

Climate Change-Induced Migration Movements in the Mediterranean Basin: Common Challenges for Spain and Türkiye

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Abstract

Migration, one of the threat multiplier effects of climate change, has the potential to become a key security issue in the following years, especially for countries with important migration routes such as Türkiye and Spain. In this sense, many countries will need significant transformations in their domestic policies regarding both international and internal migration. Impacts such as extreme weather events, drought, water scarcity, wildfires, and sea level rise resulting from global warming now have the capacity to affect all referent objects of security. Therefore, migration could now become forcible in certain societies that have difficulty coping with increasingly frequent climatic events and cannot adapt adequately. Climate change-induced migrations from Africa, the Pacific, and Small Island Developing States, which have a low share in global emissions but are among the regions most affected by climate change, and the Middle East and South Asia, are likely to be discussed as an important issue in terms of international security in the coming period. According to the Migration Data Portal's 2021 estimates, approximately 216 million people could be displaced within the country due to environmental reasons by 2050; therefore, countries affected by climate change will probably also need to restructure their economic, social, and ecological Dynamics (Clement et al. 2021). In this sense, the study aims to examine how Spain and Türkiye, which are in the Mediterranean Basin and are frequently exposed to the impacts of climate change, such as high temperatures, floods, wildfires, drought, and water scarcity, are affected by both internal and international migration movements. For this purpose, it will emphasize that both countries should be prepared at the national and international security levels for climate change-induced migrations, considering their similar geographical locations and environmental challenges.

Keywords: Spain, Türkiye, Climate Change, Migration, International Security, National Security.

Introduction

An Overview of Climate Change and Migration

The impacts of climate change are a significant threat from human security to global security. Droughts and water scarcity in Africa and many parts of the world, extreme weather events such as hurricanes, typhoons, and cyclones in America and Asia, extreme temperatures in Europe and the polar regions, wildfires in Australia, Canada, and Europe, rising sea levels, and many others... Although it is not appropriate to explicitly link individual events to climate change in order to accept its consequences in a region, at least 30 years of climatic data should be collected (WMO, 2021). Weather-related disasters, which are becoming more frequent, have the potential to threaten humans first and then national security and even international security, depending on the capacity of states to cope with them (Çelenk, 2023). The concept of threat multiplier, which entered the literature in a report published by CNA in 2007, states that climate change exacerbates and deepens existing economic, social, political, and cultural problems and multiplies new security threats (CNA, 2007). It is also possible to observe migration movements within both the direct effects and the threat multiplier effect of climate change. While sudden and strong weather-related disasters such as typhoons, hurricanes, tropical cyclones, and floods could immediately displace people living in these regions, long-term climate change-related risks have the potential to exacerbate various issues over the medium and long term and cause people to migrate voluntarily or by force. According to the 2024 Internal Displacement Monitoring Center (IDMC) report, approximately 26.4 million people were displaced due to natural disasters in 2023. The report stated that approximately 6.1 million people were displaced due to geophysical events, and 20.3 million were displaced due to weather-related events. Approximately 9.8 million people were displaced due to floods, 9.5 million people were displaced due to storms, 491,000 people were displaced due to droughts, 435,000 people were displaced due to wildfires, and 134,000 people were displaced internally due to extreme temperatures, wet mass movements, erosion, and wave action (IDMC, 2024, p. 11). It is a complicated process

to create clear data for climate change-induced international migration because the processes that trigger climate change-induced international migrations are generally examined through the threat multiplier effect. Namely, although climate change is not the primary cause of human international migration, economic, social, or political crises that may be triggered by the increase in the frequency of weather-related disasters may trigger such migration movements (Migration Policy Institute, 2023). For instance, Abel et al (2019) found significant connections between climate, conflict, and forced migration in their quantitative study examining asylum applications submitted to 156 countries between 2006 and 2015.

Although not directly related to climate change, the first migration discussions on environmental problems entered the literature after the 1970s with concepts such as ecological refugees and environmental refugees (Brown et al, 1976; Hinnawi, 1985; Myers and Kent, 1995; Myers, 1997). However, these concepts are controversial issues in international law. Under normal circumstances, in accordance with Article 1 (2) of the 1951 Geneva Convention relating to the Status of Refugees and its 1967 Protocol

“Refugee as someone who owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.” (UNHCR, n.d.).

Briefly, the fact that climate change or environmental degradations are not included among the criteria for refugee applications has paved the way for important discussions on this issue. However, the first official application for climate refugees was made in 2013 from the Pacific Islands of Kiribati to New Zealand (Buchanan, 2015). Ioane Teitiota and his family, who applied for refugee status in New Zealand due to climate change, such as rising sea levels, decreasing

agricultural yields, and water scarcity, were rejected and deported to their home country. The issue was then brought to the United Nations Human Rights Committee, which made a significant decision in January 2020 that those forced to migrate due to climate change could be granted asylum (UNHRC, 2020). However, the decision also strengthened the hands of the host countries by emphasizing that they should pay attention to the possible characteristics of climate change that could harm the “right to life” in asylum applications made due to climate change (Güneş and Çelenk, 2021).

