

# The Middle East Institute Viewpoints

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### Water and Conflict in the Middle East

Discussions of transboundary water issues in regions of the developing world other than the Middle East have tended to focus on development potential and poverty reduction. However, with respect to the Middle East, much of the media coverage and a sizable portion of scholarly writing have been devoted to "water conflicts." Given the current amount of water available per capita, the high rate of population growth, and the high levels of interstate tension and conflict in the region, images of "water wars" do not seem far-fetched.

The water situation and water relations in the Middle East are framed by several undisputed and inescapable basic facts. The first is that the Middle East is a very water-scarce region. According to the 2008 Stockholm Water Prize winner, Tony Allan, the Middle East basically "ran out of water" in the 1970s and today largely depends on water from outside the region being traded into the region, primarily in the form of its food imports. Nevertheless, about 87% of the region's freshwater is allocated to agriculture. Continued water scarcity will affect the region's social and economic potential, increase land vulnerability to salinization and desertification, and raise the risk for political conflict around the limited water available. Still, arid zones are no less prone to violent behavior than states sharing water in water humid zones. (See, for example, the Oregon State University's database of the world's 263 international river basins: http://www.transboundarywaters.orst.edu.)



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At the same time, it is important to mention that there are many examples of cooperative efforts relating to the major transboundary water sources in the region. As highlighted in the FoEME co-directors' contribution on the Jordan River basin, local cross-border cooperation is ongoing. Efforts are being undertaken at a higher political level as well. In fact, water is an integral part of the 1994 Israeli-Jordanian peace treaty; Israel and the Palestinian Authority (PA) have a joint water coordinating committee; and over the years there has been cooperation on the Nile River through the Nile Basin Initiative (See www.nilebasin.org). Marwa Daoudy's article on the Euphrates-Tigris waters also points to the ongoing efforts to identify ways to move forward collaboratively on issues concerning those particular water sources.

#### PROBLEMS AND CHALLENGES

Sometimes analysts have made the water issue in the region into a natural scientific problem (or, for that matter, more of an economic challenge). However, water issues in this region are, arguably, political. Indeed, water was identified as one of the five key issues that should be negotiated in the final status negotiations between Israel and the Palestinians. Water also was identified as a key area in the multilateral track that was formed after the Madrid Peace conference in 1991. Even today, the group that focuses on water issues meets regularly and continues to work on joint projects (See www.exact.org).

Intertwined with politics, the cooperation over the transboundary water in the MENA region is neither a smooth nor

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an equitable enterprise. Analyzing the power asymmetries relating to water in the region has produced useful insights into the situation. A phenomenon that has been labelled as "hydro-hegemony" by the researcher Mark Zeitoun usefully directs our attention to the division of a shared river basin such as the Jordan Basin. Accordingly, the "hydro-hegemon" (i.e., the dominant power in the basin) maintains a position in which it receives more than its equitable share of the water. In the Jordan River Basin, Israel is in such a position; in the Nile Basin, Egypt is the hegemon; and in Euphrates-Tigris, Turkey is dominant. The hegemonic position seems not to be related to riparian position, but is a reflection of the relative economic and political power in the basin. It can be noted that basin hegemons tend to dominate and may "hijack" the prevailing discourse so as to suit their interests. Thus, it is crucial that the international community takes note of the need to support weaker states in transboundary settings with, for example, capacity building, so as to place the states that are at a disadvantage in a better position to interact, discuss, and negotiate their shared water resources. (For a useful link and access to work on this perspective, see http://www.lse.ac.uk/collections/geographyAndEnvironment/CEPG/LWRG/LWRG\_publications.htm.)

#### **CONCLUSION**

Water scarcity in the region is already severe and is projected to increase. In 2005, the World Bank projected that the population in the MENA region will have grown to a projected more than 430 million people in 2025 from around 100 million in 1960 and today's 311 million. Thus, the per capita water average will sink even further than today's already very low levels.

Past experience does not provide any clear evidence that water scarcity directly incites violent conflict and war between nation states. But as water scarcity becomes more severe, there is a higher risk of water conflicts. It is therefore important to remain vigilant about any potentially escalating disputes over shared surface and ground waters in the region. Governments and the international community should be especially attuned to the possibility of local conflicts sparked by reductions in the volume of water allocated to irrigated agriculture, the source of employment income for a large part of the population. The social pressures that will result are potentially severe.

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#### The Jordan River Gidon Bromberg, Munqeth Mehyar, and Nader Khateeb

#### The Jordan Valley is a lush, wetland ecosystem that is the biological heart of the Middle East region at large. As the meeting point of the Asian, African, and European continents, the valley is at the cross-



roads of biodiversity. In addition to the unique flora and fauna, the valley is one of the world's most important migratory pathways for birds. Over 500 million birds migrate between Europe and Africa twice a year, dependent on the Jordan Valley as a stopping ground on their long journey.

