

Water Diplomacy and Water Security in the Israeli-Palestinian Conflict

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Published: June 18, 2023; intended publication: 2020

Abstract

This paper investigates the role of water diplomacy in ensuring water security in Israel and Palestine, as well as its potential to advance peacekeeping in the protracted conflict between the two. The analysis starts by defining water security from the perspective of both Israel and Palestine, and then delves into possible ways in which water diplomacy could solve water insecurity, along with an analysis of water management mechanisms including the role of international institutions and international law. The primary finding is that Israel and Palestine are interdependent within the context of transboundary water sources, and that according to strategic realism, Israel and Palestine will achieve greater water security by using water diplomacy. I conclude by elaborating a set of policy recommendations, emphasizing present issues refraining water diplomacy from ensuring water security, as well as what would help ensure it.

Keywords: water diplomacy, water security, Israeli-Palestinian conflict, peacekeeping

I. Introduction

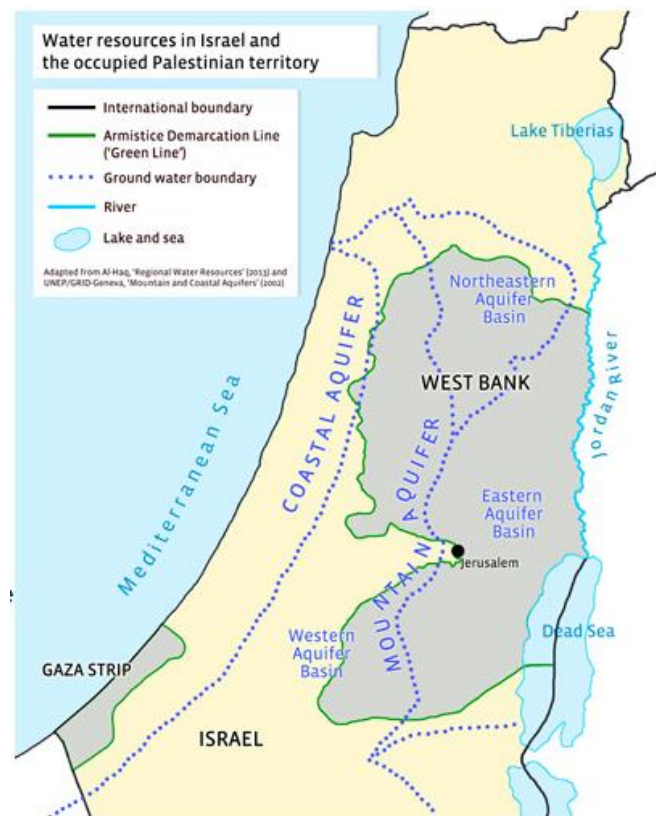
At the Paris Peace Conference in 1919, the Zionist delegation stated that what was then the West Bank, Golan Heights, and river Litani (now Lebanese territory) are “what we consider essential for the necessary economic foundation of the country. Palestine must have its natural outlets to the seas and the control of its rivers and their headwaters.” Yet, water access and distribution has been a central element in the Israeli-Palestinian conflict.

Israel and Palestine currently share three main transboundary water bodies, namely the Mountain Aquifer, the Coastal Aquifer and the Jordan River (Figure 1).

Figure 1: Water resources in Israel and Palestine¹

Following the 1967 Six-Day War, Mekorot, Israel’s national water company, gained exclusive control over the Sea of Galilee and the water resources in the West Bank, making it a national security concern for both sides. Later, the Oslo II Accords signed in 1995 included an interim agreement on water, and, more specifically, on: the allocation of water between Israel and Palestine, the obligation of both sides to ensure water management, and the establishment of a joint body to ensure cooperation and coordination of water management, the Joint Water Committee (JWC).² However, due to the fixed quantitative allocation of

water decided during the Oslo Accords along with the



lack of consideration given to demographic, natural and socio-economic developments that have affected the supply and demand of water, water resources are disproportionately allocated, reflecting significant inequalities, including Israel’s control over 80% of the West Bank’s water reserves.³ While water issues are still regulated under Article 40 of the Oslo II Accords, the population in Gaza and the West Bank has doubled, considerably increasing the demand for water. Moreover, climate change has had a multiplier effect on water scarcity, challenging the adaptive capacity of states

