

From Risks to Opportunities – Climate Security and Water in the MENA region

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Summary

Climate change and water scarcity strongly hit the region of the Middle East and North Africa (MENA). Induced and aggravated by these phenomena, the region faces unprecedented and multi-faceted socio-economic, political and security challenges that affect the whole Euro-East Mediterranean region. European and MENA states have a common interest in addressing the complex and urgent challenges related to climate change and water scarcity; the topic of migration can serve as an entry point for joint efforts. To develop better climate change and water scarcity adaptation policies, it is also important to improve natural resource management and governance as well as to include the local level.

1. Consequences of climate change

The MENA region is one of the global climate change hotspots. Even if the climate-related phenomena are per se nothing new to the region, the multitude, frequency and severity of direct and indirect climate change consequences are unprecedented. Moreover, almost all kinds of climate change-related consequences are hitting the region. In the water scarce MENA region, the various water-related consequences are of particular importance (von Lossow 2020). The rise in temperatures, for example, translates into more frequent and prolonged heatwaves with temperatures above 50°Celsius, as it was the case in the summer of 2018, resulting in an increase of water shortages, prevalence of diarrhoeal diseases and human fatalities. In the last two decades, Israel, Jordan, Syria and Iraq have experienced several protracted droughts. Rising sea levels, to mention another example, accelerate coastal erosion as well as the insalination of groundwater resources and land. It diminishes crop yields and harvests in some of the region's most important agricultural centres such as the Nile delta in Egypt, to the detriment of the local agricultural productivity and the food security in the region. Some of the climate change impacts are even mutually reinforcing, such as land degradation and declining water availability. On the other end of the spectrum, there is also abundance of water, changing snow melt patterns and torrential rainfall aggravating or causing floods even in dry areas, such as the flash floods in Jordan in autumn 2018 (Al Jazeera 2018).

Climate change-related impacts of primary order, such as rising sea-levels, increasing temperatures and extreme weather events, are aggravating and are aggravated by broader socio-economic trends, such as population growth, migration and urbanisation. More people need more water for drinking and sanitation, agriculture for food production and hydro-power for electricity. Economic development, rising incomes and standards of living foster water-intense lifestyles – the better people are doing economically and financially, the more water they consume (von Lossow 2020). Immigration, which is also contributing to a growing population, aggravates for example the provision of basic supply services. In the case of Jordan, the immigration waves of the last two decades – with 750,000 refugees from Iraq after 2003 and about 1.4 million Syrians after 2011 – drastically worsened the water situation and aggravated shortages. While Jordan was a relatively

water rich country in the region about 70 years back, today's per capita water availability ranks among the lowest worldwide (von Lossow/Shatat 2020). Linked with domestic migration and population growth taking place in the cities, the traditionally growing urbanization across the region poses additional challenges for often already overburdened infrastructures. As more and more people live in urban areas, it is cities that have to bear the increasing burden of basic service delivery, such as water, electricity and healthcare – a critical challenge, since failing to supply these services can stir public discontent, intensify tensions among the population and trigger street protests or uprisings. The impacts of climate change, for instance on water availability, render the supply of services more difficult.

A major factor for the critical situation in the region is also the low resilience in the affected sectors and policy fields, such as agriculture, energy, public health or water. Weak governance, failing policies, mismanagement and lack of financial resources are often complementing the climatic and hydrological challenges. Some countries in the region are able to address climate change-related impacts and increase their resilience, such as the Gulf states. Saudi Arabia and Qatar, for example, can better cope with climate change, as they have the financial resources, for instance to invest in desalination in order to provide sufficient freshwater resources. Despite having almost no conventional freshwater resources such as rivers, lakes or groundwater, Qatar has the one of the highest annual water consumption per head (Baalousha et al. 2017). Israel, too, underwent a desalination-based and wastewater treatment supported blue revolution between 2010 and 2015 turning the country from a water scarce one into one that is producing more water than it uses (von Lossow 2016). But most of the states in the MENA region are not able to replicate this approach. Outdated, damaged or badly maintained infrastructures is another important factor responsible for the low resilience in the water sector. They cause losses of up to 40% before the water reaches the households, fields or factories – in a mostly arid and semi-arid region.

In addition, agricultural subsidies contribute to inefficient water use and even waste of water in this sector, while household and industries have to pay for their water consumption. The subsidies also increase inequality within the agricultural sector as large-scale agriculture benefits more from the regulations than small-scale and subsistence agriculture (World Bank 2017). The dependency on subsidies increases the sector's vulnerability to climate change and water scarcity. For example, subsidies on diesel to run pumps for groundwater abstraction in Syria, was one of the factors that accelerated the negative dynamics during the drought in the late 2000s. While the farmers needed to pump deeper and deeper, the regime in Damascus had to drastically reduce the subsidies when the global economic crisis hit the country (see for instance de Châtel 2014). The irrigation system basically broke down which ended the government's efforts to set up larger agriculture production for export in the drought-prone Northern Syria that was just established a few years before.