The great explorers of the 19<sup>th</sup> century were attracted to the Jordan River. US Navy officer William Lynch described the river as "the crookedest river that was," losing one of his boats on the journey to the power of the river with its many waterfalls. In the 1930s a Jewish Russian immigrant to Palestine, Pincus Rotenberg, decided to harness the strength of the river at its confluence with the Yarmuk River to build a hydro-electric power station that, until it was destroyed in the 1948 Arab-Israeli war, produced 40% of the electricity of Mandatory Palestine.

Sadly, today the lower Jordan River is almost dry. There is not enough water left in the river to turn a hamster wheel let alone an electric turbine. Of the 1.3 billion cubic meters of water that historically would flow down the river to replenish the Dead Sea each year, as little as 70,000 to 100,000 cubic meters is all that remains. The river has seen over 90% of its water sources diverted by Israel, Syria, and Jordan. Since the 1950s the waters of the Jordan River have been diverted largely to support large-scale irrigated agriculture. Competition for scarce water resources in the midst of conflict allowed little room to think about the needs of the river. The cultural belief in "making the desert bloom," supported by the economic necessity of conquering nature, was the prevalent ideology on both banks of the Jordan.

## From Conflict Transformation to Conflict Resolution? Marwa Daoudy

Intra-basin dynamics among the Euphrates and Tigris co-riparians — Iraq, Syria, and Turkey — are better described as leading to conflict transformation rather than conflict resolution. The process of interaction has effectively seen the de-securitization of water issues, but the roots of the conflict have not yet been fully addressed.



The interaction between the three co-riparians on the Euphrates and Tigris Rivers reflects the fundamental upstream-downstream characteristic of their relationship. This geographic asymmetry is reinforced by the economic and military advantages that favor the upstream riparian, Turkey. A combination of upstream projects in Turkey (GAP Project) and Syria impact the lowest downstream riparian (Iraq). Officially, the GAP Project is scheduled for finalization in 2014, while unofficial sources anticipate that the project would be completed in 2050 if it were to be fully implemented. The consequences for downstream Syria are also highly problematic in light of the centrality of the Euphrates Basin for the country's overall water supply (65% of total water volume). Considering the actual level of completion of the GAP (45%), the current issue is less quantitative than qualitative, as waters reaching Syria and Iraq are increasingly being polluted with pesticides and herbicides.

The process of negotiation has been mixed, with peaks of crisis and periods of cooperation that saw the signing of three bilateral agreements. In the multi-purpose Protocol of 1987, Turkey committed in writing to let a minimum volume of 500 m³/second pass through the Syrian border. Two years later, a bilateral agreement on water was reached for the first time when the two downstream countries agreed in 1989 to a 58% allocation of these waters to Iraq and 42% to Syria. Following a resumption of their water meetings, Syria and

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In place of fresh water, Israeli, Jordanian, and Palestinian sewage, diverted saline springs, and agricultural runoff are most of what is left to flow. Since 1948, the river valley is a military/border zone, off-limits to the public. Until recently, too few people even knew that a problem existed.

Over the last decade, awareness of the demise of the river has slowly grown; recently, there have been resounding calls for its restoration. Since 2001 EcoPeace/Friends of the Earth Middle East, (FoEME) has been working at the community level with youth, adult residents, and mayors of nine of the most important Jordanian, Palestinian, and Israeli communities along the valley. The project, Good Water Neighbors, has helped create cooperative efforts, generated from within the local communities, in support of the rehabilitation of the Jordan River.

In each community, a FoEME staff person and local resident has worked in close partnership with youth and adults to create awareness of their own and their neighboring community's water reality and to begin building the sense of all being residents of the same valley. In each community, water-saving devices were installed and schools transformed into water-saving model buildings. Regular tours took place to the river, having gained the cooperation of the Israeli and Jordanian military. Awareness has led to petitions, with thousands of signatures collected and circulated to local and international journalists who have written about the demise of the river. Having gained the trust of residents, the project was able to focus on policy level changes by involving municipal leaders. Mayors saw that local residents were active — and with the new media interest, local mayors were willing to be vocal and even jump into the river together, in a common call for its rehabilitation. Mayors from both banks of the river — Israeli, Palestinian, and Jordanian — have signed Memoranda of Understanding committing themselves to working together to achieve a more equitable distribution of water resources.

In January 2007, Jordanian and Israeli municipalities agreed to create a peace park at the confluence of the Jordan and Yarmuk Rivers. The park is planned to include a bird sanctuary, visitor's center, eco-lodges and nature and cultural heritage trails. The chosen area is where the bombed-out power station still stands. The plan for the park would convert the infrastructure in place to something productive that would generate tourist dollars for

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Turkey issued a Joint Communiqué on August 23, 2001. In the subsequent Implementation Document of June 19, 2002, the respective water administrations committed to implement common research projects and training programs.