¹Koek, E. (2013, September 12). *Thirsting for water, 20 years after Oslo*. Retrieved from The Elders: <https://www.theelders.org/news/thirsting-water-20-years-after-oslo>

² The Israeli-Palestinian Interim agreement on the West Bank and the Gaza Strip Annex 3 art. 40, Sep. 28, 1995.

³ Lazarou, E. (January 2016). *Water in the Israeli-Palestinian conflict*. European Parliamentary Research Service.

to maintain socio-economic development and political stability.⁴

This article contributes to the existing extensive literature on water in the Israeli-Palestinian conflict and expands our understanding of the interplay between water diplomacy and water security within the context of the Israeli-Palestinian conflict. The article proceeds in three central parts. First, water security is defined and explored within the context of the Israeli and Palestine National Authority discourse. Second, water diplomacy is analysed as an opportunity to solve water insecurity using game theory, along with an analysis of water management mechanisms including the role of international institutions and international law. Last, this paper lists an elaborate set of policy recommendations for a successful establishment of water diplomacy to ensure water security.

2. Water security

The UN defines water security as *“the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving*

*ecosystems in a climate of peace and political stability.”*⁵

Given the prominent water scarcity in the region and the shared transboundary nature of its water resources, both Israel and Palestine have given great importance to water security in their national security agenda.

2.1 Israeli Discourse

Since its creation in 1948, Israel regards water as a crucial element in the development of the country and has pursued strong state control policies to maximize the utilization of water resources to further the country's economic development⁶. Furthermore, Israel has used water issues to shape its relations with riparian countries in two contrasting ways: either as a zero-sum game, gaining more control over water resources; or as a positive-sum game, through negotiations and cooperation. The former has been used with Palestine since 1967 and was exacerbated by the Hamas takeover of Gaza in 2007, which led Israel to violate the terms of the Oslo II Accords stating it had to increase water sales to Gaza from 5 to 10 mcm/ year.⁷ However, a UN report published in 2012 raised international attention to the living conditions in Gaza and stated it would be an unliveable place by 2020, and that “the aquifer could become unusable as early as 2016, with the damage

⁴ Carry, I. (2019). *Climate Change, Water Security, and National Security for Jordan, Palestine, and Israel*. Amman: EcoPeace Middle East.

⁵United Nations. (2013, May 8). *What is water security?* <https://www.unwater.org/publications/water-security-infographic/>

⁶ M., P., Tal S., Yeres J., & Ringskog, K.. (2017). *Water Management in Israel: Key Innovations and Lessons Learned for Water-Scarce Countries*. World Bank, Washington, DC.

⁷Eran, O., Bromberg, G., & Giordano, G. (2018). *Israeli Water Diplomacy and National Security Concerns*. Tel Aviv: EcoPeace Middle East.

irreversible by 2020.”⁸ Following this, in 2015, Israel decided to reverse its no-sale water policy to Gaza, based on the understanding that growing water insecurity in Gaza would worsen the humanitarian situation and fuel radicalization of the population. It therefore became in Israel’s national security interest to increase water sales to Gaza. Yet, public support for this policy change among Israeli citizens only increased when the crises in Gaza directly threatened public health and water security in Israel.⁹ Indeed, in 2016 the Israeli Ashkelon desalination plant, supplying 15% of potable water in the country, was shut down for several days due to high sewage flows out of Gaza.¹⁰ This led to a greater understanding of water security and the impact of water policies, reflected in Israeli Prime Minister Benjamin Netanyahu’s statement in 2016: “*When there is not enough water in Gaza, and Gaza is in the process of gradually drying up, the aquifers become polluted and when the aquifers become polluted, this is not limited to the Gaza side of the aquifer but also passes over to the aquifer on our side. Therefore, it is in Israel’s clear interest to deal with the water problem in the Gaza Strip.*”¹¹

