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Dry fields in south-east Turkey. © 2015 (Photo: Tina Cadez)

Environmental migration in Turkey:
Challenges, recognition and implications for policy

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Introduction

Due to its geographic and geopolitical location, the Republic of Turkey (hereafter referred to as Turkey) is a country vulnerable to environmental degradation and climate change. At the same time, the country features diverse migration dynamics. Climate change consequences are impacting one of the main economic sectors of the country – agriculture. The increase in temperature, the melting of glaciers and the change in rain patterns raise the frequency and intensity of droughts, heat waves and shortages of water in the periods of

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cultivation, a situation that threatens food security (Lütfi Şen, 2013). Water scarcity has been mitigated through dam construction. However, the construction caused environmental degradation and disabled farmers to continue with their agricultural activities. As a consequence of the Atatürk Dam construction completed in 1992, 113,476 people were displaced. The relocation process did not sufficiently compensate what people had lost. Throughout the process of Samsat district displacement, the needs of people and their socioeconomical context were not sufficiently taken into consideration (Kadirbeyoglu, 2010).

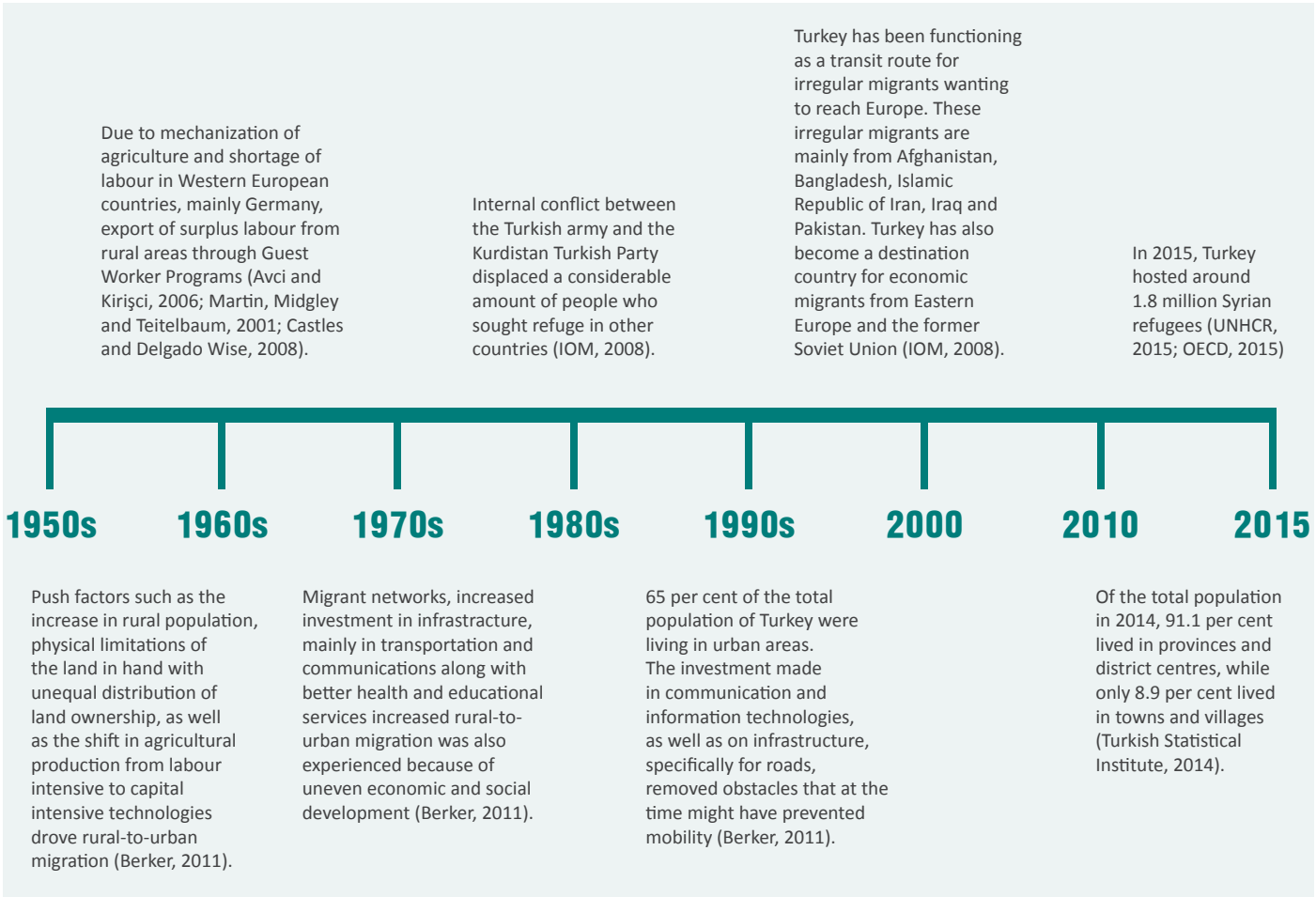
In Turkey, as agricultural production is decreasing, farmers are migrating to urban areas and changing professions (ibid.; Turhan, Zografos and Kallis, 2015). Migration is driven by many factors ranging from social, demographic, political, economic and environmental (Foresight, 2011). It is difficult to identify a sole reason for migration because there is a complex interlinked connection between multiple drivers. Climate change, a type of environmental change, has accentuated the social, economic and political vulnerability of many populations that may influence their decision to move voluntarily or to be forced to move. The study of both migration and climate change is multifaceted and complex. However, understanding the drivers is essential when designing policy. Due to the increasing implications of climate change, it has become significantly important to consider migration as an adaptation strategy to climate change.