This study examines how both environmentally induced internal and international migration movements may affect Spain and Türkiye, located within the Mediterranean Basin and frequently exposed to the impacts of climate change. The Mediterranean Basin, where approximately 530 million people live, is warming 20% faster than global averages (UNEP, 2021). In the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the general effects of climate change in the Mediterranean Basin were shown as drought, water scarcity, floods, erosion, sea level rise, extreme heat, wildfires, ocean acidification, and loss of terrestrial and marine ecosystems (Ali et al., 2022). Also, the interaction of climate change with other environmental problems, such as urbanization, pollution, loss of biodiversity, land degradation, and overfishing, further increases security risks in the region (Ali et al., 2022). In addition, the report characterizes the Mediterranean region by the intensity of internal and international migration and underlines that climate change may contribute to these movements. In this regard, the first part of the study will discuss how Spain is affected by climate change. While the extreme heat and floods experienced in recent years pose new significant risks for the country, the Western Mediterranean route and irregular migration from Africa have long been crucial security agenda topics. Therefore, the Western Mediterranean route and potential increases in migration brought on by climate change in the upcoming years will be specifically examined. The second part of the study will focus on how Türkiye is impacted by climate change and then examine the relationship between irregular migrations that may come via Southwest

Asia and East Africa routes and climate change. The discussion and conclusion section will examine how migrations from the South are addressed in international politics. Then, it will focus on where Spain and Türkiye stand in these discussions. In addition, possible collaborations in policies that both countries can develop against mass migration will be discussed.

Climate Change and Migration in Spain

The floods that hit eastern Spain in October 2024 killed over 200 people, making it one of the deadliest natural disasters in the country's history (Tanno, Paddison and Brown, 2024).¹ While the disaster has triggered climate change debate, studies show that the probability of precipitation in southeast and central Spain has doubled compared to the last 75 years, and its intensity has increased by 12% (World Weather Attribution, 2024). Valencia, which was most affected by the floods, is located near the sea and in the alluvial plain at the mouth of the Turia River, indicating that the region is vulnerable to flooding, while climate change makes the area riskier (Sangra, 2024; Tanno, Paddison and Brown, 2024).

As stated in the IPCC reports, the Mediterranean region is affected by water scarcity, drought, floods, wildfires, and rising sea levels (Ali et al., 2022). Spain is also affected by a significant part of these risks. For instance, wildfires are a major issue for the country. Approximately 1,327,000 hectares of land were affected by fires from 2009 to November 2024 (Salas, 2024a). In fact, firefighting costs in Cordoba, Spain, have increased by 66-87% in the last decade (Ali et al., 2022 cited from Molina et al., 2019). In addition, drought and water-use restrictions endanger water security. Spain, which already suffers from droughts on a regular basis, is predicted to experience more frequent droughts as a result of climate change (Vargas and Paneque, 2019). In addition to climate change, increasing demand and pollution in the household, industrial,

and agricultural sectors are projected to have an impact on water security in the future (UN, 2021; Vargas ve Paneque, 2019). The increasing effects of climate change also pose risks for Spain, one of Europe's major tourism destinations. Widespread wildfires, floods, sea level rise, and extreme heat can potentially cause economic impacts, as well as damage and loss in regions with significant cultural heritages (Hu and Hewitt, 2024). Although Spain's adaptation strategies to climate change are better than many countries in the Mediterranean Basin, the recent flood disaster has made it necessary for the country to develop more effective strategies in case of possible disasters.

Environmental challenges and climate change trigger internal migration and then international migration movements in the Mediterranean Basin (Ali et al., 2022). According to the latest data from IDMC, approximately 161,000 people were internally displaced due to natural disasters such as wet mass movements, storms, wildfires, floods, earthquakes, dry mass movements, and volcanic activities between 2008 and 2023. The number of displaced people has increased since 2017, and a significant portion of these are wildfires (112k), floods (25k), and earthquakes (15k) (IDMC, n.d.). In addition, displacements due to water-related impacts, such as dry mass movement, drought, erosion, wildfire, flood, wet mass movement, wave action, and extreme temperature, gained significant momentum after 2019. Between 2019 and 2023, approximately 98,000 people were internally displaced from water-related disasters, while between 2014 and 2018, 16,000 people were displaced (Salas, 2024b). In addition to internal displacement, climate change-related international migration is likely to be a major problem for both Spain and Europe. In 2023, approximately 280,000 irregular migrants attempted to cross from Africa to Europe by sea. This rate is 58% higher than in 2022 data (UNHCR, 2024). Spain, located on the Western Mediterranean route, attracts considerable attention in terms of irregular migration. The route is known for irregular migration to Ceuta and Melilla, Spanish settlements in Africa, as well as the sea route. According to the latest UN High Commissioner for Refugees (UNHCR) data, the number of irregular migrants trying to cross into Spain via Algeria and Morocco increased from approximately 21,000 in 2022 to

