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**White Paper**

# Towards a Common Vision for **Climate Change, Security and Migration in the Mediterranean**

April/2024

# Action Points for Climate Change, Security and Migration in the Mediterranean



## Strengthen multi-level governance and the rule of law

- Enhance policy coherence, access to data, and international norm alignment.



## Empower youth, women, minorities as change agents

- Foster inclusive policies, education access, and address financial barriers.



## Promote climate adaptation via remittances

- Lower transfer costs, improve financial literacy, and encourage skill transfer.



## Enhance climate-resilient agrifood systems

- Support sustainable rural livelihoods, resource management, and mitigate insecurity.



## Promote equitable justice for resource sharing and cohabitation

- Align justice systems with human rights, improve transparency, and accountability.



## Promote knowledge generation and accessibility

- Fund research on climate impacts, enhance science communication, and policy engagement.



## Investing in local actors

- Tailor development efforts to community needs, ensuring effectiveness and sustainability.



## Expand climate finance towards fragile and conflict-affected settings

- Redirect funds to reach the most vulnerable and support adaptation.

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## Executive summary

Increasing evidence indicates that climate change is likely to amplify risks and insecurities, leading to increased fragility and conflict (IPCC, 2022). Climate change can exacerbate food insecurity and fosters climate-induced mobility, thereby straining socio-economic systems and increasing the potential for disputes over dwindling natural resources. At the same time, conflict and fragility have proven to impede efforts to enhance climate resilience and adaptive capacity, leaving populations more vulnerable to climate impacts and exacerbating food insecurity (Scartozzi, 2020).

The Mediterranean is one of the most vulnerable areas to climate risks. The region is exposed to recurrent droughts, heat waves and other slow-onset climate events, which are leading to soil degradation and water shortages. Moreover, the region already accommodates half of the global populace grappling with water scarcity—a situation projected to further deteriorate due to climate change (ARLEM, 2021). Scientists warn that absent robust measures to manage and mitigate climate change, its adverse impact could overwhelm the adaptive capacity of the Mediterranean countries, weakening institutions and potentially exacerbating conflicts over natural resources (Scheffran, 2020).

Currently the agricultural output in the Mediterranean is declining due to climate change, unsustainable agricultural practices, and water scarcity. These issues, combined with the region's growing population, pose significant challenges to sustaining living standards and development opportunities. Furthermore, food security is threatened by unsustainable human activities, such as deforestation, excessive water use in irrigation, and overuse of chemical fertilizers and pesticides. These actions, compounded by climate change impacts, exacerbate the region's growing demand for food, which in turn heightens its reliance on imports, making it increasingly susceptible to international price fluctuations.

Climate change, socio-economic insecurity and political instability are pushing countries to critical levels of fragility. In the most affected regions, these factors are fostering grievances that can result in forms of organized violence and conflict. While the food-land-water nexus represents a potential intersection where to mitigate these tensions, conflict, poverty, and a lack of opportunities for youth—exacerbated by environmental and climate change—compel migration within and across regions, which often occurs through unsafe channels, including the perilous journey across the Mediterranean Sea. Additionally, the challenge is intensified by the lack of cohesive long-term governance and a common vision among agricultural resource management authorities and policy actors, leading to disparate efforts in addressing these issues (ARLEM, 2021).

Improving people's resilience in the region strongly depends on the ability to enhance the regional adaptive capacity to climate risks. The way governments and communities manage resources and food systems is a determinant factor in whether the Mediterranean area can endure development and peace. With no peace, there is no space for development. With no development, economic opportunities and food security, peace cannot last.

This white paper is the result of a high-level discussion carried out at the event “Towards a Common Vision of the Climate, Migration and Security Nexus in the Mediterranean Region,” organized by the CGIAR Focus Climate Security and the Alliance of Bioversity & CIAT, and held in Rome in June 2023. The discussion collected opinions of scientists, politicians, experts and representatives of relevant international organizations on the climate-security-mobility nexus in the Mediterranean. The purpose of the discussion was to analyze current and foreseen vulnerabilities, risks and hazards affecting livelihoods in the region, and identify potential solutions and integrated approaches to increasing



climate adaptation capacities, reducing involuntary and unsafe migration, and sustaining peace and stability.

With this aim in mind, a number of recommendations have emerged:



1. **Strengthen governance to enhance policy coherence across climate, agriculture, and migration sectors in Mediterranean countries amid the climate crisis.** It is essential to adopt a comprehensive and coherent approach that recognizes the interconnectedness of climate change with food insecurity, human (im)mobility, conflict, and fragility. Policy frameworks should aim for holistic and integrated objectives across various pillars and dimensions, enhancing coherence and coordination across relevant sectors. Key government actors in the region should also have access to necessary knowledge, data, and tools to enhance adequate and systematic climate action. It is also critical to embrace the logic and structures of multi-level governance, where decision-making is polycentric and distributed across scales of governance and stakeholders, ensuring that actions are coordinated, inclusive, and adaptable to the varied and specific needs of different communities. Finally, the countries' legal framework should be strengthened and be rule-based, aligned with international standards and norms, and address the overlapping provisions and gaps that hinder effective implementation.



2. **Empower youth, women, and minorities as champions of change.** To enhance climate adaptation in the Mediterranean, it is essential to include women, youth, and minorities, not only for the diversity of perspectives they bring but also for the tangible socio-economic benefits and contributions to peace and stability their involvement can foster. By focusing on inclusive and gender-sensitive policies, and equipping these groups with access to education, science, and technology, their potential to drive meaningful climate action can be unlocked. However, it is crucial to address systemic barriers, such as access to financing, so that their contributions can be sustainable and scalable.



3. **Promote investments in climate adaptation through remittances.** Leveraging the potential of remittances and diaspora investments is crucial to promote local entrepreneurial activities and climate adaptation schemes in the Mediterranean. To this end, the remittance flows should be made faster and safer by reducing transfer costs. Mediterranean governments and hosting countries should take the initiative to develop an effective mass payment system, including determining funding and technical assistance requirements. Beyond financial contributions, adaptation capacity could also be enhanced through the transfer of skills, knowledge, and in-kind remittances from the diaspora. Additionally, promoting financial inclusion and literacy among migrants would improve their capacity for investment, thereby contributing more effectively to local resilience.



4. **Enhance climate-resilient agrifood systems and sustainable rural livelihoods to mitigate migration drivers and support development.** Interventions should focus on developing climate-resilient agrifood systems and enhancing rural livelihoods through initiatives like supporting pastoralism, developing value-added crops, engaging local cooperatives and market chains, fostering skills and opportunities in rural areas for the youth, and promoting economic inclusion for refugees and IDPs in camp and settlement settings. Emphasizing the sustainable, inclusive, and equitable management of natural resources in peripheral territories and rural populations is vital to mitigate conflict risks over territory control. Adopting a systemic approach, which transcends specific project interventions to include collaboration with governments and investors, is crucial for fostering ecosystems that support resilient food production and comprehensive natural resource management. This strategy

aligns with climate-resilient development goals, enhancing adaptive capacity and reducing mobility pressures by addressing the broader social and economic factors influencing migration decisions.



5. **Promote an efficient justice system for equitable resource sharing and peaceful cohabitation.** Effective justice systems across the Mediterranean should be strengthened, incorporating and aligning informal and customary justice with international human rights standards to ensure equitable resource sharing and peaceful cohabitation. Aligning these systems is essential to address social norms that limit rights, particularly in relation to indigenous people and women's land tenure rights. Legal education, access to justice, and digitalization of registration processes, along with the development of laws from a human rights-based perspective, can be effective ways to improve transparency and accountability.



6. **Support the production of scientific evidence on the climate-security-mobility nexus to inform policymaking.** Funding should be made available to promote research on the connections between climate, security, and mobility, focusing on contexts affected by multiple crises and on the indirect pathways underlying the nexus. Efforts should be made to enhance accessibility to scientific knowledge through communication and translation of research to relevant audiences, engage with policy institutions more effectively, and develop transdisciplinary research and knowledge co-production processes to engage potential end-users and to build on local and indigenous knowledge.



7. **Increase investments and support for local actors to enhance the reach, effectiveness, and accountability of the humanitarian, development, and peacebuilding action.** As the Mediterranean is a highly complex and diverse region, both climatologically as well as socio-politically, more local engagements will allow for more customized and responsive approaches. This targeted support ensures that interventions are better aligned with the specific needs and dynamics of each community, thereby improving outcomes and fostering sustainable peace and development across the region.



