
THE OCCUPIED-OCCUPIER RELATIONSHIP IN THE CONTEXT OF WATER RESOURCES IN THE OCCUPIED PALESTINIAN TERRITORY

Fadia Dabes

Historical background

A great deal has already been written about the historical evolution, beginning in the early 1900's, of the Arab-Israeli water conflict. The overwhelming majority of authors and researchers agree that water has always been considered an important strategic element in terms of the Israeli policies, plans and regional development. Many would state that the root of the Arab-Israeli water conflict can be traced back to the Sykes-Picot Agreement in 1916. Under this particular document, which divided the regions of the Middle East between British and French control, no direct mention was made of water rights. The Sykes-Picot Agreement would most certainly have left the watersheds in the region divided in a most convoluted manner; the Litani and Jordan headwaters just south of the Huleh region would have come under French control, while the Lake Tabariyya would have been split into two, with one part coming under international control and the other under French control. The Yarmouk Valley, meanwhile, would have come under both British and French control, while the lower stem of the Jordan River would have found itself under international control on the West Bank and British control on the East Bank. Throughout the 1930's and the 1940's, the West further manipulated the affairs of the Middle East in order to control the resources of the region and then to create a Jewish homeland in an area long considered central to Arab nationhood. However, despite the promise of a "national home" in the Balfour Declaration of 1917, the Zionists were displeased with the land and water resources granted to the Jews by the British in 1919 and consequently embarked on a strategy of acquiring land as Israeli property in order to promote agricultural colonization based on Jewish labour. The following attempts to summarize Israel's obligations as a "belligerent occupier" in relation to the water resources in the OPT.

The water resources and their utilization

The sources of water in the West Bank are those renewable waters of the Mountain aquifer that rises and outcrops in the West Bank but extends across and below the territories of Israel. The main recharge acceptance area is located in the core of the West Bank. The overall bal-

ance in the West Bank is estimated to be 679 million cubic meters (mcm)/year, of which 483 is used by Israelis outside the West Bank and 75 mcm used by the Israeli colonies within the West Bank.

The Gaza aquifer, which is a classical coastal aquifer, represents the sole water source of the Gaza Strip covering an area of 360 (km²) with a total recharge of approximately 60 mcm/yr. The Gaza aquifer is threatened by seawater and salt ground water intrusion due to over pumping, and by pollution, especially nitrates from the overuse of fertilizers and infiltration of sewage.

The Jordan River has an average annual flow of 1,300 mcm. It is shared between Jordan, Syria, Lebanon, Israel and the OPT. Since 1967 Israel has been the dominant power in the Jordan River Basin. Of the 1,300 mcm annual flow, Israel utilizes 640 mcm. Also, since 1967, the Palestinians have been denied access to their legal entitlement from the River's water, which was estimated by the Johnston Plan of 1956 at approximately 259 mcm.

ISRAELI VS. PALESTINIAN UTILIZATION FROM THE SHARED WATER (MCM/YR)

Aquifer basin	Annual recharge	Israeli water use	Colonies water use in the West Bank	Palestinian water use	Total water use
Western aquifer	362	340	10	22	372
Northeastern aquifer	145	103	5	42	150
Eastern aquifer	172	40 from wells	50	54	144
Gaza aquifer	60	0	5-10	110	115-120

The rights and obligations of Israel for the OPT water resources

The international community regarded the status of the Palestinian territory occupied by Israel as a result of the 1967 war as an occupied territory subject to the laws of belligerent occupation, namely the provisions of both the Hague Convention of 1899 (II) and 1907 (IV) and Geneva Conventions of 1949.

The Hague Convention is widely believed to codify customary international law and contain rules legally binding on all nations, including Israel. The essence of these rules focuses on humanitarian concerns, as they emphasize the obligations and responsibilities of an occupying power towards the local population, as well as various rights relating to state and privately owned property. Additionally, the Regulations consider the occupying State as the guardians over natural and other resources, but do not entitle them to the right of ownership, to disposal or to transfer to its own state. This right of guardianship has its own limitations in terms of the amounts being used from these resources.