2.2 Palestine National Authority’s Discourse

The Palestinian Water Authority (PWA) stated that “the water sector is one of the most vital sectors for the sustainable development at the national level”, reflecting

the equally important role water security plays for Palestinian national security.¹² Palestine has relied on Israel for water since 1967, as Israel has gained control over most of its water resources and issued a military order requesting a necessary permit from the Israeli army for the construction of new Palestinian water installations. Moreover, despite the Joint Water Committee (JWC) being made up of equal amounts of experts from both sides, until 2017, Israel still had a veto power over Palestinian water resource projects in all Areas, restricting the PWA in the development of its projects.¹³ In 2017 the JWC was revived and modified, reflecting loosening Israeli control in Area A and Area B, but still requires approval from the Israeli Civil Administration for projects in Area C, which comprises 60% of the West Bank.¹⁴ The Palestinian’s Water Authority Strategic Plan of 2016-2018 outlines several challenges faced in achieving water security, as well as strategic goals to ameliorate it, revolving around the establishment of institutions capable of providing good governance for the water sector, as well as water laws to regulate the sector and improve its services.¹⁵ Moreover, the PWA has established a set of 15 principles, titled “Elements of a Water Policy”, meant to guide Palestinian governance in the water sector in the future. Interestingly, as analysed by Dr. Rouyer¹⁶, “*Elements of a Water Policy*” is strikingly similar to the Israeli Water

⁸ UNRWA. (2012). *Gaza in 2020 a liveable place?* occupied Palestinian territory: United Nations.

⁹ Eran, O., Bromberg, G., & Giordano, G. (2018). *Israeli Water Diplomacy and National Security Concerns*. Tel Aviv: EcoPeace Middle East.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² State of Palestine Water Authority. *Water Authority Strategic Plan 2016-2018*.

¹³ Eran, O., Bromberg, G., & Giordano, G. (2018). *Israeli Water Diplomacy and National Security Concerns*. Tel Aviv: EcoPeace Middle East.

¹⁴ *Ibid.*

¹⁵ State of Palestine Water Authority. *Water Authority Strategic Plan 2016-2018*.

¹⁶ Rouyer, A. R. (1999). The Water Accords of Oslo II: Averting a Looming Disaster. *Middle East Policy Council*.

Law established in 1959, including a shift in water management. Indeed, presently, water sources are separately managed by villages and communities, and are privately owned. However, Article 1 of the guiding principles states that “all sources of water should be the property of the state”, which is a key principle also found in the Israeli law.¹⁷ Moreover, the PWA recently shifted its arguments of water scarcity from solely blaming it on the Israeli occupation and its control over water sources, to arguing that the lack of financial resources required to develop the water sector and infrastructures, the lack of proper institutions and governance to support the water sector, along with climate change acting as a multiplier effect, are also factors affecting water scarcity.¹⁸

3. Water diplomacy

According to the UN, “*water diplomacy is a branch of diplomacy, applied to bilateral and multilateral negotiations on water issues between and among states. Water diplomacy is about dialogue, negotiation and reconciling conflicting interests among riparian states. It involves the institutional capacity and power politics of states.*”¹⁹ Water has shown promising signs in past negotiations between Palestine and Israel, as seen in the Oslo II Accords in water was the first agreed upon item. However, the Oslo II Accords was designed to be an interim agreement which should have been re-negotiated within 5 years following its signature to be effective, as it

was designed according to 1995 demographics of the population and did not reflect a comprehensive conclusive agreement²⁰. Moreover, Israel’s relaxation of its veto over Palestinian water projects in 2017 also mirrors a step forward towards a more equal system of water management, despite its remaining veto power over Area C covering most of the West Bank.