8. **Expand climate finance towards fragile and conflict-affected settings to support climate adaptation efforts.** Although the Mediterranean region received about 4.6 billion Euros in 2016 from public, private, bilateral, and multilateral sources, the distribution of these funds is highly imbalanced, favoring stable and secure areas. Particularly as far as public finance is concerned, more efforts should be made to reach fragile and conflict-affected populations as well as the most vulnerable.

## Introduction

According to FAO (2022b), conflict continues to be a significant driver of acute food insecurity. In 2021, approximately 70 percent of the global population affected by food security crises lived in countries where conflict was the leading cause of food insecurity (FAO, 2022a). At the same time, as noted by the ICRC (2020), approximately 60 percent of the 20 countries that are most vulnerable to climate change are affected by armed conflicts (ICRC, 2020). Specifically, 142 million households and 527 million individuals residing in conflict-prone or fragile areas also urgently require climate adaptation interventions and financial support (Läderach et al., 2021). The compound effect of climate risks, fragility, and conflict erodes resilience, perpetuating a cycle of deepening food insecurity, poverty, hunger and further fragility and conflict. Breaking this vicious cycle is then crucial in the current accelerating climate crisis.

The Southeastern Mediterranean region – which in this paper specifically refers to Northern Africa (Egypt, Libya, Tunisia, Algeria, Morocco) and Western Asia (Iraq, Syria, Lebanon, Israel, Palestine, Jordan) – is disproportionately impacted by climate change. The Mediterranean Sea is warming at a projected rate that will exceed global averages of 20 percent on an annual basis (MedECC, 2020). At the same time, erratic rainfall patterns, increasing temperatures, and climate extremes are increasingly contributing to water scarcity, droughts, and floods (Price, 2019). These climatic conditions concur with socio-economic and political factors, influencing adaptive pathways and mobility choices.

The mobility patterns in the Mediterranean region are characterized by an intricate blend of diverse motivations, routes, and circumstances. As of 2023, the Sahel region, which closely intersects with migratory flows in the Mediterranean, recorded 3.7 million internally displaced people (IDPs) (UNHCR, 2023b). In 2022, the Middle East and North Africa regions hosted 2.4 million refugees, 12.6 million IDPs, 251,800 asylum seekers, and 370,300 stateless persons (UNHCR, 2023c). And while the majority of people on the move remains in the countries and regions of origins, there has been an increase of new arrivals in Europe by sea, with 213,896 new arrivals between January and September 2023 (IOM 2023e; UNHCR, 2023a).

While climate change is not the sole driver of migration, it has been shown to significantly amplify existing socio-economic challenges that play an important role in shaping migration decisions (Desai, et al., 2021; IPCC, 2022). Likewise, climate change has also been linked, via intermediate and mediating factors, to increases in conflict onsets and structural violence, which can be contributing factors to migration (Scartozzi, 2020). Overall, the feedback loop created by the interactions of the climate-security-mobility nexus can have compounding and destabilizing effects, making populations more vulnerable and likely to migrate in search of stability and safety.

Promoting peace-positive climate adaptation and sustainable development is essential in mitigating the adverse effects of the climate-security-mobility nexus. By addressing the root causes of vulnerability, such as poverty, lack of access to resources, and governance challenges, communities can better withstand and coordinate to climate-related shocks and slow onset events. However, more needs to be done, especially on financing adaptation (UNEP, 2023a). Despite the urgent need, fragile and conflict-affected regions receive minimal climate finance—only 2.1 USD per capita, compared to 162 USD in peaceful countries (UNDP, 2021). There's a critical need to prioritize support for these vulnerable areas.

This white paper stems from a high-level stakeholder discussion aimed at establishing a common vision of the climate, migration, and security nexus in the Mediterranean region. Recognizing our collective responsibility, we aim to provide guidance and shape policies that effectively address the highlighted

challenges in the region, ultimately leading to a sustainable and prosperous future for the Mediterranean region and its inhabitants.

## The Mediterranean Background and Context

### 1. Climate trends

The Mediterranean is increasingly becoming a climate change hotspot, progressing at a rate above the global average, and where impacts pose direct and indirect risks to the region's population (Giorgi 2006; Lionello et al. 2014; IPCC, 2022). The mean annual surface temperature of the region is warming 20 percent faster than the global average (MedECC, 2020). Direct risks from climate change include extreme heat, wildfires, droughts, storms, sea level rise and ocean acidification. These impacts can interact with human-made changes, stemming from urbanization, pollution, and changes in land use, resulting in compound and cascading consequences for livelihood systems, water scarcity, and food provision (IPCC, 2022).

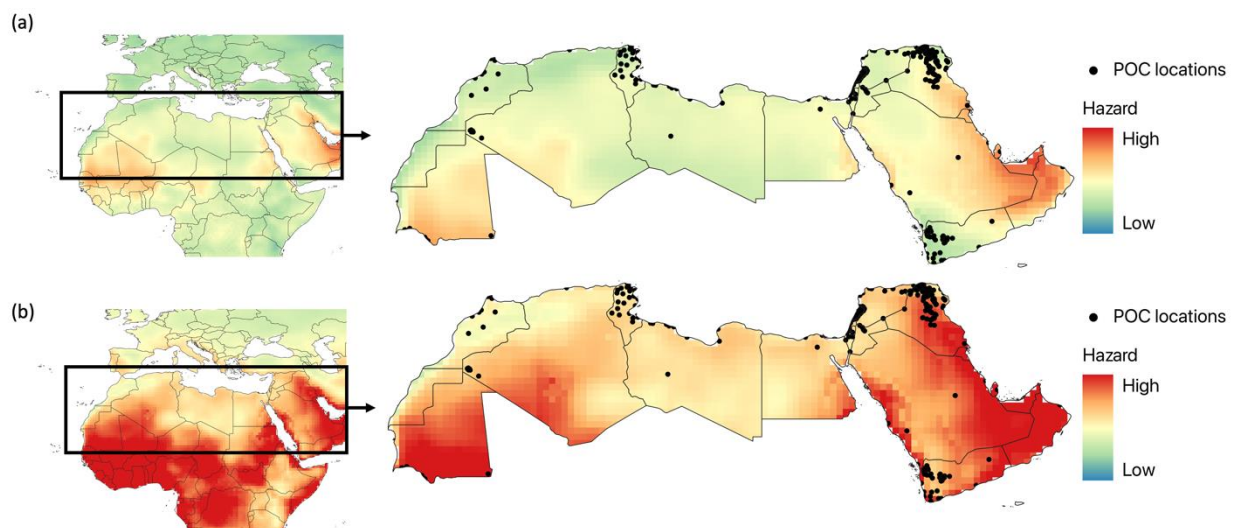


Figure 1: Compound heat, drought and flood under baseline (a; 1980-2010) and future (b; 2020-2040) conditions. Black dots represent current locations of known forcibly displaced persons.

Projections indicate further temperature rises, an increase in evapotranspiration, and a fall in precipitation levels, impacting water availability (IPCC, 2022; Lange, 2020). The IPCC Sixth Assessment Report projects that at the end of the century the annual mean warming on land, compared to the last 20 years of the 20th century, will be in the range of 0.9-5.6°C depending on the emission scenario (IPCC, 2022). It also projects a reduction in precipitation levels of 20 percent in parts of the basin by 2050 (Lange, 2020). The temperature increase heightens the risk of heatwaves and droughts (IPCC, 2022; Philip et al. 2023; UNEP, 2021), becoming a serious threat to the region where water demand is expected to double by 2050 (UNEP, 2021).

Despite the projected overall decrease in precipitation levels, flash floods are still a threat because of more rapid water cycle and dry/urbanized soil, particularly in coastal areas on the basin's northern rim (IPCC, 2022; Lange, 2020). Moreover, sea level is reported to have risen at a rate of  $1.4 \pm 0.2$  mm yr<sup>-1</sup>



during the 20th century (IPCC, 2022), though it has risen at a greater rate in more recent years. Projections indicate that up to 130 percent more people will be exposed to sea level rise by 2100, which has occurred throughout the 20th century to the present day and is projected to continue (Vecchio et al., 2024; IPCC, 2022).

The effects of climate change are of particular concern in parts of the basin already strained by significant population growth and dependence on agriculture, such as the eastern Mediterranean and north Africa (Lange, 2020). In addition, the Mediterranean region is home to millions of forcibly displaced and stateless populations including refugees, asylum seekers, internally displaced persons and stateless people. Displaced populations in some countries, such as Iraq and Syria, are located in areas of high risk of flooding and potentially dangerous composite hazards in future (World Bank, n.d.). Moreover, the populations living in the eastern and southern rim of the basin, such as the Nile Delta in Egypt, are particularly vulnerable to the projected impacts of sea level rise (Kheir et al., 2019; Lange, 2020).