The Fourth Geneva Convention, which was concluded in 1949, and Protocol I added to it in 1977 are also relevant to this discussion. According to Article 55 of Protocol I, the occupying State shall be regarded only as the administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct. The Convention requires that an occupying State take full responsibility for meeting the needs of the civilian population under occupation. Care shall be taken in warfare to protect the natural environment against widespread

long-term severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended, or may be expected to cause, damage of the natural environment and thereby to prejudice the health or survival of the population. Wanton destruction of properties is considered a grave breach for which individual criminal responsibility can be attributed by virtue of Article 147 of the IV Geneva Convention. The following sections describe how Israeli policies and plans have constantly violated the rights of the occupied people in terms of their water resources, and what impact these policies have on the status of and prospects for Palestine's development.

The Parties' position on the water conflict

The Israeli position

In order to support their claims regarding the waters currently being utilized by Israel, Israeli legal experts have usually relied on the doctrine of "Prior Use" or "Historical Rights" when dealing with regional water resources. Moreover, they have persistently referred to all "existing uses" as non-negotiable and constantly raised the issue of the availability of "alternatives of comparable value" (desalination, wastewater reuse, and the importation of water from neighbouring countries) as a means to supply Palestinian needs. What this means is that Israel's official position in terms of its water dispute with its Palestinian neighbours is based on its objection to sharing the available water resources in a fair and equitable manner, as has been revealed time and time again in the Israeli style of negotiating over the past seven years. In short, although Israel is prepared to discuss the need to meet some of the immediate Palestinian needs, it nevertheless does not appear to consider the water issue as requiring a permanent solution.

For proof of the official Israeli position regarding the water issue, one has only to consider the statements of Israeli officials and political leaders. For example, David Ben Gurion said in 1956: "We have a water war with the Arabs, the fate of the Israeli State depends on whether we lose or win this battle. If we lose it, we lose everything."

Menahem Kantour the Director General of Tahal Water Company in 1979 was quoted in the *Jerusalem Post Supplement*, 4 May 1979: "Against each dunum irrigated in Palestine there is one thirsty dunum in Israel".

The former Israeli Minister of Agriculture, who in December 1990 was quoted by the *Ma'ariv* newspaper as stating the following: "It is reality and need which created the Israeli control over the water resources; it would be impossible to give up a drop of water in the West Bank."

As for the former Israeli Water Commissioner Meir Ben Meir, he has repeatedly declared the following positions: "(i) The Palestinians can solve their water problem through pursuing non-conventional sources or through purchasing from Israel; (ii) Although Israel is prepared to discuss allocations and rights pertaining to the uses of water with the Palestinians, it refuses to discuss sovereignty over the available resources; (iii) International Law does not apply in the case of the Palestinians since Palestine is not recognized as an independent state".

Finally Writing about the 1967 Six Day War in his 2001 memoirs, Israeli Prime Minister Ariel Sharon said that "while the border disputes between Syria and ourselves were of great significance, the matter of water diversion was a stark issue of life and death." "People generally regard 5 June 1967 as the day the Six Day War began", Sharon later told the BBC in 2003. "That is the official date. But, in reality, it started two-and-a-half years earlier, on the day Israel decided to act against the diversion of the Jordan [River]."

The Palestinian position

Of relevance to the overall discussion with respect to the Israeli Palestinian water conflict, is the Palestinian position on international law in solving the current conflict. This analysis is made to assess the willingness of the Palestinians to accept solutions that are based on the rules of international law. The Palestinians have continuously considered the notion of permanent sovereignty over natural resources as the legal background for their claims to water rights. Over the years, this position has been reflected in the writings of Palestinian experts and politicians and was reaffirmed in the recently adopted formal position from the water resources in a document entitled “Legal Framework of Permanent Status Negotiations: the Palestinian Water Rights”. This position builds on the spirit of international law, and it confirms that the first step for the Palestinians is to regain their limited territorial sovereignty over their water resources. However, the Palestinians have also acknowledged that the principle of equitable and reasonable utilization should govern the relationship between Israel and Palestine over the utilization, development and protection of shared water resources. According to this position, the Palestinians demand equal amounts for “Vital Human Needs” as the Israeli consumption. Furthermore, the water needs for economic and social development shall be determined based on methodologies that are to be agreed upon by both parties. As for the proposed solution to desalinate or treat wastewater as means of supply for the Palestinians, these shall be possible when the equity applies and reallocation of existing utilizations is implemented

