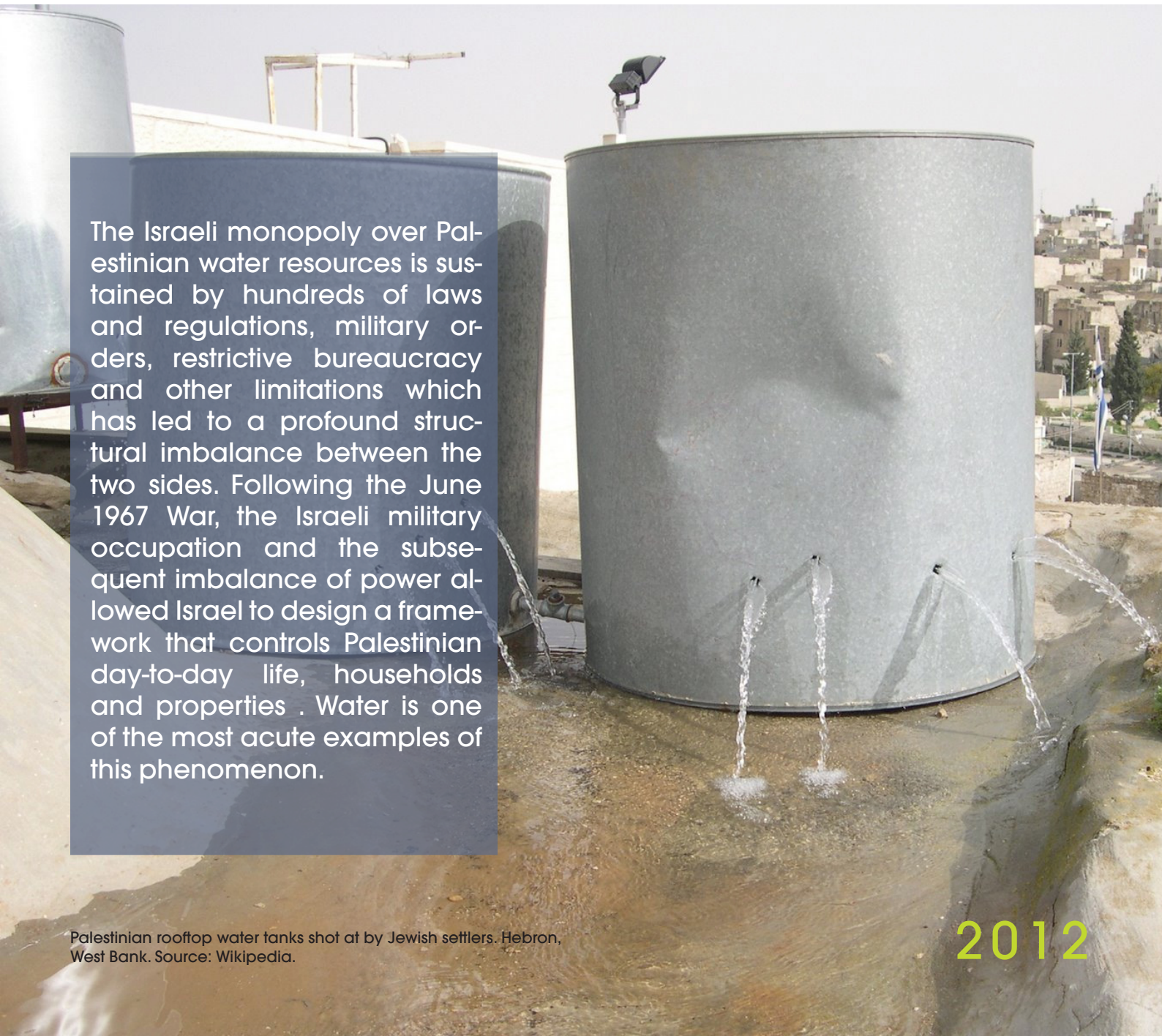


CEPR **MEMO**

Israeli Water Exploitation in the Occupied West Bank



The Israeli monopoly over Palestinian water resources is sustained by hundreds of laws and regulations, military orders, restrictive bureaucracy and other limitations which has led to a profound structural imbalance between the two sides. Following the June 1967 War, the Israeli military occupation and the subsequent imbalance of power allowed Israel to design a framework that controls Palestinian day-to-day life, households and properties. Water is one of the most acute examples of this phenomenon.