## **2. Human Mobility, Climate and Security**

Migration has long shaped the Mediterranean region, with countries often simultaneously representing points of origin, transit and destination. At mid-year 2020, the northern African sub-region hosted an estimated 3.2 million international migrants, nearly 61 percent of whom were either from the same sub-region or other African sub-regions (UN DESA, 2020). An estimated 49 percent of all international migrants in the region were refugees and asylum seekers. Globally, an estimated 12.3 million international migrants – 4.4 percent of the global migrant population – were from Northern Africa. Of these emigrants, 48 percent and 13 percent were hosted in Europe and Western Asia respectively (UN DESA, 2020). Western Asian Mediterranean countries are also characterized by intense mobility patterns. Jordan alone, for instance, hosts the world's second-highest number of refugees per capita. Some 730,000 refugees are registered with UNHCR, predominantly from Syria, with large groups from Iraq, Yemen, Palestine, Sudan, and Somalia (UNHCR, 2023d).

The migratory journeys in the Mediterranean are often highly risky, as they may involve crossing remote terrains such as the Sahara Desert and/or residing, at least temporarily, in politically fragile countries such as Libya where conditions of migrants are often dangerous. Crossing the Mediterranean is also associated with severe risks and life-threatening dangers, as the Mediterranean Sea witnesses a rising number of migrant fatalities. In particular, the Central Mediterranean route – from North Africa to Italy and, to a lesser degree, Malta – is the deadliest known migration route in the world, with more than 17,000 deaths and disappearances recorded by the IOM Missing Migrants Project since 2014. This is due both to the length of the overseas journey, which can take days, as well as increasingly dangerous smuggling patterns and gaps in search-and-rescue capacity (IOM, 2023c).

Broadly, the Mediterranean migration context can be characterized as consisting of three closely interrelated patterns: (a) mobility and displacement as a result of multiple, acute and protracted crises across the region, particularly in Iraq, Libya and Syria; (b) complex irregular migration flows, driven by economic and other factors, within and transiting through the region, particularly to and through North Africa and towards Europe, as well as towards Gulf countries; and (c) the movement of (regular and irregular) labor migrants both within and from far beyond the region, with Gulf countries acting as the principal magnet for migrant labor (IOM, 2023d). Common countries of origin include West African countries such as Nigeria, Côte d'Ivoire, Niger, or the Gambia, from which a mixed landscape of drivers appears to be contributing to out-migration. These include – but are not necessarily limited

to – escalating tensions over resource sharing, religious or ethnic tensions and conflicts, a lack of livelihood opportunities and poverty, an emergent culture of migration (particularly amongst youth), extant social networks in potential destination countries, some of which are heightened/ amplified by the negative impacts of climate change (Crawley et al., 2016; Huddleston, Karacay, & Nikolova, 2014).

The role of climate change in exacerbating mobility patterns is mostly indirect, due to its detrimental impacts on, for example, livelihoods, health, and security (Horwood, 2023). It is clear that in the areas from which most Mediterranean migrants originate – particularly in the Maghreb, West Africa, the Levant, and other sub-Saharan countries – the intersection of climate change, livelihoods and income generation opportunities, physical safety and the threat of violence, as well as individual and household aspirations continue to affect human mobility within and out of said regions. This is especially the case in contexts reliant on climate-sensitive economic sectors and activities, such as agriculture. Climate change is likely to further exacerbate a range of such drivers, particularly in how it may interact with and sometimes serve to further engender conditions of fragility.

Security in the Mediterranean – deeply interconnected with migration dynamics – is multi-faceted both in the diversity of issues and threats that are arguably present within and tangential to the region, as well as in the multitude of (predominantly sub-regional and *ad-hoc*) security mechanisms and platforms that have emerged over the years. Historical fault lines and unresolved conflicts – such as the continued absence of a genuine Middle East Peace Process, the absence of a two-state solution between Israel and Palestine, and dissent between Algeria and Morocco on the Western Sahara – have been increasingly complemented by the geopolitical interests of newer players, such as Russia, China, Saudi Arabia, Iran, and the United Arab Emirates (UAE) (Pierini, 2020; Alexandrova-Arbatova, 2018; van der Putten, 2016; Scartozzi, 2022). Whilst there have been attempts to create and sustain a coherent regional Mediterranean security architecture – see, for instance, the 1995 Barcelona Process, the Barcelona +10 conference in 2005, the subsequent establishment of the Euro-Mediterranean Partnership (rebranded as the Union of the Mediterranean in 2008), and the 5+5 Defence Initiative – such efforts have tended to result in a rather fragmented and incoherent assortment of relations and networks (Cohen-Hadria, 2016).

Factors relating to conflict and fragility are also critical in understanding the emergence of available mechanisms that may influence the decision to engage in migration, as well as particular routes that can incentivize the selection of a destination area. In the context of the Mediterranean, this notably includes the collapse of the Libyan government since the overthrow of Muammar Gaddafi in 2011 and the disintegration of its governance and border security, which has created near-perfect conditions for the emergence of human smuggling networks (Hammond, 2015; Jeandezbog & Pallister-Wilkins, 2016). Yet, despite the instability in Libya opening up the opportunity to attempt crossings, it has crucially not diminished the risks faced by those undertaking such efforts, as the elevated number of fatalities in the Mediterranean Sea document. In addition, some – such as Mezzadra and Stierl (2019) have accused the European-funded Libyan coastguards of engaging in forms of mass abduction, as migrant boats setting off from the coast are forcibly returned and those on board to detention centers, where they are often detained in abject conditions and exposed to human rights violations (Adesina, 2021).

**“The role of climate change in exacerbating mobility patterns is mostly indirect, due to its detrimental impacts on, for example, livelihoods, health, and security.”**

As such, in order to properly understand how actors seek to engage with, manage, and cooperate on security issues – particularly concerning climate security, natural resource management and territory governance, it is critical to comprehend the practical functioning of the existing array of security mechanisms. This involves delving into the underlying climate-security mechanisms and discerning how they give rise to what can be considered pragmatic and at times intricate diplomatic responses.

### 3. The Climate Security and Mobility Nexus

The climate-security-mobility nexus refers to the trans-spatial interplay between climate change, human mobility (including migration and displacement), and conflict dynamics, which manifests itself through a complex web of pathways.

In the Mediterranean, one of the main pathways through which climate impacts conflict and mobility relates to (climate change-induced) natural resource scarcity. Resource scarcity resulting from the impacts of climate change is particularly pronounced in the North Africa and Middle East region, especially with regards to the availability of and access to water. The region's major river basins (Nile, Jordan, Tigris, Euphrates) are expected to experience a significant surge in water demand, partially driven by demographic growth, industrialization, and urban expansion. The consequences of climate change amplify these challenges by further exacerbating water scarcity, whilst the fact that approximately 60 percent of surface water resources are trans-boundary in nature makes the design and implementation of effective governance structures for managing resource allocation and enacting effective adaptation interventions even more challenging. This degree of water insecurity may spark tensions and conflicts at both the sub-national and inter-state level which may, in turn, further escalate migratory pressures within and towards the Mediterranean region (Sokou, 2022).

Climate-related natural resource scarcity may also affect mobility dynamics through the impacts it may have on the viability of (rural) livelihoods. Inadequate access to water and food resources exacerbates poverty and can encourage individuals to migrate from rural areas to urban centers or even other countries. As noted elsewhere in the paper, the North African region serves as both a destination and transit point for migration, with population pressures from the Sahel region amplifying this trend. Migration in this context is driven by a confluence of factors, including environmental and climate change impacts, limited water resources, reduced agricultural productivity, and shifts in economic and demographic conditions (Schefferan, 2020). Moreover, historical precedents exist with regards to instances of migration related to water scarcity, such as the drought-driven rural exodus observed in Morocco during the period between 1980 and 1990, and in Algeria and Tunisia in 1999 (de Haas, 2007; García-Nieto et al., 2018). This, combined with the resource scarcity, can induce migration from rural to urban areas, exemplified by cities such as Cairo and Casablanca, driven by the increasing challenges of sustaining livelihoods in the countryside. These escalating urbanization patterns are intrinsically linked to the depopulation of rural regions (McLean & Ben Brahim, 2023; IOM 2022).

