**Conflict Factsheet**

**Jordan and Israel: Tensions and Water Cooperation in the Middle-East**

<table>
<thead>
<tr>
<th>Type of conflict</th>
<th>Intensity</th>
<th>Conflict Locality</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>1</td>
<td>Western Asia</td>
<td>1948 –ongoing</td>
<td>Agricultural / Pastoral Land, Water, Ecosystem Stability</td>
</tr>
<tr>
<td>Countries</td>
<td></td>
<td>Israel, Jordan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conflict Summary**

The rivers of the Jordan system all have a transboundary nature, a configuration which requires cooperation amongst all co-riparians to achieve sustainable water management. Yet the tensions which have prevailed between Israel and its Arab neighbours since 1948 have limited cooperation until today and at times escalated to war. However one country, Jordan, distanced itself from the other Arab countries in the region and signed a peace agreement with Israel in which cooperation over water played an important role.
Conceptual Model

Climate Change
Gradual Change in Temperature and/or Precipitation

Social and Economic Drivers
- Economic Development
- Infrastructure Development
- Land Use Change
- Pollution / Environmental Degradation

Context Factors
- Agricultural / Pastoral Land, Water, Ecosystem Stability
- History of Conflict
- Reduced State Capacity and/or Legitimacy
- Increased Land Scarcity
- Livelihood Insecurity
- Increased Water Scarcity
- Change in Access / Availability of Natural Resources

Fragility and Conflict Risks
- Intersite Tensions
- Intermediary Mechanisms
- Environmental Change
- Increased Water Scarcity
- Gradual Change in Temperature and/or Precipitation

History of Conflict
Conflict History

Note: This case is focused on the cooperative aspects of the water management relationship, with the generally difficult relations as a context factor. This is not a history of the violent conflicts nor is it meant to imply that these conflicts were caused by environmental factors.

In this region where most of the rivers are shared between two or more states, the continuous tensions between Israel and its Arab neighbours since 1948 have been an obstacle to cooperation over water. US mediator Johnston failed in his attempts during the 1950s to broker a multilateral agreement on water amongst all the co-riparians of the Jordan system, i.e. Israel, Jordan, Syria, Palestine and Lebanon. Yet the failed agreement later helped pave the way to a bilateral peace treaty between Israel and Jordan, which was signed in 1994 (see Yarmouk River: Agreement between Syria and Jordan). Even though some factors still prevent both countries from implementing all water clauses of the 1994 agreement, the co-riparians deepened their cooperation over water in early 2015 with an agreement to jointly build a "peace canal" – a project which the co-riparians had been discussing in recent years (Farooq, 2010), which will provide water both to Jordan and to Israel.

Conflict Background

Jordan and Israel are both tributaries to the Jordan and the Yarmouk River – rivers which are part of the Jordan River system. The Jordan River flows downstream through Israel where it forms the border with Jordan South of the Sea of Galilee. As for the Yarmouk, it originates in Syria and forms the border between Jordan and Israel, before joining the Jordan River downstream to the Sea of Galilee. Following the 1948 war which opposed Israel and its Arab neighbours, all co-riparian states to the Jordan system started unilateral water-development plans. Whilst Jordan announced plans to divert the Yarmouk river for irrigation purposes, through the construction of the East Ghor Canal, Israel began the construction of a National Water Carrier to transport the water of the Sea of Galilee to its arid South (FAO, 2009).

Unilateral water development projects escalate the conflict

These unilateral developments caused skirmishes amongst the co-riparians, which led the US to send a mediator to the region. After long negotiations to seek an agreement on water allocation amongst all the co-riparian states to the Jordan system, the process failed in 1955 (Haddadin, 2000). Although Israel was willing to negotiate, in 1955 a major drawback to a multilateral agreement was that Arab countries did not recognise Israel and feared that the plan could be seen as an implicit recognition of Israel as a country (Ibid.). Following the failure of the negotiation process, all countries continued their national water-development projects, which escalated the tensions. In fact, during the period of 1957-1967, Syria started several projects to divert the Jordan River, whilst Israel diverted the water of the Lake Tiberias and transferred it to its arid South (Baumgarten, 2009). The attacks that Israel conducted to destroy Syria’s water projects contributed to the spark of the six-day war in 1967 (Ibid.).
In summary, following the independence of Israel in 1948, tensions between the latter and the Arab countries in the region prevented multilateral cooperation over the waters of the Jordan River system. Nevertheless, despite the failure of the agreement, the process resulted in a rapprochement of Jordan and Israel, who subsequently met secretly during "picnic table" meetings over the 1960s and the 1970s and tacitly followed the Johnston plan (Brothwick, 2003). These secret meetings paved the way to broader cooperation in later decades, which will be described in the following section.