INSTRUMENTS OF CONTROL

Territorial divisions

The Oslo Accords divided the West Bank into three geographic areas: A, B and C. Area A is under Palestinian “National” Authority (PA) responsibility in terms of civil matters as well as security and mostly includes Palestinian cities such as Ramallah, Nablus, and Bethlehem. Palestinian villages and other rural areas are mostly located in Area B, which is under full civil PA control, but security responsibilities remain with the Israel Civil Administration. All other areas (around 60 % of the land) are defined as Area C, which includes Israeli settlements, roads to access settlements, buffer zones, strategic areas, most of Palestinian farmland and water. The security and civil jurisdiction in these areas is maintained by the Israeli military occupation. This territorial administration is relevant in terms of water management within the West Bank. In Areas A and B, springs and wells to access ground water are mainly under control of local Palestinian municipalities, as are utilities and private Palestinian owners. In Area C, the full control of water infrastructure (wells) and natural springs is under Israeli control.

Oslo Accords – Article 40

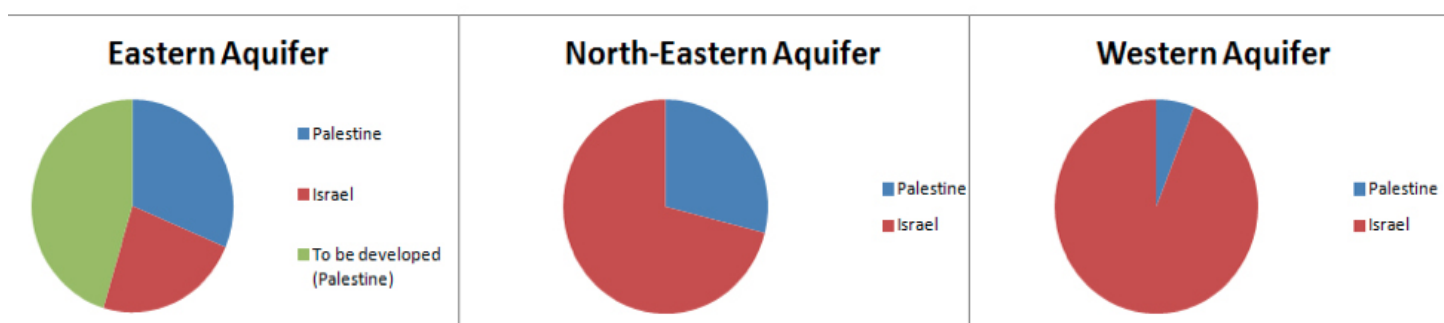
The Interim Agreement signed in 1995 was also meant to deal with issues related to water consumption in the West Bank. A strategy was established in order to solve the serious water shortage in Palestinian towns and villages,

though without changing Israeli consumption or demand. Article 40 of the Oslo Accord did not acknowledge the excessive allocation of water to the Jewish settlements and have far underestimated the amount of water available to the Palestinians (Scarpa 2004: 147). Both the projected population growth and the expected supply of water from different aquifers were miscalculated. Moreover the calculations were based on limited access to water data especially concerning extraction from the Eastern Aquifer, a water basin lying underneath the West Bank. The over-exploitation of water resources available and the lack of infrastructure to manage them were issues that were not addressed in the negotiations. Moreover, the lack

of regulation on the access to water for Jewish settlers made the procedures for extraction more complex and less sustainable. International investment strategies in the water sector were de-

veloped in order to address the short-term needs of the population as a way to delay a potential water crisis. No clear long-term strategy was developed by international donors or by the Palestinian Water Authority concerning the drilling of new wells and sewage disposal. The inadequate disposal of polluted water and the over-exploitation of water resources are therefore added to the overall problems of cooperation between the Palestinian Authority and the Government of Israel in the regulation of the water sector.

