurs in sites where livelihood opportunities similar to those available in sites of origin are not available, relocation can undermine economic

opportunities, cultural practices and social connections, leading to secondary migration. Research studies indicate that when international planned relocation guidelines and best practices are not followed, the participation of affected people in decision-making risks to be limited or neglected, in turn overshadowing the need for adequate compensation of those to be relocated (Matti et al., 2023). In the following sections, the two case studies of Tajikistan and Kyrgyzstan underline these aspects as well as the importance of fully including households in relocation design characteristics to unveil its benefits.⁷

The relationship between all these forms of mobility and adaptation to climate change is complex. Adaptation, vulnerability and resilience emerged in environmental science to explain the relationship between natural and social systems in the context of environmental change (Geddes, 2015). The IPCC (2014:69–70) defines adaptation as “the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities”. Thus, under this definition, climate change adaptation constitutes a continuous stream of activities, decisions and changes in attitudes of individuals, households, communities, groups, sectors or governments in response to impacts (potentially) generated by climate change (Banerjee et al., 2017; Banerjee et al., 2019). The capacity of individuals and communities to successfully cope with hazards, by responding or reorganizing to maintain their essential function, identity and structure, shapes their resilience. Proactive and anticipated migration can, in this sense, function as an adaptation measure that could reduce the potential for forced mobility in the future. When adequately planned, migration could help climate-affected individuals to move out of, and recover from, harm as well as to satisfy basic needs and secure livelihoods despite adverse environmental condition (United Kingdom, The Government Office for Science, 2011; Tacoli, 2011; Farbotko, 2020). Migration can also lead to improved socioeconomic status, with greater access to employment, services and other opportunities in the country of destination (Gemenne and Blocher, 2017). Therefore, migration can be an exercise of the agency of an individual, a group or a community.

Several studies indeed show that migration as adaptation to climate change provides multiple benefits both to migrants as well as to their family members in climate-affected countries, as recognized in the 2010 Cancun Adaptation Framework of the UNFCCC (Adger et al., 2002; Yang and Choi, 2007; Mohapatra et al., 2009; Nash, 2018). First, migration may lessen strain on limited resources and alleviate demographic pressure on an environmentally stressed area. Migrants’ financial remittances to family members can improve their welfare and resilience to climate variability, including climate shocks, while supporting their income, especially if remittances are received over longer periods (Yang and Choi, 2007; Banerjee et al., 2017; Gemenne and Blocher, 2017; Banerjee et al., 2019; Gemenne, 2022). Moreover, remittances contribute to accumulation of savings, asset creation, livelihood diversification and improved access to food. Research demonstrates that financial remittance inflows are more stable than other forms of private capital flows, particularly during crisis (Ratha, 2003; De et al., 2016). In addition, the transfer of skills and knowledge plays a significant role in acquiring new skills, in providing know-how and in creating or consolidating social networks helpful for enhanced livelihood in the country of origin (Banerjee et al., 2017). These financial and social transfers related to migration support climate change adaptation in at least two main ways. First, beyond fulfilling basic needs, remittances can support existing businesses in

⁷ Research studies have also analysed the situation of refugees in disaster-prone or environmentally dire refugee camps. See Martin, 2017.

agriculture or non-agriculture sectors by making them more resilient and are instrumental in the diversification of rural economies (Barnett and Webber, 2010). Second, remittances are extremely relevant in the aftermath of environmental disasters. Research studies conducted in a number of disaster-prone countries – such as Haiti, Jamaica, the Philippines, Samoa and Viet Nam – have revealed that remittances increase following disaster events to assist their family members in recovery phases (Paulson and Rogers, 1997; Adger et al., 2002; United Kingdom, The Government Office for Science, 2011). In Tajikistan, research studies have found that remittances are spent first on daily household consumption, such as food; second on major ceremonies, such as weddings and funerals; lastly, on the repair of housing or investment in local infrastructure (Babagaliyeva et al., 2017).

Conversely, migration could qualify as maladaptation if it turns out to increase vulnerability to climate change and/or significantly undermines capacities or opportunities for present and future adaptation (Barnett and O'Neill, 2010; Huckstep and Clemens, 2023). Vulnerability is defined as “the propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt” (IPCC, 2021:5). Migration may enhance vulnerability, for instance, when migration is perceived as the only option for survival, when the socioeconomic status of migrants is not maintained or bettered after moving, or when migrants face barriers to obtaining employment, access to adequate and dignified living conditions (Farbotko, 2020). However, the inability to migrate may enhance vulnerabilities even more and people may be displaced or, even worse, become trapped in life-threatening situations they cannot escape.

Legal and policy frameworks for responding to migration in the context of climate and environmental changes

The vast majority of migrants in the context of climate and environmental changes will move within the borders of their own country (World Bank, 2022a). A smaller but often more visible proportion of people will cross international borders (ibid.). The policy frameworks differ between these two forms of mobility – internal and cross-border. This section first outlines universal human rights afforded to all people on the move. Then, more specific frameworks are discussed in relation to internal and cross-border movements. This brief review of policy frameworks is not meant to be comprehensive. Rather, it sets the context for understanding those that are relevant to Central Asia and the areas of destination of cross-border movements.

Universal standards

The UDHR provides clear guidance in Article 13 that “everyone has the right to freedom of movement and residence within the borders of each [S]tate” (United Nations, 1948a). Article 12 of the ICCPR affirms that “everyone lawfully within the territory of a State shall, within that territory, have the right to liberty of movement and freedom to choose his residence” (United Nations, 1966a:171). Article 12(3) of the ICCPR provides certain exceptions: “The above-mentioned rights shall not be subject to any restrictions except those which are provided by law, are necessary to protect national security, public order (ordre public), public health or morals or the rights and freedoms of others, and are consistent with the other rights recognized in the present Covenant”. To the extent that climate change impacts produce conditions that undermine national security, public order or public health, which may be the case in disasters induced by natural hazards, then governments would have the right to enact provisions that would require people to move.

The UDHR and the ICCPR also address movements across international borders. Importantly, UDHR Article 13, incorporated into the ICCPR, declares that “everyone has the right to leave any country, including his own, and to return to his own country”. The Declaration does not, however, require any other country to admit people who exercise their right to leave. Similarly, UDHR Article 14, also incorporated into the ICCPR, states that “everyone has the right to seek and to enjoy in other countries asylum from persecution,” but there is no corresponding obligation on the part of States to offer asylum. The obligation is not to forcibly return someone to where they face a well-founded fear of persecution or other serious harm.⁸

Other human rights instruments apply to all persons, regardless of their status as internal or international migrants or the cause of their movements. Among these are the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966b:3); the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (United Nations, 1984); the Convention on the Prevention and Punishment of the Crime of Genocide

⁸ For an in-depth analysis, see IOM, 2014.

(United Nations, 1948b); the Convention on the Rights of the Child (United Nations, 1989:3); the International Convention on the Elimination of All Forms of Racial Discrimination (United Nations, 1965:195); the Convention on the Elimination of All Forms of Discrimination against Women (United Nations, 1979:13); Convention on Rights of Persons with Disabilities (United Nations, 2006:Annex I); and, more specific to movements of people, the Convention relating to the Status of Refugees and its 1967 Protocol (hereinafter the Refugee Convention) (United Nations, 1951); and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (United Nations, 1990).

Internal displacement

Internal displacement is a matter of State sovereignty. The limits of sovereignty are not absolute, however. The provisions discussed in the previous section apply to internal movements as well as international ones. The Guiding Principles on Internal Displacement are a useful framework for understanding the rights of those who move and the obligations of States towards those who relocate for environmental reasons, among others (United Nations, 1998a). The Guiding Principles are not legally binding, but many States have adopted them into national law (Kälin and Schrepfer, 2012). In the Introduction (Scope and Purpose) of the Guiding Principles (paragraph 2), internally displaced persons or groups of persons are those “who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border”. However, only one region has adopted the principles into a binding law. The African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention), ratified by 31 out of 55 Member States and went into force in 2012, explicitly recognizes that there will likely be displacement from climate change, stating in Article 4: “States Parties shall take measures to protect and assist persons who have been internally displaced due to natural or human made disasters, including climate change” (African Union, 2009).

Principle 6 of the Guiding Principles affirms that all persons have the “right to be protected against being arbitrarily displaced from his or her home or place of habitual residence”. In the case of disaster displacement, arbitrary displacement would include situations in which individuals are forced to flee for reasons that “are not justified by compelling and overriding public interests” (Principle 6.2(c)). In the case of disasters induced by natural hazards, such displacement is arbitrary, “unless the safety and health of those affected requires their evacuation” (Principle 6.2(d)). Principle 7 of the Guiding Principles also states that “the authorities concerned shall ensure that all feasible alternatives are explored in order to avoid displacement altogether. Where no alternatives exist, all measures shall be taken to minimize displacement and its adverse effects”.

The Guiding Principles emphasize the need for consultation with the affected parties, stating that the free and informed consent of those to be displaced shall be sought. The authorities responsible for displacing persons are encouraged to involve those affected, particularly women, in the planning and management of their relocation. Moreover, care should be taken to ensure that “proper accommodation is provided to the displaced persons, that such displacements are effected in satisfactory conditions of safety, nutrition, health and hygiene, and that members of the same family are not separated” (Principle 7.2).

Overall, although approximately 40 countries worldwide have adopted some laws, policies or plans addressing internal displacement, these often lack implementation, as in the case of the Kampala Convention, or address only some specific aspects of internal displacement, leaving others behind. For instance, actions and measures to restore internally displaced people's self-sufficiency and resilience are often absent – a lack that is exacerbated by operational challenges and political unwillingness to assist and protect their populations affected by internal displacement (Kälin, 2019).

International migration

States possess broad authority to regulate the movement of foreign nationals across their borders. Although these authorities are not absolute, States exercise their sovereign powers to determine who will be admitted and for what period. The authority of States is limited by certain rights accorded to foreign nationals in international law. There are no international instruments that specifically address international movements stemming from environmental factors. Those moving because of environmental factors have the same rights and responsibilities as others who cross international borders.

There are no legally binding conventions that apply specifically to persons whose migration, displacement or relocation is correlated with climate change impacts. The United Nations Convention on the Protection of All Migrant Workers and Members of Their Families (hereinafter the Migrant Workers Convention) will apply if those who move enter the labour market in a country of destination. There are no specific provisions, however, within the Migrant Workers Convention for those moving because of environmental factors compared to any other reasons. Some may be covered under the 1951 Refugee Convention. Article 1(A)2 of the Refugee Convention defines refugees as persons who were unable or unwilling to avail themselves of the protection of their home countries because of a “well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion”. While hardly anybody seeking protection because of purely environmental reasons is likely to meet the definition as it stands, those fleeing from the impacts of climate change may qualify if their lives are in danger because they are unable to access resources due to a protected characteristic (that is, race, religion, nationality, membership of a particular social group or political opinion).

The immigration policies of most destination countries are not conducive to receiving large numbers of migrants whose movement has been induced by climate and environmental changes, unless they enter through already existing admission categories (Kälin and Schrepfer, 2012). Typically, destination countries admit persons to fill job openings or to reunify with family members. Employment-based admissions are usually based upon the labour market needs of the receiving country, not the situation of the home country. Family admissions are usually restricted to persons with immediate relatives (spouses, children, parents and, sometimes, siblings) in the destination country (Martin, 2017).

Humanitarian admissions are generally limited to refugees – that is, those who fit the definition in the Refugee Convention: persons with a well-founded fear of persecution on the basis of race, religion, nationality, membership of a particular social group or political opinion – and international protection-seekers. The “dominant” view of international law, as Scott (2020) defines it, argues that most people moving because of environmental harm will be unlikely to meet the legal definition of a refugee, forced to flee because of loss of livelihood or habitat and not because of persecutory

policies (Shacknove, 1985; McAdam, 2012 and 2017; Kälin and Schrepfer, 2012).⁹ Presumably, if a country were to protect some of its nationals from environmental harm while allowing others to suffer because of their race, religion, nationality, membership of a particular social group or political opinion, a claim to asylum might be appropriate (UNHCR, 2020). Although subsidiary protection, the complementary protection status available in the European Union law which could be applied when the refugee status is not, has never been recognized by the CJEU to protection claims made in the context of climate and environmental changes, there are many cases where national courts and tribunals of European Union Member States have issued such protection due to harmful environmental activities and disasters in the country of origin (see section on Italy and Austria).

Temporary protection statuses on humanitarian or compassionate grounds have been issued by a number of countries in the aftermath of sudden-onset disasters, such as earthquakes, volcano eruptions, floods, hurricanes and tornados. Residence permits are usually issued on a temporary and emergency basis, with limited access to the labour market and rights (see Appendix).

Yet, climate change is already severely impacting, both directly and indirectly, a wide range of internationally recognized human rights. States have a legal obligation to respect, protect, fulfil and promote all human rights for all persons, without discrimination, including the responsibility to protect human rights when taking action against climate change, as prescribed by the Paris Agreement (UNFCCC Conference of the Parties, 2015a:Preamble). As part of their obligations, States must take positive and effective measures to prevent, protect from and redress climate change impacts. The Office of the United Nations High Commissioner for Human Rights recalls that States must also ensure that all persons have the necessary capacity to adapt to climate change, with particular attention to those in position of particular vulnerability, such as vulnerable groups and those living in areas particularly exposed to the risks of climate change (e.g. coastal areas, small islands, low-lying coastal zones, disaster-prone areas) (United Nations, 2018). Access to food, water, shelter, housing, health and sanitation, which encapsulate the basic needs of people affected by climate and environmental changes and represent binding human rights obligations for the States, may be disrupted in the aftermath of disasters (Sommaro et al., 2020). Reports by the IPCC, IOM, the Office of the United Nations High Commissioner for Human Rights and UNHCR, among others, highlight that climate change has an impact on several rights, such as the rights to life, self-determination, development, health, food, water and sanitation, and adequate housing and a range of cultural rights (IPCC, 2014; IOM, 2018b; United Nations, 2018; UNHCR, 2020). In Resolution 64/162, the United Nations General Assembly recognized that disasters induced by natural hazards were a cause of internal displacement, while the Human Rights Council noted, in Resolution 35/20, along with Resolutions 7/23, 10/4 and 41/21, “the urgency of protecting and promoting human rights of migrants and persons displaced across international borders, in the context of the adverse impact of climate change” (United Nations, 2017a:5).

⁹ A New Zealand case highlights the barriers to refugee claims based on the effects of climate change. A Kiribati citizen who had overstayed his visa applied for asylum citing the effects of climate change on his home country. The Supreme Court of New Zealand held in 2015 that “[i]n relation to the Refugee Convention, while Kiribati undoubtedly faces challenges, Mr. Teitiota does not, if returned, face ‘serious harm’ and there is no evidence that the Government of Kiribati is failing to take steps to protect its citizens from the effects of environmental degradation to the extent that it can”. The court did not rule out that another case involving serious environmental harm from climate change might meet the persecution bar for refugee status. See New Zealand Supreme Court, 2015. Other jurisdictions have over time agreed that people displaced by disasters do not qualify as refugees, such as the High Court of Australia, the Supreme Court of England and Wales, and the Canadian Supreme Court, among others. See Scott, 2020. However, there is an increasing scholarship challenging this dominant view. See, among others, Hathaway, 1991 and 2014; Betts, 2013; Foster, 2016a and 2016b; Scott, 2020.

The 2010 Cancun Agreements adopted the Cancun Adaptation Framework, where all parties are invited to undertake “measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional and international levels” (paragraph 14(f)) (UNFCCC Conference of the Parties, 2010b). The 2015–2030 Sendai Framework for Disaster Risk Reduction, adopted by the United Nations World Conference held in Sendai, Japan, aims to substantially reduce disaster risk and loss of lives, livelihoods and health through identified targets and priority areas. It expressly mentions displacement and acknowledges the importance of promoting and protecting human rights.

The 2015 Nansen Agenda for the Protection of Cross-border Displaced Persons in the Context of Disasters and Climate Change encourages States to identify measures for the protection and assistance of transnational disaster-displaced persons. In addition, the 2016 New York Declaration for Refugees and Migrants recognizes that the adverse impacts of climate change, environmental degradation and disasters represent a cause of forced migration (United Nations, 2016). These instruments, therefore, call on States to provide adequate solutions to climate change and to protect people affected by it, both within and across their territories. The Preamble of the 2015 Paris Agreement acknowledges that climate change is a common concern of humankind, and therefore “Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity”.¹⁰ The Agreement requested the Executive Committee of the Warsaw International Mechanism for Loss and Damage to establish a task force on displacement to develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change (UNFCCC Conference of the Parties, 2015b).

The Global Compact for Migration encourages States to create environmental conditions conducive for people to lead peaceful, productive and sustainable lives in their own countries (objective 2) as well as to develop or build on existing national and regional practices that provide for humanitarian admission when migrants’ return to their countries of origin is not safe or possible, including due to sudden-onset disasters (objective 5). In line with this, in September 2019, five United Nations human rights treaty bodies issued a joint statement on human rights and climate change, in which they acknowledged that climate change poses significant risks to the enjoyment of the human rights protected under their related conventions and encouraged States to offer complementary protection mechanisms for migrant workers “displaced across international borders in the context of climate change or disasters” (United Nations Committee on the Elimination of Discrimination against Women et al., 2019:paragraph 6).

¹⁰ The particular vulnerability of migrant children in the context of climate and environmental changes has been recently explored in the 2022 Guiding Principles for Children on the Move in the Context of Climate Change, which contain recommendations for safeguarding the rights and well-being of children regardless of their location or migration status. See UNICEF et al., 2022.

In its 2020 key legal considerations concerning the applicability of international and regional refugee and human rights law in case of cross-border displacement owing to environmental and climate factors, UNHCR urged States to carefully consider all intertwined drivers of migration, including the socioeconomic and political impacts of climate change on vulnerable, discriminated or marginalized populations, as well as short- and long-term risk of human rights violations related to environmental harm that may bolster claims for refugee status within the meaning of the 1951 Geneva Convention (UNHCR, 2020). UNHCR argued that, in specific cases, climate change may strengthen the evidence of a well-founded fear of persecution, for instance, when a government deliberately fails to protect against the effects of environmental threats affecting a particular social group; when forced migration results from a conflict over natural resources and affecting a particular social group; or when the government denies assistance to its populations, for instance to an ethnic or religious minority, in the aftermath of disasters (ibid.). UNHCR presented an example concerning a 2009 case decided by a New Zealand court, where it held that people aiding in disaster-relief activity in the aftermath of cyclone Nargis in Myanmar¹¹ were viewed by the State as being opponents to the regime and that the arrest of these people amounted to persecution, thus qualifying them for refugee status (New Zealand Refugee Status Appeals Authority, 2009). UNHCR also clarified the importance of complementary forms of international protection, in particular the role played by the principle of non-refoulement and international human rights law in those cases where international and regional refugee instruments were not applicable.

¹¹ In the decision document issued by the New Zealand Refugee Status Appeals Authority, “Burma” is used instead of the new name Myanmar. IOM, however, complies with the United Nations Terminology Database and uses “Myanmar” in this publication.

Destination countries

Two countries, the Russian Federation and Kazakhstan, are the destinations for the vast majority of Central Asian migrants (Nikiforova and Brednikova, 2018). However, movements to the European Union have been increasing, particularly to Germany (see Table 4). This section looks at the migration trends into the European Union, the Russian Federation and Kazakhstan to examine the scale of migration into these countries; the importance of migration to these countries for migrants and for the countries themselves; and the legal, policy and bilateral/regional agreements governing immigration.

European Union

As of 2022, almost 446 million persons were living in the European Union, which include some of the wealthiest countries in the world as well as mid-income countries, particularly in Eastern Europe. Nearly 87 million international migrants lived in the European Union in 2020 (an increase of 16% compared to 2015 numbers) (DESA, 2021). In 2020, the population of non-European Union migrants in the European Union reached over 40 million (IOM, 2021c). Among European migrants, the largest number of migrants come from Eastern European countries – such as the Russian Federation, Ukraine, Poland and Romania (IOM, 2021d). In total numbers, Germany persistently has the largest number of immigrants of any country in the European Union, mostly coming from other European Union Member States (primarily Poland) and non-Member States, in particular Türkiye, the Russian Federation, Kazakhstan and the Syrian Arab Republic (Statista Research Department, 2023). After Germany, the United Kingdom and France have the second and third largest foreign-born population, with 9.4 million and 8.5 million, respectively, in 2020 (IOM, 2021d).