Particularly in the MENA region and the Southeastern Mediterranean basin, it is important to highlight the Water-Energy-Food security (WEF) nexus –particularly evident in the context of a growing population and where demand for food, energy and water resources is consequentially increasing. Water management is, for instance, critical for regional food security as the agricultural sector is the biggest user of water in the region. Potential trade-offs and connections must also be considered regarding the energy sector. This is especially true when considering the energy requirements involved in practices such as desalinization of water for agriculture (IOM, 2023a). Particularly in the context of the region's rapid population growth and urbanization rates, demand for food and imported

agricultural commodities (FAO, 2022c) is expected to continue to increase, whilst sustainable food production systems reliant on land- and sea-based ecosystems are also threatened by climate change. As highlighted by the WEF nexus, access to water, energy, and food is crucial for human well-being, poverty alleviation, and sustainable development. However, global food production and supply chains consume a high percentage, estimated to be around 30 percent, of the world's energy (FAO, 2014; IRENA & FAO, 2021). The rising demand for these resources intensifies potential trade-offs across various sectors, including water, energy, agriculture, fisheries, livestock, forestry, mining and transportation, leading to unpredictable consequences for both livelihoods and the environment.

Water plays a pivotal role in the daily routines of households, with women from the MENA region often bearing a disproportionate burden in securing this essential resource for their families. Consequently, many of the challenges associated with water scarcity – including those related to mobility and conflict – tend to disproportionately affect women. While mobility is an inherent part of daily existence for individuals globally, the availability of mobility is frequently marked by inequality based on factors such as gender, ethnicity, race, religion, age, and social class (Klepp & Fröhlich, 2020). For instance, reports from humanitarian aid agencies operating in MENA countries highlight the heightened vulnerability of women and girls to sexual assault and violence in conflict zones and refugee settlements, where access to water often necessitates walking long distances. Research further demonstrates how the departure of men due to out-migration can leave women dealing with escalating water scarcity while simultaneously caring for children in conflict and war-torn areas. Paradoxically, this situation sometimes results in women assuming greater decision-making authority within households and communities (IOM, 2023a). Women and girls face unique human security challenges, especially considering that they make up 80 percent of the population displaced by extreme weather events globally (CGIAR, 2022).

**“The ability of a state to mitigate suffering and deliver emergency assistance in destination regions emerges as a crucial element in averting the escalation of social conflicts”**

The climate-security pathways in the Mediterranean also relate to how disaster-related risks and impacts may cause displacement and directly or indirectly contribute to insecurity and tensions. The ability of a state to mitigate suffering and deliver emergency assistance in destination regions emerges as a crucial element in averting the escalation of social conflicts triggered by natural and human made disasters into full-blown violent conflicts. Typically, displacement due to disasters is internal, of short duration, and directed towards regions where humanitarian aid is accessible or where pre-existing migrant social networks are established. As highlighted earlier, certain population groups are most affected, particularly women and girls. In case of natural disasters and displacement, they may encounter disparities in obtaining emergency assistance. In extreme cases, the breakdown of social networks can

occur and exacerbate preexisting vulnerabilities while also engendering new ones, thereby amplifying poverty and socioeconomic disparities (CGIAR, 2022).

A significant example of how disasters-related impacts affect countries already characterized by weak governance in the context of the Mediterranean Region is the one of Libya, a country where social and political tensions merge with the visible effects of climate change. It is widely recognized that political instability and fragility in Libya exacerbated the impacts of Storm Daniel, which devastated northeastern Libya, and as a result of which an estimated 44,862 individuals remain displaced as of October 2023 (IOM, 2023b). With governance challenges and a fractured political landscape, governing authorities struggled to coordinate effective disaster response and failed to invest in longer-term infrastructure maintenance (Baseman & Said, 2023). The civil conflict has more broadly left Libya



more vulnerable to climate change, particularly exemplified by the Derna dam collapse linked to infrastructure damage from a siege. Indeed, Derna experienced significant conflict, including a two-year siege in 2017-2019, as part of General Haftar's campaign to eliminate Islamist groups in Libya. Post-conflict development efforts, however, were limited (England, 2023). Sustainable peace is urgently needed to prepare for future disasters and heal a decade of turmoil, requiring a political settlement to restore effective governance. Without a comprehensive solution, the humanitarian crisis in Derna may fuel further instability and the risk of renewed violence (England, 2023). Furthermore, although disaster-related displacement is rarely cross-border in nature, a failure to deliver sustainable and durable solutions for internally displaced communities and facilitate recovery and reconstruction efforts may similarly serve to further exacerbate existing fragility.

Finally, compounding climate- and conflict-related risks may cause individuals and communities to be significantly constrained with regards to their ability to engage in migration or in their choice of migration routes. Enhancing adaptive capacity serves to mitigate the risks linked to involuntary migration and immobility, ultimately affording individuals greater agency in their migration choices. Policy interventions, in turn, have the potential to eliminate obstacles and broaden the range of secure, organized, and regular migration options, thereby empowering vulnerable populations to adapt to the challenges posed by climate change (IPCC, 2023). Conversely, individuals or households that lack social networks, or financial capacity, or that face significant security risks whilst on the move may become 'trapped', thereby being forced to remain in what are often climate vulnerable areas. Populations residing in these contexts are potentially more likely to become associated with armed groups or be drawn into specific conflict dynamics (CGIAR, 2023). Like mobility, immobility in the context of climate change is understood to exist on a spectrum, ranging from voluntary to involuntary (Thornton et. al, 2023). The former implies immobility by choice, while the latter denotes forced immobility. Individual decisions and outcomes related to immobility may be influenced by varying levels of vulnerability and resilience.

## **Action Plan to Address the Climate Security Migration Nexus in The Mediterranean**

The accelerating impacts of climate change, and the need to mitigate these impacts in the future, bring urgency to scaling up action on adaptation and security. Action must prioritize climate resilience, sustainable development, and peacebuilding to secure the region's future. Achieving this requires ambitious and coordinated efforts, informed by scientific research and driven by a shared vision. As the Mediterranean confronts the daunting consequences of climate change, the effectiveness of implemented transformative measures will shape the fate of its people and determine their level of security and stability. Below are key action points discussed at the event highlighting critical elements in this endeavor.

### **1. Strengthen Governance to Enhance Policy Coherence Across Climate, Agriculture, and Migration Sectors in Mediterranean Countries Amid the Climate Crisis**

Governments must recognize the critical links between climate, mobility, and security as a pressing political issue and act to integrate these considerations into legislation and policy. Achieving climate security requires a 'whole of government' and 'whole of society' approach, acknowledging the

interconnectedness of climate change, human (im)mobility, and conflict. Policy frameworks should aim for holistic and integrated objectives across various domains, including climate resilience, peace, and social cohesion. This may be challenging in the context of regions such as the Sahel and the Mediterranean, where key actors - such as relevant ministerial staff – can at times lack the necessary knowledge and tools for climate-sensitive actions amidst complex risk landscapes. Moreover, integrating policies in line with the Global Compact for Migration (GCM), which identifies environmental degradation and disasters as key drivers of mobility and calls for mitigating actions, is essential for a comprehensive strategy (IOM, 2018).

By integrating environmental, demographic, migration, and cohesion policies, particularly at the local level as highlighted in an IOM (2023f) study from Italy's mountain regions, we can harness the positive impacts of migrants on climate strategies. Moving towards a multisectoral approach that includes migration, trade, agriculture, and economic considerations encourages a shift from isolated policy development. This method promotes inclusivity and leverages insights from those directly affected by climate change. It also underscores the importance of international cooperation and regional collaboration, which are vital in enhancing awareness, addressing climate risks, and tackling challenges like food insecurity, climate change, and biodiversity loss more effectively.

Addressing the climate-security nexus necessitates that climate policy instruments adapt to multi-level governance structures, where decision-making is polycentric and spans various governance levels (national, sub-national, local). This approach involves diverse government stakeholders in all policy stages—from agenda setting to evaluation—and promotes both vertical and horizontal coherence in achieving collective targets. A clearer focus on vertical coherence is crucial, especially in decentralized countries where agriculture might be managed at a local level, while migration governance remains centralized, leading to mismatches in capacities and priorities.

From this perspective, fostering the relationship between the state and society is crucial, particularly in fostering participatory and inclusive approaches. There is still a lack of dialogue and engagement between central state and local actors, including traditional and religious leaders, business associations, and women's groups. In these contexts, it is fundamental to invest in cultural awareness and preparedness to cope with a changing environment. Similarly, it is important to help relevant stakeholders to understand the impact of climate change from an onsite perspective.