¹ The previous flood disaster occurred in 1959, and 144 people died. Most of the deaths were not due to a climatic cause but to the collapse of the dam that released water from the Vega de Tera reservoir (Tanno, Paddison and Brown, 2024).

approximately 24,000 in 2023 (UNHCR, 2024). In general, a significant part of irregular migrants trying to cross into Spain are Sub-Saharan African migrants, followed by Moroccans (IOM, 2020). The African continent is highly sensitive to climate change, but Sub-Saharan Africa is one of the most affected regions. According to UN Trade and Development (UNCTAD) Data and the ND-GAIN Country Index, 10 of the 25 least developed countries most affected by climate change are in West Africa (Benin, Burkina Faso, Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Sierra Leone) (ND-GAIN, 2024; UNCTAD, 2024). These societies, whose main livelihoods are mostly based on agriculture and stock raising, may decide to migrate because they cannot cope with long-term droughts, floods and water scarcity (Li and Samimi, 2022). As stated in the latest IPCC's Assessment Report, although migrations due to climate change mostly occur within the country, the economic, social and political conditions of the countries may also lead people to international migration, but it is difficult to determine the accurate data (Ali et al., 2022). In Spain, the international migrant stock was approximately 1.7 million in 2000, while it reached 6.3 million in 2010 (Migration Data Portal, 2024). According to the European Council, the Western Mediterranean route, which was one of the most used routes until 2018, has shown a decreasing trend since 2019 as a result of the relationships between Spain, Morocco, and the EU, as well as policies within each unit (European Council, 2024). However, the latest data from UNHCR show an increasing trend in irregular migration movements. Although debates about relative impacts continue, the threat multiplier effect of climate change may trigger migration movements in vulnerable countries. Therefore, with the increasing effects of climate change, migration movements that will increase are likely to be a risk for Spain in the following years.

Climate Change and Migration in Türkiye

The impacts of climate change on the Mediterranean Basin also pose significant risks for Türkiye. As the frequency and impact of droughts, higher temperatures, floods, and extreme weather events increase, the country's vulnerability is expected to grow in the coming years (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, n.d.). The World Bank's 2022 Türkiye: Country Climate and Development Report stated that Türkiye is vulnerable to the effects of climate change, considering its geographical location and social, political, and climatic conditions. The report showed that Türkiye is highly vulnerable in 9 out of 10 climate vulnerability dimensions compared to OECD countries (World Bank, 2022, 2).² In the Climate Change Adaptation Strategy and Action Plan (2024–2030) prepared by the Ministry of Environment, Urbanization, and Climate Change, the number of weather-related disasters in Türkiye between 2010 and 2021 was stated as 8,274. Of these disasters, 32% are storms, 30% are heavy rains and floods, and 17% are hailstorms (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, n.d., 29). The report also included data from the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and estimated that the cost of floods between 1970 and 2021 was 2.8 billion US dollars (ESCAP, 2021). In addition, wildfires pose a significant risk for the country, with a total of 139,503 hectares of forest area affected by 2,793 disasters in 2021 (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, n.d., 29). Drought and water security are also among the disasters that have attracted attention in recent years. Although it is hard to evidently correlate the increased risk of drought in Türkiye in recent years to climate change, current studies and projections support the impact of climate change on drought (IPC, 2014). The potential for droughts, extreme weather events, floods, and high temperatures to combine with other social and eco-

2 10 climate vulnerability dimensions of the World Bank (2022): "Agriculture, forestry and fishing (% GDP), Annual extreme heat days increase in 2050, Average annual risk to assets, Average annual risk to wellbeing, Forcibly displaced population, Maize yield change in 2050, Poor population exposed (% of poor), Population exposed (% of total), Share of population exposed in 2050, Share of transport network exposed."

cepted in the international community. For example, in the climate change-themed discussions at the UN Security Council, migrations, especially from Africa, have been accepted as a security problem for the Global North (Çelenk, 2024). However, it is still challenging to find a basis in international law. Although the uncertainty of the threat multiplier effect is among the reasons for this, the host states' concerns against migration that the increasing impact of climate change may trigger play an important role. Although Spain and Türkiye have made various cooperations with the

border states and at the international level, irregular migrations are still a problem for these two countries and considering that these migration movements will increase in the coming years, it may be very critical for them to develop both their national security systems. In addition, artificial intelligence-supported technologies can be designed to control border security by developing cooperation between the two countries; joint training can be given to EU-supported security forces, and maritime security can be ensured by creating joint patrol systems in the Mediterranean.

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