The European Union is not immune to the adverse effects of climate change. Many European Union countries will be facing more frequent, severe and longer-lasting droughts, which have already caused EUR 9 billion in annual losses, particularly hitting agriculture, the energy sector and the public water supply (European Commission, n.d.c). Increased drought means increasingly frequent and severe heatwaves and wildfires, particularly in the Mediterranean area, and temporary water shortages across the Union (IPCC, 2014). Flooding is a common natural hazard in the region that, along with storms, has affected millions of people and incurred massive economic losses in the last three decades. Climate change is likely to increase the frequency of flooding as well as extreme hazards across the Union in the coming years (ibid.). The 2022 IPCC report argued with high confidence that extreme weather events, such as floods, currently have significant impacts in the European Union in multiple economic sectors, especially in manufacturing, utilities and transportation, and will lead to adverse social and health effects. For instance, the same report projects with medium confidence that climate change would likely impede economic activity in Southern Europe more than in other subregions. Progressive climatic changes could also affect productivity levels in the European Union. The increased frequency and intensity of heatwaves can have serious impacts on health and productivity. Elderly people, children as well as migrant workers performing physical work without air conditioning are vulnerable to heat-related illnesses

and injuries.¹² The ILO projections suggest that 0.03 per cent of the total working hours in the European Union will be lost as a result of heat stress in 2030, corresponding to around 103,000 full-time jobs. Despite these numbers, the European continent is projected to be markedly less exposed to job losses and heat stress, except for Southern Europe that is expected to be only marginally affected. Using projections for 2030, the ILO analysis reveals no productivity losses due to heat stress in any of the main employment sectors for Europe. Interestingly, the ILO projections point to a virtually zero effect of heat stress on labour productivity in Northern Europe.

European Union–Central Asia relations have been evolving during the past decade. The Union adopted its Central Asia strategy, which was endorsed by the European Union Council in June 2019 (European Commission, 2019c). As described by the European Union Parliament, “the scope of the EU’s relations is linked to the readiness of individual Central Asian countries to undertake reforms and strengthen democracy, human rights, the rule of law and the independence of the judiciary, as well as to modernise and diversify the economy, including by supporting the private sector and small and medium-sized enterprises, in particular, in a free market economy” (European Parliament, 2019:2).

The 2019 strategy includes actions related to both climate change and migration. Under the rubric of partnering for resilience, the strategy posits that “it will promote democracy, human rights and the rule of law, intensify cooperation on implementing the Paris climate commitments and tackling trans-regional environmental challenges to turn them into opportunities, and step up cooperation on migration”, although this does not explicitly link environmental and migration issues (European Commission, 2019c:2). In the strategy, the European Union also agrees to enhance its bilateral dialogue and cooperation on migration and mobility with the countries of Central Asia, in particular in the framework of the EPCAs (ibid.). Important focus areas of the EPCAs are the root causes and the prevention of irregular migration, trafficking in human beings, return and readmission, legal migration and border management (ibid.). To date, EPCAs have been signed with Kazakhstan and Kyrgyzstan. Negotiations were expected to commence with Tajikistan in 2021 (Council of the European Union, 2021).

The European Union provided collectively to Central Asian countries EUR 1.02 billion in funding for 2014–2020 from the Development Cooperation Instrument. This funding includes bilateral assistance and regional programmes. Trade is another important vehicle for promoting cooperation between the European Union and Central Asia. In 2020, EUR 22.3 billion was spent on two-way trade in goods. A trade surplus of EUR 4.1 billion was in the favour of Central Asia.

Several other European Union initiatives provide yet unknown opportunities to address migration in the context of climate and environmental changes. The European Green Deal and the New Pact on Migration and Asylum separately tackle the global challenges posted by climate change and migration. The aim of the Green Deal is to make Europe climate neutral and protect the natural habitat (European Commission, 2019d). The Green Deal’s external action – coordinated with its green diplomacy, trade, humanitarian and development policy – aims to promote far-sighted environmental policies in third partner countries (ibid.). There is little acknowledgement of the causal link between climate change and migration in the communication on the Green Deal,

¹² For instance, in 2017, informal workers were estimated to account for 38 per cent of the total employment in Poland and for around 36 per cent in the Russian Federation. See ILO, 2019.

except in one sentence that discusses the linkages to a variety of outcomes including displacement (European Commission, 2019e).¹³ Conversely, the European Union Climate Adaptation Strategy, a key element of the Green Deal, recognizes the role of climate change in exacerbating displacement and migration, and acknowledges the role of adaptation and trade in adapting to climate change. However, no further steps, actions or plans are envisaged in the Green Deal in order to address migration in the context of climate change. The absence of discussion of migration in this context appears to be a lost opportunity as a further aim is to improve the well-being of the population.

A recognition that migration, displacement and planned relocation in the context of climate and environmental changes should be embedded in the European Union's thinking and external action is essential. The European Commission has taken first steps in reporting that humanitarian needs are dramatically rising worldwide because of armed conflicts, combined with the impact of climate change and environmental degradation (European Commission, 2021b). A similar recognition that anticipatory labour migration and planned relocation could be beneficial would help shape future adaptation programmes. Development, humanitarian and international cooperation programmes in third countries could financially and operationally support local communities' empowerment and resilience towards the adverse effects of climate change. Similarly, pathways to safe, orderly and regular migration within countries and across borders could help people adapt to worsening conditions through remittances, building of new skills and return of expertise gained abroad. Although the European Commission notes the need to further mainstream climate change impacts into aid policy and practice, the climate–migration nexus should be comprehensively included in all European Union environmental and migration policy sectors, starting with the Green Deal. In this regard, the Just Transition Mechanism, part of the Green Deal, is key to ensure a fair and just transition towards a climate-neutral economy for all. The Mechanism will mobilize around EUR 100 billion over the period 2021–2027 to support those regions across the European Union Members States most affected by the transition, for instance those more reliant on fossil fuels and resource-intensive industries. It is estimated that the carbon-neutral transition will create around 1.2 million jobs in the European Union by 2030.

Yet, finding workers to fill such jobs may be difficult without new approaches to immigration. Although it focuses primarily on border management and asylum issues, the European Commission's New Pact on Migration and Asylum also sets out new approaches with regard to international cooperation with source countries, responsibility sharing across the European Union, and admission and integration of immigrants. With regard to the last issue, a European Commission press release notes: "A credible legal migration and integration policy will benefit European societies and economies" (European Commission, 2020a:2). In a 2021 report on migration and asylum, the European Commission reaffirms the importance of developing a European Union talent pool in order to match the skills of migrant workers with the needs of European Union employers, as well as talent partnerships with third partner countries to attract "the talent Europe needs" (European Commission, 2021c:22).

¹³ The text reads: "The EU will work with all partners to increase climate and environmental resilience to prevent these challenges from becoming sources of conflict, food insecurity, population displacement and forced migration, and support a just transition globally" (European Commission, 2019e).

This is significant in light of forecasts that the domestic workforce is not sufficient to address all present and future labour and skills shortages in the European Union. Migrants are traditionally overrepresented in essential sectors, ranging from agriculture and food service activities (11.4%) to domestic work and construction (15.1%) (European Commission, 2021a). Moreover, more than 25 per cent of migrants are highly educated and almost 40 per cent are overqualified for the job they do (ibid.). Conversely, almost 20 per cent have only primary school education and need further support (ibid.). Hence, to fully unveil migrants' development potential as well as to redirect migrant workers to greener sectors and to respond to the higher workforce demand, it would be crucial that those already in the European Union could be able to benefit from the Just Transition Mechanism as well as to access vocational and reskilling programmes, jobs in new economic sectors and pertinent green services.

In addition to these new mechanisms, established European Union and broader European institutions and legislative provisions have import for addressing the status of climate-induced movements of people. All 27 Member States are bound by the Refugee Convention as well as the ECHR. Article 78 of the Treaty on the Functioning of the European Union provides the legal basis on which the common European Union asylum policy is developed in compliance with the 1951 Geneva Convention, also mentioned in the Charter of Fundamental Rights of the European Union.¹⁴ Not only have several scholars argued that, in certain cases, both the refugee status and subsidiary protection as established under Directive 2011/95/EU (or the Qualification Directive) may be applied to migration in the context of climate and environmental changes (Betts, 2010; Scott, 2020; Mayrhofer and Ammer, 2022; Scissa, 2022a; Rosignoli, 2023), but there is concrete recognition of such statuses in the case law of several Member States (see the sections on Italy and Austria). Although neither the ECtHR nor the CJEU have yet had the opportunity to deal with a claim solely or primarily based on climate and environmental factors in the context of migration, they have reflected on the matter. For example, in almost 300 cases the ECtHR has concluded that environmental harm may lead to a violation of a broad range of hitherto guaranteed human rights – that is, the rights to life, health, private and family life, and property (ECtHR, 1994, 2004 and 2005).

Moreover, European Union secondary legislation in the field of migration and asylum, under specific circumstances, might already cover environmental causes of migration. Directive 2001/55/EC (or the Temporary Protection Directive), activated for the very first time in March 2022 following the Russian Federation's invasion of Ukraine, ensures immediate protection to a mass influx of third-country nationals fleeing, in particular, conflict or endemic violence, or systematic or generalized violations of their human rights. It has been argued that this directive may also extend to other causes of displacement, which can very well include those associated with the adverse effects of climate change (Sciaccaluga, 2017; Scissa, 2023b). This possibility has been supported by the European Parliament very recently. Indeed, on 17 February 2023, the European Parliament submitted a parliamentary question in order to explore the possibility for the European Commission to activate the Temporary Protection Directive in case of mass influx of people who may have fled the earthquake that devastated wide areas in Türkiye few days before (European Parliament, 2023).

¹⁴ Article 18 stipulates the right to asylum.

Besides, the Directive enables Member States to discretionally extend temporary protection to additional categories of displaced persons (Article 7). The European Union should, however, overcome two main constraints concerning the instrument's highly politicized activation process and narrow scope of application. Unfortunately, in negotiating the content of the recently released New Pact on Migration and Asylum, the Commission proposed to repeal the Temporary Protection Directive and substitute it with a mechanism to manage migration crises, which does not make any reference to environmental causes of migration or related emergencies (European Commission, 2020c).

Beyond international and temporary protection, other European Union instruments could prevent the removal of a person affected by environmental and climate changes. Directive 2008/115/EC (Return Directive) states that the implementation of return must respect the principle of non-refoulement (Article 5) and that removal shall be postponed if it would violate this principle (Article 9). Moreover, Article 6(6) allows Member States to decide at any moment to grant a right to stay for compassionate, humanitarian or other reasons to irregular third-country nationals. Where a return decision has already been issued, it shall be withdrawn or suspended for the duration of validity of the residence permit or other authorization offering a right to stay (Scissa, 2022a). Therefore, this directive distinguishes between legal (non-refoulement and effective remedy) and other obstacles that may postpone or suspend removal (mental and physical state of the individual, humanitarian grounds impeding their removal, technical reasons). In this framework, both non-refoulement and humanitarian clauses may well apply to cases of removal in environmental change-affected countries, although the latter on a discretionary basis.

The European Union also supports Member States in offering legal pathways to protection in the Union, particularly through resettlement and humanitarian admission programmes. Both are voluntary in nature and Member States can discretionally decide the criteria and number of admissions in their territories.

Resettlement is a key instrument of inter-State solidarity for responding to emergencies and humanitarian crises, whereby third-country nationals in clear need of international protection are resettled from life-threatening conditions in non-European Union countries to European Union Member States, where their international protection claim will be assessed. Since 2015, two resettlement programmes have been coordinated at the European Union level and involved roughly 70,000 migrants in need of international protection from the Middle East, the Horn of Africa and North Africa, Türkiye, Lebanon, Jordan, the Niger and Rwanda (European Commission, 2020b). In 2016, the Commission proposed a regulation establishing a Union Resettlement Framework to establish a stable, European Union-wide mechanism providing safe and legal pathways to international protection for vulnerable migrants in third countries (European Commission, 2016). The Commission's pending proposal, repropounded under the New Pact for Migration and Asylum, is relevant also for migration in the context of climate and environmental changes, as it includes international protection-seekers with socioeconomic vulnerability among the potential beneficiaries of resettlement. Disasters or other environmental stressors may displace people and exacerbate their vulnerability, in terms of livelihood and wealth losses. Hypothetically, migrants whose movement has been induced by climate and environmental changes might be eligible for this instrument. Specific guidelines are needed to turn this indirect possibility into a concrete opportunity (Scissa, 2022a).

At the European Union level, Member States have over time implemented voluntary resettlement programmes or granted humanitarian admission to vulnerable migrants coming from conflict-torn countries. Moreover, 20 Member States plus Iceland and Norway have adopted in their domestic legislation various forms of temporary and/or humanitarian protection status catering for a wide variety of needs and situations, which deals or could deal also with environmental issues. For instance, pursuant to Article 43 of the Foreign Nationals Act of Iceland, migrants who are not eligible for the refugee status, but are nevertheless in need of protection due to armed conflicts or natural disasters, may be granted a residence permit on humanitarian grounds (Iceland, Government of, 2016).

Importantly, a 2020 European Migration Network study found that States grant less favourable conditions than the European Union-harmonized statuses for serious health reasons, non-refoulement principle and environmental reasons; “these chiefly relate to shorter duration of residence permits and restrictions to access the labour market, education, integration services and social benefits” (EMN, 2020:4). In some cases, judicial authorities have been expanding available European Union protection statuses or adapting national standards based on a broad understanding of European Union law. The legal framework and key case laws of the top eight European Union destination countries (Germany, Greece, Latvia, Italy, Estonia, Austria, Czechia and Sweden) of migrants from Central Asia (see Table 4) are examined in the subsections that follow to explore what legal pathways to protection are available in these European Union Member States and whether they refer (or not) to environmental causes of migration.

Germany

Though German administrative courts have not so far considered environmental factors as sufficient ground for the refugee and subsidiary protection statuses, in some cases they have significantly supported the issuance of the third protection status available in Germany: the ban on deportation. Section 60 of the German Residence Act regulates the national ban on deportation, based on Germany’s human rights obligations according to the ECHR. In particular, migrants may not be returned to their countries of origin if this would violate Article 3 of the ECHR on inhuman or degrading treatment or punishment (Scott, 2014). Unlike international protection statuses, the ban on deportation enshrined in German domestic law does not require a physical actor of harm. Rather, as noted by Schloss (2021), it is also applicable in case of dire humanitarian conditions attributable to poverty or to the State’s inability or incapacity to deal with disasters.

The Higher Administrative Court in Baden-Württemberg, in a case decided in December 2020, banned deportation (non-refoulement), arguing that humanitarian conditions in Afghanistan had seriously deteriorated. The court was explicit in mentioning environmental conditions, such as the climate and natural disasters, as relevant factors for assessing the humanitarian conditions (Schloss, 2021), in particular the worst drought in decades that affected Afghanistan in 2018 and the subsequent partial collapse of the agriculture sector. German courts had previously denied relief from deportation for cases involving environmental shocks and stressors because the petitioner could not demonstrate that a third party was responsible for the harm nor was the petitioner targeted for harm. Moreover, violations of Article 3 of the ECHR can be found in very exceptional cases, where the applicant is “in a situation of extreme material poverty that does not allow him to meet his most basic needs, such as, inter alia, food, personal hygiene and a place to live, and that undermines his physical or mental health or puts him in a state of degradation incompatible with human dignity” (CJEU, 2019:paragraph 92). Furthermore, decisions on the cases were generally

made on a case-by-case basis consideration not just the harm but the situation of the specific applicant – that is, was the applicant in poor health or had some other debilitating condition. For instance, ban on deportation was granted to families with minor children and depending on the claimant's situation, such as existing family ties in Afghanistan, income and property (Schloss, 2022). What was significant in the December 2020 case was that the judges granted relief from deportation to a healthy, young man based on the overall conditions in Afghanistan, including COVID-19, conflict and environmental factors.

In an April 2020 case, the Administrative Court of Freiburg granted a ban on deportation to a claimant from Somalia, where severe droughts had increased the number of internally displaced to approximately 2.1 million (ibid.:273). The Court found that the grave famine caused by the drought and the plague of locusts had likely aggravated the already dramatic humanitarian situation in Somalia. The objective circumstances of the country of origin, together with the personal conditions of the claimant, who suffered from post-traumatic stress disorder, led the Court to argue that the applicant's removal to Somalia would amount to a breach of Article 3 of the ECHR (Germany, Administrative Court of Freiburg, 2020:paragraph 54).

When it comes to State-led pathways to protection, since 1956 Germany has been implementing humanitarian admission programmes from conflict-torn countries. From 2013 to 2015, for instance, three humanitarian admission programmes were set up for refugees from the Syrian Arab Republic, which enabled 20,000 Syrians to enter Germany safely from neighbouring countries, especially from Lebanon, Egypt and Libya (EMN, 2016). Through family reunification, Syrian family members were also admitted to the German territory. Humanitarian admission provides for a temporary residence permit. Priority is particularly given to cases of (or risk of) violence and/or torture; illnesses and genital mutilation; persecution against ethnic, social or religious groups; sex-based discrimination or persecution; family unity; and ties with the country as well as to single parents, the elderly and children (ibid.; Welfens, 2022). Humanitarian admission programmes in Germany do not specifically refer to environmental stressors as causes of migration or as criteria to be taken into account when deciding whom to admit. This appears in contrast with the Government of Germany's Climate Foreign Policy Strategy, to be launched in the first half of 2023, whose aim is to offer opportunities for comprehensive policy synergies and common approaches to all policy departments to also tackle the impacts of climate change on migration and displacement (Vinke et al., 2023). More explicitly, the German 2008 Strategy for Adaptation to Climate Change clearly affirms that climate change could exacerbate existing social tensions and radicalization, leading to an intensification of economic, political, religious or conflict-related reasons for migration into the European Union (IOM, 2018b).

Greece

In Greece, the two statuses of international protection recognized at the European Union level are into force as well as humanitarian protection. Under Article 19A of Law 4251/2014 (hereinafter Article 19A), enacting the Code of Immigration and Social Integration, and other provisions, a residence permit may be granted on humanitarian grounds to third-country nationals who reside in Greece and are: (1) victims of trafficking in human beings; (2) victims and important witnesses of criminal actions; (3) victims of domestic violence, whereby the residence permit is extended also to minor children of the victims or to the adults having custody of the minor victims of domestic violence; (4) third-country nationals who are employed either under particularly abusive working conditions or as minors; discrimination on the grounds of sex is included herein; (5) persons under

a legally approved addiction treatment programme; (6) third-country nationals whose removal or return to the country of origin or habitual residence is made impossible due to force majeure as well as health reasons concerning themselves or their family members, international sanctions of their countries, and the clause of non-refoulement under Article 3 of the ECHR or Article 3 of the International Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; (7) parents of minor Greek nationals; (8) adults who are not able to take care of themselves due to a severe mental or physical illness or minors who are in need of protection measures and are accommodated in entities purposely for public benefit, provided that their return into a safe environment is impossible; (9) minors whose custody has been assigned by a Greek court or a foreign one recognized by the Greek authorities to Greek families or families of third-country nationals who reside legally in the country or the adoption of whom is still pending before the Greek authorities; (10) victims of labour accidents and other accidents covered by Greek law; (11) minors accommodated in boarding houses that operate under the competent ministries; and (12) persons suffering from severe mental or physical health issues.

At least two humanitarian reasons justifying the residence permit under Article 19A may, in principle, be relevant to migration in the context of climate and environmental changes: (1) the existence of serious health reasons might be relevant inasmuch as severe illnesses might be caused or exacerbated by the adverse climate and environmental conditions in the country of origin, or might justify a ban on removal to climate-affected third countries; (2) akin to the German case, the non-refoulement clause linked to a risk of torture and inhuman and degrading treatment may have a role to play in exceptional cases of extreme material deprivation incompatible with human dignity, as ruled by the CJEU.

From 2015 onwards, the Greek asylum and migration law changed considerably in light of great migration flows and policy developments. Amendments were chaotically introduced by law, abolishing or radically transforming pieces of legislation introduced just before. The legal framework seems therefore highly fragmented and difficult to engage with. This may be detrimental to the evaluation of protection claims, including those based on or associated with climate and environmental factors.

The domestic legislation on asylum underwent substantial reforms throughout 2016. Among other things, the consolidated Greek Asylum Law (L 4375/2016) introduced three additional legal avenues to humanitarian protection (Greece, Government of, 2016). Firstly, Article 22 set forth the issuance of a residence permit for humanitarian reasons to international protection-seekers who held a valid asylum-seeker's card and whose application had been lodged up to five years before the entry into force of the present law and its examination was pending in second instance. Secondly, a residence permit for humanitarian reasons could be granted to persons eligible under Article 28 of Presidential Decree 114/2010 (Greece, Government of, 2010). Such a provision established that a leave to remain in Greece on humanitarian grounds had to be granted to an international protection-seeker who could not be removed due to objective or technical reasons, such as serious health reasons, international embargo, mass violations of human rights in the context of armed conflicts or obligations stemming from the principle of non-refoulement. Thirdly, Article 67 introduced a right to remain on humanitarian grounds for those migrants or stateless persons whose international protection claim had been rejected, but who nevertheless could fulfil the conditions for being granted humanitarian protection. This provision was abolished according to Article 611 of Law 4686/2020 (Greek Council for Refugees, 2021).