The problems created by the occupation

Asymmetry among the Parties

Asymmetry appears to be in favour of Israel, and it exists at many levels and in different forms. It is the view of the author that unless the below-mentioned asymmetries are addressed and remedied, the plea of Israel to have a real Palestinian Partner in “Water and Environment”, will never materialize. The first level of asymmetry concerns the utilizations from the Mountain Aquifer. Whilst around 3 million Palestinians have access to 16% of the Mountain Aquifer’s renewable waters, Israel, – besides all the other surface and groundwater resources available for its use – has control over the remaining 84% of these waters. The major challenge is how to achieve an equitable, mutually beneficial arrangement for the Parties in conflict despite the current relations and inequity in the power structures.

Asymmetry of information and knowledge regarding the trans-boundary groundwater resources is another important problem. At the one end; there is an abundance of data and information on the Israeli side, and at the other, a paucity of data and information on the Palestinian side. By and large, the Palestinians were and still are recipients of data from the various Israeli or international organizations, due to the unilateral control over research and development in the field of hydrology and water resource development. This fact is serious, and would require great efforts in order to verify existing information and reproduce national Palestinian figures and statistics.

The third level of asymmetry concerns the parties’ interests in resolving the conflict. Israel, being the powerful party, does not appear to envision the benefits from achieving an equitable and reasonable solution based on the rules of international law. However, the Palestinians have failed so far to build confidence among the Israeli politicians and negotiators concerning their intentions towards the shared trans-boundary groundwater resources. The challenge is how to reach a balance between the parties’ interests at the table of negotiations to ensure that the solutions pursued are equitable.

Fourthly and finally, the level of development in the field of water infrastructure and services is far less developed in the Palestine Territories compared with Israel. After the establishment of the PA and especially after the take-over by the Palestinian Water Authority, many projects have been implemented to construct new water networks or to rehabilitate existing ones. This is considered to be a time consuming task that requires commitments from the Palestinians and Israelis, supported by the international community.

Parties' emphasis on positions

The Israeli position not to give up a drop of its existing use, and its persistent arguments concerning the need to develop new and additional water resources including desalinated water and reused wastewater need serious reconsideration. The Palestinians, on the other hand, confirm their rights to permanent sovereignty over their natural resources and rely on the principles of international law as the basis for resolving the conflict. These two extreme positions will never meet unless there is a mutual acknowledgement for the need to cooperate and build confidence in this vital field.

Resistance to international law

To date international law has had limited role in resolving the water conflict between Israel and Palestine. The existing inequitable utilization of the international watercourses – including trans-boundary groundwater – has been considered “de facto” as establishing water rights and the “no harm” rule appears to be the overarching principle embraced by at least the Israeli negotiators. From this researcher’s perspective, it is established that Israel is unlikely to be ready for a binding agreement relating to trans-boundary groundwater on the basis of international law. This justifies their hesitancy to conclude the issue of water in the 1995 Israeli-Palestinian Interim Agreement. The resistance on the side of Israel to conclude a legally binding agreement on the Mountain Aquifer is linked to three main reasons: (i) The great dependence of Israel on its waters; (ii) Israel’s undeclared recognition that their current utilizations of the shared groundwater resources violate the principles and rules of international water law, and (iii) Any future legal arrangement that builds on the rules and principles of international law and relevant best practice threatens Israel’s absolute control over the shared groundwater. As for the Palestinians, it is believed by this researcher that they have accepted the Interim arrangement on water for two main reasons. Firstly, given the transitional nature of these arrangements, the Palestinians expected that the final status negotiations will bring equitable solutions for them; secondly, the Interim Agreement is the only official document whereby Israel recognized the Palestinian water rights and therefore constituted – they hope – the first real step towards cooperation and agreement in the field of water. The realities proved that the signed agreements do not provide an adequate framework for the regulating the relationship of parties as far as the Mountain Aquifer is concerned. The next section further elaborates on the question whether or not, in the context of the Mountain Aquifer, the signed treaties brought mutual benefits to the Parties.