“Israel recognizes the Palestinian water rights in the West Bank. These will be negotiated in the permanent status negotiations and settled in the Permanent Status Agreement relating to the various water resources.” - Article 40, Oslo Accords



Projection for Water Consumption from West Bank Aquifers pursuant to Article 40, paragraph 20 and Schedule 8 paragraph 1 of Appendix

Joint Water Committee (JWC) operating principles

The lack of clear separation between water policy formulation, regulation and implementation is a severe problem in the Palestinian water sector. However, the main obstacle to the efficient operation of the Palestinian Water Authority (PWA) is the power imbalance between Israeli and Palestinian actors. For example, PWA departments responsible for licensing or permits are controlled by the Joint Water Committee (Joint Israeli and Palestinian organization) and needs its approval for every suggested project (Klawitter and Barghouti 2006: 5). In other words, the power asymmetry between the two sides challenges the PWA's institutional role and provides it only with limited control of the West Bank water resources.

After the Oslo Accords, the JWC was supposed to act as an overall regulatory body. With regard to the operating methods of JWC, every water infrastructure development project in the West Bank (Palestinian or Israeli) needs to be approved by this coordinating body. This includes every pipeline greater than 5 cm diameter and 200 m length, every well that needs constructing or rehabilitating (Selby 2004: 207). Formally, the JWC is composed of an equal number of delegates from the Palestinian Water Authority and the Israel Water Commission and should function as a coordinating body where all decisions are taken by consensus. However, the JWC did not fulfill its role in providing effective collaborative governance for joint resource management, which led to weak governance and mismanagement in the Palestinian water sector (Selby 2004: 3).

These inequalities within the JWC can be seen by examining the decision-making process at the joint committee.

At first sight, the decision-making powers are equally divided between the two sides at the technical level (Zeitoun 2009: 100). However, other

powers available to the Israeli side play a significant role in dismantling this formal equality. Firstly, JWC cannot make final decisions for permits requested in Area C. These areas are under full control of the Israeli Civil Administration which takes ultimate decisions regarding permits there (Figure 1). In addition, JWC does not have jurisdiction over the water resources

"If any of the technical, political or military interests of the Israeli side may be compromised by a Palestinian project tabled at the JWC, the water project will be blocked" (Zeitoun 2009: 102).

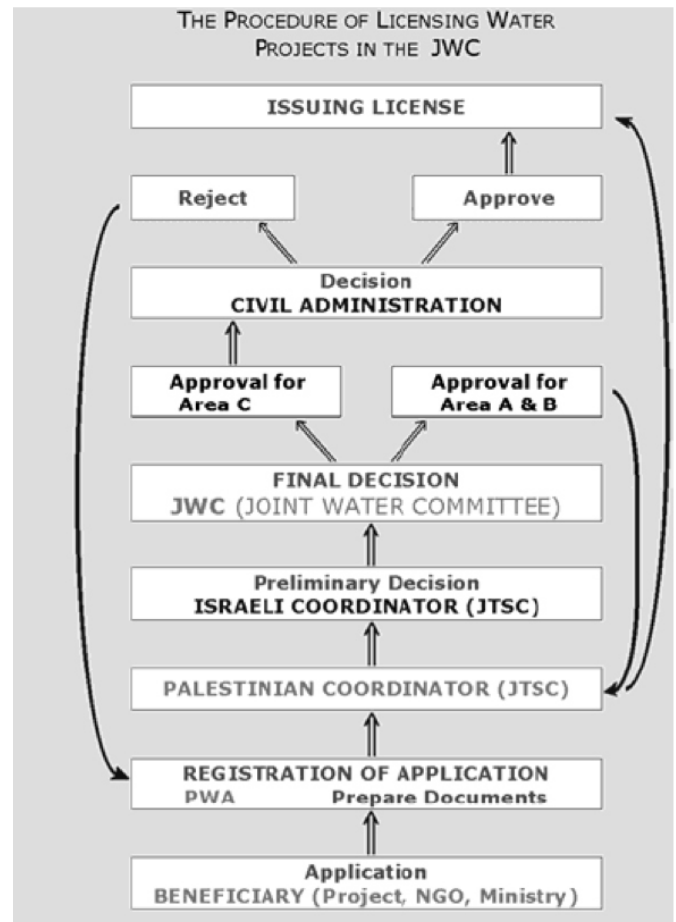


Figure 1: Joint Water Committee: Project Licensing Procedure.
Source: Messerschmid 2003: 4

in Israel's territory, namely resource management and monitoring of water resources within Israel proper is not JWC's responsibility.