A new law (L 4825/2021), passed in September 2021, establishes that: “The competent authorities on a case by case basis can at any time grant a residence permit for reasons of compassion, humanitarian or other reasons, to a third country national, who resides illegally in the Greek Territory, according to Article 19A of Law 4251/2014” (Greece, Government of, 2021:Article 2, paragraph 2L). In case of issuance of the residence permit, no return decision is issued. If the return decision has already been issued, then it is revoked or suspended for a period equal to the period of validity of the residence permit (ibid.). However, according to the Greek Council for Refugees and the European Council on Refugees and Exiles, this article has never been enforced in practice (Greek Council for Refugees, 2021). All in all, there seem to be no cases of application of humanitarian protection on account of environmental stressors.

In light of the severe deficiencies of the Greek reception system in violation of basic human rights and the great number of international protection-seekers arriving in Greece over the last years (ECtHR, 2011), no humanitarian admission programme has been implemented by this country. Rather, relocations of vulnerable migrants from Greece to other European Union Member States have been repeatedly set forth.

Latvia

Latvia grants temporary protection in addition to international protection status. Whereas the grounds for serious harm coincide with those established at the European Union level, those substantiating well-founded fear of persecution are meticulously indicated by law. As explicitly stated in Section 39 of the Latvian Asylum Law (Latvia, Government of, 2016), the official carrying out an assessment of the migrant’s fear of persecution shall consider the asylum-seeker’s:

- 1) race, skin colour, origin or membership of a specific ethnic group;
- 2) religious affiliation, participation in official private or public religious services, his or her other religious activities or expression of views, or also personal or group behaviour based on religious views;
- 3) nationality that may also be expressed as membership of such group, which is determined by cultural, ethnic or language identity, common geographical or political origin or relationships with residents of another country;
- 4) membership of a specific social group, which conforms to one of the following characteristics:
 - a) group members have common congenital attributes or a common parentage, which cannot be changed, or they have common attributes or a conviction, which is so important to the identity or awareness of the person that the person may not be forced to abandon it, and the above-mentioned group has a unique identity in the relevant country, which the community regards as different,
 - b) depending on the conditions in the country of origin, such group, main common attribute of which is a specific sexual orientation, may be regarded as a special social group therein;
- 5) political views or opinions regarding the potential persecutors referred to in Section 42 of this Law and their policies regardless of whether the asylum seeker has acted according to his or her opinion.

If, on the one hand, such a list may guide courts in their evaluation of refugee claims, on the other hand, it may discourage extensive interpretations based on European Union law and international human rights standards, thus a priori excluding the possible role of environmental stressors in supporting the evidence of protection needs. Finally, Section 61 of the Asylum Law regulates temporary protection that, akin to Directive 2001/55/EC, is “granted to persons . . . [who] have left or have been forced to leave their country of origin due to armed conflicts or endemic violence; due to serious threats to human rights or because they have suffered from systematic or general violations of human rights”. The emphasis posed on human rights (potential or occurred) violations may suggest that environmental causes of mass migration might be included, though not expressly mentioned by law. When temporary protection expires and the person has not yet left the country, a removal order follows. However, in deciding upon removal, the existence of humanitarian reasons impeding the removal shall be taken into account. In such cases, the person shall not be returned to their country of origin as long as such reasons exist. No protection status on environmental grounds seems to have ever been issued by Latvian competent authorities.

As for other safe and regular avenues to protection in Latvia, it is relevant to note that the country had no experience in resettlement and humanitarian admission before the so-called “refugee crisis” in 2015/2016 and introduced some legislative changes after that period in order to implement the commitments made under the European Union resettlement schemes (EMN, 2016).

Italy

Italian courts and tribunals have already dealt with serious harm in the context of human-made disasters, in particular harmful environmental activities such as oil extraction. Subsidiary protection to claimants from the Niger Delta (Nigeria) has been provided pursuant to Article 15(b) and (c) of the Qualification Directive. In particular, subsidiary protection on the basis of torture and inhuman and degrading treatment was issued, where a personal and direct risk of being exposed to ill treatment was tangible and the story was held credible (Italy Tribunal of Rome, 2011; Italy Court of Cassation, 2021b; paragraph 2; see also Italy Court of Appeal of Naples, 2019; Italy Tribunal of Genoa, 2022). The direct and personal risk was substantiated by experiences of torture and killing of family members and by factors particular to the claimants’ personal circumstances, such as the ownership of oil fields, their employment in oil companies and their direct (or family members’) belonging to rebel groups. Subsidiary protection succeeded in the case of claimants from the Niger Delta because of two main reasons: courts and tribunals were able to identify an actor of serious harm; and the disaster was qualified as human made. The State of Nigeria was held responsible for both actions and omissions causing serious harm to local communities affected by oil pollution, oil spillage and oil violence. Oil extraction carried out by companies was considered a human-made disaster punishable by criminal law. These strong components helped the Italian competent authorities to substantiate the risk of serious harm.

At the same time, victims of harmful environmental activities from the Niger Delta were eligible for subsidiary protection under Article 15(c) of the Qualification Directive. More into detail, Article 15(c) was activated where the claim lacked credibility or no nexus with the protected grounds of the 1951 Refugee Convention was found, but the oil violence in the area justified the serious and individual threat to a person’s life and integrity (Italy Tribunal of Trento, 2018a and 2018b; Italy Tribunal of Rome, I Civil Section, 2012). The climate of “generalized” violence of the Niger Delta (political insecurity, social violence, terrorist attacks, presence of non-State armed groups, gender violence, oil violence) was interpreted as reaching the level of indiscriminate violence in the context

of armed conflict and hence as demonstrative of State failure (Italy Tribunal of Trento, 2018a:25 and 2018b:21; Italy Tribunal of Venice, 2015:6–7). As such, it may be a model for other countries, meriting an elaborated description of Italy’s laws and policies.

Beyond international protection, Italy explicitly offers four (national) protection statuses applicable to people displaced by disasters and other environmental threats.¹⁵ Chronologically, the first provision dealing with migrants’ protection on environmental grounds concerns Article 20 of the Italian CAI through which the President of the Council of Ministers may establish temporary protection measures, akin to the discipline of the subsequent Directive 2001/55/EC, to be adopted for relevant humanitarian needs, in case of conflicts, “natural disasters” (*disastri naturali*, in Italian) or other events of particular seriousness in non-European Union countries (Italy, Government of, 1998:Article 20). Although this provision has never been activated on account of “natural disasters”, it remains a valid instrument of protection.

Another fundamental disposition is Article 5(6) of the CAI, which has regulated humanitarian protection for over two decades in Italy. It operates as a safeguard clause in order to fully comply with the principle of non-refoulement as well as with Article 10(3) (on asylum) of the Italian Constitution. It was therefore conceived to be issued to people not eligible for international protection statuses who nevertheless could not be expelled because of serious reasons of humanitarian nature, or resulting from constitutional or international obligations of the State of Italy. Humanitarian protection is a flexible instrument to be granted to persons who suffered, or would be at risk of suffering upon removal, from an “effective deprivation of human rights” to be assessed by taking into account both the objective situation in the country of origin and the applicant’s personal conditions, with particular reference to their vulnerability (Italy Court of Cassation, 2009, 2018a and 2018b). As noted by the Tribunal of L’Aquila, vulnerability has to be broadly interpreted as to encompass, inter alia, the international protection-seeker’s health, age and exposure to famine, natural or environmental hazards and other similar circumstances (Italy Tribunal of L’Aquila, 2018). These may include land grabbing as well as the general environmental and climate conditions of the country of origin if able to jeopardize the core of basic human rights of the individual. The Court of Cassation specified that such conditions include both sudden-onset and slow-onset events (Carta, 2018).

It is in this context that, in January 2008, the Ministry of the Interior decided to temporarily suspend the expulsion of Bangladeshi citizens from the national territory due to the serious damage caused in November 2007 by the violent cyclone Sidr in parts of Bangladesh. More recently, humanitarian protection was given to persons coming from Nepal following the dramatic earthquake that destroyed wide areas of the country in 2015 (Italy Court of Appeal of Genoa, 2017). The dynamic approach endorsed by administrative and judicial authorities consolidated the issuance of humanitarian protection due to hazardous events or other serious local factors hindering a dignified and safe return (Italy National Commission for the Recognition of International Protection, 2015a and 2015b). These included droughts (Italy Tribunal of Cagliari, 2019), famine (Italy Tribunal of Milan, 2016) and floods (Italy Tribunal of Naples, 2017; Italy Tribunal of Catanzaro, 2018; Italy Court of Cassation, 2021a). In 2020, the Italian Court of Cassation found that the feasibility of removal must be established, taking into duly account both the objective conditions in the country

¹⁵ More broadly, the European Parliament has found that other national legislation in the realm of the European Union may be used to address the issuance of protection on environmental grounds, such as in case of Belgium, Bulgaria, Cyprus, Ireland, Latvia, Lithuania, Malta and Slovakia (Kraler, 2020).

of origin and the migrant's subjective vulnerability and ascertaining that the general condition of poverty does not reach the famine threshold, which is recognized as a valid ground substantiating the need to humanitarian protection (Italy Court of Cassation, 2020a).¹⁶ In this case, therefore, the condition of poverty generated by a flood and characterized by the loss of home, work and land could, in principle, substantiate the need for protection if it is integrated with conditions of particular vulnerability of the subject capable of undermining the inalienable core of the person's rights or when the condition of indigence reaches the threshold of famine.

Over the last years, the Italian legislature has significantly intervened in the discipline of migration and asylum law as well as in reception, rights and duties of international protection-seekers (Biondi Dal Monte and Rossi, 2021). For the purposes of this work, attention is particularly drawn on the renovation of humanitarian protection in the context of climate change and environmental degradation.

Decree-Law of 4 October 2018, No. 113 (also known as Decree-Law on Immigration and Security), substituted humanitarian protection, which, however, still finds application on pending cases, with a fixed and exhaustive list of protection grounds and, in particular, introduced Article 20-bis in the CAI. This new disposition expressly provided protection to international protection-seekers whose country of origin was in a situation of contingent and exceptional calamity, which did not allow for a safe return. Under these circumstances, a six-month residence permit was issued that could be renewed for a further period of six months if the conditions of exceptional calamity persisted. The contingent and exceptional character of such a calamity clarified that only sudden and singular events, such as earthquakes or floods, could be considered as eligible events under this disposition, thus excluding slow-onset events from its scope of application (Italy Court of Cassation, 2021c). Interestingly, the legislator did not qualify the nature of the calamity into question, potentially covering both natural and human-made environmental hazards.

Decree-Law of 21 October 2020, No. 130/2020 (also known as Lamorgese Decree) is an amendment to the former Decree-Law on Immigration and Security, including Article 20-bis. Under the 2020 formulation, the residence permit is issued owing to serious calamity. This amendment seems to allow for a broader interpretation of the calamitous event based on the degree of severity rather than on its occurrence or progression over time (Scissa, 2022a). Additionally, the provision no longer specifies the duration of renewal for a maximum of six months, thus potentially suggesting that it could be renewed as long as the conditions of environmental insecurity in the country of origin persist (ibid.).

The Lamorgese Decree also amends the grounds on which removal is prohibited under Article 19 of the CAI, already modified by the former 2018 decree. Pursuant to the new formulation, refoulement as well as expulsion and extradition to the migrant's country of origin is prohibited when there are reasonable grounds for believing that they would be at risk of torture, inhuman or degrading treatment, or otherwise of systematic and gross violations of human rights. Moreover, removal cannot take place when it will result in a violation of the person's right to private and family life. Due to the non-refoulement obligations established under Article 19, therefore, "special protection" would have been issued to those persons who, despite not qualifying for international

¹⁶ The same reasoning has been applied by Italy Court of Cassation, 2020b:l section and Italy Court of Cassation, 2020c. Please refer to Scissa, 2022a; Negozio, 2022.

protection, could not be expelled. Therefore, it can be argued that a broad range of environmental causes of migration is expressly protected under Articles 20 and 20-bis of the CAI, respectively, via temporary protection and protection against serious calamities. At the same time, before ordering the removal of a third-country national, the competent authorities are required to assess whether the environmental conditions in the country of origin may constitute a violation of the protection-seekers' basic human rights and human dignity, pursuant to Article 19.¹⁷

However, in May 2023 a new decree-law was adopted, which intervened once again on Article 20-bis of the CAI (Italy, Government of, 2023). Currently, its formulation is exactly like the original version of 2018, thus requiring a "contingent and exceptional calamity". Moreover, by virtue of the same decree-law, special protection to protect the right to private and family life pursuant to Article 19, paragraph 1.1, has been repealed and is no longer into force.

As for the residence permit based on calamity, it is important to highlight from a procedural perspective that there are two ways to get it under Article 20-bis of the CAI, and that the procedure has never changed since its entry into force in 2018. On the claimant's request, *questure* (police stations) can first issue it directly. In fact, the three statuses that satisfy the requirements of the constitutional right to asylum under Article 10(3) of the Italian Constitution (refugee status, subsidiary protection and the national institute of humanitarian protection now known as special protection) do not include protection against calamities. Thus, whereas international and national protection claims are normally assessed by the Territorial Commission for the Recognition of International Protection or related sections (administrative authorities) and are examined by judicial authorities on appeal, claims pursuant to Article 20-bis of the CAI are evaluated by competent *questure*. Second, judicial authorities on appeal may direct the relevant *questura* to give the residence permit on calamity if a case-by-case analysis so requires. This is the case where both the *questura* rejects the foreigner's request and the Territorial Commission denies international and national protection.

According to the Department for Civil Liberties and Immigration at the Ministry of Interior, from October 2018, when Article 20-bis entered into force, to March 2023, a total of 153 residence permits on calamity were issued by 44 Italian *questure*.¹⁸ The highest rates were reached by the *questure* of Bari (36), Genoa (9), Gorizia and Lecce (8), Foggia (7), Messina and Naples (6), Vercelli (5), Ancona and Reggio Emilia (4). The *questure* in Cagliari, Florence, Mantua, Oristano, Padua, Sassari and Siena each issued three residence permits in the period at stake. This means that the *questure* in front-line southern regions have been most active in providing Article 20-bis permits, although the *questure* in central and northern regions have played a significant role. Twenty-seven *questure* have issued either one or two residence permits on calamity in total. Arezzo, Avellino, Enna, Ferrara, Macerata, Novara, Nuoro, Pisa, Prato, Rieti and Verbania each issued two residence permits, while Brescia, Brindisi, Campobasso, Grosseto, Imperia, Lucca, Milan, Modena, Pescara, Pordenone, Ravenna, Reggio Calabria, Rome, Turin, Trento, Treviso and Vicenza issued just one separately.

¹⁷ Special protection has been also recognized in the context of human-made disasters. See Italy Tribunal of Turin, 2023; Italy Tribunal of Genoa, 2022.

¹⁸ An official enquiry has been conducted by Chiara Scissa in accordance with the right of every person to generalized civic access (*diritto all'accesso civico generalizzato*) to data, information and materials available in public administrations, provided by Italian Legislative Decree No. 33/2013. Data on Article 20-bis are in fact not publicly available. This part is taken from Scissa, 2023a.

With regard to the nationalities of the beneficiaries of protection against calamities, they are from Africa, Asia, Europe and Latin America. Most residence permits for protection against calamities have been provided particularly to nationals of Pakistan (57), Albania (15), Bangladesh (14), Nigeria (13), China (12), Brazil (6), Colombia (5) and India (4). This finding is not surprising given the disproportionate effects of climate change and related hazards affecting these countries. However, it is interesting to note that Article 20-bis is applicable also to less evident cases, such as to nationals from Serbia (2), the Russian Federation (2), Ukraine (1) and Belarus (1). Other nationalities provided with a residence permit on calamities are Türkiye (3), Ghana (3), Sri Lanka (2), Senegal (2), Morocco (2), Guinea (2), Chad (2), Peru (1), Mexico (1), North Macedonia (1), Kenya (1) and the former Soviet Union (1).

Although the type of calamity triggering the protection need for these beneficiaries is unknown, it is likely that extreme weather events have played a prominent role. In fact, the calamity had to be “exceptional and contingent” from 2018 to 2020 and again from May 2023 for Article 20-bis to be in effect. Moreover, there is clear evidence that Italian judicial authorities have requested the application of Article 20-bis of the CAI in cases concerning protection from recurring floods in Bangladesh, and from the earthquake that severely affected Albania in November 2019 (Italy Court of Cassation, 2020d; Italy Giudice di Pace di Bari, Settore Immigrati, 2021). Moreover, the comparative analysis of the notion of “calamity” in Italian environmental law and migration law demonstrates that the term has been commonly used to indicate exceptional and sudden hazardous events, mainly associated with extreme weather events (Scissa, 2021).

This analysis, the first ever conducted on the implementation of Article 20-bis of the CAI, is illustrative of the fact that providing protection to migrants fleeing climate and environmental changes does not constitute an excessive burden for receiving States. As a matter of fact, fewer than three residence permits on calamities per month have been issued over more than four years in a front-line Member State such as Italy, thus confirming that this kind of protection does to open the gate to uncontrolled flows.

Finally, in February 2022, a reform of the first articles of the Italian Constitution was approved for the first time since 1948 to include “the protection of the environment, biodiversity and ecosystems, also in the interests of future generations” within its constitutional principles (Italy Camera dei Deputati, 2022). The Constitution binds Italy to respect, protect and promote its principles and, pursuant to Article 10(3) of the Constitution, to ensure protection to foreigners who cannot enjoy the democratic liberties enshrined in the charter in their countries of origin (Biondi Dal Monte and Rossi, 2022). The reference to future generations embraces both Italian and foreign citizens, thus potentially reinforcing the obligation for Italy not only to safeguard the national environment but also to provide protection to third-country nationals coming from an environmentally unsafe country of origin (Scissa, 2022b).

Since 2015, Italy has been implementing national resettlement programmes on a permanent basis as well as several ad hoc humanitarian corridors through plans of private sponsorship. Priority is given to cases of (or risk of) violence and/or torture, lack of foreseeable alternative durable solutions, and persecution due to belonging to social, ethnic or indigenous group, family unity and links with the State (EMN, 2016). Italy admits resettled persons with a visa on humanitarian grounds, which is then converted into international protection status. As for humanitarian corridors, the first three developed since 2015 concerned nationals from Lebanon, Morocco and Ethiopia. In 2015, 95 persons were resettled and/or admitted through (humanitarian) admission programmes, while in 2016, 294 individuals were admitted through private sponsorship programmes (ibid.).

Estonia

Estonia grants refugee and subsidiary protection status according to European Union law. However, the latter may be issued “if, for humanitarian or for some other considerations, [the international protection-seeker] cannot be sent back to your country of origin” (Estonia Ministry of Interior, 2007:16). In fact, the 2006 Act on Granting International Protection to Aliens (Estonia, Government of, 2005) embeds a non-exhaustive list of grounds of serious harm, including death penalty, torture or inhuman or degrading treatment or punishment, or an individual threat to the person’s life or civilians’ lives or violence by reason of international or internal armed conflict (Article 4(3)3). In principle, therefore, subsidiary protection may include other life-threatening situations, including those related to adverse environmental and climatic conditions, where an actor of harm can be identified. Moreover, the Aliens Act outlines the possibility of granting a residence permit on humanitarian grounds, with significant limitations. The provision only applies to foreigners who are already in Estonia and when it is “evident that forcing a person to leave Estonia would be clearly unduly burdensome for them, they lack the possibility of getting the residence permit in Estonia on another basis and the alien does not constitute a threat to public order and national security” (Estonia, Government of, 2009:Article 149.2). Estonia does not, therefore, provide explicit protection on environmental grounds and possibilities to be admitted or remain on humanitarian grounds are limited. This contrasts with the State awareness of the impact of climate change and disasters on future migration flows in the European Union and in Estonia (Estonia Ministry of the Environment , 2017:10). In order to mitigate spillover effects on migration, the Estonian Ministry of the Environment aims to support the capacity of all States in adapting to climate change (ibid.:40); however, adequate measures in asylum and migration domestic law need to be envisaged for its efforts to be effective.

Estonia implements temporary or ad hoc resettlement arrangements. In 2016, resettlement was included for the first time in the Act on Granting International Protection to Aliens as a legal avenue to enter the country. Estonia, together with Latvia and Lithuania, started to resettle refugees under the European Union scheme, giving priority to single mothers, including those with children and minors, and for the purpose of maintaining family unity (EMN, 2016).

Austria

Austrian asylum or migration law does not explicitly provide protection on environmental grounds. Nevertheless, Austrian courts have granted subsidiary protection due to slow-onset disasters, a status almost never granted on such a basis in other European Union countries (Ammer et al., 2022). Austrian transposition of European Union norms on subsidiary protection does not conform to the European Union Qualification Directive. Although the European Union Court of Justice makes clear that a human actor of serious harm is required for the purposes of subsidiary protection, the issuance of this status in Austria is conditioned to the existence of a real risk of violation of Article 2 or 3 of the ECHR upon return to the country of origin. Given their potential to disrupt these core human rights, Austrian judges found that disasters – such as recurring periods of drought with hunger crises, food insecurity, most severe flooding, locust plague and earthquakes – are important elements to take into duly consideration when assessing the need of subsidiary protection (Mayrhofer and Ammer, 2022). In particular, subsidiary protection has been granted to Somali international protection-seekers affected by the impacts of severe droughts in combination with their (1) lack of family support network; (2) profession as farmers; (3) gender; or (4) affiliation to a minority clan (Scissa et al., 2022). Conversely, Austrian courts have never granted the refugee status on account of disasters, usually arguing that disaster-related harm would not qualify as

persecution and that it would lack connection to a persecution ground as enshrined under the Refugee Convention. In addition, humanitarian protection under Section 55 of the Austrian Asylum Act has never been issued on environmental grounds (Mayrhofer and Ammer, 2022).

