

Ensuring European Societal Resilience to the Future Challenges MENA, Climate Change and EU Risk Management

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Introduction

On February 24th, 2022, Russia launched its illegal invasion against Ukraine. This conflict rapidly escalated, becoming the biggest interstate war since WWII in terms of size of committed fighting force, battle intensity, casualties, refugees waves and scope of destruction inflicted on essential civilian infrastructure in Europe. Russia's aggression against Ukraine substantially redefined threat-perception across Europe, to some degree also in the US and the rest of the world. Hard security considerations, military power preeminence, national defence planning and deterrence returned to the heart of discussion of policy-makers, military planners, diplomats but also the broad public.

This development represents a strategic U-turn in many ways. Since the tragic events of 9/11, the transatlantic community spent two decades both in blood and treasure on counterterrorism and counterinsurgency operations, nation-building efforts, stability and capacity building missions predominantly in the Middle East, North Africa but also other parts of the world. Post 9/11 wars in Afghanistan and Iraq, Arab Spring and consequent armed conflicts in Libya, Yemen and Syria, which still are not resolved, significantly reshaped the MENA region but also Europe. Now, after arguably chaotic, mismanaged and in opinion of some shameful withdrawal of Allies from Afghanistan in summer 2021, the transatlantic community reached a point of symbolic closure, disengagement from the region and refocus on a set of challenges represented by authoritarian revisionism be it Chinese great power ambitions or Russian aggression.

While described shift may be a viable strategy for the United States, we argue that for Europe retreat from the MENA region would be unwise, risky and likely leading to emergence of substantial threats directly affecting Europe's security environment. Nexus of climate

change impacts, demographic pressures, changing patterns of energy consumption, and great powers competition over critical resources in the region will generate high potential for conflict and instability in coming years. Geographical proximity, presence of large communities from MENA countries in EU, importance of regional energy exports for European energy security are just a few examples, why EU and its member states have to stay vested and engaged in the MENA.

In the following text we would concentrate on the climate change dimension of the emerging challenge and EU risk management strategies and policies towards the region. We see impacts of climate change as both crisis catalyst and multiplier due to its cross-dimensional consequences and truly environment shaping quality.

MENA and the Climate Change Impacts

Climate change is changing our everyday lives day by day, and redefining the world's crisis management toolkits to deal with something that is coming way sooner than we feared. If we do not slow global emissions, temperatures could rise to above three degrees Celsius by 2100, causing further irreversible damage to our ecosystems, causing wide-range displacement and the disruption of supply chains, and that water scarcity will increase with droughts costing €65 billion (EU, 2021 and IPCC, 2018). Thus, it is not surprising to say that conflict is also an inevitable consequence of climate change (Livingstone 2015), of which the challenges represent one of the biggest “threats to international stability” (Barnett, 2000). Thus, the social and economic effects of climate change are bound to hit the MENA region the hardest, directly affecting Europe.

One of the most affected and most at risk from climate change is the MENA region. MENA countries are very vulnerable to climate change impacts as they are naturally affected by harsh climate conditions, extremely high temperatures, limited groundwater and rainfall and scarce agricultural and arable land. Due to the combination of water and precipitation scarcity, high population growth and geographic concentration of the population, this is the most water-stressed area in the world (Borghesi & Ticci, 2019). Between 1980 and 2022, temperatures across MENA increased 0.46°C per decade, well above the world average of 0.18°C (Lim et al. 2023). On top of that, sustained droughts continued to diminish water resources from river systems and crippling heatwaves persisted over long durations of this summer season (Židuliaková, 2022). This has aggravated the MENA region with droughts in Morocco in 2022 and Tunisia in 2023, while causing intense floods in 2022 in the United Arab Emirates, Iran, Saudi Arabia, Qatar, Oman and Yemen (Lim et al. 2023). The MENA countries

