Conflict Factsheet

**Israel-Palestine: Water-Quality Issues**

<table>
<thead>
<tr>
<th>Type of conflict</th>
<th>Intensity</th>
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<tbody>
<tr>
<td>Sub</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Conflict Locality**

- Western Asia

**Countries**

- Israel, Palestine

**Time**

- 1948 – ongoing

**Resources**

- Water, Ecosystem Stability

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**Conflict Summary**

Water-quality issues form an important part of the Israeli-Palestinian conflict. Despite the efforts of the countries' leaders to establish peace and to jointly protect water in the 1990s, both parties have failed to sustain cooperation. As this environmental issue transcends state boundaries, the failure to jointly address water-quality issues has had consequences on the environment and put the health of both the Israeli and Palestinian populations at risk.
Conceptual Model

**Climate Change**

- Demographic Change
- Economic Development
- Infrastructure Development

**Environmental Change**

- Increased Water Scarcity
- Pollution / Environmental Degradation

**Intermediary Mechanisms**

- Change in Access / Availability of Natural Resources
- interstate Tensions
- Public Health Risks
- Politicisation

**Fragility and Conflict Risks**

**Social and Economic Drivers**

- Water, Ecosystem Stability

**Context Factors**

- History of Conflict
- Power Differential
Conflict History

Since the creation of Israel in 1948, Israeli-Palestinian relations have remained contentious. After the six-day war in 1967 and the nationalisation by Israel of the occupied territories’ water resources, water reached a prominent place in the conflict. Although cooperation was attempted in the 1990s, until today the political antagonism between both parties has stymied joint water-sharing and water-protecting efforts. This case study will focus on the water-quality aspect of the conflict, whereas another case deals with water-sharing issues more generally (see Israel-Palestine: Water-sharing conflict).

Conflict Background

Amongst the three water sources shared by Israel and Palestine, Israel is located upstream on the Coastal Aquifers and downstream on the Mountain aquifer, the most important water source for Israel and Palestinians. Israel is also located both upstream and downstream of the Jordan. Whilst Palestinian use of water has been restricted by Israel since 1970 (see Israel-Palestine: Water-sharing conflict), Israel has been pumping more water than sustainable from the aquifers.

Water pollution and environmental hazards

The water issue between both countries goes beyond water-allocation aspects. Over-pumping has contributed to pollution from agrochemical products as well as seawater infiltrations (Brooks and Trottier, 2010). In addition to that, water quality in Israel and Palestine has been further affected due to widespread wastewater discharge into the environment.

Since the 1980s, Israel took unilateral measures to treat wastewater released by Israeli cities, which was polluting its water sources. The rapprochement of Israel and Palestine in the 1980s contributed to the signature of two peace agreements, in which both planned to cooperate on joint water-protection mechanisms. Yet whilst Israel has been taking measures to ensure wastewater treatment, infrastructure is lacking in the West bank until today and the population continues to discharge untreated sewage into the environment (Dinar et al., 2011). This pollutes water streams, which flow downstream to Israel and Gaza, and contaminates groundwater aquifers (Ibid.). In 2004, 60 million cubic meters of wastewater were discharged into the environment (Ibid.). The impact of such practices is even greater in industrial centres, such as Hebron’s industrial zone, which discharges highly hazardous carcinogenic chemicals into water streams, in part as a consequence of an Israeli import ban on water treatment chemicals that were identified as dual-use goods (Friedman, 2014). Not only do these carcinogenic chemicals infiltrate in the soils downstream, but they also pollute the water used by Israeli desalination plants to produce drinking water for the Israeli population (Ibid.).

An unsustainable situation for both parties

Even though Israel succeeded in unilaterally creating new water sources to meet the demands of its population, water protection require joint efforts from both Israelis and Palestinians. Reports which point out that 95% of water in Gaza is undrinkable demonstrate the emergency of the situation for Palestinians (EWASH, 2011). A 2015 UNCTAD report concurred, noting that ‘[t]he damage of contamination and over abstraction is such that the aquifer may be unusable by 2016 and, if unaddressed, the damage may be irreversible by 2020’ (para. 46.).
Moreover, the potential hazards of contaminated water flowing into Israelis households also show the impacts of the status quo on Israel and its population. Unsuccessful attempts to put aside tensions to cooperate on water issues have shown that parties were not able to isolate water from the conflict, in contrast to the case of Armenia and Turkey (see Turkey-Armenia: water cooperation despite tensions). Nevertheless, it can be hoped that the unsustainability of the situation will lead both countries to remedy the water-quality issues and accept the support of the international community in doing so.

Resolution Efforts

The Oslo Agreement: towards a solution to water-quality issues
Following secret meetings, which were held in parallel to the Middle-East Peace Process with the facilitation of the US and Norway, Israel and Palestine reached a peace agreement in 1993. In this “Declaration of Principles”, both parties agreed on temporary water allocations (Brooks and Trottier, 2010). It was only in 1995, with the Oslo II interim agreement, that issues of water quality and sewage were addressed (Dinar et al., 2011). The agreement established a Joint Water Committee as well as a Joint Palestinian-Israeli Environment Expert Committee (EEC) and gave each party a veto right regarding water-development projects (Ibid.). Through meetings of the Joint Committees, the Palestinian Authority agreed to build Wastewater Treatment Plants (WWTP) and to link certain cities in the West Bank to a WWTP located on Israeli territory (Ibid.). From the beginning of the joint operations, international donors played a major role in financially supporting costly Israeli-Palestinian sewage treatment projects (Al-Sa’ed et al., 2014).