The operating and decision-making nature of the committee itself is also a subject of power imbalance. At the JWC, Israel has an effective veto over the decisions regarding all water projects. However, the Palestinian side at the same committee is not provided with the equivalent veto.

As a result, high numbers of Palestinian projects were rejected or delayed by JWC since 1995; many water projects are still waiting for JWC approval. In

comparison, all Israeli proposed projects, except one, have been approved (Lunat 2010). While the principle of equal representation applies to both sides, in practice, Israel has vetoed the Palestinian development of water resources in the West Bank.

Military Orders

Besides the administrative measures, the complex legal system issued by the Military Commander functions as a codification of control as well as an institutional framework of the occupation. From the beginning of the Israeli occupation, with not more than three Military Orders, Israel has created a “mechanism of total control” over water in the West Bank (Messerschmid 2004: 3). Shortly after the June 1967 War, Military Order 92 transferred full authority over all water concerning issues in West Bank and Gaza Strip from various local utilities to an Israeli official appointed by the area military commander (Mair et al. 2003: 12). Moreover, Military Order 158 introduced a permit system for all water projects. In other words, the law prohibited the construction of any new or reconstruction of old water infrastructure without a permit from an official appointed by the area military commander. The military order also provided this Israeli official with the right to refuse a permit without a justification and no mechanism was established to appeal the official’s decisions (Mair et al. 2003: 12). Lastly, Military Order 291 declared all water resources to be the property of the State of Israel. In this way the military orders ensured full control of state-owned natural resources and built up the legal system for issuing drilling permits and extraction rates for Israel.

Destruction of Palestinian water facilities

Other control measures include the efficient and potential application of physical force. The Israeli Army’s destruction of Palestinian water facilities on the grounds that they were constructed without permits is frequent activity. These water facilities mainly include rainwater harvesting and storage cisterns used to collect water during the rainy season and to store it for use in the dry season, agricultural pools used for field irrigation and spring canals. Many Palestinian communities are highly dependent on rainwater collected during the rainy season. Since rainwater becomes a critical source for their domestic and agricultural use, these harvesting cisterns play a major role in villagers’ livelihood. However, since the resumption of the *intifada* in September 2000, the Israeli Army constantly demolishes the rainwater harvesting cisterns and prevents villagers from building new ones or rehabilitating the old ones (Amnesty International 2009).

Destroying and confiscating water tankers guarantees control over the Palestinian domestic water use and paralyses day to day activities. Such repeated actions by the Israeli Army are particularly frequent in the Jordan Valley where water tankers as well as tractors or trailers for transporting water to and from villagers is a constant Israeli practice (Amnesty International 2009: 54-55).



Isolated communities depend on cisterns to store water for domestic consumption. Source: EWASH, “Down the Drain”, March 2012.

In addition, Jewish settlers frequently carry out attacks on Palestinians and their water facilities. In many cases, settlers from nearby colonies enter Palestinian villages and throw various substances into rain harvesting cisterns which makes them no longer suitable for human or animal consumption. When settlers and Palestinian villagers are using the same pipes for domestic water consumption, the water pipes to the Palestinians are frequently cut by Jewish settlers. These activities carried out by settlers do not fall under the category of official state policies, but Israeli authorities rarely investigate such attacks and the ones who are responsible usually remain unpunished. Jewish settler attacks on Palestinian water facilities are often carried out with the knowledge of Israeli soldiers, but without their interference.