are also particularly vulnerable to sea level rise due to climate change which could be extremely disruptive for climate-sensitive activities, from tourism to agriculture and fishing, especially in the Mediterranean and Red Sea sub-regions. A study on 84 coastal developing countries found that about 24 percent of MENA's coastal GDP and 20 percent of its coastal urban extent is exposed to sea level rise and storm surges, which is around twice as much compared to the same indicators measured worldwide (Borghesi & Ticci, 2019). The World Bank estimates that the sea level rise could affect 43 port cities in the region, including Alexandria which could experience devastating effects, with more than 2 million people displaced in the case of a 0.5-metre rise (Verner et. al., 2013). Therefore, an early and concerted climate and development action is needed to avert the emerging crisis associated with the current climate crisis.

EU Risk and Crisis Management in CDSP Context

The European Union has recognized the increasing importance of risk and crisis management in the face of climate change and has developed policies and practices to address these challenges. The EU's current approach to risk and crisis management encompasses various frameworks and strategies aimed at managing climate-related risks and crises. Both at international and European level, due to much higher climate risks, there is a growing recognition of the need for comprehensive and integrated approaches to climate-risk management. Such approaches acknowledge the significant role of climate change as a risk factor while including prevention/mitigation, preparedness, response, and recovery (IPCC, 2019). However, many new descriptors are emerging to convey the complexity of risks from climate change.

Climate change adaptation (CCA) and disaster risk reduction (DRR) offer complementary approaches to managing the risks associated with extreme weather and climate-related events (European Environment Agency, 2017). Addressing CCA and DRR requires the collaboration of policy experts, scientists, and practitioners. As the current and future problems we are facing are highly complex and intertwined in many different areas, it is important for all collaborators to build resilient societies and con-

trolling climate hazards are among their shared goals (European Environment Agency, 2017).

Many EU member states often voice their opinions at many climate events and their security implications. While accepting the influence of climate change on conflict situations in poor countries and not opposing additional action, certain nations are more worried with urgent national security risks in the present geopolitical scenario (Bunse et al., 2022). Many politicians have found themselves diverting their attention on the Russian invasion of Ukraine, meaning many investments in climate mitigation and adaptation are put on hold, as they had to take care of more pressing issues regarding humanitarian aid and military. On the other side, countries such as Ireland, Sweden, and Germany appear to be the doers. They want to refocus the discourse on climate security towards more practical or technical talks, as well as actual initiatives that help mitigate climate-related security issues (Bunse et al., 2022). Both in Europe and neighbourhood regions, MENA especially, the need for CCA and DRR is rising as the severity of climatic events are starting to cause negative effects on broad populations, economy, wildlife and overall ecosystem stability¹.

The EU seems to be trying to find ways to include military capacities into the fight against climate change. By proposing the *Climate Change and Defence Roadmap*, it aims to implement more than 30 specific initiatives in the fields of multilateral partnerships, capability development, and operations within the climate security-defence nexus. The proposal is to improve early warning, to integrate environmental factors into the planning and implementation of CSDP missions (civilian and military), to increase the energy efficiency of CSDP missions, and to work more closely with the UN and NATO in the areas of climate change and defence to take into account national policies (EEAS, 2020).

¹ It is significant to highlight that these phenomena' regional manifestations vary across Europe, and that future climate change may cause their severity and frequency to increase even more.

As a result, systems to measure the environmental footprint of missions have been tested and environmental advisors have already been deployed in several CSDP operations. The roadmap also aims to align with the objectives of the European Green Deal, reduce emissions in the defence sector, and protect biodiversity, while monitoring and reviewing the implementation of its actions. In general, the roadmap seeks to contribute to a broader and long-term EU agenda on climate change while also highly contributing to addressing the climate-security nexus and promoting partnerships in addressing climate-related challenges.