This research was based on an extensive literature review on environmental and climate change and migration, and on the existing literature on the links between both topics. The policy recommendations are based on this review.

Migration dynamics in Turkey

Turkey is a country with dynamic migration patterns, being a source, destination and transit country. Figure 1 shows the migration dynamics of Turkey from the 1950s to 2015, highlighting the main migration events that took place and were influenced by both the internal and international context.

Figure 1. Historical overview of migration dynamics in Turkey



Source: Own elaboration by authors.

It is important to mention that population concentration tends to continue in metropolitan areas and large cities. Direction of migration is generally from east to west, from inland to large cities and coastal area, Istanbul being the most important centre of attraction (Ministry of Development, Republic of Turkey, 2014).

Climate change in Turkey

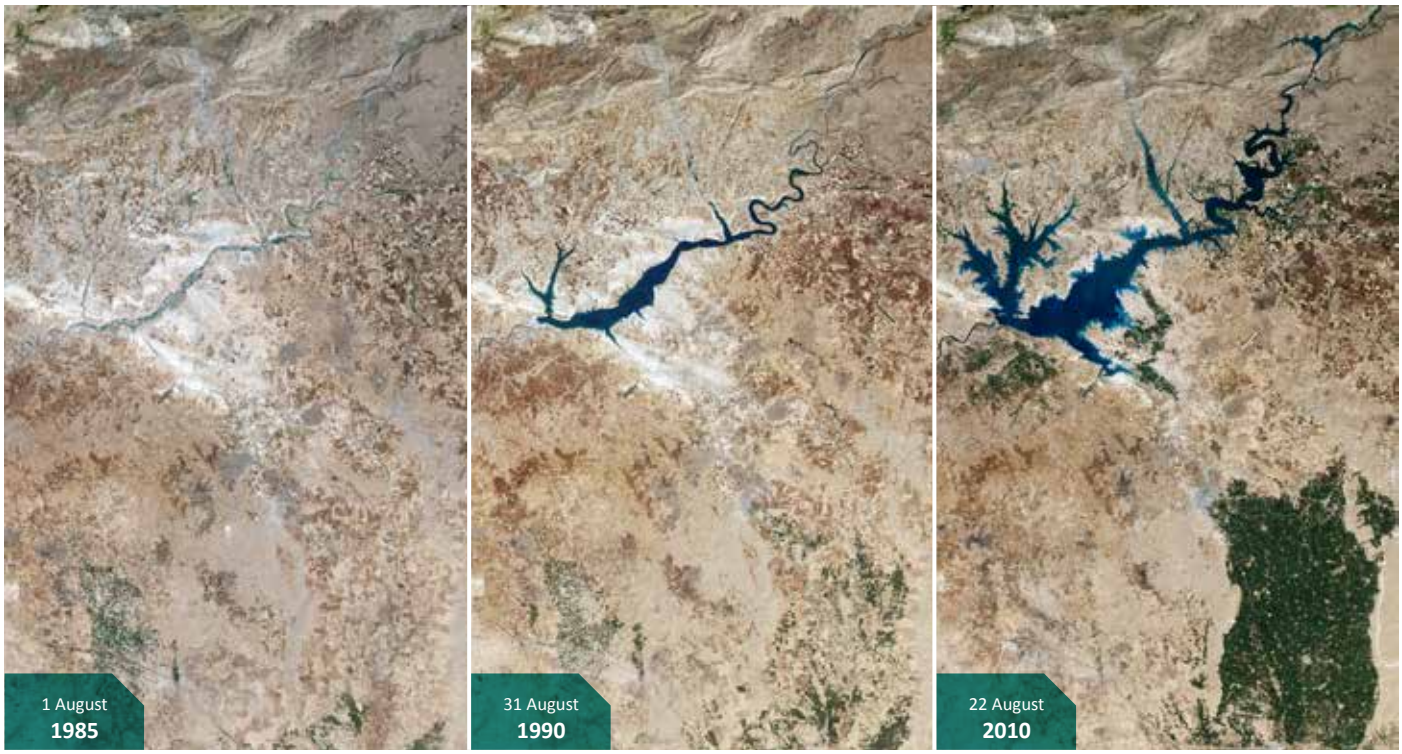
The climatic changes that have impacted Turkey from the 1960s to 2010, among others, are as follows (Lütfi Şen, 2013):