Bilateral tensions prevent cooperation
Two years after the establishment of the Commissions, tensions reoccurred between both sides, which accused each other of violating the agreements (Dinar et al., 2011). Moreover, the Commission’s projects to link Jewish settlements to the West Bank’s WWTPs and to connect Palestinian cities to Israel’s WWTP – which represented for Palestinians a breach of sovereignty – met strong Palestinian opposition. According to the PA, such projects were “desirable from an environmental perspective, but not from a political one” (Ibid.).

Cooperation to control transboundary pollution was further affected due to the 2000 uprisings of the second Intifada, which caused considerable damage to water and wastewater infrastructure in the West Bank (Ibid.). International donors were forced to interrupt the construction of several WWTPs due to violence, and bilateral cooperation stopped during the first six months of the conflict (Ibid.).

Even though Palestinian and Israeli leaders publicly committed to separate water cooperation from the conflict (Ibid.), the Israeli army prevented the construction of WWTPs for Palestinians in the West Bank, although these had received all necessary permits (Al-Sa’ed et al, 2014). As Al-Sa’ed et al. argue, since the 1995 water treaty, Israel has continuously used its veto power over Palestinian wastewater development projects and prevented donor-funded sanitation infrastructure from getting the necessary
permits for construction (Ibid.; Friedman, 2014). Israel even prevented Palestinians from the effective use of a treatment plant – which was built in 1998 by the US Agency for International Development (USAID) – for fear that Palestinians could use one of the recycling components – sulphuric acid – to build a bomb (Friedman, 2014).

The inability of Israeli and Palestinian leaders to isolate water despite the considerable environmental impacts of wastewater discharge for both countries shows how difficult cooperation is in the context of an antagonistic, zero-sum political relationship.

**Water-quality issues cannot be solved unilaterally**

However, none of the parties benefit from such a situation. Even though technology developments – desalination plants – have allowed Israel to develop new water resources, water protection cannot be achieved unilaterally. Any rehabilitation measures unilaterally undertaken by Israel downstream are insufficient as long as polluted water continues to come from the West Bank upstream. Considering the impacts of contaminated water on the population’s health, cooperation over water quality should be an urgent priority. This urgency for mitigation actions is compounded by the consequences of over-pumping (notably salinisation) and the predicted effects of climate change (sea-water infiltrations). In principle, international donors – notably USAID, Germany’s Development Bank (KFW), France’s Development Agency’s (AFD), the European Union and Japan’s International Cooperation Agency (JICA) – who already funded wastewater projects since 1995, have pledged to provide the funds needed to remedy the wastewater situation (Al-Sa’ed et al, 2014). The support of the international community is however conditional on its acceptance by both sides.

**Civil society activism**

Whereas the governments of Israelis and Palestinians have been unable to break the deadlock on many questions of transboundary water cooperation, the region has also born witness to remarkable civil society activism in the interest of both peace and environmental sustainability by promoting cooperative efforts to protect a shared environmental heritage. EcoPeace Middle East (formerly Friends of the Earth Middle East) unites Jordanian, Palestinian, and Israeli environmentalists and seeks to further its objectives both through advocacy at the national and international level and grassroots activism, e.g. by building capacity at community level and seeking to strengthen cross-border environmental cooperation at the local level (for a short history & lessons learnt of the organization, see EcoPeace Middle East, no date).
<table>
<thead>
<tr>
<th>Intensities &amp; Influences</th>
<th>Resolution Success</th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Reduction in Violence</strong></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>There was no reduction in violence.</strong></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>Reduction in geographical scope</strong></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>There has been no reduction in geographical scope.</strong></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>Increased capacity to address grievance in the future</strong></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>There is no increased capacity to address grievances in the future.</strong></td>
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<tr>
<td><strong>7</strong></td>
<td><strong>Grievance Resolution</strong></td>
</tr>
<tr>
<td><strong>8</strong></td>
<td><strong>Grievances have been mostly ignored.</strong></td>
</tr>
<tr>
<td><strong>9</strong></td>
<td><strong>Causal Attribution of Decrease in Conflict Intensity</strong></td>
</tr>
<tr>
<td><strong>10</strong></td>
<td><strong>There has been no reduction in intensity</strong></td>
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**INTENSITIES**

International / Geopolitical Intensity

Human Suffering

**INFLUENCES**

Environmental Influences

Societal Influences

**Violent Conflict**

Yes

**Salience with nation**

National

**Mass displacement**

None

**Cross Border Mass Displacement**

No
Entry Points for Resilience and Peace Building

Cooperation
Due to the transboundary nature of the water sources in both Israel and Palestine, water protection cannot be achieved unilaterally. Cooperation over water quality should be an urgent priority.

Mediation & arbitration
International donors such as the United States Agency for International Development (USAID), Germany’s Development Bank (KFW), France’s Development Agency’s (AFD), the European Union, and Japan’s International Cooperation Agency (JICA) played a major role in financially supporting costly Israeli-Palestinian sewage treatment projects. The support of the international community is however conditional on its acceptance by both sides.

Treaty/agreement
Issues of water quality and sewage were addressed in an agreement between Israel and Palestine in 1995. The agreement established a Joint Water Committee and a Joint Palestinian-Israeli Environment Expert Committee (EEC).

Improving infrastructure & services
Palestine agreed to build Wastewater Treatment Plants (WWTP) through meetings of the Joint Committees. However, the Israeli army prevented the construction of WWTPs for Palestinians in the West Bank.

Resources and Materials

Conflict References
Israel-Palestine: Water-Quality Issues

References with URL
Al-Sa’ed, R. et al. (2014). Situation Analysis and Perspectives of Transboundary Wastewater Management Along Israel/Palestine borders.
Further information
https://factbook.ecc-platform.org/conflicts/israel-palestine-water-quality-issues