However, any recent advancements to even get to a reasonable strategy has taken decades, which already could prove negative effects due to hesitations. It remains to be seen if the new framework will tackle the problems that the previous ones neglected, but hopefully we will not reach a point where there is no turning back. By understanding that this roadmap still holds gaps, it allows for further improved transformation that provide a foundation in addressing climate change impact, not only in Europe but also its neighbouring regions. These strengths provide a foundation for addressing climate change impacts, however, challenges remain. While efforts have been made to fully integrate climate considerations into decision-making processes, there is room for improvement in ensuring that climate considerations are at the forefront of risk and crisis management strategies, not only in the EU, but probably even more importantly in its neighbouring regions.

Middle East and North Africa in Spotlight

Since the EU has geographic, cultural, political, and economic ties with its neighbouring MENA countries, the EU has a vested interest in developing adaptive climate strategies and mitigating climate challenges and spill-over effects, such as migration, security, and economic stability (Lienard, 2022). The MENA region faces several challenges and issues that impact its socio-economic development and stability; from natural disasters, water scarcity and food insecurity and climate change impacts. Additionally, deeply rooted problems of governance, corruption, and societal divisions further exacerbate these challenges. The MENA region also carries a lot of economic disparities among its countries. Despite this, all MENA nations face a shared and significant threat: high vulnerability to the impacts of climate change which poses massive strains on agricultural productivity and food security throughout the entire region. The-

refore, countries respond to these challenges in distinct ways, largely influenced by their income levels. Countries, particularly those in the Gulf, have managed to establish relative stability and functionality, while having the financial means to engage in self-protective measures, which often involve energy-intensive activities that may inadvertently contribute to further environmental degradation (Borghesi & Ticci, 2019). In contrast, lower- and middle-income, like Algeria, Egypt, Morocco, countries within the MENA region are predominantly compelled to rely on strategies such as migration and the unsustainable overexploitation of water and land resources to cope with climate-related pressures, exhibiting a mix of stability and vulnerability (Borghesi & Ticci, 2019). However, countries such as Lebanon, Libya, Syria, Iraq, Yemen, and others serve as prime examples of how internal conflicts hinder effective management and response to these challenges. These conflicts not only impede development and exacerbate vulnerabilities but also hinder regional cooperation and coordination.

Since the region faces such challenges and vulnerabilities arising from climate change, examining the impact underscores the need for enhanced risk and crisis management measures. Water scarcity is a pressing issue, exacerbated by rising temperatures and changing precipitation patterns. With limited freshwater resources and high reliance on water-intensive sectors like agriculture, the MENA region requires tailored approaches to address water scarcity and promote sustainable water management. The EU has been involved in supporting the MENA region in water management for decades providing assistance to *African Union* and *Nile Basin Initiative* and offered plans for negotiations related to the Ethiopian Grand Renaissance Dam (Lienard, 2022). In this aspect, the EU recognises that these challenges need to be addressed head on to promote sustainable development, crop resilience, but most importantly general stability (Lienard, 2022). So far, the EU has collaborated with the MENA countries to bring diplomatic outreach, financing, and technical assistance to tackle these challenges. The EU is already engaged in supporting the renewed agenda to allocate €7 billion in aid to the MENA region, with 42% dedicated to the mitigation of climate change (Lienard, 2022). However, this aid alone is not sufficient to support all the countries to reach their *Nationally Determined Contributions* (NDC) targets. As a result, while the EU is giving financial aid, it is equally critical to evaluate the need for extra inter-

national financing and assistance in order to successfully address climate change in the MENA area.

The region's grappling significant challenges cannot be overlooked. On one hand, the population is growing rapidly, while on the other, Gulf Cooperation Council states are responsible for some of the highest per capita carbon emissions globally and continue to export vast amounts of fossil fuels (Ahmad, 2023). Despite concerns over sluggish economic growth, particularly concerning the aspirations of the young population, it is worth noting that Saudi Arabia, Bahrain, and the UAE have made pledges to achieve net-zero emissions by at least 2060. However, these commitments alone may not address the massive problems still faced by the MENA region.