The legal framework of Mediterranean countries should also be strengthened and aligned with international human rights standards and norms, while also addressing gaps and overlaps that hinder effective implementation. Laws should set clear standards on climate adaptation measures to uphold human rights principles, regulate disputes resolution, and establish social participation and accountability. Institutions play a big role in achieving climate security, and there is a need to promote institutional capacity building at all levels, including very local administrations. Training and resources are crucial, as is coordination among institutions in natural resource management, irrigation, governance, and ecological transitions. However, it's vital that legal frameworks and programs concerning migration, agriculture, and climate change are both coherent and inclusive, ensuring they do not exacerbate inequalities or vulnerabilities to climate change but rather address climate security challenges equitably.

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The interconnectedness of water, energy, food, and migration necessitates improved management to mitigate climate change impacts. Specifically, the Mediterranean's water sector needs governance and regulatory reforms for more efficient water management and to encourage private sector participation. Investments are needed to improve water distribution systems and reduce non-revenue water. Similarly, there is a need to integrate renewable energy sources with water management practices to ensure affordable and sustainable water supplies. Collaboration and cooperation, including north-south, south-south, and triangular partnerships, are essential to tackle climate change and water-related challenges effectively. Initiatives, such as the Union for the Mediterranean (UFM)'s Ministerial Water Declaration, can help the Member States to implement sustainable and integrated water management policies and contribute to a sustainable livelihood for the region's citizens. Finally, learning from successful projects like the Smart DESERT Project, which has been granted the UfM label, and exploring innovative solutions to address natural resource issues is also recommended.

## 2. Empower youth, women, and minorities as champions of change

Despite being those most affected by climate change and migration, young people continue to pave the way in developing solutions, contributing with a wealth of ideas and energy. As Ayisha Siddiqa, a member of the UN Secretary-General's Youth Advisory Group on Climate Change, states, "young people aren't just a quota to fill" (United Nations, 2023). Including young people as active stakeholders in climate action, both in civil and public society, is critical to a just transition.

As climate change forges ahead, children and young people face increasing risks. Climate change's environmental and social consequences have particular impacts and experiences for young people, often differing from those of adults. Droughts and flooding places youth at particular risk of food insecurity and waterborne disease.

Climate change does not only affect our ecosystems, but increasing evidence points to the link between climate change as an amplifier for migration, displacement and conflict. Young migrants often face different challenges and opportunities from their adult counterparts, such as being left behind, travelling unaccompanied, having different needs, and facing challenges concerning education and employment (UNICEF, 2023). As such, it is important that these differences and distinct impacts are accurately accounted for in climate adaptation policies and that young people's voices are amplified in the process.

One way to manage the Mediterranean climate change challenges is to empower youth and minority communities. According to the UNDP's 2021 Peoples' Climate Vote, almost 70 per cent of young people identify climate change as a global emergency. Young people are also more likely to experience anxiety surrounding climate change and are more motivated to take action (UNICEF, 2022). Young people are agents of change, entrepreneurs and innovators. Whether through education, science or technology, young people can scale up their efforts and use their skills to accelerate climate action. Developing multi-disciplinary and action-oriented education programs at scale is crucial for empowering children and young people, enabling them to leverage their skills to navigate current and future challenges. This broad-based educational empowerment will also enhance youth participation in decision-making processes, ensuring policies are inclusive and effective for all. It is essential that these programs extend beyond project-based initiatives to reach wider groups, including youth and women, for greater impact.

It is also essential to consider the needs of women and minorities in the MENA region, who are often disproportionately affected by climate change and migration challenges (IOM, 2024a). Vulnerabilities

to climate change are reflected in the structural inequalities and marginalization rooted in our social structures, such as gender, age, ethnicity, and low income. Due to gender norms, women are overrepresented in the management of food and water systems, areas particularly affected by climate change. Globally, 70 per cent of households have women and girls as their primary water collectors (UN Women, 2023). Additionally, women make up of 43 per cent of the agricultural sector (FAO, 2011), yet, they are often excluded from land ownership, owning only 20 per cent of land globally (The Wilson Center, 2022). The Mediterranean region is no exception to these trends. Securing women's land rights can thus be a powerful tool for climate adaptation, to limit gender vulnerabilities and strengthen women's ability to conserve and protect land. As water availability decrease, significant impacts will be seen in the Mediterranean agricultural sectors as crop yields are expected to decrease and 20 per cent of all exploited fish and invertebrates expected to disappear (MedECC, 2020). Due to women's leading role in the agricultural sector, these changes will have disproportionate gender impacts. This can already be seen through the lens of migration where 80 per cent of those displaced by climate change are female (UNDP, 2016; UN Women, 2023).

Including women, girls and other minorities in climate adaption initiatives leads to improved outcomes and far-reaching benefits. Investing in women's empowerment and inclusion leads to greater success of climate adaption programs as women are more likely to participate, draw on social networks and successfully manage finance which leads to the success and longevity of gender sensitive climate projects (Bisung, 2011). Empowering women and other marginalized groups is a climate adaption tool. Climate adaptation needs to happen at all levels, both national, regional and global. The empowerment of women can aid in strengthening community-based initiatives and as such community climate adaption and resilience (UNEP, 2023). Empowerment fuels innovation and leads to greater community resilience. Moreover, women's inclusion in national decision-making processes may lead to lower carbon emissions (Mavisakalyan & Tarverdi, 2019) due to their varied impact and perceptions of climate change. Thus, gendered inclusion on all pollical levels will strengthen climate adaptability.

Inclusive and gender sensitive climate adaptation policies are also key for sustaining peace. Climate change may exacerbate violence both on a household, community and national level. Using a gendered lens allows us to identify gender specific vulnerabilities to climate change, such as increased cases of gender-based violence (The World Bank, 2022; Nunbogu & Elliott, 2022). Due to the close link between climate change and conflict, climate adaption has the potential to both sustain peace (Morales-Muñoz, 2022) as well as exacerbate conflict (Tänzler et al., 2010; Scartozzi, 2020; Läderach et al., 2021). Nature-oriented projects may increase underlying power structures, either through working in patriarchal structures or re-enforcing existing societal inequalities to resource access. However, including conflict-sensitive measures in nature-oriented projects may increase the chances of a more successful contribution to peace (Läderach et al., 2021).

As the Mediterranean adapts to the climatic changes ahead, inclusivity and diversity should be a key issue for all stakeholders involved. Understanding and recognizing the multifaceted web of intersectional disparities that lingers in all walks of life will be essential to ensure that climate adaptation is successful and long lasting. This can only be done alongside the empowerment and inclusion of marginalized groups. Investment in women and young people's empowerment is key to ensure the inclusion of these groups in all sectors. As climate change will have multifaceted impacts on all sectors, without adequate representation, climate adaptation risks exacerbating already existing inequalities and conflicts. Instead, inclusive innovation and decision-making leads to inclusive outcomes, benefiting everyone, including the planet.



### 3. Promote investments on climate adaptation through remittances

The nexus between migration and climate change has been explored in previous studies (Desai, et al., 2021; IPCC, 2022), but the contribution of migrants to climate adaptation and resilience through remittances and investment is still quite underestimated. The International Day of Remittances highlights the significant support and contribution that migrants provide for the sustainable development of their countries of origin. Only in 2022, migrants have sent \$647 billion to their low and middle-income countries, with over \$100 billion going to Africa alone (IFAD, 2023). This is done with small transactions of US\$200 on average, 10 to 12 times a year. In these countries, the combined value of Official Development Assistance (ODA) and foreign direct investment is substantially less than the funds sent by migrants to their households. Remittances are of considerable economic importance also for the Mediterranean. A study on the remittance flows from Europe to eight Mediterranean countries<sup>1</sup> indicates that remittances through formal channels can vary between 2 and 20 percent of GDP of the origin country (FEMIN, 2006). Still, the channels of transmissions in the Mediterranean predominantly go through the informal sector, with the notable exception of the German-Turkish corridor (FEMIN, 2006).

Migrants and diaspora communities should be seen as active actors for the development of origin and host countries, and their significant contribution to rural development, climate adaptation and resilience through remittances and investments should be recognized and promoted. Remittances allow families to fight poverty, put food on the table, pay medical and education expenses and improve their housing, water and sanitation. It is also estimated that recipients manage to either save or invest 25 per cent of the money they receive. One-quarter of these savings (US\$25 billion annually) goes into agriculture-related investments (IFAD, 2023).