Resolution Efforts

Rapprochement between Jordan and Israel

The rapprochement with Israel at the end of the failed Johnston negotiation process led Jordan to distance itself from the position of the Arab countries. Whilst the latter continued to oppose Israel’s water development projects, Jordan tacitly agreed to them (Jägerskog, 2003). This change of position can be explained by several factors. In fact, due to its downstream location on both the Yarmouk and the Jordan River, the lack of any water-allocation plan put Jordan in a difficult situation. Whilst Israel diverted the Upper-Jordan upstream, Syria also diverted the water of the Yarmouk before it would reach Jordan, reducing the flow entering Jordan territory. Moreover, Jordan could not use the waters of the Lower Jordan, as these were polluted by the saline waters which Israel discharged to the flow (Brothwick, 2003).

The influence of the US on the bilateral rapprochement

In order to support bilateral cooperation, the US provided funding for both the Israeli National Water Carrier and the Jordanian East Ghor Canal Project, on the condition that both countries would approve each other’s plans (Jägerskog, 2003). The intervention of the US as a third party permitted to reinforce bilateral cooperation. US mediation played again a major role in 1969, when Israel bombed the East Ghor Canal following suspicions that Jordan was overusing the canal — although scholars also point out that this attack was probably also linked to the fact that Jordan was supporting the PLO, which conducted raids in Israel (Ibid.). US mediation then brokered an agreement between Jordan — which committed to stop the activities on its territory — and Israel — which agreed to stop its attacks.

Impact of the Middle-East Peace Process of 1991

The 1990s marked another step in the Israeli-Jordanian cooperation on water thanks to the Middle-East Peace Process (MEPP), which started in Madrid in 1991 (Baumgarten, 2009). In summer 1992 — during the MEPP process —, Israel reduced its water use and increased diversion of the Jordan to the Yarmouk to allow Jordan to meet its water demands, which was a significant cooperative step on Israel’s part (Haddadin, 2000). As a result, both countries reached an agreement on a draft common agenda in October 1992 and signed a Peace Agreement in 1994 (Ibid.).

A successful peace agreement signed in 1994
Amongst others, the agreement included clauses on water-sharing as well as mutual protection of water quality and it established joint institutional bodies such as the Joint Water Committee and Regional Water Data Banks Projects (Baumgarten, 2009; Kramer, 2011b). The treaty also included joint projects such as desalination plants which were to be undertaken in the four years following the signature of the text. This agreement was successful because it was comprehensive and succeeded in including side issues, which were hindering cooperation on water (Haddadin, 2000). For instance, Israel agreed to give back to Jordan the Wadi Araba land, which Israel seized during the 1948 and 1967 wars (Ibid.). Moreover, the political context in the 1990s played a role in the success of the process, as by then several Arab countries had recognised the existence of Israel (Ibid.).

Finally, the awareness that Jordan lacks water and oil resources has made the population more inclined to agree to such an agreement (Farooq, 2010). In February 2015, cooperation between Jordan and Israel has culminated with the signing of an agreement on a water-transfer project from the Red Sea to the Dead Sea – to protect the latter from depletion – and to build desalination plants to provide water to both Israel and Jordan (I24, 2015). After years of planning to assess the environmental impacts of the project, this initiative will be critical to provide water to very dry regions in both countries (Ibid.).

Drawbacks to cooperation

Yet several factors continue to hinder the sustainable management of the rivers which could be an obstacle to further cooperation between the co-riparian states. The main factor lies in the ambiguity of the treaty, which does not specify how water should be shared in case of drought, nor the precise quality of water that Jordan should receive from Israel (Kramer, 2011b). In 1999 due to a drought Israel reduced the quantity of water to Jordan by 60%, whilst in 1998 and 2009 Jordan received polluted water from Israel (Ibid.). These situations led to tensions in Jordan and could lead to tensions again in the future. According to Kramer, the Joint Water Commission has done little to address these outstanding issues (Ibid.). Moreover, according to Haddadin – who was the former senior negotiator to the MEPP –, a number of water provisions of the treaty have not been implemented yet (Ibid.). Scholars highlight that the lack of political will is one of the obstacles to the implementation of technical solutions (Kramer, 2011a).

This lack of implementation may be due to the asymmetry of power between both co-riparians in terms of capacity and financial resources (Ibid.). In fact, in a context of joint implementation, these asymmetries can play a very hindering role when it comes to selecting the tools and the technology – for instance databases or logistical instruments – to use to implement technical solutions (Ibid.). Countries with asymmetrical capacities would not necessarily have access to the same instruments.

Finally, despite the agreement there are still tensions between Israel and Jordan, notably at the level of the population. The feeling of Jordanians that the treaty is unfavourable to them, the accusations by the Jordanian people that Israel is violating the water-sharing agreement coupled with the tensions stemming from the unresolved Arab-Israeli dispute result in continuing resentment of the Jordanian population towards Israel (Yorke, 2013). The recent wars in Lebanon and in Gaza and the violence between Israelis and Palestinians have amplified the lack of trust of Jordanians towards Israel (Kramer, 2011a; Haddadin, 2014).