The inadequacy of signed agreements

The obligation to cooperate contained under the relevant regional treaties appears to serve mainly the objectives of the Israelis – namely protecting their existing uses. The Interim Agreement of 1995 provided a merely temporary solution for this eternally complicated conflict. The Agreement emphasizes the Israeli recognition of Palestinian water rights in the

West Bank, but gives no definition of these rights. Only additional supplies to serve the urgent water needs were allocated to the Palestinians under Article 40; these are to be developed from the Eastern Aquifer Basin and any other agreed sources. Furthermore, there is no agreement on the overarching legal principles that will govern the rights and obligations of both parties. The negotiations on these rights were postponed for the permanent status negotiations. According to the Interim Agreement these should have commenced in 1998, three years after the signing. However, to date, the unstable political environment within the region has hindered the commencement of any serious negotiations on water. If one compares the agreements with what has actually been achieved, there is a strong indication of the complexity of the situation and the inequality of the power structures that appears to favour the Israelis. The existing joint mechanisms and institutions – namely the Joint Water Committee – completely failed to fulfil their obligations. On a technical level, the essential projects for development were delayed, rejected or put on hold due to unjustified reasons.

Lack of vision on cooperation

Although one would argue that Israeli/Palestinian cooperation on water-related matters became active after 1993, the author's research in that regard reveals that genuine cooperation on the utilization, development and protection of the trans-boundary groundwater resources is still lacking. This is true because the magnitude of the problems outpace any effort for comprehensive management. Existing cooperation efforts don't operate within a comprehensive cooperative framework, rather they are scattered, fragmented and often lacking the long term vision. Additionally, little if any of the existing cooperation addresses the cross-border environmental and water issues of genuine pressing concern, as they involve solutions that are political in nature and require long term commitment. The current situation of ad-hoc and non-sustainable cooperation has widened the gap between the parties and deepened the mistrust in all respects and at all levels. The continuation of the *status quo* in relation to the imbalance in utilization and the uncoordinated management of trans-boundary groundwater are not in the interest of both parties. Any further delays in taking serious steps towards genuine co-operation will lead to a more deteriorated water situation and to inflation in the water crises, thus causing harm to the present and future generations and to the groundwater resources themselves.

Palestine's water institutions and good governance

The newly established Palestinian Water Authority (PWA), is empowered to regulate and manage all water resources for Palestine, including trans-boundary water resources. The mandates of PWA are not fully achieved, and will not be, unless the sovereign rights of the Palestinians over the trans-boundary groundwater are respected and recognized. The PWA is facing many obstacles in its efforts to rehabilitate, build and operate new systems and structures. There is a need for investment in the water sector. Building the water institutions together with the required infrastructure will require huge investments to accomplish it. This need calls for a genuine commitment from the international community and Israel to help establish strong institutions of comparable capacities to those in Israel, in order to pave the way for co-operation. Nevertheless the Parties were expected to start cooperating in 1993, 1994 and 1995, when they signed three consecutive formal legal arrangements. Presently, the emphasis on positions rather than interests on both sides continues to intensify the problem and amplify the complexity of the water conflicts.

Lack of donor coordination

There is a lack of strategic thinking and a lack of good programs to support. This is not to be blamed on the donors alone, but rather more on the recipient parties. The lack of a comprehensive vision for the cornerstones of successful cooperation described above, and the fact that most of the projects were of financial benefit, reflected on the donors and their programs. Accordingly, there is a tendency by donors to favour ad-hoc projects, as they are easy to implement and monitor. The impact of donor funding for multilateral and bilateral projects over the last 10 years has been poor and at best incoherent. For many years donors were acting out of mere “solidarity”, but now the time has come for a more professional approach.