#### **“Migrants and diaspora communities should be seen as active actors for the development of origin and host countries”**

From this perspective, it would be important to establish partnerships between governments, international organizations, relevant stakeholders and diaspora communities, as IOM has done with the iDiaspora platform, to leverage the potential of remittances and diaspora investments as critical sources of socio-economic development, climate adaptation and resilience in low and middle-income countries (iDiaspora, 2023). In the Mediterranean, for example, the pooling of resources domestically through local associations should be envisaged. The purpose would

be to finance local infrastructure projects, as well as local entrepreneurial activities and productive investments. Larger cooperative pooling schemes could also be devised, whereby the NGOs (i.e. diaspora organizations) in host and recipient countries could help pool resources and work with banks and multilateral organizations to finance projects and develop financial services to the remittance industry. The Mediterranean governments could also help sponsor the transfer of knowledge and know-how of migrants and help establish and recognize diaspora organizations to stimulate business development. The development of a think tank to deal with remittance issues should also be considered (FEMIN, 2006).

Also, while the cost of sending remittances has been significantly reduced, there is still the need to make the remittances flow faster, and safer while reducing transfer fees. In Africa, the average transfer fee to send \$200 was 8.85 per cent in 2022, making the continent the most expensive region in the world to send money to. Africa remains far from the 3 per cent target set in the SDGs to be achieved

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<sup>1</sup> Turkey, Morocco, Tunisia, Algeria, Egypt, Lebanon, Jordan, and Syria.

by 2030. Sending money within Africa is even more expensive at 11 per cent transfer fee on average (IFAD, 2023). Also in the Mediterranean, a number of market imperfections and information deficiencies are encountered, including lack of transparency on transfer costs, inadequate payment systems and limited usage of bank accounts, that result in high transaction costs (FEMIN, 2006). Payment systems in Mediterranean countries need to be improved and links with hosting countries need to be strengthened in order to reduce transaction costs and provide better services. The Mediterranean governments and hosting countries should take the initiative to develop an effective mass payment system, including determining funding and technical assistance requirements. The banking system is an effective way for channeling remittances into productive investments. Banking services specifically targeted at migrants, including mortgage products, remittance-tailored bank accounts, and investment funds, should be encouraged to attract remittance funds through the banking sector (FEMIN, 2006).

Financial inclusion and literacy among migrants need to be promoted to enhance their capacity for investment and sustainable development in their home countries. Despite an overall improvement in financial inclusion in Africa, driven largely by the growing ownership of mobile money accounts, South Sudan, Egypt and Sierra Leone are still below the 30 percent, presenting the lowest levels of financial inclusion in the continent (IFAD, 2023). Migrants may not be aware of the climate finance tools and terminology, despite being already important contributors of climate adaptation through investments in climate-smart agriculture and other climate-related activities. Migrants should be provided with the necessary tools and accompaniment to invest back home. Financial instruments should be designed and tailored to the specific resources and preferences of migrants, enabling them to invest in climate-related activities and rural development in their home countries. Financial mechanisms such as equity, programming platforms, and investment funds can facilitate migrant investment in rural agriculture and businesses.

#### 4. Enhance climate-resilient agrifood systems and sustainable rural livelihoods to mitigate migration drivers and support development.

People whose livelihoods directly depend on ecosystem services, such as farmers, pastoralists, fishermen, and forest dependent people, are identified as particularly vulnerable to climate change impacts (Mogomotosi et al., 2020; Otto, 2017). Climate change impacts are having real and tangible impacts on agricultural and pastoral livelihoods, leading farmers to change their agricultural practices, sell their land and livestock, or abandon agriculture as a livelihood altogether (AWC & WFP, 2022). The loss of agricultural livelihoods represents a significant factor in the context of migration movements towards Europe, exacerbated by inadequate investment in rural development (FAO, 2017). Additionally, policies promoting the sedentarization of pastoralists and restricting their movement, particularly in the MENA region, critically impact these communities' ability to adapt to climate change. Recognizing and addressing this sensitive issue is crucial for developing informed and effective solutions that meet the specific challenges and needs of pastoral communities.

As resource scarcity, climate change impacts, and insecurity compound in many places, migration processes can challenge the resilience of host communities. Hosting states for refugees and displaced people are often located in countries struggling with poverty or resources insecurity themselves, which highlights the importance of supporting transit and destination, and addressing the multiple challenges they face. CGIAR research in Jordan has shown that in refugee host communities Jordan, a country that hosted more than 730,000 refugees in 2022 (UNHCR, 2023d), finding work on the

agricultural labor market represents an adaptation strategy for farmers who have lost farming or animal production businesses. However, the labor market, especially in sectors like agrifood essential for green transitions, is increasingly reliant on migrant labor. This necessitates a focus on promoting social cohesion and strengthening efforts for the social and economic integration of migrants, refugees, IDPs, and host communities to ensure mutual benefits and harmony.

Climatic factors, such as droughts, might contribute to migration and potentially heighten grievances and conflicts, particularly among pastoralists and sedentary farmers. This suggests a complex interplay between environmental stressors and social dynamics, underlining the importance of participatory resource management and conflict resolution strategies. Inadequate management of natural resources and policies toward peripheral territories and rural populations may also exacerbate existing challenges and provide fertile ground for the emergence of conflicts over the control of the territory by armed groups and insurgent groups. Moreover, the high vulnerability of rural communities can also create fertile ground for recruitment into non-state armed groups as a maladaptive strategy for survival. In this way, insurgent groups can capitalize on the impacts of climate change on local livelihoods and food security for recruiting the local population to join their ranks (Caus & O-Neil, 2021; NUPI & SIPRI, 2023).

Investments in rural development and attention to interventions that support livelihoods can help diversify adaptive and migratory choices, and improve food security. Building resilient and inclusive agrifood systems in rural areas will require the development and testing of replicable models and solutions, providing farmers with the knowledge, information, and access to climate-smart farming and technology solutions, and helping farmers access funding to implement such solutions. While many successful climate-smart farming solutions exist, including eco-solutions to small-scale farming systems (Lamonaca et al., 2022), rangeland rehabilitation and water harvesting in drought affected areas (Strohmeier et al., 2021), as well as smart farming solutions based on technology advances including sensors, remote sensing, and the Internet of Things (Adamides, 2020), facilitating a large-scale uptake of these solutions in origin countries of migration movements remains a challenge.

### ***The Climate Smart Village Projects***

A climate-smart village is a community or a collection of communities that brings together interested groups from various sectors, including members of the community themselves, the public sector, agricultural research institutes, and non-governmental organizations, to understand how and what makes climate-smart agriculture work. The purpose is to spread the adoption of climate-smart practices. When we talk about climate-smart agriculture, we're talking about three objectives: to sustainably increase food production, and that covers improving nutrition; to enable farmers to adapt to climate change; and to reduce greenhouse gas emissions. Practices vary from one village to another. Families in one climate-smart village may decide to plant crop varieties that are resilient to drought and resistant to pests, while households in another may opt to produce and use organic fertilizers on their farms in order to cut greenhouse gas emissions. The idea is that they decide what works best for them... We generate evidence that shows when, where, and how climate-smart agriculture practices work". On the basis of this evidence, key partners and funding institutions can be convinced of where upscaling the climate-smart village approach makes sense (Alliance of Bioversity and CIAT, 2017)

Enhancing agrifood value chains and helping local farmers produce more climate-resilient crops to achieve can generate more resilient agricultural livelihoods. Other important strategies include

engaging with local cooperatives and market chains, emphasizing skills development and opportunities for the youth population, and promoting the economic inclusion of refugees in camp settings. Skills mobility partnerships (SMPs), for example, can help local populations build the skills needed to boost new food production technologies, for example in modern food production systems based on hydroponic, aquaponic, and aeroponic growing. Such skill transfer programs can help make migration a choice, as migrants can help remove labor force shortages in innovative food production sectors. Moreover, they can provide the capacities young people need to engage in food sector entrepreneurship in their countries of origin, thus potentially making migration unnecessary by providing more resilient and climate smart agricultural livelihoods in place (IOM, n.d.).