Conflict resolution recommendations
To remedy to these hindering factors, scholars have offered a number of suggestions. Since cooperation over water as one discrete resource has only led to limited implementation, linking water to other issues – such as solar energy in Jordan – might be a way of achieving win-win solutions, which would give greater incentives to both parties to cooperate (Farooq, 2010). To address the asymmetries of power, differences should be taken into account in the drafting of the initiatives and all stakeholders should be involved (Kramer, 2011b). Moreover, with the goal to lessen asymmetries of capacity, third parties could engage in capacity-building with the parties and initiatives could be developed individually with each party to prepare them for cooperation at a later stage (Ibid.).

In order to appease tensions amongst Israelis and Jordanians – which currently hinder economic exchanges –, scholars suggest continuing joint water development initiatives which lead to win-win situations (Farooq, 2010). The Project of a canal between the Red Sea and the Dead Sea is an example of such an initiative. Kramer also highlights the importance of projects such as the “Good Water Neighbour” – project implemented by NGOs in Israel –, which raise awareness on shared-water issues and promote cross-border cooperation at the local level (Kramer, 2011b). Such initiatives play a major role in building trust amongst cross-border populations through water cooperation. Finally, in addition to addressing these aspects, it is also important to remedy the vagueness of the treaty regarding water allocation in case of drought. Given the predictions of the Jordan’s Initial National communication to the UNFCCC – according to which the region will witness temperature rises, diminution of precipitation and reduced water availability over the next three decades –, the failure to remedy this loophole could lead to additional tensions between Israel and Jordan and affect the relations between both co-riparians (The Hashemite Kingdom of Jordan, 2013).

To conclude, the peace agreement signed between Israel and Jordan in 1994 has certainly reduced the likelihood of armed conflict over water. Nevertheless, a number of clauses on water still have not been implemented due to lack of political will and to the asymmetries between the two riparians. In early 2015, both countries showed renewed commitment to cooperation with their agreement to jointly build a canal to supply water to both Jordan and Israel and replenish the Dead Sea. Yet sustainable cooperation will require addressing the issues analysed above that may otherwise impede cooperation in the long term.
<table>
<thead>
<tr>
<th>Intensities &amp; Influences</th>
<th>Resolution Success</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTENSITIES</strong></td>
<td></td>
</tr>
<tr>
<td>International / Geopolitical Intensity</td>
<td>Reduction in geographical scope</td>
</tr>
<tr>
<td>Human Suffering</td>
<td>There has been no reduction in geographical scope.</td>
</tr>
<tr>
<td><strong>INFLUENCES</strong></td>
<td>Increased capacity to address grievance in the future</td>
</tr>
<tr>
<td>Environmental Influences</td>
<td>The capacity to address grievances in the future has increased.</td>
</tr>
<tr>
<td>Societal Influences</td>
<td>Grievance Resolution</td>
</tr>
<tr>
<td>Diplomatic Crisis</td>
<td>Grievances have been partially addressed.</td>
</tr>
<tr>
<td>No diplomatic crisis</td>
<td></td>
</tr>
<tr>
<td>Violent Conflict</td>
<td>Causal Attribution of Decrease in Conflict Intensity</td>
</tr>
<tr>
<td>No</td>
<td>Conflict resolution strategies have been clearly responsible for the decrease in conflict intensity.</td>
</tr>
<tr>
<td>Salience with nation</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Mass displacement</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Cross Border Mass Displacement</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Entry Points for Resilience and Peace Building

Cooperation
In 2015, Jordan and Israel agreed to jointly build a peace canal which will provide water to both countries. Jordan and Israel have also agreed upon and implemented several technological measures, such as desalination plants, water carriers, and canal projects.

Mediation & arbitration
The intervention and mediation of the US as a third party permitted the reinforcement of bilateral cooperation. In one occasion, the US provided funding for both the Israeli National Water Carrier and the Jordanian East Ghor Canal Project, on the condition that both countries would approve each other’s plans. As a result, the US brokered a peace agreement between Jordan and Israel.

Treaty/agreement
In 1994, Jordan and Israel signed a bilateral peace treaty that included clauses on water-sharing. The treaty established joint institutional bodies such as the Joint Water Committee and Regional Water Data Banks Projects.

Improving state capacity & legitimacy
The improvement of state capacities and financial resources would help alleviate the asymmetry of power between both co-riparians, which has contributed to the lack of implementation of some water clauses of the 1994 peace treaty.

Resources and Materials

Conflict References
Yarmouk River: Tensions and cooperation between Syria and Jordan

References with URL
Yorke, V. (2013). Politics matter: Jordan's path to water security lies through political reforms and regional cooperation.
Sixdaywar (2010).

References without URL

Further information
https://factbook.ecc-platform.org/conflicts/jordan-and-israel-water-cooperation-middle-east