As for humanitarian admission, Austria implemented a humanitarian admission programme for Syrian refugees from 2013 to 2016 to the benefit of 1,900 persons. Beneficiaries were entitled to a permanent residence permit, basic welfare support, initial accommodation, family reunification and family unity, and integration support (including legal and vocational counselling, language courses and access to education for minor children, among others) (Kratzmann, 2016). Priority was given to survivors of violence and/or torture, persons in need of medical assistance, including treatment for genital mutilation, and persons at serious risk of persecution due to their sexual orientation or gender identity, ethnic belonging, religious belief, risk of refoulement, sex, family unity and links to the State (EMN, 2016). Climate change or environmental conditions were not taken into account in the implementation phases of these programmes.

Czechia

The 1999 Act of Asylum, last amended in 2015, regulates international protection statuses at the domestic level (Czechia, Government of, 1999). It is interesting to note that the national asylum law slightly diverges from international refugee law and the European Union asylum law in a number of aspects. For instance, Section 2.4 defines persecution as serious violations of human rights, as well as measures inflicting psychological pressure or any other similar act, or acts that, when combined, constitute persecution in their intensity, if carried out, supported or tolerated by actors of persecution. Whereas the Refugee Convention leaves persecution undefined, the European Union Qualification Directive contextualizes the acts of persecution more precisely than the vague definition endorsed by Czechia.

Conversely, Section 14 expands the exhaustive list of elements of serious harm enshrined under European Union law to include those cases where the migrant's removal from Czechia would contravene its international obligations.¹⁹

Finally, Section 14 also includes humanitarian asylum to be granted when the traditional refugee status cannot apply but there are humanitarian reasons in cases warranting special consideration. Further indications substantiating the content of such humanitarian reasons are missing, however, and in principle, environmental considerations might be included therein.

As for further legal avenues to protection, Czechia has implemented national permanent programme-based schemes as well as temporary or ad hoc arrangements for resettlement and humanitarian admission. The latter does not apply only to recognized refugees but also to international protection-seekers with the aim of providing protection as a durable solution for (groups of) refugees when return is not reasonable (EMN, 2016). The adverse environmental conditions in the country of origin are not considered a criterion to be taken into account in implementing these programmes.

¹⁹ These include, at least, the obligations outlined in the section on legal and policy frameworks for responding to migration in the context of climate and environmental changes in this report.

Sweden

Following the 1994 International Conference on Population and Development, held in Cairo, Sweden considered reforming its national law on asylum by extending protection to people who, despite not meeting the requirements for international protection, were still in need of protection in the context of climate and environmental changes. The proposal for a legal provision to protect people who were unable to return to their countries of origin because of an environmental disaster was adopted and entered into force in 1997 (Scott and Garner, 2022). However, it has never been applied, as both its scope of application and its interpretation have been narrowly limited. First, environmental disasters only concern sudden and widespread catastrophes with long-term and devastating effects where basic needs could not be met, such as in the case of the Chernobyl disaster or the disappearance of island States due to sea-level rise. Second, judicial authorities systematically dismiss protection claims based on environmental disasters. In particular, one report concludes that Swedish courts failed to carefully consider claims relating to disasters, as an individual assessment of specific country-of-origin information was almost never carried out, and they frequently lacked reasoning to support the conclusions reached (Ammer et al., 2022). As a result of such legal and judicial constraints and with the aim to harmonize its asylum system to the European Union's, the Swedish provision on environmental disasters was first suspended in 2016 and then repealed in 2021.

With regard to other legal avenues to protection, Sweden has been implementing resettlement since 1950. From 2011 to 2015, Sweden and Norway hosted nearly 45 per cent of all persons resettled in the European Union (EMN, 2016). Interestingly, the legal status of resettled refugees seems to be more stable than those of non-resettled refugees insofar as Sweden issues permanent residence permits to the former group and temporary permits to the latter group. In 2016, Sweden introduced an obligation, whereby municipalities shall mandatorily receive and support newcomers, including resettled refugees. However, no reference to climate and environmental triggers is envisaged.

Russian Federation

In 2021, 74.9 per cent of the Russian Federation's population lived in urban areas (UNCTAD, 2022). The Russian Federation is a major emitter of greenhouse gases and vulnerable to climate change, especially to droughts, extreme precipitation, floods, forest fire and degradation of permafrost in the northern region, among others (Chestin and Colloff, 2008). According to the Roshydromet Climate Centre estimates, the climate in the Russian Federation is warming about 2.5 times more intensely than the global average, which will test the country's adaptative capacity (Roshydromet Climate Centre, 2017). The country's economy mainly relies on its services, industry and agriculture sectors – all of which will likely be affected by the adverse impacts of climate change. In fact, severe and extensive droughts can cause a 40–50 per cent reduction in gross grain yields in major grain-producing regions in the Russian Federation (ibid.), while roughly 85 per cent of large settlements on permafrost are located in the Russian Federation, which are projected to be strongly affected by permafrost thaw by 2050 (IPCC, 2022). The Russian Federation is also vulnerable to disaster displacement. From 2008 to 2021, 147,651 internal displacements due to disasters, especially floods and storms, were recorded; in 2022, disasters in the Russian Federation displaced 2,700 people (IDMC, 2023).

The Russian Federation is traditionally a country of both immigration and emigration, with nearly 11 million Russians living abroad (7.4% of the total population and 56.7% of whom are female), and almost 12 million international migrants living in the Russian Federation (8% of the total population and 50.9% of whom are female) (IOM, 2021b). The migration corridor from Central Asia to the Russian Federation is one of the most stable in the world since the collapse of the former Soviet Union, especially for migrant workers who look for better employment and income opportunities. The Russian Federation is the principal destination for a majority of Central Asian migrants, including 95 per cent of migrants from Tajikistan, 83 per cent from Kyrgyzstan and 60 per cent from Uzbekistan (Rocheva and Varshaver, 2018). For rural communities in Kyrgyzstan, for example, labour migration has become a livelihood strategy, with many Kyrgyz migrant workers seeking employment in the Russian Federation. The Russian Federation is also an attractive pole because of the solid social networks and communication flows between the newcomers and those migrants who are already well established in the country, who can help them find accommodation and job opportunities (Sengupta, 2018). Although labour migration within Central Asian region and to the Russian Federation is predominantly low skilled, there are exceptions. Migrants from Kazakhstan, for example, are largely composed of students and highly skilled professionals (Nikiforova and Brednikova, 2018). At the same time, the Russian Federation is likely to remain a destination for low-skilled migrant workers, especially from Kyrgyzstan, Tajikistan and Uzbekistan.

The Russian Federation has adopted a number of laws since the breakup of the former Soviet Union. Article 27 of the Russian Federation's Constitution establishes the right to migrate internally and internationally. Adopting language similar to the Universal Declaration of Human Rights, Article 27 states:

- 1) Everyone who is lawfully staying on the territory of the Russian Federation shall have the right to freedom of movement and to choose the place to stay and reside.
- 2) Everyone shall be free to leave the boundaries of the Russian Federation. The citizens of the Russian Federation shall have the right to freely return into the Russian Federation (Russian Federation, Government of the, 1993).

Legislation specifically related to migration and citizenship include: Federal Law on Citizenship (2002); Federal Law on the Registration of Foreign Nationals and Stateless Persons (2006); Federal Law on Entry and Exit Procedures for Foreign Citizens and Stateless Persons in the Russian Federation (1996); Federal Law on the Legal Status of Foreign Nationals in the Russian Federation (2002, last amended on 10 August 2019); Federal Refugee Law (1993); and Federal Law on the Voluntary Resettlement of Nationals (1996).

Federal Law No. 115 of 2002, as amended in 2019, focuses on the legal status of foreign nationals in the Russian Federation. Article 13.3 sets out a significant change in the requirements for entry into the Russian Federation (Russian Federation, Government of the, 2002). Prior to these changes, migrant workers from the CIS could enter and reside in the Russian Federation with their national identity documents. Now they need an internationally recognized passport to enter. Changes in visa requirements were made as well. Foreign workers from countries without a special entry visa arrangement with the Russian Federation must pass a Russian language and history test and have medical insurance and pay taxes. Most Central Asian countries, however, have special entry visa arrangements with the Russian Federation. Foreign nationals authorized to arrive in the Russian Federation without a visa can apply for a work permit after entry.

The Russian Federation seems to be reluctant to acknowledge the role of climate and environmental changes as potential drivers of migration. In commenting the strong reference to the climate change-migration nexus endorsed by the Global Compact for Migration, the Russian Federation declared that “As of today, there is no reliable and universally recognized scientific evidence pointing to the direct correlation between climate change and displacement” (Russian Federation, Government of the, 2018a:2). However, the role of climate change in contributing to an intensification of both internal migration, within Central Asia, and cross-border migration, from Central Asian countries to the Russian Federation, cannot be automatically disregarded. Although it does not model international migration, the *Groundswell* report by the World Bank suggests there could be some outflows in the border region, especially involving rural and highly mobile Central Asian populations.

Some authors, moreover, recall the 2017 report of the Roshydromet Climate Centre on the climate risks in the territory of the Russian Federation that demonstrates that 90 per cent of the most severe economic losses occurred because of severe weather events, such as floods, strong wind, heavy rain and drought (Umnova-Koniukhova et al., 2019). In this regard, the Russian Federation has included “natural disasters, accidents, and catastrophes, including those connected with global climate change, the deterioration of the physical condition of infrastructure, and outbreaks of fire” among the main threats to national security in its National Security Strategy (Russian Federation, Government of the, 2015) and has confirmed in its environmental action plan for 2020–2022.

Umnova-Koniukhova and others (2019:1008) argue that migration in the context of climate and environmental changes from Central Asian countries to the Russian Federation may become a threat to the national security of the Russian Federation. In the authors’ view, the insecurity of environmental migrants and the lack of legal boundaries for environmental migration will create additional social tension, overloading the management system in densely populated areas of the country, creating a shortage of resources (ibid.). Water shortage in Central Asia as well as in other regions may induce a greater number of people, already affected by socioeconomic vulnerability, to head to the Russian Federation. Environmental degradation is also projected to trigger massive migration within the Russian Federation. First, ecological deterioration in the most industrialized area of the country, aggravated by dumps and massive industrial waste, is expected to put “hundreds of thousands of people” on the move (ibid.:1009). Second, rising temperatures are projected to cause migration in the context of climate and environmental changes from the northern areas.

References to migration in the context of climate and environmental changes in the Russian legislation are mostly indirect. For instance, the Federal Law on Protection of the Population and Territories in Case of Natural or Man-made Disasters (Law No. 68) applies to “Russian Federation’s citizens, foreign citizens and stateless persons staying in the territory of the Russian Federation or part thereof” from emergency situations of natural and human-made nature (Russian Federation, Government of the, 2013). An emergency situation is defined as “a situation in certain territory caused by an accident, natural hazard, catastrophe, natural or other disasters, which may lead or have led to human casualties, damage to human health or environment, heavy material losses and affect people’s vital activities” (ibid.:Article 1).

With the aim to prevent the occurrence of emergencies and to limit their damages to people and territories, Law No. 68 sets forth humanitarian and technical protection measures in compliance with international and national laws as well as for information on radiation, chemical, medico-biological, explosive, fire and environmental safety in the interested areas. It should be noted that the law does not provide further explanation regarding the nature of such protection

measures nor the modalities through which they should be implemented. Besides, international and national safeguard norms are not specifically identified. Article 18 states clearly the rights of Russian citizens during emergencies, including the protection of life, health and personal property; the right to be informed about the emergency and safety measures; the right to take part in emergency prevention and response measures; and the right for compensation of damage to their health and property due to emergency situations as well as for disability pensions as a result of injury or disease. The Concept of State Migration Policy 2019–2025 does not mention migration in the context of climate and environmental changes (Russian Federation, Government of the, 2018b).

Kazakhstan

Akin to the neighbouring Russian Federation, Kazakhstan is a country of both immigration and emigration. 7.7 million citizens from Kazakhstan left the country in 2022 (IOM, 2023a). In the same year, more than 7.5 million migrants arrived in the country. The vast majority, nearly 6 million arrivals, come from CIS Member States, especially from the Russian Federation (41.1%), Kyrgyzstan (30.4%), Uzbekistan (27.6%), Azerbaijan (0.4%) and Belarus (0.2%) (ibid.).²⁰

Migration within Central Asian countries is facilitated through visa-free programmes as well as propelled by lack of jobs, political conflict and turmoil in home countries (Di Bartolomeo et al., 2014). People from Kyrgyzstan, Tajikistan and Uzbekistan move to Kazakhstan seasonally, often with their families, to harvest cotton and do other farm work (Marat, 2009). High-skilled workers, meanwhile, are more likely to move to countries with greater economic opportunities (Mukhitidinova, 2015).

Kazakhstan is particularly exposed to sudden-onset events, especially to floods, and landslides (Kazakhstan, Government of, 2017a). From 2010 to 2020, the World Bank registered more than 40 disasters induced by natural hazards occurred in Central Asian countries, affecting more than 300,000 people and causing 270 deaths and over USD 332 million in economic damages. Thousands of people have been displaced in Kazakhstan because of sudden-onset events, including severe floods and devastating earthquakes (Viviane et al., 2021).

The World Bank identifies “climate in-migration hotspots” in Karaganda, Nur-Sultan and Kostanay. These are largely due to projected increases in both water availability and crop productivity. Climate outmigration hotspots by 2050 are expected along the southern border of Kazakhstan due to projected decreases in water availability and crop productivity (ibid.). Recent research found that in six years over the period 2000–2016, more than half of the land area in Kazakhstan displayed drought conditions (Dubovyk et al., 2019). At the same time, rising temperatures could open other areas to agriculture, such as northern and eastern Kazakhstan, but these effects could be compromised by other adverse impacts on ecosystem services (Viviane et al., 2021). Finally, the Aral Sea region is particularly affected by climate change impacts. Situated between Uzbekistan and Kazakhstan, the lake has irrecoverably dried up over the decades. The arid climate along with water scarcity “had an extremely negative impact not only on the natural environment of the region, but also on the economy and living conditions of the population and their migration” (Narbayep and Pavlova, 2022:8). On this point, Lioubimtseva found “a continuous

²⁰ The Border Service of Kazakhstan reported that 1.6 million arrivals accounted for non-CIS countries of origin in 2022, in particular Türkiye (40.3%), the United Arab Emirates (17.6%), China (10.5%), Egypt (8.6%) and Georgia (6.5%). See IOM, 2023a.

migration of the population from Karakalpakstan, an autonomous republic within Uzbekistan, adjacent to the Aral Sea, to eastern Uzbekistan and Kazakhstan” (Lioubimtseva, 2014:417).

Kazakhstan’s immigration and naturalization laws have evolved over time. The 1993 Constitution guarantees free movement within the territory of Kazakhstan and persons generally have the right to freely choose their residence (Kazakhstan, Government of, 1993:Article 21.2). It also states that foreign citizens and stateless persons in Kazakhstan shall enjoy the same rights and freedoms, as well as the same obligations, afforded Kazakh citizens, unless otherwise prescribed by the Constitution, laws or international treaties (Article 12.4). Among the relevant laws on immigration are as follows: Citizenship Law of 1991; Law on the Legal Status of Foreign Citizens of 2006; Refugee Act of 2009; Population Migration Act of 2011 (with recent amendments in 2019); Population Employment Act of 2013; Law on Amendments and Modifications to Certain Legislative Acts of the Republic of Kazakhstan on Combating Trafficking in Persons of 2013; and Criminal Code of 2014 (with recent amendments in 2020). Kazakhstan authorized a legalization programme for irregular migrants in 2006. In 2019, Kazakhstan ratified an agreement with Uzbekistan on the protection of the rights of migrant workers (*UzDaily*, 2021). Free medical treatment is authorized for migrants from other countries in the event of injury or other work-related health problems. The agreement includes a procedure for recognizing diplomas and degrees and sets forth social security and pensions. Kazakhstan’s national law on migration does not refer to environmental factors nor does it provide a definition of migration in the context of climate and environmental changes (Kazakhstan, Government of, 2011). Moreover, Kazakhstan’s national legislation remains underdeveloped and not always in line with international standards. For instance, Kazakhstan is a party to the Refugee Convention. Refugees are granted refugee status for one year. Refugee status can be extended for one more year if the circumstances in the country of origin has not changed, thus strongly limiting the refugee status to maximum of two years (UNHCR, 2019).

Five-year policy and action plans were adopted in 2017, such as (1) the Concept of Migration Policy of the Republic of Kazakhstan for 2017–2021 and (2) the Action Plan on Implementation of the Concept of Migration Policy for 2017–2021 (Kazakhstan, Government of, 2017b), in which no reference can be found on migration in the context of climate and environmental changes. The concept paper outlines several internal challenges, including “labour redundancy with low qualification and deficit of qualified personnel in certain sectors of economy because of the low education level; overpopulation of the largest cities and separate territories ...; the obzlyudeniye [depopulation] of the border territories and reducing population, especially working-age, in northern regions ...” (Chapter 2). External challenges stressed by the concept paper include the “risk of growth of labour power with low qualification due to the expected inflow, first of all, [of] labour migrants from the countries of Central Asia; risk of growth of outflow of qualified personnel and talented youth; hit to the country with flows of migration of destructive elements” (ibid.).

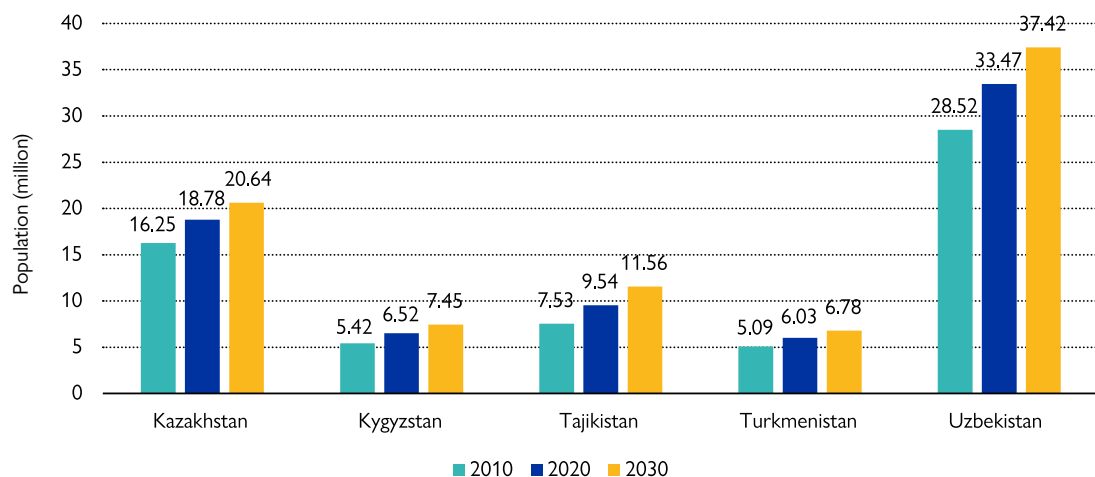
The concept paper also describes several components of the new migration policy strategy to include “1) temporary migration for involvement of foreign workers to certain sectors of economy or specific priority projects; 2) long-term migration for involvement of skilled foreign workers on the long-term projects directed to implementation of new innovations, increase in enterprise and development of human capital; 3) implementation of the national program[me] of advanced training”.

Central Asia: A regional profile

Geographic, demographic and economic profile

The Central Asia region is a landlocked area surrounded by mountain ranges on the east and south and the Caspian Sea on the west (Geohistory, 2017). It borders the Russian Federation, the Islamic Republic of Iran, Afghanistan, Pakistan and China. As of 2019, Central Asia was home to some 73.2 million people, the vast majority of whom reside in just two countries: Uzbekistan (33 million) and Kazakhstan (more than 18 million) (Viviane et al., 2021). Although the population is still growing, by 2050, the World Bank projects a strong decrease in the Central Asian population, down to 69 million (ibid.).