A point often highlighted is the need for inclusivity in forming more sustainable and climate resilient livelihoods (CGIAR, 2023). Many studies highlight the advantages of including vulnerable individuals themselves – including pastoralists, internally displaced persons (IDPs), refugees, migrants, women, children and others – when designing and implementing projects and programs, not only as beneficiaries but as parties with decision-making and leadership roles (CARE, 2018; Mercy Corps, 2019; World Vision, 2020; ICVA, 2022). On this regard, the Alliance of Bioversity and CIAT (2017) has been involved in developing and testing in several countries the so-called Climate Smart Villages, which build on local-level discussions, active participation of local population and awareness about the link between climate change and security to enhance localized strategies of climate resilience.

Bottom-up approaches to operationalizing the HDP nexus such as the one of the Climate Smart Villages Projects, which may include projects or investments that help build sustainable agricultural livelihoods, are likely to yield more responsive, effective, and targeted resilience and peacebuilding interventions, as affected population groups can be involved in problem-solving, decision-making, and the priority-setting of measures. As such, understanding local, place-specific preferences and needs is a critical precursor to the effective design and implementation of a given program or intervention, as well as its sustainability.

## 5. Promote an efficient justice system for equitable resource sharing and peaceful cohabitation

The interconnectedness of climate, security and migration is evident in particularly fragile contexts and communities. In such contexts, the application of an efficient customary justice system could make a difference. Two relevant examples in Africa are the communities around the Lake Chad and the displaced population in Burkina Faso. In the first example, the reduction in the lake's surface, droughts, sandstorms, and the impact on agricultural activities have influenced the vulnerability of those communities, exposing them to exploitation by Boko Haram. In the second example, the displaced people face difficulties in sustaining themselves and lack basic resources such as water. The exploitation of the situation by adversarial individuals and the burden on small communities become major problems in the area.

In Africa and the Mediterranean, justice systems, including customary and informal mechanisms, are pivotal in preventing and resolving conflicts related to natural resource management, land rights, and property issues. These systems can offer tailored solutions for vulnerable groups like women, youth, and indigenous people, ensuring their access and ownership rights are protected. Moreover, enhancing access to justice, improving transparency, and digitizing registration processes can bolster the implementation of laws that safeguard women's rights and land tenure. To develop such systems effectively, actions must encompass multiple areas, focusing on integrating customary solutions that



specifically address the unique challenges faced by these groups in securing land access and ownership.

As part of climate action, it is fundamental to foster the emergence of dialogue spaces that allow affected populations to question and challenge laws and institutional structures that sustain underlying sources of vulnerability and conflict. Programs ought to incorporate reflexive dialogue approaches throughout the whole project management cycle, accounting for appraisal, design, implementation and evaluation. Actions prioritized through participatory appraisals conducted with community members themselves will need to integrate development models that challenge structural and intersectional sources of vulnerability and instability, as perceived by local populations, such as inequality, political exclusion, gender-based violence, and resource entitlements.

In the Mediterranean, recognizing and facilitating the role of customary institutions in natural resource management and conflict resolution is critical. Many effective forms of collective action build upon customary institutions. Efforts towards strengthening collective action for natural resource management and the resolution of resource-based conflict need to assess the complementarity between customary and statutory mechanisms, while acknowledging and addressing weaknesses in both (see: IOM, 2024b). The legitimization of legal pluralism through hybrid governance arrangements can support institutions and communities also in navigating the complexities of postcolonial contexts.

It is also important to ensure the support of formal policy processes and the willingness of government actors to advocate for required reforms. Embedding sustainable peacebuilding strategies in climate action requires addressing legal structures - like resource entitlements- and embedded economic practices -such as informality of land leasing - that act as structural drivers of vulnerability. However, these lie frequently beyond the scope of action adopted by resilience building interventions. For this reason, subnational governments need to play a more active role during the assessment phases of programme design, and actively participate throughout implementation so as to advocate for reforms that support conflict transformation and systemic resilience. It is also necessary to empower local constituencies, women, indigenous people, civil society organizations through legal education. This involves offering legal training to enhance their understanding of their rights and the essential legal mechanisms available for reporting rights violations and seeking redress and remedies.

Finally, there is a need to support the rights of marginal groups to access justice. Both community- and government-led institutions for resource allocation and management commonly evidence the exclusion of marginalized groups, among others, on the basis of gender, ethnicity, cultural norms, and social class. The limited capability of marginalized groups to access multiple spaces for resource management and conflict resolution restrains their adaptive capacity and fuels grievances within and across communities. Resilience programmes looking to foster a sustainable peace hence need to identify existing spaces for the resolution of disputes, recognize their exclusive nature, invest in legal literacy for the protection of rights, and build capacities for the deployment of equitable and inclusive institutions.

## 6. Support the production of scientific evidence on the climate-security-mobility nexus to inform policymaking

Research is a fundamental pillar in informing policy and decision makers to develop and implement solutions that equitably and effectively respond to climate change challenges. Nevertheless, translating science into actionable policy is a challenging process, both due to divergences between scientific knowledge production and policy cycles, as well as to the complexity of how the effects of

climate change are embedded in non-linear, multi-actor, dynamic socio-ecological systems (Carneiro et al., 2022). As such, efforts in improving the interface between science and policy, must include enhancing accessibility to scientific knowledge through communication and translation of research to relevant audiences, engaging with policy institutions more effectively, and developing transdisciplinary research and knowledge co-production processes to engage potential end-users (Clark et al, 2016).

Key government actors designing policies and devising strategic priorities must have ready access to real and almost real time multivariate datasets and tools capturing intersectional and compounding vulnerabilities, accurate climate projections and modelling, and appropriate assessment tools and frameworks capable of reflecting context-specific manifestations of the climate, peace, and security nexus. From that perspective, leveraging scientific knowledge to enable a deep understanding of the climate-security-mobility nexus can guide policy makers towards the right political decisions. Still, divergent viewpoints about the interlinkages between climate change, migration, and security persist within the scientific community, which can become further convoluted due to often inconsistent media coverage of climate change. As such, a significant component of the science-policy interface is a deep understanding of the discourses and framings of policy actors, to identify potential evidence gaps and enable effective knowledge exchanges.

To provide robust evidence to policymakers, research on the connections between climate, security, and mobility should focus particularly on contexts of multiple crises. This requires comprehensive and integrated approaches that recognize the complexity of poly-crises contexts, shed light on the indirect pathways underlying the climate-migration-conflict nexus, and build on local and indigenous knowledge. Furthermore, co-creation processes that draw on firsthand experiences are essential to complement theoretical approaches, as they provide a more tangible and nuanced understanding of the challenges faced on the ground.

Such comprehensive scientific approaches should be reflected in interlinked and complementary strategies and actions at the policy level. Within the Agenda 2030 framework, it is important to pursue all 17 Sustainable Development Goals (SDGs) as interconnected and necessary for achieving a sustainable society. Actions taken in one area, such as mitigating or adapting to global warming, must consider the impact on other dimensions, such as food production, land degradation, biodiversity, and human health. No single goal, taken alone, is sufficient to achieve climate security.

Science should support policy makers in transforming climate adaptation strategies and aligning resilience objectives with peace-building objectives to create climate-resilient societies. Traditional climate adaptation approaches, which lack conflict sensitivity, have proven insufficient in reaching the most vulnerable populations. For this reason, it is necessary to develop decision support tools that inform policy and programming decisions from an integrated perspective, such as the CGIAR Climate Security Observatory (CSO) are needed (CGIAR, n.d.). The CSO is a platform that presents rigorous scientific evidence on how, where and for whom compound risks of climate insecurity are occurring and provides tailored solutions to improve climate resilience capacities while contributing to reducing fragility and insecurities.

## 7. Increase investments and support for local actors to enhance the reach, effectiveness, and accountability of the humanitarian, development, and peacebuilding action

Collective local action is a requisite for accountability and leadership in local adaptation and risk management. Its importance is magnified further as financial and human resources are becoming increasingly stretched, seeking to respond to growing demand. To build climate resilience across the Mediterranean region, political local resources play a particularly vital role: they are key to managing human mobility, negotiating potentially contentious issues around property ownership, access to land and land use, and to ensure coherent priority setting and planning. Leadership is also required to counter institutional and public discrimination of vulnerable groups, including migrants and displaced people, by establishing rules and incentives for positive actions, as well as potential consequences for negative actions. This means sensitizing and collaborating with mid-level officials and municipal frontline staff in how to support marginalized populations, sometimes including through migrant-specific programmes (OECD, 2020). However, often it may require strengthening a sector or whole area rather than targeting specific population groups. Thus, taking a territorial approach based on political legitimacy may provide long-term solutions for development and climate security.