3.1 Prisoner’s Dilemma

The transboundary nature of the three main water bodies (Figure 1) combined with the mutual importance of water security as a national security concern creates a state of interdependence between Israel and Palestine, reflecting a mutual interest. I argue that both sides are better off when using water diplomacy, illustrated by an iterated prisoner’s dilemma model (Figure 2). In this game theory model, rational actors (in this case Israel and the Palestinian National Authority) can choose to either use water diplomacy and cooperate, or defect, thereby maintaining their existing policies or using a more offensive approach. Two necessary conditions must be satisfied for the iterated prisoner’s dilemma game to function:

firstly, *Temptation to defect > Reward for mutual cooperation > Punishment > Sucker’s payoff*
and secondly: $2 \text{ (Reward for mutual cooperation)} > \text{Temptation to defect} + \text{Sucker’s payoff}$

¹⁷ Ibid.

¹⁸ State of Palestine Water Authority. *Water Authority Strategic Plan 2016-2018*.

¹⁹ Hefny, D. M. (2011). *Water Diplomacy: A Tool for Enhancing Water Peace and Sustainability in the Arab Region*. Cairo: UNESCO.

²⁰ Eran, O., Bromberg, G., & Giordano, G. (2018). *Israeli Water Diplomacy and National Security Concerns*. Tel Aviv: EcoPeace Middle East.

I argue that the first condition is satisfied in the short run, but not in the long run when the game is iterated. This is because cooperation through water diplomacy is the most rational strategy to achieve the mutual national interest of Israel and Palestine. Indeed, in the short run, the temptation to defect would be easier and greater for either side but would not solve the compelling water insecurity which would be prominent in the long run. Accordingly, this strategy is aligned with the theory of strategic realism in the sense that actors will act in their own self-interest, which in this case, due to their state of interdependence within the context of transboundary water bodies, means cooperating through water diplomacy.

Figure 2: Prisoner’s Dilemma Matrix

		Israel	
		Cooperate	Defect
Palestine	Cooperate	Water Security (Israel will benefit in long run, Palestine will benefit in long run)	Water Insecurity (Short-run benefit for Israel, deterioration for Palestine)
	Defect	Water Insecurity (low short-run benefit for Palestine, deterioration for Israel)	Water Insecurity (less time and effort for Israel and Palestine but no water security)

- If both actors defect, choosing to follow their present policies, it will cost both actors less time and effort, which is beneficial in the short run. However, in the long-run, water insecurity will

persist, increasing water scarcity and pollution issues, which is largely unsustainable.

- If Israel cooperates and Palestine defects, it would benefit Palestine in the short term if it uses a successful offensive strategy, increasing its direct water supply, but would be detrimental in the long run, as Israel would adopt tighter water policies thus preventing the achievement of water security for either side.
- If Palestine cooperates and Israel defects, it would be more beneficial for Israel in the short run, considering the amount of water sources it controls, but would not resolve the issue of the increasing water insecurity (including pollution). Moreover, in the long run, it would strongly impact Palestinian society, worsening the humanitarian situation in Gaza and fuelling radicalization of the population, causing unrest and increasing insecurity for Israel.
- If both actors chose to cooperate using water diplomacy, Israel and Palestine will obtain mutual gains, namely, greater water security for both.

However, there are several flaws and external factors to take into consideration when using such a simplistic game theory model. Firstly, the longstanding protracted conflict has led to mutual distrust between Israel and Palestine, which may cause them to fall in a spiral of mutual retaliation, thus blinding the long-term mutual benefits. Secondly, this model may hold true to the relation between Israel and the Palestinian National Authority but may not hold true to the Hamas in Gaza,

which needs to be considered a completely separate actor, with a different notion of rationality and different relations with Israel. Thirdly, from a Machiavellian perspective, leaders on either side will take actions considering they must avoid being resented by their people, and so must ensure they have public support. In the past, the lack of public support jeopardized peace talks. In 1995, Israeli Prime Minister Yitzhak Rabin was assassinated by an Israeli ultranationalist opposing Rabin's peace initiative and the Oslo Accords.