2. Climate security perspectives

Cascading effects of climate change and environmental degradation increase tensions and conflicts over natural resources. This is particularly the case, against the background of other big challenges in the region such as population growth, migration, sustainable development, conflict and violence. Given the scale and scope of the climate change consequences, and given that natural resources have traditionally been considered issues of national security in the MENA region, debates on and linked to climate change underwent a securitisation process in the last two decades (CNS 2007, WBGU 2009, Pettenger 2017). At the centre of the related debates and discourses is the question whether or to what extent climate change is causing violent conflict. One of the most prominent examples is Syria, which caused an intense academic dispute: one side argued that the extraordinary

drought in the 2000s was a decisive factor that destroyed the livelihoods of the farmers in Northern Syria which then moved to urban areas and later became part of the anti-government uprisings of the so-called Arab spring and the subsequent civil war (see for example Kelly et al 2015). The other side highlights the failure of agricultural policies aggravated by the global financial crisis, the oppression of marginalized socio-economic groups and state violence and assess that climate change is just one among several drivers that lead to the civil war in Syria (see for example Selby et al 2015). Even if a direct link between the drought and the civil war is contested and even if it is difficult to weight the actual role of climate change and water scarcity in relation to the Syrian war, it is clear that from a policy-oriented perspective, climate change and water did at least contribute to the fragile context in a way that should ideally be prevented.

The securitization of climate change and water availability resulted in alarming and partly aggressive rhetoric by some governments in the region. In Egypt, for instance, the Nile water question has always been perceived as matter of national security, given that about 95% of the Egyptian water resources stem from the Nile. As a consequence, Cairo has repeatedly been threatening Ethiopia implicitly or explicitly with war, should Addis Ababa begin to use the Nile water resources more intensely, 86% of which originating in the Ethiopian highlands. In 1979 for instance, after signing the Camp David Agreement, Egyptian President announced that “The only matter that could take Egypt to war again is water.” (as cited in The Times 2010). Egypt's Minister of State for Foreign Affairs, the later UN Secretary-General Boutros Boutros-Ghali, stated in 1985 that “The next war in the Middle East will be fought over water, not politics.” (as cited in UNU 2011). In the context of the conflict with Ethiopia over the Grand Ethiopian Renaissance Dam (GERD) which is being built by Addis Ababa upstream, President Mohammed Morsi referred to the Nile in 2013 when he stated “If it loses one drop, our blood is the alternative” (as cited in Al Jazeera 2013). Even rhetorically less militarized, there are similar patterns in other river basins, such as the Euphrates and Tigris basin, where downstream Iraq has been opposing the increasing water use by Turkey which already brought a decline of water discharge by one third within 40 years (von Lossow 2018).

Such rhetoric often also has a function in the domestic area at the same time. The purpose is to unify the society and close the ranks behind the government's policies and to discipline the country's own population or to oppress any kind of protest, when proposed policies and politics are presented as being without any alternative. Similarly, border protection measures have been justified by presumably preventing further degradation of water resources. In Israel and Jordan, immigration has increasingly been framed as an additional burden for the already scarce water resources. Moreover, securitization has also justified investments in large-scale infrastructure as a means of saving and protecting the country and the nation, even if the benefit of these projects is contested and while they imply remarkable negative social, environmental or economic downsides. Prominent examples are the Red Sea-Dead Sea project or the Grand Ethiopian Renaissance Dam (GERD) for both of which smaller alternatives with similar or even better hydrological benefits had never been seriously considered by the decision-makers.

Another result of the securitization of climate change and water is the potential downplaying of internal politically or socio-economically motivated violence, such as in the contexts of Syria's agricultural policies before the outbreak of the conflict or Iraq's anti-government protests during the summer 2018. Linking violent protests and in some cases even state violence to climate change, diminishes the governments' political responsibility for these escalations. Then, climate change serves as a case of “force majeure” that triggers violence and conceals governance and government failure. An extreme case of such kind of “greenwashing” of violence and war, partly state-financed or tolerated, was the case of Darfur. After the then UN Secretary-General Ban Ki-Mon publicly underlined the climate change dimension of the Darfur crisis and war in 2007, this reading has been

repeatedly highlighted by the Sudanese regime. The government in Khartoum remarkably downplayed the regime's role in the conflict, such as financing Janjaweed militias that fought in Darfur.