This shift in Syria's and Turkey's mutual dynamics over water and security was greatly favored by the settlement of their pending "Kurdish issue." In the 1998 Adana Protocol, Syria committed to terminating support for the PKK and expelling 'Abdullah Öcalan from its territory. Öcalan's capture by Turkish authorities in February 1999, with the help of Israeli intelligence services, served as the first major catalyst for the severing of the link between security and water issues. The occupation of Iraq, the subsequent redistribution of cards for the control of strategic resources and areas of influence, and the consecutive shift in power relations, constituted additional turning points.

In 2003, the "new" Iraqi entity shifted from an economic and strategic partner over oil and Kurdish separatism to an unpredictable neighbor, backed by a powerful American occupier. An interdependent network of family and tribal relationships links the (Kurdish) Iraqi Minister for Water Resources, Abdul Latîf Rashid, to his counterpart in the Kurdistan Regional Government (KRG) through Jalal Talabani (President of Iraq) and Masud Barzani (President of the Kurdistan Regional Government), both of whom had benefitted from Syria's protection and citizenship during the Saddam Husayn era. Turkey and Syria have therefore been greatly concerned by the concretization of Kurdish claims in Iraq and the possible impact on their own population. Syria was eager to contain the birth of irredentism in its northeastern provinces and keen on developing security arrangements with the central government of Nuri al-Maliki. In 2008, Turkey took a step further by launching military incursions in the Kurdish-controlled territory in northern Iraq, with the intent of ending PKK attacks. In doing so, Turkey revived past military incursions carried out in line with "hot pursuit" agreements reached in the 1980s with Saddam Husayn. The very recent unveiling by the Turkish government of a \$12 billion investment package for the southeastern Anatolian provinces reveal renewed priorities placed on the expansion of water and socioeconomic infrastructures in the region in the heart of Kurdish activism.

The third bilateral agreement between Syria and Turkey in

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the local communities based on a healthy ecosystem. Creation of the park would be the first concrete step towards rehabilitating the river valley as a whole.

Most recently, FoEME has developed neighbor's trails or paths that tour each one of the nine project communities in the valley, highlighting the natural and cultural heritage sites but also the threats facing the Jordan River. Several thousand local residents from the respective communities and the population at large have already participated in these tours. Each tour ends at the Jordan River — witnessing the demise of the river and discussing the water issues of the other side. The first regional tour bringing foreign tourists from Europe, Africa, and North America took place in February 2008. A study of environmental water flows, needed to sustain a healthy Jordan, will soon begin as will an international design event — a collaborative charrette, involving architecture faculty and students from Yale University, together with local Jordanian, Palestinian, and Israeli architects — which aims to further conceptualize what a peace park on the Jordan River could look like.

The fact that the river continues to flow with sewage is evidence of how much work still needs to be done. At the national governmental level in Israel, Jordan, and the Palestinian Authority, the revival of the Jordan River receives little more then lip service. Grand technological projects like a canal from the Red Sea to the Dead Sea gain ministerial support with ease. The incremental policy measures of demand management, water conservation, pricing reform, and removal of subsidies are unlikely to attract media attention and therefore gain high level political support. Conflict, competition, and cultural arrogance have been responsible for the demise of the Jordan. Cooperation based on principles of sustainability is what FoEME believes will revive the Jordan and bring real peace for the residents of the Middle East.

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2001 opened a new chapter while failing to address volumetric and qualitative allocations, and the status of the third co-riparian. Since 2005, Track Two channels have gathered experts and former officials from the three coriparian countries through the Euphrates and Tigris Initiative for Cooperation (ETIC). The objective is to pave the way for the resumption of official discussions over shared water resources. Since the early 2000s, Turkey has shifted its discourse over transboundary waters from focusing on sovereignty to the advocacy of benefit-sharing on a bilateral basis with Syria. As a NATO member and neighbor to Syria and Iraq, Turkey's interest in regional stability resulted in its active mediation of indirect negotiations between Syria and Israel over the Golan Heights. Multi-purpose cooperation with Baghdad over water and oil also has been sporadically evoked by the two upstream riparians, and recent declarations called for joint projects. The three co-riparians officially declared last March their will to cooperate over shared waters by establishing a joint water institute with experts from each country. At the end of May 2008, the Iraqi Water Resources Minister visited the Syrian and Turkish capitals to meet about the resumption of trilateral talks and agree on flow increases from upstream sources into the two rivers.

The years ahead will show whether an evolution in the regional and international context will bring about a resolution rather than a transformation of the conflict over the transboundary waters in the Euphrates and Tigris basins.

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