- Increased frequency of temperature rise – during summers, reaching 40°C or more.
- Changing patterns of precipitation – due to temperature increase, precipitation has changed significantly, and has increased in the north-eastern part of Turkey, while it decreased in the west. In north-eastern Turkey, the change affects food production as farmers can no longer rely on rain-fed agriculture.
- Melting of glaciers – average loss of 10 m per year due to temperature increase led to early snow melt, causing rivers filling up earlier than usual. The situation was not favourable for the summer because the supply of water was insufficient.
- Sea-level rise – from 3 to 8 mm rise per year.

According to Lütfi Şen (2013), the impacts of climate change in the future in Turkey include temperature increase in all seasons, with a peak in the summer. The pattern of precipitation increasing in the northern part of the country and decreasing in the south-eastern part of the country will continue. The changes in temperature and precipitation patterns will influence the duration and intensity of droughts. Sea-level rise will impact low-lying areas of the river deltas and coastal areas. Overall, changes in the climate will increase the water stress.

Climate change-induced migration

In the Seyhan River Basin in the south-east region, 70 to 90 per cent of people are employed in the agricultural sector. This area represents only 13.3 per cent of cultivated land in the country and has the lowest level of agricultural mechanization (Chan, 2013; Morvaridi, 1990; Ministry of Development, 2014). Due to lack of a complete reform, inadequate regulation, a high percentage of farmers not owning land and around 80 per cent of producers only having 10 ha, high numbers of seasonal workers move every year from east to west and from south to north (OECD, 2011; Turhan, Zografos and Kallis, 2015). Considering an increase in temperature, changes in precipitation patterns and droughts, rain-fed agriculture would not be sustainable due to water scarcity. It is projected that the availability of water will decrease in the region, which threatens food



Flooding and growth of Atatürk Dam Lake in south-eastern Turkey. © NASA/Goddard Space Flight Center (Marit Jentoft-Nilsen (GST), 2013)

security (Lütfi Şen, 2013; Özdoğan, 2011). The Ministry of Environment and Urbanization of Turkey launched in 2011 "The Strategic Steps to Adapt to Climate in Seyhan River Basin", with the main objective of developing water resources to meet the needs of changing consumption demands (Ministry of Environment and Urbanization, Republic of Turkey, 2011). Human mobility, migration or displacement in relation to the effects of climate change in the basin is nowhere mentioned in the strategy.

In the case of the displacement due to the construction of the Atatürk Dam farmers, who were left with no other option than to migrate, the farmers became seasonal workers or changed professions due to the inadequate management of water resources. Previously, they were all landowners but lost the title in the process (Kadirbeyoglu, 2010). So far, not much attention has been given to seasonal workers, who are one of the most vulnerable populations (ibid.; Turhan, Zografos and Kallis, 2015). Policies, such as the National Climate Change Adaptation Strategy and Action Plan and the National Strategy and Action Plan for Improving Work and Social Lives of Seasonal Migratory Workers, identify seasonal workers as most vulnerable to climate change but do not provide solutions to address their vulnerabilities. Seasonal workers do not have much access to social security; they do not receive any compensation for the crop failure or lower harvest as a consequence of climate change (Turhan, Zografos and Kallis, 2015). In addition to the financial situation, health is threatened by temperature increase. Seasonal migrants are placed under tents, lacking basic needs, and up to one third of them suffers from different diseases in temporary settlements (Turhan, 2013).