The lack of proper coordination is a significant problem, with regard to coordination between Palestinian institutions and between donors. All donors have their own political agendas and particular reasons for funding joint projects. These agendas only converge to some, often limited, extent. The support is primarily politically motivated from the donor side, targeting the “democratic”, secular, “progressive western-minded”, often left-leaning organizations without any overall common strategy or deeper analysis of the factors determining the real political developments in the Palestinian community and within Israel.

Potential remedial and corrective strategies

This section introduces a range of potential remedial and corrective strategies ranging from the most difficult but most important to the less difficult, but might ultimately lead to success.

Putting an end to the occupation

Given the prevailing politics and the imbalance of power structures, this scenario is considered to be the most legitimate for the Palestinian people, but obviously the most difficult to achieve in the short term.

Raising the issue of compensation

According to Thomas Stauffer (1999), if Israel is to compromise on its control of water resources, it will do so only with compensation, as was the case with Israel’s withdrawal from the Sinai after the 1967 war. To estimate the value of this water for compensation purposes several factors must be taken into account. The process of valuation is not unlike that used by Jewish activists seeking compensation for Nazi crimes.

Calling for the intervention of a third party

The need for third party intervention then arises, particularly to address the issue of power inequity. The third party is recommended to consist of one member nominated by each party, plus one member that does not share the nationality of any of the parties, whom the nominated members who shall serve as chairpersons will choose. It is recommended that the team’s expertise is diverse and includes a lawyer, a hydro-geologist and an economist. The third party team could help the process by identifying aspects of the problem, the actors, and they could also act as an advocate not just for compromise, but also for ensuring the accuracy and reliability of facts and information. This stage must emphasize the universal need for reliable data and information, because without it the rational management of aquifers at any level is impossible.

Start by satisfying the vital human needs

It appears that “vital human needs” is a first call on water. The Committee on Economic, Social and Cultural Rights adopted the General Comment on the Right to Water in order to provide greater interpretive clarity as to the intent and meaning of the Covenant. The 2002 General Comment used the term “personal and domestic uses” rather than “vital human needs”. This term is broader in definition and content, and emphasises that the right to water takes precedent over all other water needs. The General Comment confirms that, although the adequacy of water required for the right to water may vary according to different conditions, some factors apply in all circumstances. The “vital human need” factor includes availability, quality, physical and economic accessibility, non-discrimination and information accessibility. Hillel Shuval, an Israeli water specialist and a professor at the Hebrew University in Jerusalem proposed estimates for the minimum legitimate baseline water needs of the Israelis and Palestinians. This amount is required to ensure a reasonable minimum standard of living in a semi-arid area suffering from serious water shortages. He has defined this as the Minimum Water Requirement (MWR). In 1991, at an Israeli/Palestinian meeting, he came with the suggestion that the ultimate MWR allocation for domestic, urban, and industrial use for Israelis and Palestinians alike should be about 125 cubic meters/person/year (CM/P/Yr).

The second call for states is to examine their economic and social development needs and the extent to which the available resources can meet all their needs without compromising the sustainability and long-term safe yield of the resources. The results of this study might recommend the reconsideration of water utilizations among the parties and therefore a decision in response will be crucial. If the results reveal that even under an equitable and reasonable utilization scenario, the existing resources are not adequate to compensate for the regional shortage, the parties are required to create options for mutual benefits, and to plan together for the valuable regional water resources in order to ensure their sustainable development. They could also cooperate in the areas of developing unconventional water resources, such as desalinated water or regional development projects. Linkages could be made to provide the Israelis with goodwill benefits while providing the Palestinians with technical assistance that could raise the level of knowledge in the Palestinian Authority concerning water resources in the Middle East to the level of the other parties. There is no real reason to build another water database in Israel, which no one in Israel uses, while there is a tremendous need for the Palestinian Water Authority to build its own water database.