By evaluating the current adequacy of EU's risk and crisis management measures, there are significant gaps and limitations in regards to dealing with climate change in the MENA region. Inadequate consideration of MENA-specific vulnerabilities, insufficient financial resources, coordination challenges, and limited capacity-building efforts hinder the EU's ability to effectively address the impacts of climate change. Addressing these gaps is crucial as they have significant implications for both the EU and the MENA region. Insufficient risk and crisis management measures in the MENA region can lead to increased vulnerability, economic losses, and social unrest. The consequences of climate change in the MENA region can have spillover effects, including security concerns, migration pressures, and economic ramifications, which directly affect the EU.

Recommendations

Although the EU's existing risk and crisis management policies are excellent, they may not sufficiently handle the MENA region's special difficulties. According to the study, the EU's present initiatives may fail to take into account the MENA region's specific vulnerabilities and complexity in terms of climate change implications. Water scarcity, intense heat waves, sea-level rise, and extreme weather events necessitate specific methods that take into consideration the MENA region's socioeconomic, political, and geographical unique characteristics. With the persistent and growing threat of climate change is challenging the current (in)action towards ensuring nation-wide and international peace and security. Building resilience

and preparedness of society to crisis situations involves a combination of individual, community, and institutional efforts. By adopting new approaches, the EU can aim to build a comprehensive and integrated crisis response system that effectively utilises both military and civilian capacities, ensuring the resilience and preparedness of society to various crisis situations.

1. Individual and Community Level of Building Resilience

To assist alleviate the negative consequences of climate change, the EU may contribute to a variety of projects targeted at boosting local capacity to adapt to and respond to climate risks, therefore promoting sustainable development even before any disasters struck. For starters, it may support initiatives that encourage sustainable and ecologically friendly behaviours, allowing communities to create economic resilience while reducing their ecological imprint. These initiatives can offer financial aid, training, and technical assistance to help build dynamic, resilient local economies that are less exposed to climate-related shocks. For example, the United Arab Emirates is already seeking to become a global hub and a successful model of the new green economy under the Green Economy initiative. The strategy aims to promote sustainable development across various sectors, especially focusing on diversifying the economy, investing in renewable energy, enhancing energy efficiency, and encouraging sustainable agriculture and water management practices (UEA Government Portal, 2023)².

Second, by developing its monitoring and forecasting capabilities and collaborating with regional meteorological agencies and research organisations, the EU can improve preparation and reduce vulnerability to disasters related to climate change in the MENA region.

Finally, the EU can organise environmental programs to raise awareness among individuals and groups in the region. Government to government dialogue should go hand in hand with direct enga-

² More information about the current UAE Green initiative can be found here: <https://u.ae/en/about-the-uae/economy/green-economy-for-sustainable-development>

gement with populations via development programs and projects implemented via local and international NGOs. By raising knowledge and understanding of climate change, its causes, and its consequences, the EU can empower individuals to make informed decisions and take proactive efforts to adapt to climate change. The EU can enable MENA communities to become active agents of change by promoting local sustainability initiatives and pressing for climate action via education.

2. *Climate Intelligence and Early Warning Systems*

To successfully handle the unpredictability of changing weather in the MENA area, the EU can develop climate monitoring, early warning systems, and data analysis methods. These initiatives have the potential to improve the region's readiness and response to climate-related challenges. Such a system might involve additional advancements in research on the link between climate and war, as well as the use of artificial intelligence (AI) systems capable of modelling the future and anticipating the most susceptible places in need.

Additionally, precise data analysis may be utilised to analyse and deliver accurate predictions and warnings for extreme weather phenomena such as sandstorms, floods, or heat waves - this may incorporate satellite technology to anticipate temperature and precipitation. Using these advances and artificial intelligence, the EU may advise and support the national government in MENA on focused reaction plans, resource allocation, and evacuation as preventative steps to limit the consequences of climate-related hazards. The combination of climate monitoring, early warning systems, and data analysis enables proactive decision-making, such as resource allocation, evacuation planning, and preventative actions.