Palestinian water dependence on Mekorot

In 1982, the West Bank's water infrastructure previously controlled by the Israeli Army was transmitted to the Israeli national water company Mekorot. In 2007, Mekorot and the Israeli government signed an agreement under which Mekorot became a 100 % state-owned company. Palestinian dependency on Mekorot water supply operates in different forms. Only a small percentage of rural villages or bigger towns are connected to tap water network and in this way dependent on direct Mekorot decisions about allocation rates of water supply. More often Palestinian purchasers are dependent on water provided at Mekorot water filling stations and later stored in cisterns or roof tanks. However, the most common form of dependency on water supplied by Mekorot appears from Israeli control over Palestinian water institutions. The relationship is so asymmetric that the Palestinians have to buy water from Mekorot in order to provide sufficient water supply to the consumers – this water is often from aquifers that are exploited by Israel in the West Bank. In every sense of the word, the Palestinians are buying their own water.

MAINTAINING INFRASTRUCTURE

Besides these control mechanisms, Israel is also maintaining already built water infrastructure in the Palestinian territories. The strategy includes numerous other mechanisms operating at different interconnected levels. Consequently, the

current state of affairs becomes ever-more normalized and, by invoking facts on the ground, irreversible realities are created. Mekorot plays a crucial role as an implementer of this national policy to sustain the Israeli occupation of Palestine. Since the Mekorot tap water network fully incorporates all West Bank settlements, this ensures the existence of these infrastructures. Mekorot plays the key role in sustaining the settlements and securing that they become a permanent fixture upon Palestinian land. Ongoing control over the majority of West Bank wells and thousands of meters of water pipe networks express clear territorial claim from Israel.

Water supply to the settlements

Despite the varying official status of Jewish settlements, all 121 of them receive constant water supply from Israel's national water company Mekorot. Compared to unconnected Palestinian villages, all Jewish households within the West Bank are connected to the Mekorot water network and get tap water obtained either from within the West Bank or from the aquifers' waters that flow into Israel's territory. This leads to the situation, when approximately 300,000 of West Bank settlers (East Jerusalem excluded) are getting full water supply from Mekorot to maintain more than basic household needs and develop agriculture that requires intensive irrigation.

After the June 1967 War, Israel took control of West Bank's water resources and developed a water network serving the settlements. Israel's water pipes which support Jewish settlement water needs clearly cover different areas of the West Bank with the highest number of water infrastructure concentrated in the Jordan Valley. The first Mekorot well in the West Bank was drilled in 1971, but the more intensive establishment of the efficient supply network to the settlements began with the settlement expansion in the 1981 (World Bank 2009: 5). The current amount of water supplied from Mekorot to the Jewish settlements is unofficially estimated at some 75 million cubic meters (MCM), of which 44 MCM is produced in 48 wells owned by Mekorot within the West Bank (World Bank 2009: 5).

Allocation of water from the main groundwater aquifers in the oPt

Aquifer	Potential (MCM/year)	Palestinian allocation* (MCM)	Proposed Palestinian allocation*** (MCM)	Palestinian Abstraction 2008 (MCM)
Eastern	172	74.5**	172 (100% of 172)	
Northeastern	145	42	116 (80% of 145)	
Western	362	22	181 (50% of 362)	
Total/ year	679	138.5	469	91.50

* According to Article 40 (Oslo II Agreement, September 18, 1995).

** Including extra 20.5 MCM of "immediate needs" to be developed for Palestinian use from Eastern Aquifer.

***The proposed allocation was considered according to the aquifer location and recharge area.

Source: Palestinian Ministry of National Economy, September 2011, on the basis of World Bank (2009) and PCBS (2009a)

Discriminatory Mekorot water management policies

The new realities emanating from settlement construction fostered the conflict over limited water resources between the two sides. The first concern arising from settlement construction and their water supply policies involves the impact which the newly drilled Mekorot wells have on neighbouring Palestinian wells. The need for water by newly arising Israeli settlements has led to drilling deep wells which are in a close proximity to the Palestinian wells or springs developed before the June 1967 War (Institute for Palestine Studies 1978: 178). In contrast to the Palestinian wells, which rarely reach 100 meters and are drilled by unskilled Palestinian farmers, Mekorot is drilling wells that are twice as deep due to the fact that Mekorot has much more advanced technology. Deeper wells secure water quality and quantity provided again to Jewish settlements. The reports from nearby Palestinian villages indicate water decrease in their wells and springs.