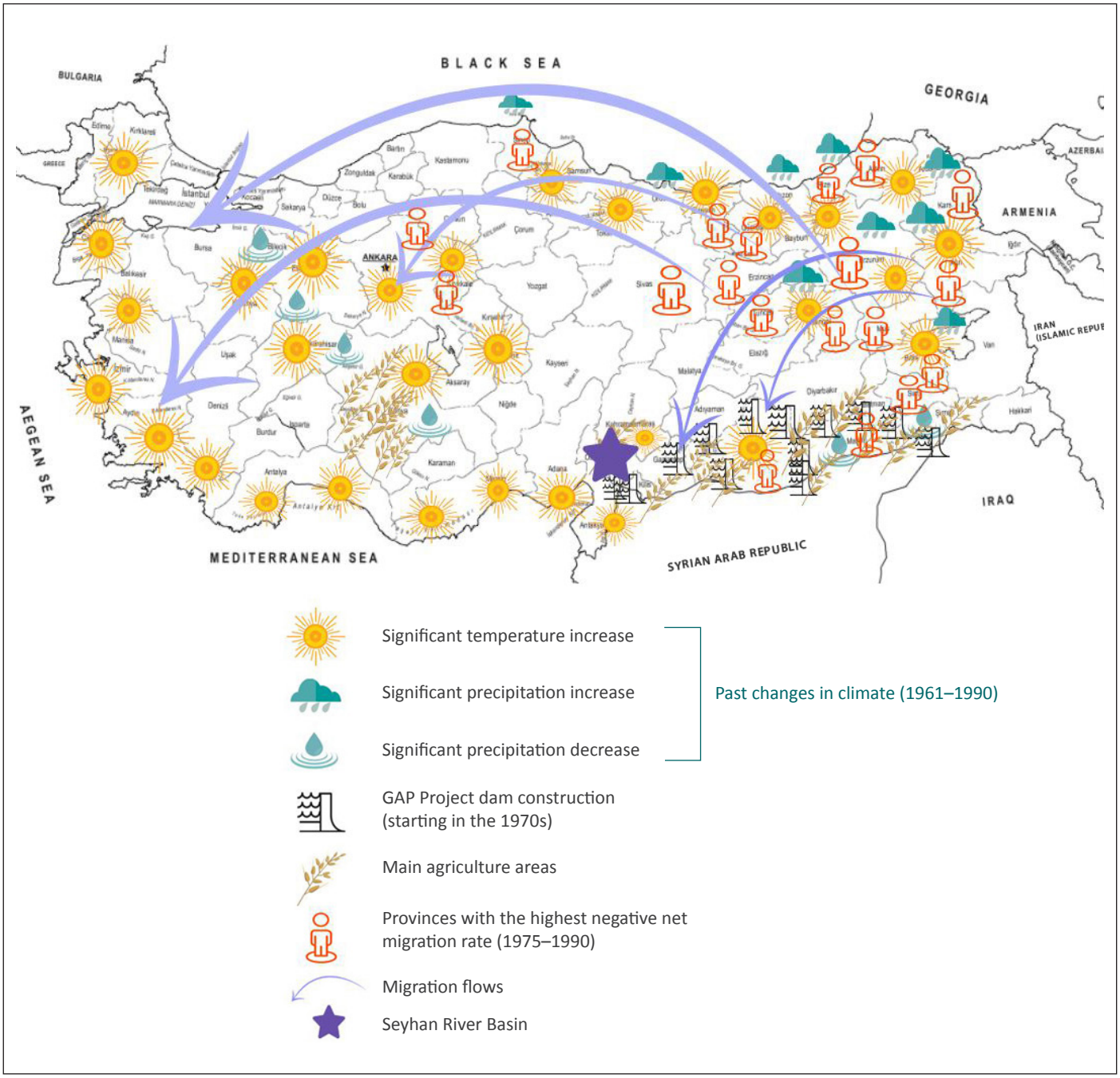
Climate change does not only negatively impact seasonal workers, but it also affects landowners of cotton plantations: research on the Çukurova region (part of the Seyhan River Basin) showed that cotton production was harmed after changes in precipitation patterns, which diminished the quality of cotton and increased the cost of production (Turhan, 2013). As the cotton becomes wet, it becomes heavier, and two situations arise: the first one is that the quality decreases, which affects Turkey´s position on the global cotton market; the second is that since workers are paid by the weight of the collected cotton, owners have to pay more for labour. These effects of weather change consequently change the migration flows of seasonal migrants and pose risk to workers' livelihoods with unstable yearly changing income.