Figure 1. Demographic trends in Central Asia, 2010, 2020 and 2030

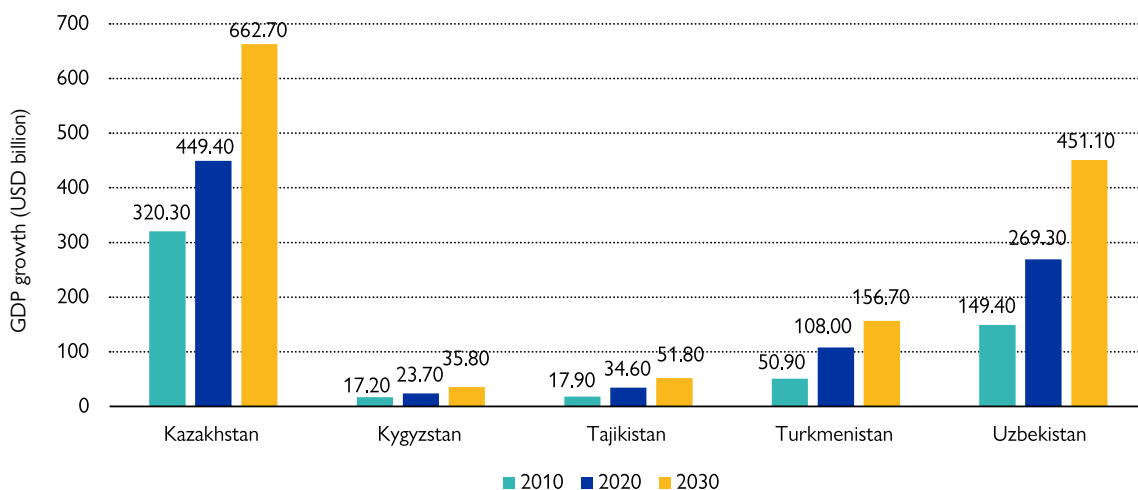


Source: DESA, Population Division, 2020.

Economic development varies within the region, with countries ranging from low to middle income.²¹ GDP varies significantly. Kazakhstan has the largest GDP (USD 171.08 billion), with Uzbekistan coming next (USD 59.92 billion) and then Turkmenistan (USD 45.23 billion). Tajikistan and Kyrgyzstan have much smaller economies (USD 8.19 and 7.74 billion, respectively) (World Bank, 2021a) (see Figure 2). Per capita income also varies significantly. In 2020, Kazakhstan's per capita income was USD 9,122.2 (2020) and Turkmenistan's was USD 7,330.4, whereas Tajikistan's was USD 852.3, Kyrgyzstan's was USD 1,256.9 and Uzbekistan's was USD 1,759.3 (ibid.). The COVID-19 pandemic affected growth prospects in the region. According to the World Bank, the economies of Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan together faced an estimated contraction of 1.7 per cent in 2020. The World Bank expected a modest recovery across the region of 3.8 per cent in 2022. Again, neither the contraction nor the projected recovery is equal across the region (ibid.).

²¹ For more information, please see the World Bank's list of low- and middle-income economies at <https://data.worldbank.org/country/XO>.

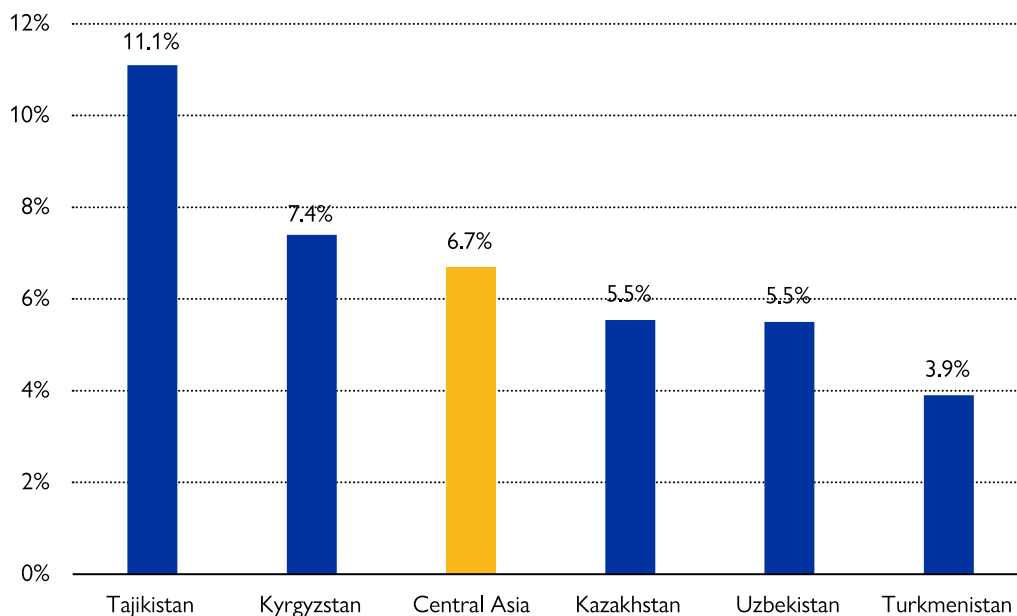
Figure 2. GDP growth in Central Asian countries in 2010 and 2020 and estimations for 2030



Source: World Bank, 2021c.

The pandemic also affected employment in the region as is the case around the world. Overall, the unemployment rate was 6.69 per cent. Tajikistan was hit the hardest with an unemployment rate of 11.1 per cent, whereas Turkmenistan had an unemployment rate under 4 per cent in 2021 (World Bank, 2021c). See Figure 3.

Figure 3. Total unemployment rate (percentage of the total labour force) (modeled International Labour Organization estimate) in Central Asian countries, 2021 (%)



Source: World Bank, 2021c.

Half of Central Asian population resides in urban centres (DESA, 2021). Nevertheless, agriculture remains an important economic and employment sector, as some Central Asian countries are major food producers and cotton exporters (Viviane et al., 2021). Industrial sectors include oil, natural gas, coal, light manufacturing, food processing, mineral extraction, and mining for industrial and precious metals (ibid.).

Migration patterns

Central Asian countries are home to almost 8 million international migrants. Since the split-up of the former Soviet Union, the total stock of international migrants in the five Central Asian countries has grown from 5.7 million to 7.8 million (see Table 1). The largest number of international migrants is in Kazakhstan. The smallest number is in Turkmenistan, where the international migrant population has declined by about 20,000 during the past 30 years. Kazakhstan also has the largest proportion of international migrants as measured by percentage of the total population (9%). In the other countries, international migrants account for 2–4 per cent of the population.

Table 1. International migrant stock in Central Asian countries, 1990–2020

COUNTRY	1990	1995	2000	2005	2010	2015	2020
Kazakhstan	2 971 634	3 295 157	3 554 484	3 717 649	3 797 527	3 885 576	4 203 899
Kyrgyzstan	522 574	550 022	566 315	652 852	726 544	742 841	774 377
Tajikistan	537 699	555 426	541 183	586 235	584 647	585 060	586 851
Turkmenistan	260 005	243 523	224 398	231 939	234 635	238 531	242 554
Uzbekistan	1 427 980	1 515 731	1 575 965	1 730 224	1 888 942	1 976 024	2 027 823
TOTAL	5 719 892	6 159 859	6 462 345	6 918 899	7 232 295	7 428 032	7 835 504

Source: DESA, Population Division, 2020.

Apart from Kazakhstan, emigration is a more common facet of life in Central Asia than immigration. Intra-regional migration among CIS countries is a key feature in the region and is underpinned by geographic, cultural, economic, political and social links that are historical in nature (see Table 2).

Table 2. Bilateral migration flows within Central Asia, 2020

Country of origin	Destination country					Total
	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	
Kazakhstan	0	7 085	16 644	1 104	296 511	321 344
Kyrgyzstan	12 599	0	2 146	973	8 940	24 658
Tajikistan	840	11 351	0	446	7 563	20 200
Turkmenistan	19 994	No data	1 465	0	67 003	88 462
Uzbekistan	13 092	4 856	11 408	756	0	30 112

Source: DESA, Population Division, 2020.

The migration corridor from Central Asian countries to the Russian Federation, Ukraine, Belarus and other CIS countries is even larger than the one within the subregion (see Table 4). The largest number of migrants go to the Russian Federation. It represents one of the most stable patterns of migration, especially for migrant workers. In recent years, Central Asian countries have revised policies regulating intraregional migration through the conclusion of bilateral agreements on entry and readmission. Further cooperation is currently occurring in the region on enhancing the

management of mixed flows, including on aspects related to border management, migrants' rights and protection, and irregular migration. These are discussed in greater detail later in this report.

The establishment in 2015 of the EAEU, which includes the Russian Federation, Armenia, Belarus, Kazakhstan and Kyrgyzstan, has also allowed people from its Member States to move freely to live, work and study in other EAEU Member States (IOM, 2020b). According to one observer, “the EEU has made some progress in the trade in services. Forty-three service sectors were liberalized in January 2015 and an additional nine sectors, including advertising, tourism, and research, were approved for liberalization in May 2018” (Troitskiy, 2020). The EAEU contributed in other ways to easing the movement of labour. “The window for registering labour migrants at a new place of residence was extended and the number of documents required was reduced. Uniform rules governing migrants’ access to health care and preschool education were introduced, and an agreement on labour migrants’ pension rights was signed in December 2019” (ibid.). The liberalization of financial services has been delayed to 2025. Education has become one of the contested areas, as the Russian Federation has sought to expand integration in this sector, claiming it is a service linked to the common market of labour, while Kazakhstan has staunchly objected to the idea and Belarus has shown little enthusiasm.

The EAEU appears to be under stress, however. Economic problems stemming from internal policies as well as the pandemic have upended some of the plans for integration. The EAEU, according to Dragneva and Hartwell (2021), focuses on the political economy of protectionism. The authors note that it “remains a geopolitical rather than economic project [...], as trade liberalisation has been halting in individual member states and across the bloc as a whole” (Dragneva and Hartwell, 2021:1). In addition, the Russian Federation’s worsening relations with both the European Union and the United States affects the ability of the EAEU to gain traction in negotiating better trade arrangements with these economic superpowers. In light of the crisis over Ukraine, whether the EAEU will be able to overcome the economic barriers to its effectiveness or not is still to be seen.

People from Central Asia also migrate, mostly through irregular channels, to Western and Central Europe, especially the European Union, where work and family ties are relatively strong (UNODC, 2015). Irregular migration is a feature of this form of movement. Most migrants from Central Asia as well as other countries heading to the European Union first enter Kyrgyzstan and Tajikistan and are then smuggled through Kazakhstan and the Russian Federation to Western Europe (ibid.).

Table 3. Migration flows between and within Central Asia and the European Union by sex, 2010 and 2020

	Number of migrants in 2010	Number of migrants in 2020	Change between 2010 and 2020
Total	1 048 902	1 434 473	↑ 36.76%
Male	510 574	658 819	↑ 29.00%
Female	538 328	775 654	↑ 44.10%

Source: DESA, Population Division, 2020.

Table 4. Top 3 European Union destination countries by country of origin and sex, 2010 and 2020

Country of origin	2010						2020					
	Destination 1	Total	Destination 2	Total	Destination 3	Total	Destination 1	Total	Destination 2	Total	Destination 3	Total
Kazakhstan	Germany	812 460	Greece	28 574	Latvia	7 058	Germany	1 128 201	Greece	27 523	Czechia	8 015
(M/F)	M: 401419 F: 411041		M: 13169 F:15405		M: 3185 F: 3873		M:522201 F: 606000		M: 13106 F: 14417		M: 4081 F: 3934	
Kyrgyzstan	Germany	67 389	Italy	1 188	Latvia	987	Germany	92 834	Italy	1 944	Czechia	1 262
(M/F)	M: 32791 F: 34598		M: 186 F: 1002		M: 424 F: 563		M: 39254 F: 53580		M: 344 F: 1600		M: 728 F: 534	
Tajikistan	Germany	23 344	Latvia	669	Estonia	403	Germany	32 157	Austria	633	Latvia	565
(M/F)	M: 11548 F: 11796		M: 330 F: 339		M: 199 F: 204		M: 17468 F: 14689		M: 310 F: 323		M: 290 F: 275	
Turkmenistan	Germany	5 334	Latvia	714	Estonia	358	Germany	7 347	Latvia	552	Estonia	332
(M/F)	M: 2476 F: 2858		M: 337 F: 377		M: 132 F: 226		M: 3205 F: 4142		M: 253 F: 299		M: 117 F: 215	
Uzbekistan	Germany	34 045	Greece	8 784	Italy	2 424	Germany	46 898	Greece	8 459	Sweden	4 343
(M/F)	M: 16098 F: 17947		M: 3736 F: 5048		M: 449 F: 1975		M: 20680 F: 26218		M: 3735 F: 4724		M: 2205 F: 2138	

Source: DESA, Population Division, 2020.

The number of female labour migrants has been rising in and from Central Asian countries (Tables 3 and 4). Men have historically been more likely to migrate for work, with one in three working-age men being abroad in the case of Tajikistan, for example (Laruelle, 2013). In 2020, there were 2.9 million international migrant women and girls in Central Asian region (51.7% of migrants' total share) (IOM, 2020a). However, women's employment is changing across the subregion. A study of gender and labour migration to the Russian Federation found women made up 31 per cent of labour migrants from Kyrgyzstan in 2015, 13.4 per cent of those from Uzbekistan and 9.6 per cent from Tajikistan (Rocheva and Varshaver, 2018). Female migrants tended to be employed in the service industry and trade, while male migrants were more often engaged in construction. A survey of female migrants from CIS member countries²² found women from Central Asia were the most vulnerable group in terms of living conditions and lack of adequate access to medical services; they also sent home the largest portion of their salaries as remittances (Rocheva and Varshaver, 2018).

International remittances play an important role in Central Asian economies, especially for the less developed countries in the region (IOM, 2020b). Two of the world's top 10 remittance-receiving countries relative to GDP are Kyrgyzstan and Tajikistan. In Kyrgyzstan, remittances have been estimated to reduce the national poverty rate by 6–7 per cent (World Bank, 2019b). Remittance flows into Central Asian countries largely reflect migration patterns within and from the region, closely linked to work and income generation. The Russian Federation, the largest destination for migrants from the subregion, remains the biggest source country of remittances to Central Asian countries (IOM, 2021d).

As in other parts of the world, mobility restrictions imposed in response to the COVID-19 affected migration patterns, as movements were reduced significantly when destination countries closed their borders. Migrants trying to return home were also stranded due to border closures. This particularly affected transit through Kazakhstan, which grants admission to those returning by land to Tajikistan, Kyrgyzstan and Uzbekistan. The pandemic further led to a significant drop in migrants' remittances, affecting their and their family members' livelihoods around the world (Zhenmin, 2020). For example, remittance flows from the Russian Federation to Tajikistan and Kyrgyzstan fell by 37 per cent and 17 per cent, respectively. Nonetheless, in 2020, remittances still made up 29 per cent and 27 per cent of GDP in Kyrgyzstan and Tajikistan, respectively (United Nations, 2022). In 2022, although remittances to the CIS countries were expected to shrink in the wake of the Russian Federation's invasion of Ukraine, Kyrgyzstan, Tajikistan and Uzbekistan seem to have received record high amounts of remittances from the Russian Federation, almost twice as many as in 2021 (Ratha et al., 2022).

Climate change

Climate change will have significant impacts on Central Asia. It is already one of the most arid regions in the world (Guo et al., 2017). On the one hand, wider development challenges could amplify climate risks, which include, temperatures increasing by up to 6.5°C compared to pre-industrial levels by the end of this century, altered precipitation regimes, more frequent heat extremes and increasing aridity. On the other hand, increasing rates of glacial and snow melt could lead to greater river run-off and to decreasing water availability in the medium term to long term

²² At present the CIS comprises Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.

(Reyer et al., 2017). According to a 2014 World Bank report, heatwaves would not only affect the morphology of Central Asia but would also significantly impact its workers' health, reducing labour productivity and endangering safety at work while inflicting losses on the economy as a whole (World Bank, 2014). Indeed, although Central Asia, together with Europe, is the least affected region by heat stress according to the ILO, projections suggest that around 103,000 full-time jobs will be lost by 2030 as a result of heat stress (ILO, 2019).

Water scarcity and increased temperatures will have major implications for climate-sensitive sectors, such as agriculture and energy production. Although increased drought is forecast for some countries, increased precipitation will be seen in others. The poorest Central Asian countries and populations among them will be hardest hit by climate change. Tajikistan, Kyrgyzstan and Uzbekistan are most vulnerable to climate change in terms of exposure, sensitivity and adaptive capacity (IPCC, 2014). It is estimated, for example, that 6.6 million people in Kyrgyzstan will be at risk of the impacts of climate change by 2050 (World Bank, 2014).

The adverse climate effects will be felt most acutely by those irregularly employed, especially migrants coming within or beyond the region, that are also less likely to benefit from health care and social protection measures, as well as those who are already more vulnerable because of their gender or migration status. By 2030, the ILO projects a loss of 0.1 per cent (or 32,300 full-time jobs) in Central Asia, where Tajikistan is expected to be the most affected with 0.2 per cent of working hours projected to be lost owing to heat stress in 2030 (or 4,900 full-time jobs) (ILO, 2019). They will also be at greater risk of heat stress, higher rates of unemployment and poverty, poor access to basic rights and services such as housing and health care, deficient water management infrastructure and lack of energy (World Bank, 2014).

Intersections of climate change and migration within Central Asia

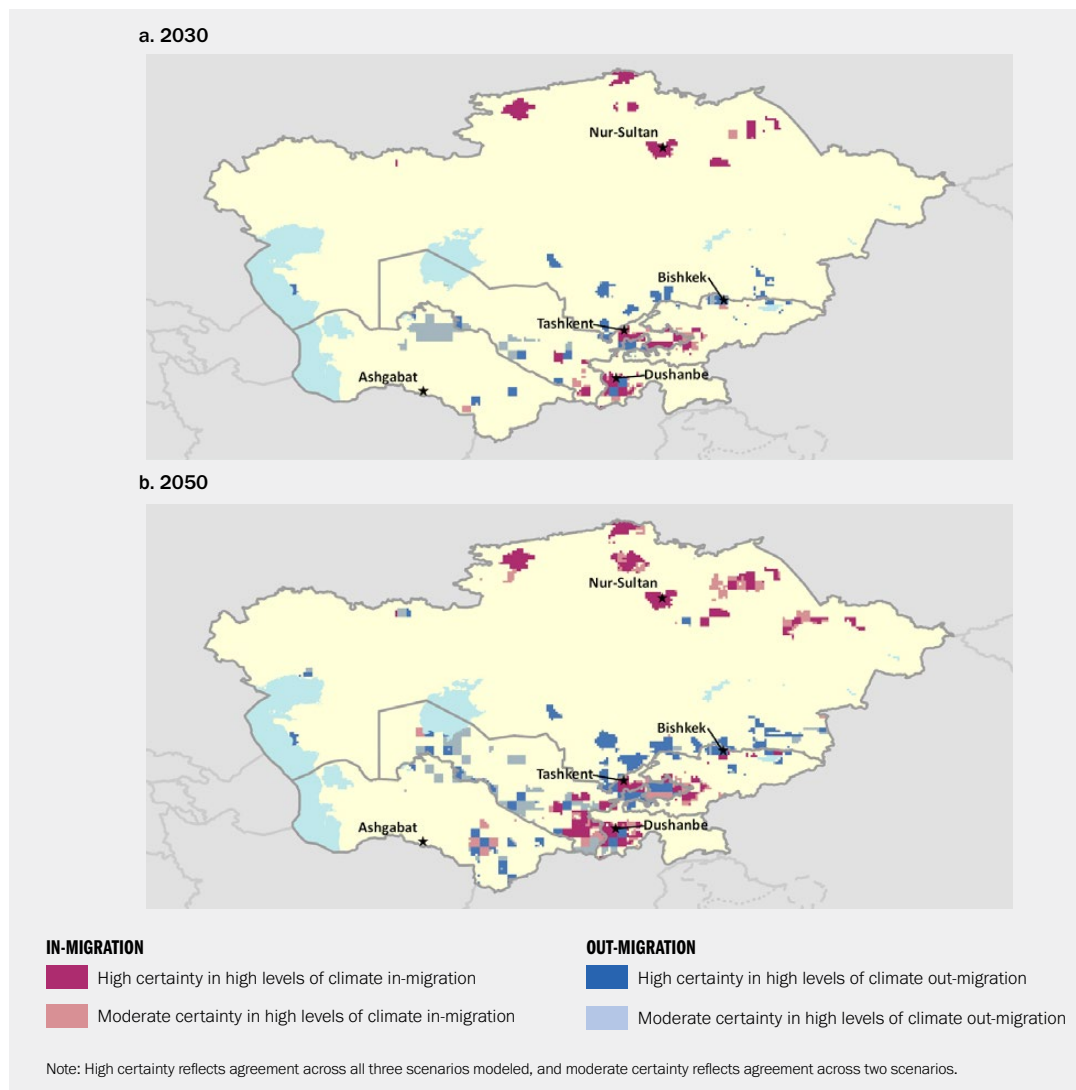
Climate change and its cascading effects are expected to exacerbate migration trends within and across Central Asia in search of better economic opportunities. The World Bank's *Groundswell* report highlights the areas of Central Asia likely to be most affected by climate change, in terms of crop productivity and water availability, as well as the likely destinations of internal migrants who will be exposed to these impacts (see Figure 4). The report forecasts the number of internal climate migrants under three scenarios: (1) a pessimistic scenario that posits little progress in reducing the impacts of climate change; (2) an inclusive development scenario; and (3) a climate-friendly one. The modelling indicates that as many as 2.4 million (3.4% of the total population) will move under the pessimistic scenario. Numbers are lower in the other scenarios: about 1.8 million (2.5% of the total population) under inclusive development and 1.6 million (2.4% of the total population) in the climate-friendly scenario. The *Groundswell* report does not model cross-border migration nor does it take into account the impacts of glacial melt. It is likely, however, that people in communities that already are the source of substantial migration within or out of Central Asia will follow these pathways as climate change impacts increasingly adversely affect their lives and livelihoods.