When the water table in neighbouring Palestinian wells go down, the villagers have several options: they can deepen the existing well; apply for a permit to drill a new well; or ask for a connection to the Mekorot water network. The permission from the JWC for the new well could take years and very likely would be rejected – this option usually is no longer considered. In terms of deepening existing wells, the pumping costs most often exceed what Palestinian villagers can afford. Potentially, a

foreign donor will fund an expensive water project. However, it takes lots of time, requires particular knowledge and resources, but most importantly, does not guarantee the end result due to the fact that Israeli Civil Administration very often restricts donor projects in the Palestinian territories, particularly in Area C of the West Bank. Even after the donors are found and projects donated, Israeli civil authorities in the West Bank tend not issue permission to start sponsored water projects (Messerschmid 2010). In this situation, the villagers are left with the only choice with no other alternatives but to join the Mekorot water network. In consequence, Mekorot is working on the integration of the entire West Bank system (Israeli settlements and Palestinian towns and villages) within its larger Israeli network (Knighton 2003: 27).

Often Palestinian and Israeli water users are supplied by the same water system, which does not deliver on equal terms. For example, the settlers commonly receive their supply through 2 inch pipes, while Palestinians use only half inch pipes (Messerschmid 2007: 5). In addition, so called "joint reservoirs" have two different levels of outlets: the lower one for settlers and the higher for Palestinians. Obviously, the higher outlet will be dry for months while Israeli settlers will still have water (Messerschmid 2007: 5).

Mekorot is working on integrating the entire West Bank water system into Israel proper. The Mekorot monopoly of the water sector is consolidating the Jewish settlement and integrating Palestinian towns and villages' into an inextricable system. Israel thus prevents Palestinians from maintaining their own water infrastructure. The Israeli bureaucracy is so heavy and powerful that it also prevents international donors from developing the Palestinian water sector. The consequence is that many large water projects, funded by the main donors, such as USAID, GTZ, and ECHO have given up fighting for permits to drill new wells and instead have redirected their activity to other sectors where they are less likely to face Israeli opposition (Messerschmid 2007: 14).

The Separation Wall

Besides the fact that the Wall consumes Palestinian land and restricts access and movement, it has a severe effect regarding water resource management. The Wall directly affects Palestinian access to water by physically cutting across their water networks and separating farmers from their fields and wells. The most severe impact is that the Wall includes most important water zones on its western side by incorporating the western slopes of West Bank's hills into Israel; Palestinian waters of West Bank aquifers are technically easier to abstract from the western slopes. Israel was never interested in drilling inside the territories, but rather in preventing Palestinians from drilling. The natural flow of aquifers brings water to the Israeli territory. Simultaneously, the western slopes of the mountains, especially around the areas of Palestinian towns Qalqilya and Tulkarm are strategically important in terms of fresh water abstraction.

One of the most important consequences of these limitations caused by the Wall's construction is that Palestinian farmlands do not get water. Consequently, after over three years the uncultivated Palestinian lands became Israel's property and were confiscated from the private owners. In this manner, water use restrictions by the separation Wall's zone can be used as a tool for land annexation.

Israel's National Water Carrier

The national water carrier is the main water project in Israel that brings water from the more rainy northern regions to the Negev Desert in southern Israel. The main ambition of the national carrier is to satisfy the water needs of all Israelis taking into consideration rapid population growth,



Mekorot's Major Water Plants Map. Source: Mekorot.

From its conception, the development of the national water carrier was focused on all available ground water reservoirs, including those in the West Bank and extending into Israel proper (Stork 1983: 20). Wide-scale drilling and pumping from mountain sub-aquifers enabled Israeli water suppliers to meet water demands in the occupied Palestinian territories, the northern and central parts of the country. Though, with the construction of the national water carrier, Palestinian aquifer waters were able to be moved from replenishment areas to the arid south of Israel.