3.2 Regional Cooperation

*“Just as conflict over water can fuel instability, sound water management and regional cooperation on water issues can bolster harmony. The importance of regional efforts to integrate water issues in national and international policies is indispensable.”*²¹ Water diplomacy can ensure water security through different levels of water management mechanisms. At the macro level, international institutions as well as international law play a role in advancing water diplomacy and regional cooperation. In addition to being one of the largest aid donors to Palestine, the EU has been increasingly engaged with the aim of achieving lasting peace in the region.²² The Regional Initiative Programme (RIP) takes action on several levels, engaging the civil society as well as regional actors. It has provided support to the EU Water Initiative regarding the

Mediterranean and Middle East, including the management of transboundary water sources and river basins²³. Moreover, the EU finances external initiatives which promote trilateral water cooperation between Israel, Jordan and Palestine, such as the Regional Water Data Banks Project (RWDBP) that works in partnership with national water agencies, as well as the Good Water Neighbours Project (GWN), which uses mutual water concerns to further transborder cooperation.²⁴

Palestinian water rights under international law have been extremely ambiguous and subject to debate as they directly raise the question of Palestinian sovereignty and whether Palestine qualifies as a 'state'. This being said, customary international law characterizes riparian states as those that “arise as an incident of ownership to land adjacent [to a] river” and lies on the principle of *sic utere tuo it alienum non laedas*, based on property law, forbidding riparian states to use their 'property' in a way that would harm the property rights of their neighboring riparian state.²⁵ Hence, under customary international law, the lower part of the Jordan River should be equally shared amongst Israel, Palestine and Jordan. The United Nations Convention on the Law of Non-Navigational Use of International Watercourses (UNWC) was adopted by over one hundred nations in 1997 and entered into force in August 2014, establishing a legal framework for the cooperation on shared water sources,

²¹ Shay, D. C. (2017). Israel's Strategic balance: Opportunities and Threats. *Regional Water Security: Challenges and Opportunities in the Middle East*. Herzliya: IDC Herzliya.

²² Office of the European Union Representative, West Bank and Gaza Strip, UNRWA. (2016, May 16). The European Union Assistance to Palestinians.

²³ Kramer, A. (2008). *Regional Water Cooperation and Peacebuilding in the Middle East*. Adelphi Research.

²⁴ Ibid.

²⁵ Niehuss, J. *The Legal Implications of the Israeli-Palestinian Water Crisis*. Sustainable Development Law & Policy, Winter 2005, 13-18, 76.

which Palestine ratified in 2015.²⁶ Article 40 of the Oslo II Accords declares that “Israel recognizes the Palestinian water rights in the West Bank” and that these should be more precisely defined and negotiated in the Permanent Status Agreement. However, the interim agreement has never been re-negotiated, and consequently, Palestinian ‘water rights’ have not been explicitly defined nor has an integral set of rights for all shared water sources been drafted, restricting these rights to the West Bank part of the Mountain Aquifer.²⁷

4. Policy recommendations

As seen previously, water diplomacy is not doomed to fail and shows substantial opportunities for cooperation. The subsequent recommendations draw light on present issues refraining water diplomacy from ensuring water security for riparian states in the Israeli-Palestinian conflict, as well as what would help ensure it.

4.1. Address water security as an individual matter

Water must stop being used in other political agenda arguments and must not be seen as a national security weapon against the other party. The Water and Energy Minister of Israel, Yuval Steinitz, stated at an international conference in 2016: “*Water is water, regardless of the political situation [...] Regardless of the political situation we have to resolve the water problem and we have to prepare already today to supply enough water to everybody.*” Which exemplifies the mindset required to achieve water security for both Israel and

Palestine. Indeed, only now is Israel starting to understand that Palestinian water insecurity threatens both Israel and Palestine’s national security and that they are interdependent when it comes to water.