Acute natural hazards linked to climate change also pose threats to people in Central Asia, leading to displacement and emergency evacuation. As recounted in the 2022 World Migration Report, "Central Asia has experienced significant disaster events in recent years, resulting in the displacement of tens of thousands of people. . . . In 2020 alone, heavy rains and severe flooding in Uzbekistan and Kazakhstan led to 70,000 and 32,000 new displacements, respectively" (IOM, 2021d:82). Further displacement is expected, as climate and other environmental changes

increase the number and intensity of natural hazards. The 2022 IPCC report projects that “extreme climate, such as drought, heatwaves and rainstorms, will have a 10 per cent negative impact on agricultural production and the ecological environment” in Central Asia (IPCC, 2022:1489). The disasters in 2022 in Europe and Central Asia resulted in 107,000 new internal displacements and a total of 32,000 internally displaced persons (IDMC, 2023).

According to the *Groundswell* report, there will be outmigration hotspots along the southern border of Kazakhstan, the Fergana Valley in Uzbekistan and Tajikistan, and the area around Bishkek, due to projected decreases in water availability and crop productivity. Likewise, smaller areas in eastern Turkmenistan and southern Uzbekistan along the Amu Darya River are projected to become climate outmigration hotspots (Viviane et al., 2021). Interestingly, the Fergana Valley is also expected to be an in-migration hotspot together with some areas in southern Tajikistan (including Dushanbe) and in northern Kazakhstan. Projected increases in both water availability and crop productivity will attract migrants.

Figure 4. In-migration and outmigration hotspots in Central Asian countries, 2030 and 2050



Source: World Bank, 2022b.

Note: This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration.

Although climate change will affect the entirety of Central Asia, there are significant differences among the individual countries in the region. The next section turns to more specific profiles on environmental change and migration in Kyrgyzstan and Tajikistan, the two Central Asian countries most affected by emigration, as well as the Russian Federation and Kazakhstan, the principal countries of destination.

Case studies on emigration

Kyrgyzstan

Kyrgyzstan is a middle-income country. Its GDP per capita based on purchasing power parity in 2021 was USD 5,289.7 (World Bank, 2022c). In 2021/2022, it was ranked 118th among countries on the Human Development Index (UNDP, 2022). National economic growth had been disrupted mainly by disasters induced by natural hazards, gold production shocks and political instability (Viviane et al., 2021). As of 2019, 0.6 per cent of the population lived in extreme poverty in addition to 20.1 per cent living below the national poverty line (Asian Development Bank, 2020). Poverty particularly hits rural and mountainous areas, although the poverty gap between rural and urban areas has narrowed over time. Unemployment is relatively high and concentrated among youth and women. According to the World Bank data on labour force participation rates, the youth unemployment rate was 14.8 per cent in 2019, while female employment decreased to 44.1 per cent in 2019, compared with 74.5 per cent male employment (ILO, ILOSTAT, 2021).

Women also earn significantly less than men (74.3% of men's salaries) even though women tend to be more educated. Since 2014, the share of poor women has been notably on the rise, resulting in increasing forced movements of women within and beyond Kyrgyzstan (National Statistics Committee of Kyrgyzstan, 2018).

Table 5. Human Development Index in Central Asian countries, 2021

Rank	Country	Human Development Index
56	Kazakhstan	0.811
118	Kyrgyzstan	0.692
122	Tajikistan	0.685
91	Turkmenistan	0.745
101	Uzbekistan	0.727

Source: UNDP, 2021.

In 2020, Kyrgyzstan's economy was deeply affected by the COVID-19 pandemic; the country has not fully recovered, particularly in certain sectors. According to the World Bank, the country's "real GDP contracted by 0.7 per cent in January–August 2021, year-on-year, . . . as a result of a fall in gold production (-29%), while the non-gold economy is recovering [from the COVID-19 crisis] (3.6%), . . . supported by increased remittance inflows and trade revival" (World Bank, 2021d:62). Inflation has also been on the rise, as has the trade deficit (World Bank, n.d.b). Political instability (e.g. prime ministers were deposed in 2005, 2010 and 2020) and corruption are barriers to further economic growth (World Bank, n.d.a).

Since the break-up of the former Soviet Union, there have been three waves of emigration from Kyrgyzstan (FIDH, 2016). During the first wave (1989), emigration was largely of residents from other republics who were living in Kyrgyzstan at the time of the break-up. These emigrants came primarily from the Russian Federation and Ukraine but also included ethnic Germans and

Tatars. Economic as well as inter-ethnic tensions were the primary motivators of migration. The second wave (early 2000s) of migrants were traders who bought products in other countries and sold them, primarily in Kazakhstan and the Russian Federation. As regulations were imposed on cross-border trade, however, fewer people were able to benefit from this process and emigration declined. The third wave (2006) is characterized by emigration to work abroad. Due to high levels of poverty, unemployment and food insecurity, an estimated 0.5 per cent of the population left the country every year between 2010 and 2015 (National Statistics Committee of Kyrgyzstan, 2018). According to statistics from the Kyrgyz State Migration Service estimates, the vast majority are in the Russian Federation (520,000) and Kazakhstan (80,000) (Kyrgyzstan Ministry of Foreign Affairs, Department of External Migration, 2021). These are both members of the EAEU. Most Kyrgyz migrants leave to find work in the Russian Federation and Kazakhstan, mainly due to unemployment and low wages back home (FIDH, 2016). Migration of women grew during this period; women accounted for almost 40 per cent of migrants from Kyrgyzstan. In some cases, women migrate with their families. In other cases, they migrate on their own; these include married women whose spouses remain in Kyrgyzstan as well as unmarried women (ibid.). Emigration has led to a rise in remittances, essential for the survival of those family members who remain. According to the World Bank, the remittance inflow accounted for 32.5 per cent of the national GDP in 2021 (World Bank, 2021f).

Kyrgyzstan is highly vulnerable to climate change effects and natural hazards, especially earthquakes, drought, landslides and mudslides, flash floods and glacier lake outburst floods. In 2013, the Government estimated that an increase in temperature by 1°C would lead to an increase in the average annual number of climatic hazards by 214 cases in Kyrgyzstan (Kyrgyzstan, Government of, 2013). In the Third National Communication of Kyrgyzstan under the UNFCCC, the Government expressed its concerns about the increasing occurrence and intensity of climate emergencies in Kyrgyzstan, where “of the 70 world dangerous natural processes and phenomena, causing significant damage to the population, economic activities and infrastructure, more than 20 take place in the country” (Kyrgyzstan, Government of, 2016b:126). It identified its water, energy, agriculture and infrastructure sectors as the most exposed to climate change and where to expect the greatest economic losses in absence of adaptation actions. In particular, without appropriate adaptation measures, the Government projects more than USD 700 million total economic damage in water resources, USD 200 million in the energy sector and agricultural losses worth USD 70 million (ibid.).

In the context of high social and economic vulnerability as well as climate change and disaster exposure, the impacts on migration are potentially significant. In 2018, for instance, disasters triggered 4,700 new internal displacements (World Bank, 2021e). Kyrgyzstan’s high economic dependency on few economic activities, such as agriculture, increases its population’s vulnerability to environmental stressors. Research shows that women and children are particularly vulnerable to climate change given that a greater number of women is employed in agriculture and livestock activities as a result of male migration (Kelly et al., 2013). In this framework, individuals often use cross-border and internal labour migration as an adaptation strategy to increase income and to cope with adverse climate effects (Chandonnet et al., 2016). Internal migrants account for 14 per cent of the Kyrgyz population, where short-distance and circular labour migration is used as a form of income diversification (Avdeev, 2021). International labour mobility brings several economic advantages to households who use remittances for immediate consumption. In Kyrgyzstan, remittances act therefore as a safety net for local communities, who use them to cover every day basic needs and are usually insufficient to support long-term investments. Some experts

believe that remittances have a low capacity to act as a vehicle for development or to foster DRR and adaptation to climate change in Kyrgyzstan because they are used for everyday consumption (Blondin, 2020; Ryazantsev et al., 2021). This perspective does not consider, however, the benefits to human development of increased consumption when it contributes to healthier and less food-insecure populations.

The scale of migration in the context of climate and environmental changes within Kyrgyzstan is projected to increase by 2050 in all three scenarios modelled in the 2021 *Groundswell* report. In the more inclusive development scenario, 0.18 million internal climate migrants are projected (2.8% of the total population), reduced to 0.14 million in the more climate-friendly scenario (2.4% of the total population). While in the pessimistic scenario, 0.2 million internal climate migrants (3.9% of the population) could be reached by mid-century, representing up to 26 per cent of internal migrants in Kyrgyzstan. Yet, policies regarding migration in the context of climate change have not been adopted. In its policy analysis on migration, environment and climate change, IOM concludes that:

There is limited information on how and to what extent migration in the context of climate change and environmental degradation has been mainstreamed into national legislation, policies and strategies in Kyrgyzstan. There is a lack of understanding of [migration, environment and climate change] nexus in the country. In addition, there is limited capacity and coordination to address the topic among national actors in Kyrgyzstan (e.g. ministries, State agencies, local government institutions, [civil society organizations], [community-based organizations], migrants, diaspora members, and sending and destination communities) (Jeenbaeva and Banerjee, 2022:7).

Only 10 of the 42 national documents studied in the report directly refer to the migration, environment and climate change nexus (Jeenbaeva and Banerjee, 2022:17).²³ Furthermore, Kyrgyzstan does not consider that the benefits of remittances in terms of adaptation to climate change depends on enabling conditions (awareness, capacities, incentives, planning, cross-sectoral inclusion, etc.), which are largely missing. Considering the traditional socioeconomic factors regularly driving Kyrgyz citizens out of the country, potentially worsened by climate change effects to which it is particularly exposed, Kyrgyzstan would benefit from a cross-cutting mainstreaming of the multiple, complex link between migration, environment and climate change in its legal, policy and institutional framework. Very recently, however, Kyrgyzstan has recognized the potential role of diaspora in the transition to a green economy (Kyrgyzstan, Government of, 2021).

²³ These are the Law on Water, the Concept of All-Inclusive (Complex) Protection of the Population and Territories of the Kyrgyz Republic from Emergency Situations for 2018–2030; Sequence of Evacuation and Relocation of the Population and Evacuation of the Material and Cultural Valuables to Secure Regions; the Law of Civil Protection; the Guide on Disaster Risk Analysis and Assessment; the Concept of National Security of the Kyrgyz Republic; the Concept of Migration Policy of the Kyrgyz Republic 2020–2030; the Law on Internal Migration; the Regulation on Recognizing a Citizen as a Forced Migrant; and the Regulation on the Order of Intersectoral Cooperation on Prevention, Stopping, and Response to Gender Violence in Emergency Situations.

Kyrgyzstan's Concept of Migration Policy 2020–2030 could be the starting point for developing such a strategy. It recognizes the interlinkages between environmental degradation and the effects of climate change on migration:

Environmental degradation and the effects of climate change are forcing migration in the context of climate and environmental changes. Lack of clean water and land, crop failures and natural disasters are noted among the most common factors triggering migration processes. This leads to a decrease in the number of livestock breeders and farmers and the devastation of territories in remote areas and border areas (Kyrgyzstan, Government of, 2021:Section 1.6).

The Concept also recognizes that nearly 23,000 national citizens had to relocate due to disasters induced by extreme weather events, while others were displaced (Kyrgyzstan, Government of, 2021).

The Concept suggests that government agencies must be prepared for possible massive displacement as a result of natural and environmental hazards. Related actions include (1) minimizing the adverse impacts of, inter alia, environmental degradation, emergencies, climate change and degradation of natural resources that force people to leave; and (2) developing an integrated approach to protection based on predicting threats and risks, improving forecasting methods, and preventing and eliminating the consequences of emergencies. The Concept refers also to cross-cutting issues that could be relevant to address environmental causes of migration, such as the creation of enabling conditions that allow migrants to plan their return to their homeland and use the skills acquired in the process of migration; the involvement in the pension system of labour migrants abroad; and the facilitation of decent work and legal employment of foreign citizens and stateless persons who came to work in Kyrgyzstan (subsection 3.2).

Also useful in developing a comprehensive strategy is the Law on Internal Migration, which defines “ecological migrants” as forced migrants that left the permanent residence and moved internally due to a sharp deterioration of the environment or ecological catastrophe (Article 1: Main definitions) (Kyrgyzstan, Government of, 2016a). Notably, the ecological migrant is inherently envisaged as a “forced migrant” without any reference to those migrants who voluntarily decided to move away from the environmentally unsafe location.²⁴ Pursuant to Article 1 of the Law on Internal Migration, forced migrants include: (1) environmental migrants; (2) migrants from the sites of disasters induced by natural hazards, major accidents or catastrophes; (3) migrants from areas of armed conflicts and riots (Kyrgyzstan, Government of, 2002 and 2015). In a section dedicated to ecological migration, the evacuation of citizens is foreseen in case of emergency, including ecological disasters (Jeenbaeva and Banerjee, 2022). Competent authorities may decide to evacuate citizens to environmentally safer areas of the country. In this case, evacuated citizens would obtain the status of forced migrants in accordance with Article 38 of the Law on Internal Migration. Accommodation, assistance and access to basic services, including food and basic sanitary and medical services, are granted by law. Where rehabilitation of the disaster-affected areas is feasible, forced migrants would return

²⁴ In the Regulation on Recognizing a Citizen as a Forced Migrant, “forced migrants” are defined as “citizens of Kyrgyzstan who are forced to leave their place of residence and move to another locality within Kyrgyzstan due to circumstances that pose a threat to their life, health and safety, such as armed conflict, mass riots, disaster induced by natural hazards, sharp environmental degradation and disasters caused by human activity” (Kyrgyzstan, Government of, 2015).

to their former residence. Specific standards of treatment, rehabilitation, social protection and compensation to environmental migrants are provided by law, depending on the damage caused to their health by environmental disasters or degradation (ibid.).

Despite these provisions, most citizens living in dangerous locations decide to remain where they are and not to be relocated to safer areas. Research links this reluctance with the widespread perception that areas intended for relocation are less advantageous in terms of livelihood opportunities than their actual places of residence. It is worth noting that the Government is making efforts to counteract this perception. In 2020, it launched a three-year project to establish an experimental village named Ak-Tilek with 300 households, which will accommodate 1,500 residents, in the Ak-Talaa district of the Naryn oblast. The residents of Ak-Chiy and Zhany-Tilek villages, which are frequently hard hit by earthquakes and mudflows, may need to relocate thereto (Sputnik, 2020).

In summary, environmental factors in Kyrgyzstan could propel more people to migrate both internally and across borders. While national provisions recognize that dire environmental conditions may force Kyrgyz citizens to leave their homes and move within and across national borders, there is not a comprehensive strategy for addressing these movements. Some progress is being made in setting out the rights and opportunities for those who must relocate, with attention to programmes for assistance and compensation. Most people eligible for relocation seem hesitant, however, to move to other sites indicated by the Government. Discontent stemming from lower living standard and narrower opportunities in the new residence area compared to the ones they had in the former place of residence may give rise to informal self-managed migration, within or beyond national borders, to look for better job and livelihood opportunities. Moreover, it is relevant to note that, although national law envisages multiple definitions of ecological and environmental migrants and sets out procedural and substantial assistance measures, it does not extend its scope of application to foreigners arriving in Kyrgyzstan for the same reason, namely because of environmental disasters and environmental degradation occurring in their home countries. Therefore, protection and assistance to foreigners vulnerable to climate change are not foreseen by law.

Tajikistan

Tajikistan is a middle-income country. Its GDP per capita based on purchasing power parity is USD 8.75 billion in 2021 (World Bank Group and ADB, 2021). It ranks 122nd among countries on the Human Development Index. Economic growth plummeted in 2020 as a result of the pandemic but made a significant comeback (8.7% year over year) in the first half of 2021. According to the World Bank, “Tajikistan achieved higher economic growth through stronger export of precious metals and considerable pickup in domestic demand. ... In addition, the gradual opening of air traffic with the Russian Federation stimulated the inflow of migrant remittances and supported the incipient recovery of household consumption” (Ziyaev et al., 2021:7). Unemployment in Tajikistan peaked in the late 1990s at more than 16 per cent and went down to 6.6 per cent in 2019. Unemployment increased in 2020 as a direct result of the pandemic but appears to be declining in 2021 (Ziyaev et al., 2021). Higher unemployment, in combination with a reduction in remittances in 2020, caused a large increase in poverty in a country that already had high poverty rates (ibid.:12). The economic picture moving forward is not clear. The volatility in neighbouring Afghanistan and border tensions with Kyrgyzstan could also adversely affect economic recovery, as would further declines in remittances.

Based on IOM data, 274,071 immigrants live in Tajikistan, representing 2.9 per cent of Tajikistan's population. Most immigrants are female (56.9%). Emigration rates in Tajikistan are twice as high as immigration rates: 586,851 Tajiks live in other countries (6.3% of Tajikistan's population). Of these, 57.5 per cent are male, mainly driven abroad by the lack of job and economic opportunities at home (IOM, 2021c). During the first half of 2020 alone, despite the outbreak of the COVID-19 pandemic, the Government registered 129,807 citizens leaving the country for job purposes, in comparison to over 90,000 Tajik labour migrants who returned, 52 per cent less than the rate in the same period in 2019 (UNESCAP, 2020). Most emigrants are engaged in semi-skilled or unskilled work in the Russian Federation, especially in construction, accounting for more than half of jobs, repairs, services, season work sectors, agriculture and industrial production (Lemon, 2019). Akin to Kyrgyzstan, the number of female emigrants from Tajikistan has been increasing, especially after the 2008 global economic crisis. In 2016, women accounted for less than 20 per cent of labour migrants in the Russian Federation (FIDH, 2016).

Tajikistan is also home to several thousand refugees and international protection-seekers, mostly from Afghanistan. Refugees receive an initial grant of three years residency, which can be renewed if necessary. Tajikistan operates programmes for integrating refugees as well as those for return to Afghanistan. Refugees have access to legal aid, health care, education and employment as well as access to secondary and higher education (Migrants – Refugees, 2021). Although it is a party to the Refugee Convention, and had earlier offered to take in as many as 100,000 refugees, Tajikistan later closed its borders to further entry of Afghans seeking asylum, claiming they were a threat to its national security (Asia-Plus Tajikistan, 2021; Institute for War and Peace Reporting, 2021). Kazakhstan and Kyrgyzstan echoed Tajikistan's position and refused to host refugees from Afghanistan (Institute for War and Peace Reporting, 2021).

International labour migration and remittances play a vital role in Tajikistan's economy, which constituted 30–50 per cent of its GDP in the mid-2000s and 26.7 per cent in 2020 (over USD 2 billion), making the country one of the top remittance-dependent States in the world (World Bank, 2020). Not less than 40 per cent of households have at least one member who has migrated abroad and almost 99 per cent of international migrants from Tajikistan choose the Russian Federation as their destination due to the well-established migration corridor (JICA, 2020). Research shows that, like in the case of remittances sent to Kyrgyzstan, remittances from Tajik nationals abroad are used to respond to primary, basic needs, such as food and other necessities (e.g. water and clothes). Remittances are frequently used for house renovation and weddings rather than for health care, education or investment in household businesses, which indicates that remittances are generally not saved (ADB, 2016). The National Development Strategy 2030 for Tajikistan acknowledges the significant role remittances can play in supporting the national economy but considers international labour outmigration a key factor impeding the country's sustainable development. Regular outflows of qualified professionals drain the country's potential for economic growth and innovation and exacerbate the vulnerability of family members, especially children and women who remain at home, by generating strong dependencies on remittances (Tajikistan, Government of, 2016). In its updated NDC, Tajikistan affirms:

In order to discuss the issues of the relationship between gender and climate change, a common level of understanding of gender inequality is clearly needed. In the Republic of Tajikistan, as shown by the results of surveys, there are two key factors that create the context for current efforts to achieve gender equality: on one hand, traditions and gender stereotypes on the role of women in family and society, and on the other

hand, a large number of female-headed households due to large-scale male [labour] migration.

Based on the results of the review and in order to promote a link between gender and climate change in the Republic of Tajikistan, the following measures are planned: [r]aising awareness and improving understanding of the connection between gender and climate change in the development context; [p]romotion of nexus of gender and climate change in planning, budgeting and practice; and [s]trengthening the capacity [of] and providing opportunities for women's active participation in sustainable [socioeconomic] development, taking into account the climate change (Tajikistan, Government of, 2018a:32).