This indicates the importance of national water carrier in consolidating the contiguity of all water infrastructures within Israel. Ground water wells connected to the pipe network and supplying water within the territories are also integrated into various national water carrier's canals and transported to the southern parts of Israel. The creation of one national water system abandons the idea of the two national states in the territory of Israel and the occupied West Bank. The continued integration of West Bank's water infrastructure into the national water system of Israel creates irreversible facts "under" the ground which renders the two-state solution increasingly impossible.

CONCLUSION

After the June 1967 War, Israel's policies for water management in the occupied Palestinian territories have followed two overall strategies of the occupation: seizing control and maintaining infrastructure. Israel dominates the bilateral and multilateral discourses on water issues in the West Bank and in this lopsided narrative regarding the water conflict Israel appears as a "water-stressed victim" or "benevolent overlord". Most worrisome is that many outsiders, including western experts or policy-makers who are not familiar with water realities on the ground, continue to accept this narrative (Messerschmid 2007: 18).

Contesting Israel's narrative of the water conflict is challenging because Israel has institutionalized images within different societies and changing these images will face resistance. However, it is vital to organize a discourse to reveal and counter the Israeli monopoly on the Palestinian water sector to overcome the power asymmetries and secure fair access and the equitable sharing of water resources. The counter-monopoly discourse should re-frame the definition of what a political conflict the water exploitation essentially is. Israel's occupation of Palestine can no longer be seen not as a justifiable administration, but rather as an unacceptable and illegal military occupation with all its attributes, including the continued annexation of territory and exploitation of valuable natural resources, most poignantly water.

Bibliography

Amnesty International (2009): *Troubled Waters – Palestinians Denied fair Access to Water. Israel-Occupied Palestinian Territories*, London: Amnesty International.

Institute for Palestine studies (1978): The West Bank's water, *Journal of Palestine Studies*, (7)4: 175-179.

Klawitter, Simone and Ihab Barghouti (2006): *Institutional Design and Process of the Palestinian water sector: Principal Stakeholder, their Roles, Interests and Conflicts*, Delft: Symposium on Sustainable Water Supply and Sanitation, 1-15.

Knighton, David (2003): Water Fights, *The World today*, (59)7: 26-27.

Lunat, Ziyaad (2010): Charting the Rapids: The Water and Sanitation Sector under Occupation, in *Geographies of Aid in Palestine International Conference*, Birzeit University, Ramallah.

Mair, Lucky, Anjali Kamat and Julian Liu (2003): Thirsting for Justice: Israeli Violations of the Human Right to Water in the Occupied Palestinian Territories. In *A Report to the 30th Session of the United Nations Committee Economic, Social and Cultural Rights*, New York.

Messerschmid, Clemens (2004): *Till the Last Drop: The Palestinian Water Crisis in the West Bank, Hydrogeology and Hydropolitics of a Regional Conflict*.

Messerschmid, Clemens (2007): What price cooperation? Hydro-hegemony in shared Israeli/Palestinian groundwater resources. Conference paper, Amman.

Messerschmid, Clemens (2010): Bitter Water – Reality and Illusions in Water Policy for Gaza, in *Gaza-Palestine – Out of the Margins International Conference*, Birzeit University, Ramallah.

Scarpa, David (2004), Hydropolitics in recent Israeli-Palestinian relations, Water and Soil Environmental Research Unit, Palestinian National Authority.

Selby, Jan (2004): *Water, Power and Politics in the Middle East. The Other Israeli-Palestinian Conflict*, London: I.B. Tauris.

Stork, Joe (1983): Water and Israel's Occupation Strategy, *MERIP reports*, 116: 119-124.

The World Bank (2009): *West Bank and Gaza. Assessment of Restrictions on Palestinian Water Sector Development*, Washington: The World Bank.

Zeitoun, Mark (2009): *Power and Water in the Middle East. The Hidden Politics of the Palestinian-Israeli Water Conflict*, London: I. B. Tauris.