4.2. Use the gradualism model of sequencing in conflict resolution

The gradualism model of sequencing in conflict resolution is the most appropriate here and promises the best results. The rationale behind it is to address small issues before the most complex ones to build trust or, at least, foster a positive atmosphere. Thus, in this case, water security must be addressed on its own, without looking at complex and intractable issues such as Jerusalem or the sovereignty of Palestine as a separate state. This approach was used for the Oslo Accords which were arguably the most advanced peace processes between Israel and Palestine. Therefore, whether the Oslo II Accords are re-negotiated to achieve a permanent status agreement, or whether a new water agreement is formed, the gradualist approach must be used for a sound agreement on water to be effectively achieved.

4.3. Establish a comprehensive legal framework

A meticulous legal framework must be established, in the continuation of the Oslo II Accords of 1995, either through the re-negotiation of the Oslo II Accords as a permanent agreement, or through the signing of a new water agreement. It is crucial to clearly define Palestinian water rights and clarify them under customary

²⁶ Niehuss, J. *The Legal Implications of the Israeli-Palestinian Water Crisis*. Sustainable Development Law & Policy, Winter 2005,13-18, 76.

²⁷ Eran, O., Bromberg, G., & Giordano, G. (2018). *Israeli Water Diplomacy and National Security Concerns*. Tel Aviv: EcoPeace Middle East.

international law to provide a legal basis for further agreements regarding water sources.

4.4. *Take into account future changes in the environment*

Both meteorological and demographic changes must be strongly taken into consideration. The Middle East is considered a 'climate hotspot', being one of the most affected regions by climate change, and it is estimated that the yearly level of precipitation will decrease by 40% across Jordan, Palestine and Israel over the next one hundred years²⁸. In addition, changing demographics will also need to be taken into account when forming a new water agreement or when re-negotiating the Oslo II Accords, to ensure a fair allocation of water resources to meet the needs of the populations and avoid future water scarcity impacting one side more than the other, as it happened with the Oslo II Accords.

4.5. *Consider the Fatah-Hamas split*

Considering the differences between Israeli-Hamas relations and Israeli-Fatah relations (Palestine National Authority), water diplomacy must be addressed asynchronously to the PNA on one side, and to the Hamas in Gaza on the other side. The Fatah-Hamas split must be taken into close consideration as Israel cannot continue to isolate the Hamas in Gaza, but neither can it engage in talks or negotiations with the Hamas in an identical way as with the PNA. This implies a possible negotiation between the PNA and the Hamas prior to engaging with Israel, or a completely different water

agreement between Israel and the Hamas to address the issues in Gaza.

5. **Concluding Thoughts**

Israel and Palestine have failed so far in establishing a common strategy that would serve both their national security interests and would be mutually beneficial. However, water diplomacy shows promising signs in addressing water issues and achieving water security. The growing understanding of interdependence between Israel and Palestine within the context of transboundary water sources is crucial to advance water diplomacy and peacebuilding.

It is now essential for the population of both sides to realize this state of interdependence in order to increase public support for water diplomacy and achieve mutually beneficial water policies. For this to happen, on the one hand, Israeli politicians must stop denying that water insecurity in Palestine, such as the fairly recent water crises in Gaza, are largely due to extreme Israeli restrictions of access to water. On the other hand, Palestinian politicians must stop blaming all their water security issues on the Israeli occupation, thereby acknowledging their own deficiencies in water management.

If successful, water diplomacy could pave the way for future peacebuilding between Israel and Palestine, which could spill over to other subjects, by contributing in building greater trust.

²⁸Carry, I. (2019). *Climate Change, Water Security, and National Security for Jordan, Palestine, and Israel*. Amman: EcoPeace Middle East.

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