In addition, Tajikistan is deemed among the most vulnerable to climate change and extreme weather events globally and demonstrates low adaptation and coping capacity (World Food Programme, 2017). The World Bank predicts that the average surface temperature in Tajikistan will rise between 1°C and 3°C by 2050 (World Bank Group and ADB, 2021). In its Fourth National Communication to the UNFCCC, the Government of Tajikistan recognizes the country's heightened vulnerability to climate change due to its high dependence of climate-sensitive economic sectors, along with low human, technical and institutional capacities to effectively mitigate the impacts of climate change (Tajikistan, Government of, 2022). Accordingly, "[p]rojected climate change could not only reverse past development gains, but also plunge more people into extreme poverty as a result of declining crop yields, increased food costs and the spread of infectious diseases" (ibid.:81). Meanwhile, 4,800 new displacements and a total number of 2,100 internally displaced persons were reported as a result of disasters in 2019 (IDMC, 2021). The Government of Tajikistan registered 3,052 emergency situations and incidents solely in 2020, of which 213 were natural disasters (680 in 2019), especially avalanches, mudflows and earthquakes, and 2,676 were human-made disasters (2,555 in 2019) (Tajikistan Committee of Emergency Situations and Civil Defense, 2021).

For the past two decades at least, the rapidly growing population of Tajikistan has been facing the detrimental effects of climate change and environmental degradation, exacerbated by unsustainable environmental and development policies, in various ways. Major challenges concern the abnormal fluctuations in precipitation and temperature (the annual average air temperature has been increasing by 0.2°C–1.2°C since 1940) (Murakami, 2020). These, in turn, aggravate droughts and the shortage of potable and irrigation water and of agricultural lands (Olimova and Olimov, 2012; Cattaneo and Peri, 2015). Climate and environmental changes, on the one hand, and the mismanagement of natural resources and of the agriculture sector, on the other hand, have a major impact in Tajikistan, a country where, in 2019, 44.7 per cent of its total population depended on agriculture and soil fertility (IOM, 2021b). Environmental and climate factors are increasingly shaping the migration patterns of Tajikistan.

In 1994, the Government of Tajikistan established the State Committee of Emergency Situations and Civil Defense that, among its disaster and emergency-related tasks, provides assistance in carrying out emergency response activities and relocation of population during or in the aftermath of a disaster (Tajikistan, Government of, 1994; Tajikistan Committee of Emergency Situations and Civil Defense, 2021). This initiative was partially based on the Government's assumption, enclosed in the First National Communication of the Republic of Tajikistan under the UNFCCC, that international labour migration was a failure to adapt to slow-onset climate change stressors

such as soil degradation. Since then, the Government has been relocating hundreds of households every year from hazardous zones or in case of natural disasters (Olimova and Olimov, 2012). The Committee of Emergency Situations and Civil Defense, established in 2014 by law with the aim to prevent emergency situations and organize work in the event of natural disasters, provides assistance, technical support and transportation to new residence sites. Medical support and primary necessities are provided in tent camps (Tajikistan, Government of, 2014b).

Another survey also shows evidence of people resettled in places where they did not feel safe or could not be involved in any work or activity (Bulesheva and Joldasov, 2009). Emblematically, the competent central authorities moved people to places expected to be flooded by the construction of hydropower plants, which would itself be a cause of planned relocation of more than 30,000 residents (Chandonnet et al., 2016). The lack of opportunities reportedly generated secondary migratory movements, including seasonal labour migration to the Russian Federation, rural–urban migration or even return migration, where the disaster occurred, of one member of the family or the whole family nucleus (*ibid.*).

Although mainly concerned with environmental policy and the protection of the environment, the 2017 Law on Environmental Protection also stipulates relocation measures in cases where the safety of the population cannot be guaranteed. The Law assigns responsibility for emergency zoning, prescribes the order of action in the relocation of populations at risk and describes compensation rights (Tajikistan, Government of, 2017).

In its National Strategy for Adaptation to Climate Change, adopted in 2019, the Government of Tajikistan sets out relevant and long-term priority adaptation strategies against projected climate change impacts until 2030. Migration is one of seven important cross-cutting areas to achieving the Strategy (Tajikistan, Government of, 2019). The Strategy acknowledges that “climate change is likely to be an important driver of future migration” and defines environmental migrants as “people who are living in environmentally dangerous areas that are subject to planned relocation to prevent loss of life from natural disasters. The reason for relocation includes living in areas susceptible to landslides, avalanches, mudslides and other natural disasters that pose a threat to lives” (*ibid.*). The Strategy also stresses that environmental degradation has an increasing impact on the choice of migration pathways, including temporary international or internal labour migration, rural-to-urban areas or permanent migration abroad. Furthermore, the Strategy acknowledges that loss and damage during disasters, loss of livelihoods, poverty and remittances, among others, significantly contribute to shape labour migration decisions, in particular by influencing the length and breadth of the movement (Gampp, 2022).

In the Law on Migration and the Order of Internal Migration, the Government foresees annual relocation plans and makes provisions for populations living in environmentally unsafe areas. Among these measures is the Resolution on the Procedure for Internal Migration of Populations from Densely Populated Mountainous Areas with Limited Available Land to Lower-lying Valleys of the Republic of Tajikistan in 2019–2021 (Tajikistan, Government of, 2008, 2014a and 2018b).

A broader definition of migration in the context of climate and environmental changes, which is not limited to planned relocation, can be found in the Tajikistan’s Law on Migration – it is “the process of forced movement of citizens within the territory of their country due to the deterioration of the living environment and environmental disasters” (Tajikistan, Government of, 2018b:Article 1). Environmental migrants are citizens forcibly displaced or are part of planned relocation within

the national boundaries, thus excluding cross-border and internal voluntary movements as an adaptation response to environmental threats. As noted for Tajikistan's neighbouring country, research demonstrates that communities affected by dire environmental conditions are engaged in self-managed migration pathways, within or beyond national borders, as a response to unsuccessful relocation plans (Chandonnet et al., 2016).

Impacts of the Russian Federation's military hostilities against Ukraine on migration in the context of climate and environmental changes from Central Asia to the European Union

On 24 February 2022, the Russian Federation began its aggression against Ukraine, disrupting the stability of all neighbouring and non-neighbouring countries in the European and Central Asian regions. The Russian Federation has been traditionally the top one destination of migrant workers from Central Asian countries for several reasons (Turaeva and Urinboyev, 2021; Urinboyev and Eraliev, 2022). The Russian Federation and Central Asian countries share similar cultural, linguistic and religious features as well as strong political and historical backgrounds and travel permissions. However, as a result of the Russian Federation's invasion of Ukraine and the consequent sanctions imposed by the European Union, the Russian economy has taken a great hit as has the Russian Federation's standing in the world (Ratha et al., 2022). This poses dilemmas for Central Asian migrants already in the Russian Federation as well as those considering migration. Although the number of migrant workers in the Russian Federation from Central Asia has remained high since February 2022 (ibid.), it is likely that some will either go back to their countries of origin or consider other destinations to find sources of income and send remittances back home. Uzbekistan and Tajikistan have reported that respectively 133,000 and 60,337 migrants returned from the Russian Federation in the first months of 2022 (Hashimova, 2022). Moreover, Uzbekistan's State Migration Agency has reported that, among 15,000 migrants who are currently in the Russian Federation, 40 per cent wish to return to Uzbekistan due to job losses or the devaluation of the Russian rouble. Conversely, 24 per cent of the interviewees have declared to still have a stable job and wish to stay in the Russian Federation as long as they can keep their jobs (ibid.:2). Similar results are reported by a survey conducted among Kyrgyz migrants in the Russian Federation (ibid.).

In this scenario, in the near future, the European Union may represent a plausible destination for an increasing number of Central Asian migrants, whose movement may be also related to climate change and other environmental factors. The European Union should thus be prepared for larger and mixed migration flows.

As shown in this report, Central Asia is already one of the most arid regions in the world and among the most vulnerable to climate change. The areas of Pamirs, Tien Shan, Aral Sea, Caspian Sea, Amu Darya and Syr Darya, among others, will experience the highest increase in global mean temperature, with severe adverse effects on agriculture and other climate-dependent economic sectors. The poorest countries and populations in Central Asia will be hardest hit by the impacts of climate change (Russell, 2018). Currently, more than half a million people in more than 1,500 villages in Kazakhstan have no access to drinking water, while many family groups have water access for few hours a day (CABAR, 2022). The fact that the Aral Sea, which used to be the fourth-largest lake globally, is progressively shrinking down further decreases water availability in the whole region, with regional demands exceeding accessible amounts. Conflicting interests over water control has recurrently led to violence in Central Asia. Examples include violent clashes between Kyrgyzstan and Tajikistan in 2014 over the main transboundary water supply point,

and escalating military tensions between Kyrgyzstan and Uzbekistan in 2016 related to land and water disputes (Valieva, 2014; Orozobekova, 2016; Palicka, 2021; International Alert, 2022). Most recently, in April 2021, water disputes at the border between Kyrgyzstan and Tajikistan broke out in the worst violence in decades and escalated into a conflict (Putz, 2021). As seen, environmental factors are already contributing to shaping a number of migration patterns within and beyond the Central Asian region, in terms of displacement, evacuation, planned relocation, pastoralism and (seasonal) labour migration, among others. The severe impacts that climate change will have on decreasing the already scant availability of land and water resources as well as on increasing mean temperature may exacerbate existing vulnerabilities and drivers of migration within and beyond the region.

Currently, the Russian Federation and Kazakhstan are the principal destination countries for international migrants from Central Asia; however, such a consolidated trend may change according to the conflict dynamics and its potential repercussions on the economy. According to the World Bank, the International Monetary Fund and the Organisation for Economic Co-operation and Development, the Russian Federation's GDP dropped by 2.1 per cent in 2022 and may continue to shrink in 2023 (World Bank, 2022b; Council of the European Union, 2023).

The magnitude of the economic downturn will interact with climate change and national economic dynamics. For instance, a relevant variable will be countries' level of dependency on remittances from migrants working in the Russian Federation. Notably, the share of remittances received from the Russian Federation in 2022 is expected to exceed 95 per cent in Kyrgyzstan and 80 per cent in Uzbekistan (Ratha et al., 2022). Factors stimulating the remittance inflows, despite the Russian Federation's invasion of Ukraine, include the record-high amounts of money transfers from the Russian Federation to CIS countries, the higher demand for workers from Central Asian countries due to the war and the fiscal increase as well as the relocation of small Russian companies to neighbouring countries, which would increase the flow of roubles to those countries (ibid.). It is unclear whether remittances will continue to be this high, especially in light of a war in the region. However, it seems that remittance flows from the Russian Federation to its neighbouring countries are likely to increase, at least for some time (ibid.).

Further burdens for Central Asian migrants in the Russian Federation that may induce them to move back home or to other locations involve the unavailability of grain, food and goods. The Russian Federation and Central Asian countries have been particularly affected by food and good supply issues. Russians' access to food has considerably declined since the Russian Federation's occupation of Crimea back in 2014, while in 2022 the prices of basic goods in Kyrgyzstan and Kazakhstan increased by an average of 15.4 per cent, especially food (Posner, 2022). The rapid depreciation of the Russian rouble against the US dollar was quickly followed by a large depreciation of individual currencies against the US dollar in Central Asian countries. Finally, migrants may decide to leave the Russian Federation due to rumours and fears of migrants being forcibly recruited in the Russian Federation military (Wood and Khashimov, 2022; Hashimova, 2022).

Volatile economic projections combined with ramping inflation and prizes and decreasing food supplies may drive poor people in Central Asia into further poverty, exacerbating their vulnerability to loss of livelihood. The adverse impacts of climate change on these lands may further aggravate their livelihood losses.

For all these reasons, migrants wishing to move, also in the context of climate and environmental changes, may increasingly see the Russian Federation as a less attractive destination the longer the conflict and sanctions persist. Conversely, Germany and the other top European Union countries of destination could turn into more attractive destinations for migrants from the Central Asian region, including those associated with environmental stressors. In 2021, thousands of migrants from Uzbekistan (5,989), Kazakhstan (2,974), Kyrgyzstan (1,968) and Tajikistan (809) received work permits in the European Union (Eurostat, 2022). Poland and Czechia were the main destinations for Kazakh migrant workers, Italy was the fourth destination for Kyrgyz migrant workers, Latvia and Sweden were respectively the fifth and seventh preferred destinations for Tajiks, while Czechia and Latvia were the second and third top destinations, respectively, for Uzbeks (ibid.). These labour pathways to enter the European Union may become more popular in the near future for a number of reasons. Family ties and network in these countries may provide initial support to new migrants to settle. In 2021, in fact, 3,235 people left Central Asian countries to reunite with their family members in the European Union (ibid.). The main destination for family reunification for most Central Asian countries remains Germany, while Sweden is the primary destination for family members from Uzbekistan. Initial findings indicate that at least 10,000 undocumented migrants from Uzbekistan work in Sweden's informal economy. Since the beginning of the war in Ukraine, it has been argued that more than 100 Uzbek migrants who previously worked in Ukraine have arrived in Sweden (Hagman-Rogowski, 2022). Naturalization may also play a role in inducing migrants from Central Asia to reach the European Union. Also, in this case, Germany has the largest share of naturalized migrants from Central Asian countries. Countries like Latvia and Estonia may, instead, represent a favourable destination for Russian-speaking migrants from Central Asia.

In light of the plausible change in migration corridors within and from Central Asia, the European Union and its Member States need to be prepared to address increased movements, also in the context of climate and environmental changes. First, few Member States have adopted protection measures on environmental grounds. The New Pact on Migration and Asylum, currently under negotiation, could provide relevant inputs in this regard. Second, the European Union Central Asia strategy and other key policy initiatives could be leveraged in order to enhance and reinforce cooperation and partnership among the parties. China has invested roughly EUR 22.5 billion in Central Asia since the Belt and Road Initiative and has become a major trade partner to four out of five Central Asian countries' share of total foreign trade (Sahajpal and Blockmans, 2019). Still, the European Union remains Central Asia's biggest economic partner, accounting for 30 per cent of the region's total trade and financing direct investments worth EUR 62 billion (European Commission, 2019c). The downturn in the Russian Federation economy and its cascading effects on national economies in Central Asia may support big changes in the region: First, it could help the region become more independent from the Russian Federation geopolitical and economic influence; second, it may create enough room for the European Union to position itself as a major stakeholder in climate diplomacy. The 2019 European Union Central Asia strategy sees opportunities for cooperation and economic development in many sectors, including environmental protection and climate policy. In particular, renewable energy, environmental governance and ecological tourism are considered essential parts of a new approach aimed at strengthening Central Asia's resilience. The European Union is already playing a role in supporting Central Asia's environmental protection via European Union development aid and loans and may consider extending partnership and cooperation in interconnected sectors, such as educational exchange programmes and vocational training.

The next section provides recommendations on how the European Union collectively and Member States individually could avert and prepare themselves for future migration. The European Union could support solutions for people considering moving (e.g. internally, within the region or to other European Union countries), people on the move and people who stay. The same applies to the Russian Federation and Central Asian countries.

Findings and recommendations

This report focuses on the environmental drivers of migration in and from Central Asia. As detailed in the World Bank *Groundswell* report, most mobility due to climate and other environmental changes will precipitate internal movements, including anticipatory migration, displacement and planned relocation. Considering the wide and cross-cutting impacts of climate change, cross-border movements within and beyond the region cannot, however, be excluded.

The following recommendations are aimed at creating a win-win-win solution for the countries in Central Asia, the countries of destination and, very importantly, those facing environmental drivers that threaten their lives and livelihoods.

Recommendations to all countries

- Continue to support efforts to mitigate greenhouse gas emissions as a key imperative.
- Integrate human mobility challenges and opportunities into national planning processes, including NDCs and national adaptation plans, as appropriate, by drawing upon available tools, guidance and good practices.
- Recognize and strive to pursue commitments made under international law and international policy processes that are relevant to migration in the context of climate and environmental changes. This includes progress towards their incorporation into national law and policies.
- Support and enhance the collection and analysis of data referring to migration in the context of climate and environmental changes as well as of displacement and planned relocation to better define areas of intervention, national migration and climate policy actions. Include considerations on migration in the context of climate and environmental changes in NDCs in order to ensure that adequate migration measures are integrated among the adaptation strategies to climate change as well as loss and damage due to climate change.

Recommendations to the European Union

- Adopt directives to guide the actions of Member States with reference to migration in the context of climate and environmental changes. Greece, Latvia, Estonia, Czechia and Sweden do not currently provide explicit protection on environmental grounds and have never issued a residence permit on such a basis. Conversely, Italy already explicitly recognizes and addresses environmental causes of forced migration in multiple national dispositions on migration, and German and Austrian courts are banning the removal to disaster-affected countries of origin, although in limited cases. Although European Union law does not oblige Member States to provide protection on environmental grounds, Italy, Germany and Austria, together with other Member States, have extensively interpreted their obligations under international human rights law, the principle of non-refoulement and constitutional responsibility, thus

recognizing the need to protect against dire environmental conditions potentially affecting international protection-seekers. Climate change can intensify both sudden-onset natural hazards as well as slow-onset ones, which equally have the potential to disrupt people's livelihoods. National provisions should cover both sets of impacts. Moreover, as climate change will have widely divergent impacts on individuals, depending on one's vulnerability and level of resilience, competent authorities should take into account both the objective environmental and climate situations in the country of origin and the personal conditions of the international protection-seeker to evaluate whether their return is feasible, secure and human rights compliant.

- Revise and implement the directive on temporary protection to migrants coming from countries affected by disasters and highly vulnerable to climate change, in full compliance with the principle of non-refoulement. Ensuring affirmative temporary protection permits, instead of a discretionary ban to removal, would allow the beneficiaries to work, study and access essential public services.
- Identify pathways to help those anticipating worsening environmental conditions to migrate in a safe, orderly and regular manner. This recommendation is consistent with the Global Compact for Migration. For example, opening education and labour migration pathways from third countries particularly exposed to the adverse impacts of climate change could help not only the affected but also the communities from which protection-seekers originate. Their remittances and the skills they develop may enable family and community members in the country of origin to remain in place and adapt safely to climate change. Consider extending resettlement and humanitarian admission programmes to include environmental and climate conditions among the eligible criteria.
- Review and amend the European Green Deal to address migration, displacement and planned relocation stemming from environmental and climate changes. This would create synergies between the European Union's environmental and migration policies to protect and promote third-country nationals' rights and opportunities. These synergies may include fostering education, upskilling programmes and job creation for foreigners in green sectors as well as innovative research and technology to mitigate the effects of climate change. Similarly, those initiatives may be upheld within the New Pact on Migration and Asylum, a package of proposals to revise the Common European Asylum System released by the European Commission in September 2020.
- Support efforts to avert, minimize and address displacement related to climate change in Central Asian countries and elsewhere by focusing on preparedness and adaptation. Effective practices include:
 - Early warning systems to forecast climate change-related hazards;
 - Contingency planning to address different types of crises that may spark displacement;
 - Assessments to understand the potential effects of natural disasters on communities and their assets as well as the propensity to migrate;

- Inclusion in disaster vulnerability assessments factors that may impede or encourage people's ability to stay in place or move, such as age, disability, poverty and social networks, among others. The aim should be to identify who may be trapped in life threatening situations as well as those who may be displaced without resources to sustain themselves in a new location.
- Pilot-test sustainable development programmes that seek a dual approach to adaptation to climate change. These programmes should seek to help residents in the European Union, Central Asia and other regions to remain safely in place when possible and migrate or relocate internally or across borders when conditions do not permit them to stay at home. These programmes should aim to improve the well-being of those who are most vulnerable to climate change and do not have the resilience to adapt on their own.
- Enhance research, data collection, risk analysis, and sharing of information to better map, understand and manage human mobility related to the adverse impacts of climate change. Such research should include participation of communities affected and at risk of displacement or distress migration related to the adverse impacts of climate change.
- Increase funding for relocation planning where adaptation in situ will be impossible and facilitated migration programmes are unlikely to succeed; this funding should support broad consultative processes as well as the logistics of the relocation. Pilot-test new approaches to planned relocation that will protect the rights of the relocated, the needs of destination communities, and longer-term economic progress for newcomers and existing communities.
- Help Central Asian governments as well as international organizations operating in the five countries (e.g. UNHCR, IOM, United Nations Office for the Coordination of Humanitarian Affairs), and international and local NGOs increase their capacity to respond to climate and other environmentally induced migration, displacement and planned relocation.

Recommendations to the Russian Federation and Kazakhstan

Displacement

- Avert, minimize and address disasters displacement, including those related to climate and environmental changes, in the Russian Federation and Kazakhstan. This includes:
 - Implementing adequate policies to prevent disaster displacement risk;
 - Developing appropriate systems to collect, analyse and share disaggregated data on disaster displacement to provide timely and efficient disaster response, assistance and relief;
 - Including disaster displacement provisions across policy areas, laws and plans;
 - Adapting, where needed, national legislation to regional and international legal instruments relevant to disaster displacement, including the Guiding Principles on Internal Displacement.

