Working Package

Water Security in the Middle East

To be led by IPCRI – Israel Palestine Creative Regional Initiatives

Over the last decades, the Middle East (Eastern Mediterranean region) has experienced a rapid process of desertification (Kepner, 2006, Zdruli, 2012). As a result of connected factors such as climate change, rapid population growth and industrialization, water has become increasingly scarce and is considered an expensive natural resource (Zdruli, 2012). This increased scarcity has significant political and socioeconomic impacts over the entire region. While water management is highly securitized and access to the resource is considered a national security issue, there is an urgency for ensuring water security for local communities while encouraging intra-regional cooperation and EU-Middle Eastern partnerships. Thus, the potential role of water in shaping future Euro – Middle East dynamics should be examined.

This Middle East region and especially the area comprised of Israel, the occupied Palestinian territories in the West Bank and Gaza, Syria, and Jordan make up one of the most water-scarce regions in the world (Maddocks et al. 2015). When states are water scarce, their food supply, public health, and economic growth are increasingly jeopardized (FAO, 2011, Maddocks *et al.*, 2015, Iceland & Otto, 2017). In water-scarce nations, access to water is thus of key importance for economic prosperity, political stability, and vitality of the civilian population.

Therefore, water scarcity can have a tremendous social impact such as growing poverty, deterioration of health, unemployment, and mass displacement that creates large refugee populations. According to some scholars, water scarcity played a direct role in leading to Syrian war and, subsequently, creating the Syrian refugee crisis currently facing Europe, and can become a source of new waves of refugees coming from the region (Maddocks *et al*. 2015, Gleick, 2017). Moreover, water scarcity already has a tremendous environmental impact. For example, the increased dependence on desalination in the Middle East, notably Israel, demands high usage of energy and is causing large amounts of highly-concentrated salt water to be dumped back into the Mediterranean sea.

These aforementioned problems associated with scarcity make water access a national security issue, and causes water access to undergo securitization. In MENA countries which are facing extreme water scarcity, water has been framed as an existential threat, leading governments to use and justify emergency measures at a highly concentrated governmental and military level. This framing gives the state license to use exceptional measures to address the threat posed from water scarcity and often pushes major state infrastructure projects such as desalination or water dams at the expense of local communities, natural streams and the general environment (Buzan *et al.* 1998, Fischendler 2015). In the case of transboundary

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water, a highly militarized and securitized framing can encourage unilateral management schemes that increase the risk of violent conflict and discourage cooperation (Trombetta 2008). Another significant consequence of securitization is that the urgency and emergency measures often lead to the exclusion of civil society, academy and NGOs from decision-making.

Given this, many experts have cited a need for desecuritization of water issues. Desecuritization is the reverse process of securitization in which an issue is brought back into the public realm of open, transparent, policy debate, and a wider amount of stakeholders are able to help resolve problems and influence decision-making (Buzan and Waever 2003, Fischendler 2015). A desecuritized context discourages the use of violent force, and can bolster institutional mechanisms to resolve conflicts and allows parties to engage in benefit sharing (Fischendler 2015, Turton 2005). In this way, desecuritization promotes de centralization of both infrastructure and decision-making power, empowers the community level in addition to the national and aids water security by enabling the resource to be managed in a more holistic manner with concern for a broader range of stakeholders.

Nonetheless, multilateral cooperation is crucial for effective transboundary water management. Parties on a shared water source share concerns regarding both the quality and quantity of water, and are both susceptible to the risk of conflict. Furthermore, states can enjoy absolute gains from cooperation, in which all parties can benefit simultaneously by working together, rather than one benefitting at another's expense. For example, states can improve their water management through exchange of data and best practices, and by more easily coordinating adjustment to abnormal conditions such as drought (Just & Netanyahu, 1998; Jagerskog, 2013). Additionally, regional cooperation can create an institutional mechanism for dealing with issues as they arise (Subramanian et al., 2014).

Accordingly, in November 2018, the EU council adopted conclusions on Water Diplomacy (13991) that recognizes the potential of water scarcity to affect peace and security and is dedicated to promote water security by strengthening local governments and promoting regional water agreements. The resolution states that multilateral cooperation is crucial for effective transboundary water management and declares the intention of increasing the EU engagement on water.