3. *Climate-Conflict Prevention and Resolution Measures*

Climate change impact concerns have to be included into foreign policy and security conversations with all relevant stakeholders. It is critical for effective mediation and sustainable peace-making initiatives as climate stress is emerging as a key conflict factor. To lower the danger of conflict and enhance stability, the EU may push for sustainable climate-resilient development routes, particularly in vulnerable nations. The EU may help peaceful conflict settlement and long-term solutions by strengthening multilateral frameworks and boosting discussion and collaboration among MENA nations.

The crisis has grown in the region over recent years, to the point that average water coverage has fallen by 25%, and by the year 2025 it is likely that the availability will barely be above 500 cubic metres per person (Selim, 2020). Previously, the MENA countries invested in infrastructure, tapped into groundwater resources, and increased virtual water imports to boost agricultural production and access to water supply. However, this expansionist approach to water development now faces limits, necessitating difficult tradeoffs for countries that can lead to conflict within that region (The World Bank, 2023 and Selim, 2020). Thus, incorporating climate change concerns into MENA foreign policy and security discussions is crucial, especially regarding water management and resource sharing.

Recognizing climate stress as a key factor in conflicts, effective mediation and sustainable peace-building are imperative. Prioritising climate-conflict prevention and resolution is critical given the region's vulnerability. Diplomatic efforts and influence should be intensified to achieve bold climate action and resolve climate-related conflicts. The EU can play a pivotal role in promoting sustainable, climate-resilient development, particularly in water-vulnerable countries. By strengthening multilateral frameworks and fostering dialogue among MENA nations, the EU can contribute to peaceful conflict resolution and long-term solutions.

4. Creating European Security and Crisis Response Corps

There has been a rising argument in recent years that the national security danger posed by the climate catastrophe necessitates

military spending (McCarthy, 2022). However, incorporating the military into the situation could prove to be an expensive endeavour and an inefficient allocation of resources. Yet growing periodicity, scale and intensity of extreme weather incidents with severe negative impacts on lives, public health and economy dictates the need for robust, well-equipped and trained manpower as a response force. The EU might consider the creation of a professional standing force, *European Security and Crisis Response Corps*, combining military, law enforcement and crisis-management capabilities. Such force can be developed into the EU's primary tool not only for crisis management and response but also conflict prevention and peace building, CSDP missions or development programmes implementation.

Undoubtedly ambitious proposition can be seen as the cornerstone of creating the EU's own security capabilities and capacities for crisis prevention and management, while complementing NATO's growing focus on defence and deterrence. Moreover, it would be a meaningful step towards strategic autonomy and EU geopolitical ambitions. Such a force would need to be highly mobile, easy to deploy and with a reasonably light logistic footprint, yet able to provide security for itself and for populations in area of operations.

Conclusion and Discussion

Furthermore, climate change impacts in the MENA region will have broader implications for global security, migration patterns, and socio-economic stability, underscoring the urgency of finding sustainable solutions. These circumstances are required to be addressed head on. By focusing on the transformation of risk and crisis management practices within the EU, it would be easier to mitigate the adverse effects of climate change in the MENA region, fostering resilience, ensuring the well-being of affected communities, and contributing to regional stability. Therefore, it is important to look into how EU risk and crisis management can be transformed in order to address the ever-growing challenges that the MENA region is suffering.

Addressing climate-related risks and crises in the MENA region is of utmost significance for several reasons. Firstly, these regions are experiencing the direct consequences of climate change, including extreme heat waves, droughts, and water scarcity, leading to envi-

ronmental degradation, displacement, and socio-economic disruptions. Secondly, the EU and MENA region share geographical proximity, cultural ties, and interconnected economies, making collaboration and coordinated action essential for effective risk and crisis management. This paper aims to contribute to the development of effective and sustainable risk and crisis management practices that can withstand the growing demands posed by climate change, particularly in the MENA region.

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