“Almost invariably, we discuss Darfur in a convenient military and political shorthand – an ethnic conflict pitting Arab militias against black rebels and farmers. Look to its roots, though, and you discover a more complex dynamic. Amid the diverse social and political causes, the Darfur conflict began as an ecological crisis, arising at least in part from climate change.” (Ban Ki Moon, Washington Post 2007)

In the EU and among its member states, climate change in the MENA region is increasingly understood and implicitly framed as climate security. It is perceived as a threat multiplier, additionally affecting fragile and political and security settings with the potential to further destabilise this geopolitically important region. Moreover, Europe increasingly sees its security threatened by migration, in particular from war-prone countries as Syria or Libya as a transit country. Even if the link between climate change and migration is contested, some areas have turned or will turn uninhabitable forcing people to migrate elsewhere and burdening already over-stretched ecosystems and strained socio-economic settings. A lot of the measures taken by European states to address root causes of migration and to eradicate poverty often equal interventions to adapt to climate change. They aim at preventing living conditions from further deteriorating in Europe's immediate neighbourhood. Despite the implicit and partly explicit perception of climate security, instruments and measures by the EU and its member states to address climate change are mostly still in the realm of development cooperation or development assistance. Meanwhile efforts in the diplomacy and security realm fall short, despite the fact that pressing issues of climate change and water scarcity even drive regional foreign and security policies in the MENA region.

3. MENA and the EU: Common interests and joint efforts

The MENA region and Europe both have for various reasons common interests to mitigate the effects of climate change in the region, such as maintaining – or better increasing – stability and security in the fragile and conflict-prone region. Increasing tensions and intensified conflicts over the control and utilization of natural resources, for example, will increasingly contribute to shape power relations and geopolitics in the region. Prominent examples are Turkey's dominant position towards Syria and Iraq over the Euphrates and Tigris or Israel's position towards Palestine over the shared aquifers. As climate change and water scarcity-related challenges do not stop at borders, joint efforts are inevitable to appropriately tackle relevant issues, such as floods or dust-storms. It is in the interest of all MENA states that their neighbours increase their resilience as it could otherwise have serious regional security implications.

To address these challenges significant investments are required. This even increases the incentive for regional efforts and provides opportunities for cooperation – between states and other actors in the region as well as between the EU and the region. Cooperation becomes an imperative driven by genuine self-interest – even if the relations between some states might be strained for other reasons. Inter-state water conflicts over trans-boundary rivers, which provide 60% of the region's water supplies, can actually foster dialogue and cooperation. Examples are the cooperation between Syria, Jordan and Turkey over the Yarmouk river or between Jordan, Palestine and Israel over the Jordan valley (EcoPeace 2015). For the latter, the significant solar power potential of Jordan and the water production of Israel could even be used to address climate change and water-scarcity related challenges at a regional scale.

Given its political prioritization in MENA and the EU, the topic of migration and its various dimensions acts as an entry point for increasing efforts of climate change and water scarcity adaptation – even if the direct link between migration and climate and water is contested. What has been labelled ‘root causes’ of migration addresses a whole set of challenges and policy fields aggravated by or related to climate change or water scarcity. Reasonable living conditions are one precondition to prevent people from migrating within countries, in the region or to Europe as well as to prevent protests and uprisings. The supply of sufficient water resources and the provision of appropriate climate change adaptation measures are key in improving livelihoods or at least preventing the conditions from further deteriorating. Another element which is as important is alternative sources of income for farmers that get increasingly under pressure due to climate change and water scarcity.

To achieve this regional goal, it is also inevitable to address the climate change consequences on the national level by investing in governance and management structures (Ward et al 2011). No matter whether climate change is regarded as a threat multiplier, slowing down socio-economic development or as an additional cross-cutting challenge such as population growth or urbanization threatening the development agendas of the MENA countries: The governance and management of water resources, agriculture, energy and other affected sectors allow to actively adjust to extreme weather events, changing rainfall patterns, droughts, etc. Measures taken need to increase resilience, reduce climate-related risks and improve early warning mechanisms among others. For the water sector, this includes for instance better management of demand and supply, re-adjustment of resource allocation, protection of the resources, better maintenance and investments in infrastructures as well as the use of efficient and innovative irrigation technology.

Finally, to successfully address climate change and water scarcity, it is also to identify, better integrate and support the local level. Activities on the ground do not yet receive the attention needed in the national, regional and international efforts to address climate change and water scarcity. It is necessary to concretely illustrate how climate change and resource scarcity provide also opportunities for innovation, development and economic growth. The promotion of existing positive approaches and best-case experiences need to be stepped-up in order to create momentum for more initiatives to be built in the realm of these policy fields.

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