The shared concerns over water issues between states in the Middle East and the current problems associated with securitization create a crucial need for regional partnerships, and a unique opportunity for new EU-Middle East relations. The proposed Working Package will help address the need to produce policy-oriented research on water diplomacy. It will be composed of a Joint Policy Study and a Policy Brief. The Joint Policy Study will include four multi-disciplinary chapters of extended analysis. The research methodology will use a combined quantitative and qualitative data analysis regarding water resource management, qualitative interviews with experts and comparative analysis with other regions, examination

of official statements, policy documents and agreements (national and multinational), relevant academic literature and policy papers, economic indicators, and policy assessments.

The Joint Policy Study will include the following four chapters:

A. The Current State of Water

This chapter will begin with the examination of the state of water in the Middle East with a distinction between water stressed and water scarce areas. This chapter will then present the potential socioeconomic and environmental impacts of these trends both to the sub region of the Middle East and the larger Mediterranean region, with a special focus on the role of water in local and regional conflicts with special focuses on Syria and the Gaza Strip and the creation of refugee populations. The chapter will conclude by identifying the operational factors that may enable the Eastern Mediterranean to evolve into a more successful sub-region in terms of water management and the potential role of the European Union in enabling this development. Preferably, this chapter will be written by an expert in the field of water management.

B. Water Related Cooperation and Diplomacy

The scarcity of water in the Middle East has led to various historical and recent attempts to initiate cooperation and cross border agreements. This chapter will map the existing, operating and no-longer-functional initiatives, the potential opportunities and the domestic and international benefits they can bring to Middle Eastern countries. The chapter will analyze the attempts that have already been made by various countries to enhance cooperation, and will study the linkage between cooperation and geo-politics to clarify which sub-regional diplomatic opportunities can emerge from increased cooperation over water. The chapter will also identify which joint ventures can only become feasible after diplomatic/political issues between countries in the sub-region are resolved. Preferably, this chapter will be written by an expert in the field of international relations and water diplomacy. Additionally, the chapter will address the question of whether or not water agreements and cooperation can be a model for broader political agreements in the Middle East and specifically in the Eastern Mediterranean sub-region.

C. Desalination and The Nexus of Water, Energy and Security

Desalination has been adopted by many water scarce and water insecure states. This is especially true for Israel, which initiated massive water desalination and recycling operations after the 2007-2008 drought. This chapter will examine if and how desalination is a suitable and sustainable solution for water scarcity. This question will be answered through studying the externalities of the desalination process, assessing its economic and environmental impact and examining the uncertainty of financing the major capital and operational costs of such a system, which are higher than the majority of public financing systems can support or maintain in the long term and may increase general living costs. Additionally, the high demand for

energy and hence the water energy nexus will be reviewed and analyzed for its policy impacts. This chapter will be written ideally in partnership of experts in water desalination and finances.

D. De-securitization of Water as a Key for Water Diplomacy

De-securitization involves trust building and bringing securitized issues back into the field of politics and transparent public engagement, in which both governmental and non-governmental actors are involved in decision-making, and the issue operates within the confines of 'ordinary' democratic politics (Buzan *et al*., 1998, Fischendler, 2015). While experts often advocate for desecuritization, there is currently a gap between conceptual support for the process and operationalization of desecuritzation on the ground (Fischendler 2015). More evidence and studies are needed to examine how desecuritization can be facilitated, and to substantiate the theorized positive aspects of desecuritization made by its proponents. This chapter will analyze the process of desecuritization in order to better understand how it can be operationalized to ensure water security on the local level and to allow for more diverse civil society and governmental actors to collaborate on water issues, as well as issues of cross border water management and security. As climate change worsens and more states face water scarcity in the near-future, understanding how to reduce the negative impacts of securitization and facilitate processes of de-securitization for more effective water management will be crucial. Preferably, this chapter will be written by an expert in the field of water security.

The Policy Brief will address the following topic:

A. Locally Based Water Security

Civil society efforts to improve water management are a key to reducing harmful effects of water shortage, and building the foundations necessary for encouraging regional cooperation. This Policy Brief will examine the current role of civil society in tackling water and environmental problems and the role of civil societies in de securitization and the creation of trust and cooperation between rival countries. It will propose effective operational methods for de-securitization and highlight best practices. It will address the question of how local solutions from civil societies can be leveraged towards regional partnerships. This will include the review of local infrastructure developments for water security such as small scale desalination systems. The challenges of operating and maintaining these technologies and the empowerment it affords communities will all be assessed as well. Lastly, an operational valuation with specific areas of operation will be included focusing on how an integrated centralized and decentralized approach to water security and management can be implemented and which governance systems are required to support this approach.