Development-induced environmental migration

Dams are constructed, among other reasons, to mitigate water scarcity, as it was the case of the Guneydogu Anadolu Projesi (GAP; South-eastern Anatolia Project), which started in the 1970s. One of the main negative consequences of GAP is that it caused environmental damage (Bozkurt and Sen, 2013) due to inappropriate environmental assessment and the cost of mitigating the negative consequences was not considered (Başkaya, Başkaya and Sari, 2011; Şekercioğlu et al., 2011). Development-induced environmental migration caused by dam construction lacked concrete plan and strategy. The GAP project caused the displacement of 350,000 people. Only with the construction of the biggest dam in the project, 18,121 families were relocated and 52 per cent of those relocated claimed it would be better if the dam would not be constructed (Kadirbeyoglu, 2010; Morvaridi, 2004). The studies conducted show that relocation was not done properly. It lacked pre-consultation, and prior and informed consent principles (accurate information and guidance before people decided on the option given) and compensations were not adequate. Most of the decisions were not made in the people's best interest, and from 31 to 72 per cent of people's situation worsened (Kadirbeyoglu, 2010; Akça, Fujikura and Sabbag, 2013).

Figure 2 shows the relation between internal migration dynamics in Turkey, past changes in climate, the Seyhan River Basin, the main agricultural areas and the GAP from the 1960s to the 1990s. It can be seen that the areas experiencing most climatic changes have the highest negative migration rates, which means that more people are leaving the province than entering.

Figure 2. Combination of climate change and migration flows in Turkey



Source: Own elaboration by authors.

Recommendations

With the information presented and reviewed, the following recommendations have been identified and could be taken into consideration while designing a policy or integration strategy in Turkey.

Recognition of environmental migrants

From the research, it was identified that seasonal workers were not considered as migrants, partly due to the short period of time away from home. It is important that the Government recognizes potential migration, including seasonal migration, due to environmental degradation to address their specific needs. At the international level, there is not yet a consensus on the definition of environmental migrant; however, this should not hinder Turkey from developing policies to address the issue at hand. There are definitions proposed, such as the working definition on environmental migration by the

International Organization for Migration (IOM),[1] which can help push the issue forward from the conceptual debate. In light of the country's exposure to climate change impacts, it is important to take into account current impacts and the future projection of climate change and its possible implications for human mobility.

Integrating environmental migration in existing policy frameworks

The existing policy frameworks in Turkey address climate change and migration, but not yet linking the two areas. On the other hand, these policy frameworks offer potential to mainstream and incorporate the topic as witnessed in global policy processes namely, the Paris Agreement at COP21. In terms of climate change policies at national level, the following are noteworthy, among others: the Tenth Development Plan 2014–2018, the National Climate Change and Adaptation Strategy and Action Plan, the Integrated Urban Development Strategy and Action Plans, the Climate Change Strategy 2010–2020, the Drought Strategy and Action Plan for Combating Agricultural Drought in Turkey, the Action Plan for Combating Erosion in Turkey, 2015 Intended Nationally Determined Contribution and many strategies as part of the Hyogo Framework for Action 2005–2015. With regards to migration policy, law no. 6458, Law on Foreigners and International Protection and the Tenth Development Plan 2014–2018 address migration and propose specific activities for the better management of migration flows. These reforms are motivated by human rights-based approach.

The above-mentioned national instruments do not recognize the connection between climate change and migration. There is existing evidence on the links between climate change and migration, the question relies whether it is enough or not for policymakers to consider and address the topic in policy. The recognition of environmental migrants would be the first step to incorporate them into the policy framework. However, there is a general consensus at the global level that more evidence is required for policymaking, which leads us to the next recommendation.

Investment in research

There is generally more research on the south-east part of the country, but not in the other parts, while climate change is affecting the whole country. Data covering all parts of the country will help map vulnerabilities that could be useful for designing policy. It is not enough to identify which parts of the country are most vulnerable to climate change and how, but also to identify who is most vulnerable to these changes and why, and how their vulnerabilities should be addressed.

Conclusion

The links between climate change and migration are essential to address the needs of those who are most vulnerable to the changes in climate. The empirical evidence shows that one of the most affected groups by climate change and environmental degradation in Turkey are farmers. Due to the situation, their livelihoods are compromised: however, more is required to design adequate policies linking degradation of the environment and human mobility. The consequences of climate change and its negative impacts on human beings cannot be avoided. Even if the greenhouse gas emissions are reduced, adaptation measures are inevitable. According to the future scenarios of the Intergovernmental Panel on Climate Change, we can only expect more people on the move due to negative consequences of climate change to the environment (IPCC, 2014). In the case of Turkey, migration has not been considered as an adaptation strategy, migrants have not been treated in line with human rights law, and the people affected have not been considered until now. In order to prevent forced migration and address the needs of the vulnerable population, the Government should invest more in research to obtain necessary evidence and should recognize environmental migrants, to include them in their policy frameworks.

1 IOM has put forward a broad working definition that seeks to capture the complexity of the issues at stake: "Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad" (IOM, 2011:33).

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