Migration

- The Russian Federation and Kazakhstan are both countries of immigration and emigration. Concurrently, they are highly vulnerable to climate change with projected hotspots for migration inflows and outflows. Both countries should therefore consider strengthening national migration policies, strategies and legal frameworks to systematically include environmental factors to adequately respond to internal and cross-border migration in the context of climate and environmental changes. This includes extending or creating measures addressing the phenomenon.
- In times of conflicts and economic constraints, ensure non-discrimination and access to basic social services for migrant workers from Central Asia. The ongoing war in Ukraine and the European Union-imposed sanctions on the Russian Federation may lead to economic shocks and job precariousness in the Russian Federation and Kazakhstan. Migrant workers in these countries should be granted the same access to social services and welfare as other foreigners and national citizens. At the same time, the Russian Federation and Kazakhstan should facilitate the return of migrant workers who wish to go back to their countries of origin by providing sufficient, safe and not excessively onerous travel options.

Policy coherence

- Both the Russian Federation and Kazakhstan voted in favour of a United Nations resolution to adopt the Global Compact for Migration. They are therefore encouraged to implement all its objectives, in line with international duties and responsibilities. In particular, progress towards the Global Compact for Migration's commitments in the field of migration, environment and climate change is of utmost importance. These include creating environmental conditions conducive to leading peaceful, productive and sustainable lives in people's own countries and to fulfilling their personal aspirations (objective 2); investing in programmes to address sudden- and slow-onset environmental events, such as by leveraging resilience and DRR, climate change mitigation and adaptation strategies, and displacement considerations; enhancing availability and flexibility of regular pathways of migration, including humanitarian admission due to natural disasters, private sponsorships and temporary work permits (objective 5); improving the human and labour rights of migrants; detecting vulnerability related to environmental stressors; and enhancing access to basic services, among others.
- Mainstream migration in the context of climate and environmental changes in all policymaking processes. Traditional emigration and immigration drivers could be equally exacerbated by the negative impacts of climate change. To adequately manage environment-related movements of people in and out the Russian Federation and Kazakhstan, climate change and migration consideration should be mainstreamed in all policy sectors.
- Integrate migration in the context of climate and environmental changes provisions in existing migration law and policy. Neither the Russian Federation nor Kazakhstan have specific legislation dealing with the protection of migrants whose movement has been induced by climate and environmental changes. National law does not define or recognize environmental causes of migration, thus leaving people propelled to migrate

on environmental grounds without proper recognition, assistance and protection. The Russian Federation and Kazakhstan should consider therefore integrating the climate–migration nexus within their existing migration frameworks. In doing so, aspects of other national dispositions on migration in the context of environmental and climate changes (i.e. Kyrgyzstan’s and Tajikistan’s definitions, although with limitations) may be leveraged, in line with undertaken international commitments in the realm of migration in the context of climate and environmental changes.

Capacity development

- Consider opening education and labour migration pathways from neighbouring countries particularly exposed to the adverse impacts of climate change. Enhanced job creation, diverse education and upskill pathways, entrepreneurship opportunities, sustainable agriculture and industrial plans could improve both Russians’ and Kazakhs’ as well as migrants’ living conditions, in turn minimizing their vulnerability to the adverse effects of climate change at the supranational level. For instance, Kazakh labour migrants residing in the Russian Federation are highly skilled and might therefore support the Russian Federation’s green and innovative transition.

Regional cooperation

- Cooperate at the regional level to minimize environmental stressors and to facilitate population movements through joint environmental actions and climate plans, bi-/multilateral migration agreements, visa facilitation, education and work exchanges, and humanitarian and legal migration pathways to make migration a choice rather than a measure of last resort and to disincentivize precarious, irregular migration solutions.
- Strengthen the EAEU as a way to facilitate migration when that is the preferred adaptation strategy. At the same time, increase adaptation finance for more climate-vulnerable countries in Central Asia, such as Tajikistan and Kyrgyzstan, in order to address migration in the context of climate change.

Recommendations to migrants' countries of origin

Displacement

- Integrate considerations regarding disaster displacement, also associated with climate and environmental changes, in policy actions aimed at reducing vulnerability associated with poverty, land and water scarcity, and unemployment. The poorest are the most vulnerable to disaster displacement due to limited opportunities to adapt or move away from disaster-prone areas. Addressing root causes of displacement can help enhance people's resilience and adaptation strategies to climate change.
- Address challenges in water and land use management to meet the needs of the most vulnerable, who often live in marginalized areas prone to disasters, where services are inadequate and with no access to drinkable water.

Migration

- Implement policies to maximize the potential of financial and social remittances to bolster climate adaptation investments and productive activities and enhance the transfer of knowledge through family and social networks.
- Countries in the Central Asian region should consider aligning their commitments in the field of migration in the context of climate and environmental changes with the ones set out in the Global Compact for Migration as well as the 2015 Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, the 2016 New York Declaration for Refugees and Migrants, the Sendai Framework for Disaster Risk Reduction, and the 2030 Agenda for Sustainable Development, among others. Both the 2015 Agenda and the 2016 New York Declaration, for instance, recognize that the adverse impacts of climate change and environmental degradation represent a cause of forced migration. They therefore call on States to provide adequate solutions to climate change and to protect people affected by it, both within and across their territories (IOM, 2018a).

Planned relocation

- Make planned relocation work for affected communities. This entails creating full information, consultation and participation of affected communities in decisions concerning both reactive and anticipatory relocation, ensuring the right to fair trial and remedy before the court, and assuring that their safety, livelihood and opportunities in the new site are no less favourable than those held in the former place of residence, in turn avoiding irregular secondary movements. Specific needs of relocation beneficiaries should be considered in all phases. Central Asian countries should take stock of the Guidance on Protecting People from Disasters and Environmental Change through Planned Relocation (hereinafter the Guidance on

Planned Relocation) and of the recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change, including on planned relocation, set forth by the task force on disaster displacement, established at the twenty-first session of the Conference of the Parties (COP 21) in 2015 by the Executive Committee of the Warsaw International Mechanism for Loss and Damage. In this regard, when planning relocation, competent authorities should duly consider cultural and religious factors, avoid land disputes and comply with legal standards. According to the Guidance on Planned Relocation, States must have compelling reasons, robust evidence and a sound legal basis for undertaking planned relocation (Brookings Institute, Georgetown University and UNHCR, 2015a). Relocation must be thoroughly defined by law, incorporated into a specifically designed legal and policy framework, and comply with States' international obligations, including those pertaining to the full respect and promotion of human rights.

- Under international law, it is the State's responsibility to prevent and reduce disaster risk and vulnerability to it, as well as to address negative environmental conditions in its own territory (Burson et al., 2018). As clarified by the Guidance on Planned Relocation, States are, under specific circumstances, required to relocate their own citizens if needed to protect them and fragile environments unable to sustain lives and livelihoods. Planning for such situations now will help ensure that those who are relocated are able to restore and, if possible, improve their well-being (Brookings Institute, Georgetown University and UNHCR, 2015a).

Policy coherence

- Mainstream the migration, environment and climate change nexus in all policymaking processes. Traditional, key drivers of emigration within and from Central Asia are well known and relate to economic, social, demographic, environmental and political reasons. Soon, these drivers could be exacerbated by the negative impacts of climate change on a country's economy and good production, limiting job creation and income and putting life at risk. Already weak assistance and public and social services might not be able to respond to rising unemployment and poverty, thus potentially triggering greater migration outflows. To avert, minimize and address disaster displacement and address human mobility challenges, Central Asian countries could consider mainstreaming climate change adaptation in other policy domains. Adaptation should focus on three outcomes: (1) initiatives designed to enable people to remain at home if at all possible; (2) initiatives for people on the move who must be able to migrate in safety and dignity; (3) initiatives for people who migrated aimed at improving their living conditions and level of resilience.
- Include migration in the context of climate and environmental changes provisions in external policy action. Acknowledging the environmental causes of migration only through measures of internal policy, for instance, in the event of relocation of citizens and of internal movements, can only provide limited answers to the challenges posed by environmental stressors, leaving countries without efficacious legal and policy protection frameworks to deal with environmentally induced migration inflows.

Capacity development

- Engage in enhanced job creation, diverse education and upskill pathways, entrepreneurship opportunities, sustainable agriculture and industrial plans to both improve the living conditions of their populations and to minimize the adverse effects of climate change. For example, the availability of natural resources in Kyrgyzstan, including minerals, forests and pastures, presents opportunities for economic diversification and employment growth in key sectors, such as energy, agriculture and tourism. However, the share of employment in those sectors has dropped over the last decades, from 52.9 per cent in 2001 to 19.3 per cent in 2019 (World Bank, 2019a).
- Explore the potential of existing and new agreements in encouraging high- and low-skilled labour migration in the field of green transition. Central Asian countries should ensure that trade agreements in the region do not endorse restrictive and selective approaches to either trade or migration.

Regional cooperation

- Cooperate at the regional level to minimize environmental stressors and to facilitate population movements through joint environmental actions and climate plans, bi-/multilateral migration agreements, visa facilitation, education and work exchanges, and humanitarian and legal migration pathways to make migration a choice rather than a measure of last resort and to disincentivize precarious, irregular migration solutions. Reforming and potentially increasing the membership of the EAEU could facilitate such cooperation while also providing more avenues for labour mobility in the region. It would be dependent, however, on the willingness of the Russian Federation to make reforms in its own trade and foreign policy. Alternatively, a Central Asian economic union may be an alternative approach in freeing up both trade and migration within the region. Here, again, politics and foreign policy could well intervene to disrupt such plans.
- Enhance the dialogue among the countries of the region to build a more coordinated climate and migration policy, which promotes education and job opportunities for citizens as well as third-country nationals living on their territories. This includes facilitating the mutual recognition of skills and the implementation of mobility agreements in circular economy. In particular, take steps to ensure that environmental drivers of migration are included in the conceptualization and implementation of free mobility agreements within the region, such as the EAEU.

Appendix: Other national legislative and administrative actions on cross-border movements

As of 2018, 14 African countries, 6 Asia-Pacific countries, 10 Western and European countries, and 5 Latin American and Caribbean countries referred to climate and environmental considerations in their national migration legislations, policies or strategies (IOM, 2018b:6). Most references pertain to the recognition of environmental factors, including climate change, disasters and environmental degradation, as drivers of migration, displacement and/or planned relocation. In some cases, migration is explicitly considered a potential adaptation or coping strategy to the adverse effects of climate change, especially through measures such as resettlement, labour migration and planned relocation. In addition, a few laws, policies or strategies articulate specific measures to address human mobility in the context of climate change, including protection standards, free movement protocols, visa-free and visa-waivers travel, work permits and labour migration schemes.

Very few countries in the world recognize the refugee status due to disasters. For instance, since 1978, Cuba has been providing refugee protection to persons leaving their countries “due to cataclysm or other phenomena of nature”.²⁵ A limited number of countries have accorded humanitarian admission and protection over time, although on an ad hoc and discretionary basis, especially in the Americas. For instance, when the 2010 earthquake in Haiti occurred, the Dominican Republic, Brazil and Ecuador immediately allowed for humanitarian admission, while the United States and Canada accelerated the entry of persons who had already applied for admission, prioritizing their special and life-threatening situations (Weiss Fagen, 2013; Martin, 2017). In 2010, Argentina adopted a new immigration law, providing residence permits for people who cannot return to their countries of origin because of a natural or environmental disaster (Escribano, 2020). In May 2022, moreover, Argentina launched the Special Humanitarian Visa Programme for the benefit of citizens of Mexico, Central America and the Caribbean displaced by “socio-natural disasters”. It grants admission and temporary visa based on humanitarian grounds for up to three years and it is convertible into permanent resident status (Argentina National Immigration Directorate, 2022). In 2017, Brazil adopted a new immigration law to provide humanitarian visas and related residence permits in case of “serious or imminent institutional instability, armed conflict, disaster of major proportions, environmental disaster, severe violations of human rights or international humanitarian law [...]” (Brazil National Congress, 2017:Article 14(3)). In 2023, a new bill in Colombia is calling for the recognition of forced internal displacement due to causes associated with climate change and

²⁵ Decreto 26 (Reglamento de la Ley de Migraciones), de 19 de julio de 1978 (Cuba), Article 80 states: “Se considerarán refugiados aquellos extranjeros y personas sin ciudadanía cuya entrada se autorice en el territorio nacional por tener que emigrar de su país a causa de calamidad social, bélica, por cataclismo u otros fenómenos de la naturaleza y que permanecerán temporalmente en Cuba, en tanto se restablezcan las condiciones normales en su país de origen”. See Varela, 2021.

environmental degradation.²⁶ The Bolivian migration law passed in 2013 goes as far as to provide a definition of climate migrants and asks the National Migration Council to develop international agreements aimed at protecting Bolivian nationals abroad and enabling the entry of displaced persons (Escribano, 2020).

In Iceland, those who are not eligible for the refugee status, but are nevertheless in need of protection due to armed conflicts or “natural disasters”, may be granted a residence permit on humanitarian grounds (Iceland, Government of, 2016:Article 43). As seen, Italy is currently the only European Union Member State that provides multiple and explicit protection to people displaced by disasters. Since 2000, Cyprus has been implementing a ban on the deportation of refugees and beneficiaries of subsidiary protection to any country where themselves or their lives or freedom will be endangered or risk being subjected to torture or inhuman or degrading treatment or punishment or persecution because of “environmental destruction” (Cyprus, Government of, 2007:Article 29(4)). Similarly, after the 2004 Indian Ocean tsunami, Switzerland, the United Kingdom and Canada suspended deportations to Sri Lanka, India, Somalia, Maldives, Seychelles, Indonesia and Thailand due to unsafe environmental conditions (Glahn, n.d.). From 2001 to 2006, Denmark stopped returning young children to Afghanistan due to drought (UNHCR, 2009). Such an exception was later extended to vulnerable groups, such as landless people, from areas where food was lacking. Denmark also provided humanitarian asylum to single women and families with young children who would otherwise be returned to dire living conditions, such as because of famine (Kolmannskog and Myrstad, 2009). In one case, a Norwegian court recognized drought as a significant factor precluding the internal flight alternative in a case concerning a person from Somalia who sought international protection in the context of the 2011 famine (Scott and Garner, 2022; Norway Borgarting Court of Appeal, 2011).

A number of other countries provide exceptions to removal on an ad hoc basis for persons whose countries of origin have experienced significant disruption because of natural disasters. In the United States, there are a few statutory provisions that provide temporary protection status in case of natural disasters. Among these, the Temporary Protected Status allows for a six-month stay, extendable up to 18 months. The Temporary Protected Status, however, is generally granted to individuals who are already in the United States and are temporarily unable to return to their countries due to ongoing conflict, environmental disasters, or extraordinary and temporary conditions. Plus, the country of origin must request designation of the Temporary Protected Status for its nationals, thus admitting its partial or total incapacity to cope with the calamitous event; and, even in presence of these two first requirements, the national government has total discretion in deciding whether or not to grant the Temporary Protected Status (Martin, 2017).

CARICOM and the OECS have been emphasized as exemplary case studies to demonstrate how free movement clauses may provide protection and assistance to people displaced in the aftermath of sudden-onset disasters beyond asylum-related schemes (Cantor, 2018 and 2021; Francis, 2019).

²⁶ The bill states: “Forced internal displacement due to causes associated with climate change and environmental degradation is understood as forced human mobility of a person, families or social groups who are forced to move from their territory, abandoning their place of habitual residence, family and social nucleus, their economic activity and/or means of subsistence as a result of or to avoid the effects of natural disasters or climate change”. Asked to comment on the proposed law, Clara De La Hoz Del Real stated: “Constructing categories is a social process that in this case implies assigning certain rights to the people affected, but should not take away from others.” “In Colombia, the category of displacement, and the institutionally constructed figure of the displaced, come with political and social disadvantages — stigmatization, victimization and exclusions that reflect the domination of those who formulate and assign these labels over those to whom they are assigned,” she explained. See Monsalve, 2023.

During the 2017 Atlantic hurricane Season, CARICOM and the OECS provided displaced with a right to entry in other islands; supported the waiver of travel document requirements where documents had been lost or damaged; granted indefinite stays to some disaster-displaced persons, facilitating permanent resettlement; and eased access to foreign labour markets through a mutual recognition of skills scheme and/or a waiver of work permit requirements.

The IGAD, created to address environmental and climate change impacts in East Africa, established the Regional Migration Policy Framework (2015–2020) in which prevention of climate change and natural disaster-induced displacement figures as top strategic priority, confirming the relevance of climate change impacts on mobility patterns in the region (IGAD, 2015). In February 2020, all IGAD member countries adopted the Protocol on Free Movement of Persons in the IGAD region, particularly centred on enhancing labour mobility opportunities. Under this new protocol, which still needs further negotiation, people would also be allowed to ask for asylum in a neighbouring country within the region on environmental grounds. Since its inception, the ECOWAS has been putting great emphasis on free movement of persons and labour for a better regional economic and trade integration (Dick and Schraven, 2019; Wood, 2022). Member States signed the first Protocol relating to Free Movement of Persons, Residence and Establishment (ECOWAS Protocol) in 1979. To facilitate intraregional mobility, the Protocol foresees to abolish visas and grant the right to entry for up to 90 days, to grant citizens of all ECOWAS Member States the right to reside and work in other Member States and, on a later stage, the right to establishment. Article 16 of the Protocol addresses the movement of persons affected by disasters, establishing that:

1. Member States shall allow citizens of another Member State who are moving in anticipation of, during or in the aftermath of disaster to enter into their territory provided that upon arrival they shall be registered in accordance with national law.
2. Member States shall take measures to facilitate the extension of stay or the exercise of other rights by citizens of other Member States who are affected by disaster in accordance with the provisions of this Protocol when return to their state of origin is not possible or reasonable.

Therefore, the Protocol has the great potential to offer access to the Member States' territories even before a disaster strikes. It also ensures protection against forced return where there might be a risk of irreparable harm.

In late July 2022, the IGAD Member States, the EAC Member States and the States of the signed the Kampala Ministerial Declaration on Migration, Environment and Climate Change (IGAD Member States, EAC Member States and States of the East and Horn of Africa, 2022). Among other things, they expressed their concern about “the progressive desertification and land degradation creating forced mobility of people and livestock” (ibid.:1) and committed to “implement and domesticate the provisions of the United Nations Convention to Combat Desertification (UNCCD) underscoring State role to address desertification, land degradation and drought as one of the drivers of poverty and forced mobility” (ibid:4). In August 2023, the Declaration was endorsed by 48 African States in an attempt to expand it at the continental level (IOM, 2023b).

In the Pacific, initiatives leading the development of climate mobility policy include the Framework for Pacific Regionalism, the Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management, the Samoa Pathway and the United Nations Pacific Strategy 2018–2022. As explained by Farbotko (2021), these aim to protect people displaced by climate change, and also include voluntary international migration programmes as an adaptation measure, with a particular focus on labour migration. Other frameworks particularly focused on improving mutual working opportunities to foster resilience and to engage diaspora communities are the Pacific Climate Change and Migration Project, especially relevant for Tuvalu and Kiribati, and the Pacific Climate Change Migration and Human Security Programme. Several projects are currently implemented at the national level in order to advance citizens' resilience towards climate change and opportunities across all sectors of the economy (ibid.; Kraler et al., 2020).

In 2020, the United Nations Human Rights Committee opened up the possibility that deportation of a migrant to a country experiencing severe impacts of climate change could violate the ICCPR even if the person did not meet the refugee definition. It held in the case of *Ioane Teitiota versus New Zealand* that “without robust national and international efforts, the effects of climate change in [receiving] [S]tates may expose individuals to a violation of their rights under [Article] 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of the [sending States]”. Furthermore, “given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized”. The case in point did not rise to that level but future cases might (Sommaro, 2021; Villani, 2021).

In 2022, the United Nations Human Rights Committee found Australia in violation of the Torres Strait Islands indigenous group's right to be free from arbitrary interference with privacy, family and home (ICCPR Article 17) and of their right to culture (ICCPR Article 27). Torres Strait Islands are disproportionately affected by climate change and their residents are dangerously facing displacement as their homes have been slowly but progressively “eaten by the sea” (Cullen, 2018:173). In the case *Daniel Billy and others v Australia (Torres Strait Islanders Petition)*, the Committee held that the unavailability of natural resources, alternative means of subsistence and humanitarian aid had direct repercussions on the right to one's home. Moreover, the adverse impacts of climate change may cause physical or mental harm and adversely affect the well-being of individuals, thus constituting foreseeable and serious violations of private and family life and the home (United Nations Human Rights Committee, 2019:paragraph 8.12). The Committee also found Australia's failure to adopt timely adequate adaptation measures to protect the indigenous right to culture, in particular their ability to preserve their traditional way of life and to transmit to future generations their culture, traditions, and use of land and sea resources (ibid.:paragraph 8.14). Conversely, the Committee did not consider Australia in violation of the indigenous group's right to life (ICCPR Article 6), as Australia still has 10–15 years to promote climate adaptation measures and other solutions to avoid life-threatening scenarios, including planned relocation of the islanders.

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