In general, long planning horizons at the local level are necessary to support reforms on land ownership and access as well as public participation that can contribute to building climate resilience over the long-term. As political leadership may wax and wane, setting up public mechanisms for dialogue and policy development and connecting central states and local actors through transparent planning as well as funding instruments, can provide a more sustainable framework for linking climate change adaptation, management of human mobility and social inclusion. More direct support may need to be channeled to local authorities and community organizations for policy engagement too, and their efforts more closely connected to global policy discussions. Initiatives, such as the Euro-Mediterranean Regional and Local Assembly (ARLEM) are calling for greater inclusion in regional and global decision-making processes around climate action as well as unlocking climate funding for sub-national governments, fostering a more locally sensitive green transition and responses to climate impacts and their related security risks (ARLEM, 2022a).

Furthermore, local evidence, experience and technologies need to contribute more directly to science on climate risks and resilience in the region. Scientific efforts, such as those of the Mediterranean Experts on Climate and environmental Change (MedECC), will benefit from more granular data and local perspectives (MedECC, 2020). As the Mediterranean is a highly complex and diverse region, both climatologically as well as socio-politically, more local assessments can contribute to better tailored approaches. Finally, the active participation of citizens in both evidence generation and decision-making, as well as the inclusion of the private sector in local planning, will be crucial for appropriate solutions to emerge.

## 8. Expand climate finance towards fragile and conflict-affected settings to support climate adaptation efforts

Climate finance is a key instrument to improve climate security and address many of the root causes of fragility in the Mediterranean. The United Nations Framework Convention on Climate Change (UNFCCC) has set an annual target of mobilizing \$100 billion globally to assist developing countries in

their climate action efforts. While quantifying financial flows to the Mediterranean region is complex due to the intricate and blended nature of climate finance, a study by the Union for the Mediterranean (UfM) revealed that the region received about 4.6 billion Euros in 2016 from public, private, bilateral, and multilateral sources (UfM Report, 2019). However, the distribution of these funds is highly imbalanced, with a significant proportion directed towards countries that are more stable and secure (Scartozzi, 2023). Moreover, while there are positive trends in bilateral finance, multilateral finance appears to be failing in reaching the most vulnerable populations (Scartozzi et al., 2023).

Positive trends in bilateral finance are evident through several successful initiatives and investments. For example, the European Union aims to mobilize up to €300 billion in investments for sustainable and high-quality projects between 2021 and 2027 (European Commission, 2023a). The Global Gateway and the Great Green Wall Initiative have both demonstrated significant impacts in areas such as food security, water management, and sustainable agriculture, especially in Africa. The Africa-Europe Bioclimatic Collaboration (ABC 21) has also made strides in sustainable building and energy efficiency (European Commission, 2023b). Closer to the Mediterranean, the Italian Climate Fund has committed 4.2 billion Euros for projects in countries eligible for Official Development Assistance, exemplifying the effectiveness of bilateral commitments (IFAD, 2022).

In contrast, multilateral climate finance has shown significant bottlenecks, particularly in reaching fragile and conflict-affected states (FCS). The complexities of multilateral funding mechanisms often involve stringent conditions and technical prerequisites, making it difficult for some countries to access resources. As a result, multilateral climate finance has proven to date to be less effective in mobilizing funds toward the Mediterranean region. Data reveals that multilateral financial mechanisms under the UNFCCC have so far been less successful in directing funds to the Mediterranean's Non-Annex I countries, mobilizing only around a billion dollars (Climate Funds Updates, 2023). This funding has largely gone to a few countries, with Egypt and Morocco receiving the lion's share at USD 473 million and USD 293 million, respectively. Most telling is the per capita distribution of these funds. FCS countries like Libya and Syria received just USD 0.25 per person, in stark contrast to an average of USD 5.97 per person in other coastal Mediterranean countries that are not classified as FCS.

**“multilateral climate finance has shown significant bottlenecks, particularly in reaching fragile and conflict-affected states”**

The data from dedicated multilateral climate funds serve as an indicator for broader issues in the climate finance landscape. Firstly, FCS struggle to access climate finance due to a range of factors including institutional limitations and ongoing conflicts. Secondly, many countries lack the absorptive capacity to effectively utilize large-scale financing, often due to weak governance structures, lack of technical know-how, or inadequate infrastructure. These two core issues often intersect, making it doubly challenging for vulnerable nations to leverage climate finance for meaningful impact. At the same time, the under-mobilization of climate finance towards FCS in the Mediterranean not only highlights existing disparities but also signifies untapped potential for impactful investments. For instance, readiness activities aimed at building institutional capabilities can go a long way in helping these countries navigate the complexities of climate finance. Strengthening governance structures and enhancing technical expertise can, in turn, enable these nations to implement larger-scale projects effectively, thus elevating their ability to absorb and utilize available funding. Given the stark imbalances in per capita funding, there is also a clear opportunity for targeted climate investments. Such investments can be directed at initiatives that build resilience against both climate change and



conflict, thereby achieving dual benefits. Effective deployment of climate finance in these areas could be a game-changer, offering a pathway to stability and sustainability in a region plagued by both environmental challenges and socio-political unrest.

## Conclusion




This white paper critically examines major issues and potential solutions concerning climate security and mobility in the Mediterranean. The discussion stems from a high-level debate occurred during the event “Towards a Common Vision of the Climate, Migration and Security Nexus in the Mediterranean Region”, organized by the CGIAR Focus Climate Security and the Alliance of Bioversity & CIAT, and held in Rome in June 2023. This event has involved scientists, politicians, experts and representatives of relevant international organizations, and focused on the climate-security interplay in the region.

The Mediterranean is particularly exposed to shifting climatic conditions, characterized by recurrent droughts, heat waves and other extreme events. This vulnerability extends to the impact on land, water, food security and economic development. Climate change could exacerbate potential socio-economic insecurities and political instability, forcing people to migrate and potentially triggering tensions and conflicts in the most affected regional hotspots, due to agricultural shortages and the intricate food-land-water nexus.

To foster the development, the stability and the climate resilience of the region, it is critical to implement effective strategies enhancing the region’s adaptive capacity to climate risks. Through the dialogue among major experts in the field, key strategies have been identified to advance peace positive climate adaptation while managing mobility in the Mediterranean:

1. **Strengthen multi-level governance and the rule of law:** Strengthening governance across climate, agriculture, and migration sectors in Mediterranean countries requires a comprehensive approach that recognizes their interconnectedness. Policies should aim for integrated objectives, enhancing coherence and enabling key actors to access necessary knowledge and align legal frameworks with international standards.
2. **Empower youth, women, minorities as change agents:** For climate adaptation in the Mediterranean, the involvement of youth, women, and minorities brings diverse perspectives and socio-economic benefits. Policies should be inclusive and provide access to education and technology, while systemic barriers, especially in financing, need addressing for their contributions to be sustainable.
3. **Promote climate adaptation via remittances:** Leveraging remittances and diaspora investments is crucial for promoting local entrepreneurship and climate adaptation in the Mediterranean. Efforts should focus on making remittance flows faster and safer, enhancing financial inclusion and literacy, and facilitating the transfer of skills and knowledge from the diaspora.
4. **Enhance climate-resilient agrifood systems:** Developing climate-resilient agrifood systems and sustainable rural livelihoods is key to mitigating migration drivers and supporting development. This strategy emphasizes sustainable natural resource management and economic inclusion, mitigating conflict risks and reducing migration pressures.
5. **Promote equitable justice for resource sharing and cohabitation:** An efficient customary justice system should be promoted for more equitable resource sharing and peaceful cohabitation. Access to justice, transparency, reflexive dialogue approaches and digitalization

of registration processes can enhance the effective implementation of laws, particularly in relation to women's rights and land tenure.

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6. **Promote knowledge generation and accessibility:** Promote research on the climate-security-mobility nexus and improve accessibility to scientific knowledge through communication to relevant audiences. Funding co-developed and transdisciplinary research is also key for building on local and indigenous knowledge and engaging with local actors.
  7. **Investing in local actors:** Targeted support for local actors improves the reach, effectiveness, and accountability of humanitarian, development, and peacebuilding actions in the Mediterranean. This approach ensures interventions are better aligned with community-specific needs, enhancing sustainable outcomes.
  8. **Expand climate finance towards fragile and conflict-affected settings:** Directing climate finance towards fragile and conflict-affected settings addresses the unequal distribution of funds and focuses on reaching the most vulnerable populations in the Mediterranean. This effort supports climate adaptation and fosters equitable support across the region.
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