Assessing the Parties’ equitable and reasonable utilization

For the evaluation of what is equitable and reasonable, the parties are recommended to adopt a unified method of evaluation that is commonly developed and accepted. The success of such evaluation depends mainly on the availability of accurate and reliable information to be shared by the parties. The study shall address the questions of how to implement the customary rule in international law on “equitable and reasonable utilization” in the case of trans-boundary groundwater, and how to best inform and influence decision-making. This will be done by examining the type of data needed to incorporate existing legal, technical and social science requirements as well as needs for the future. What is the format for data collection and presentation to allow exchange and easy access? How dynamic is the process?

What are the triggers for the reassessment? Is there a generic model that could be implemented in cases of trans-boundary groundwater aquifers? The denied access to their share in Jordan River water has to end as soon as possible. This will secure some additional 200 mcm/yr available fresh surface water resources that are not accessible to the Palestinians at the present time.

The final conclusions of such a study will offer guidance to the parties on how to determine their legal entitlement from these shared resources. The study shall assess the quality and adequacy of the available data to identify gaps and needs for data improvement. The long-term vision must be a unified comprehensive database that incorporates all water data and related information pertinent to the development utilization and protection of the shared water resources. If it is practically difficult to carry out the assessment jointly, the determination of the factors and their relevance to the trans-boundary groundwater can be done separately, the results of which can be discussed jointly to reach an agreement with a reasonable outcome. Logically, following this unified method of evaluation is expected to yield results that are not significantly different and, therefore, reaching consensus becomes easier. Although employing the Legal Assessment Model paves the road for more proactive steps, the process for completing the assessment is essential.

Harmonizing interventions by the international community

The requirements of international co-operation cannot be accomplished unless there is a strong commitment from the multilateral institutions and governmental donor agencies to fund such activities. This commitment must derive from the governments' genuine intention to end the conflict between the Parties peacefully and amicably. It is true that current investments in the water sector in Palestine and Israel are huge; it is however believed that in the field of international co-operation these investments are improperly planned.¹ The reason for that is obvious, since as of today there is no unified donor coordination policy towards the water conflict and the means for its resolution, and accordingly projects are not planned procedures that ensure no duplications and over-investment. There is a need for the harmonization of donor policies and strategies towards the water problems and more intensified efforts.

Conclusions

A major conclusion of this paper provides that although international law continues to apply under the belligerent occupancy, Israel appears not to have intended to employ these rules and principles to resolve the existing water conflict. Accordingly, Israel has obligations that have to be fulfilled, including but not restricted to the safeguarding of the natural resources including water. The relative national and international management of water is essentially a matter for the applicable rights in times of peace. However, due to the importance of water for everybody, humanitarian rights dedicate some arrangements decreed in all times and places. Therefore the study confirms that the principle of equitable and reasonable utilization applies in times of peace as well as under occupation.

It has to be stated that the signed protocols, declarations and agreements to date concerning the water conflict have been dealt with separately from the principles of international law. The existing inequitable utilization of the international watercourses has been considered "*de facto*" as establishing water rights and the "no harm principle" is the overarching

principle by at least the Israeli negotiators. The international legal rule of equitable and reasonable utilization is not the guiding rule in any of the agreements, and is not found specifically in the interim agreement. The proposed approach to the solution lies entirely in the reallocation of the current uses on the basis of equity and principles of international law.

Given the current evidence of Palestinian water requirements, the legal entitlements of the Palestinians are estimated to be four times the current Palestinian utilizations. The increase in the Palestinian utilization must be secured from the available fresh water resources or any other sources of comparable value based on the principle of equitable and reasonable utilization.

Agriculture will continue to be the most important sector for the Palestinians. Even with the recent decrease in its contribution to the GDP or percentage of external exports this fact is not expected to change. If adequate amounts of water are secured to this sector and restrictions over export are lifted, these sectors will recover and revitalize. Additionally, there will be an inevitable increase in industrial water demand in the coming 20 years as a logical consequence of revitalizing this sector.

One of the issues that were confirmed within this study is that the available assessment of existing resources is not accurate. For more than 35 years now there has been no comprehensive study on the hydrology/hydrogeology of the WB. Most of the significant studies are in the Hebrew language and are not available for the Palestinians.

Notes

1. Of the main donors funding the Multilateral Water Resources Working Group on Water are the USA, European Union, Japan, Canada, Norway, and France.