



AL-HAQ



WATER

FOR ONE PEOPLE ONLY

*Discriminatory Access and
'Water-Apartheid' in the OPT*

AL-HAQ
2013





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Al-Haq

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I. Glossary

Appropriation: Defined as the exercise of control over property; a taking of possession.

Aquifer and Basin: The terms 'aquifer' and 'basin' are often used interchangeably for groundwater. Technically, while groundwater is a domain of flow, basin and aquifer refer to the layers in which flow takes place (and a basin may therefore have several aquifers or sub-aquifers). For instance, the Mountain Aquifer is a groundwater basin, flowing underneath much of the West Bank and central Israel, with several sub-aquifers.

Area A (17 per cent): The 1995 Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip (Oslo II) divided the West Bank into three Areas. Area A includes those parts of the West Bank that are under full Palestinian civil and security control. In Area A, which includes (parts of) six major West Bank cities, the Palestinian authorities assumed "the powers and responsibilities for internal security and public order," and the administration of civil spheres, such as health, education, policing, and other municipal services. However, since 2002, Israel has retained responsibility for overall security in all areas of the West Bank, and does not abdicate full authority over Area A.

Area B (24 per cent): Includes those parts of the West Bank that are under full Palestinian civil control and joint Israeli-Palestinian security control. Within Area B, which encompasses many Palestinian villages and towns, the Palestinian authorities was vested with the same functional authorities as in Area A, including public order for Palestinians. However, Israel retained overriding responsibility for security.

Area C (59 per cent): Includes those parts of the West Bank that are under full Israeli civil and military control, including land registration, planning, building and designation of land use. It contains the bulk of Palestinian agricultural and grazing land, water sources and underground reservoirs.

Brackish water: A mixture of fresh and salty water that contains more salt than fresh water, but not as much as seawater.

Dunums: A *dunum* (or dönüm, dunam) is a unit of land equal to 1,000 square metres. Land area in the West Bank, Gaza Strip and Israel has been measured in dunums since the era of the British Mandate of Palestine.

EWASH: The Emergency Water, Sanitation and Hygiene group (EWASH) is a coalition of 28 agencies, including national and international NGOs, UN agencies, academic and research institutions, and Palestinian institutions, working in the water and sanitation sector in the OPT.

Fresh water: For the purpose of this study understood as water naturally occurring on ground surface in rivers, springs, streams, and water naturally occurring underground as groundwater in aquifers, basins and underground streams. It is generally characterised by having low concentrations of dissolved salts and other totally dissolved solids.

Green Line: The 1949 Armistice Line, which is internationally accepted as the boundary between Israel and the OPT. Its name derives from the green ink used to draw the line on the map during the peace talks.

Groundwater: Water that is located beneath the ground surface and moves along soil pore spaces or in joints, fractures and karstic conduits within or across the rock formations. Groundwater is usually recharged from rain and eventually flows to the surface naturally, often at springs and seeps.

International watercourse: Defined under Article 2(b) of the 1997 UN Watercourses Convention as “a watercourse, parts of which are situated in different States” (see [Watercourse](#)).

Israeli Civil Administration: The body responsible for the implementation of Israel’s government policy in the West Bank. It is part of the Coordinator of Government Activities in the Territories, which is a unit in the Israeli Ministry of Defence.

Israeli settlement enterprise: For the purpose of this study, the Israeli settlement enterprise must be understood as to encompass all physical and non-physical structures and processes that constitute, enable and support the establishment, expansion and maintenance of Israeli residential communities beyond the 1949 Green Line in the OPT.

Lateral inflows and outflows: The volume of water that flows from one basin or aquifer to another or to the adjacent water body.

Occupied Palestinian Territory (OPT): The OPT refers to the territory occupied by Israel since the 1967 Six Day War. It is now composed of two discontinuous regions, the West Bank, including East Jerusalem, and the Gaza Strip.

Operation “Cast Lead:” The 2008-2009 Israeli wide-ranging military offensive against the Gaza Strip, launched on the morning of 27 December 2008 and lasting for 22 days.

Return flows: Water that could come from leaking supply networks, agricultural irrigation flows, and domestic or industrial sewage and feed natural water resources, such as surface or groundwater bodies.

Shared water resources (also named: *Transboundary water resources*): Aquifers and basins resources that are shared by two or more politically, economically or culturally distinct communities. Mainly: the Jordan River, the Coastal Aquifer and the Mountain Aquifer. The

Oslo Accords contain provisions applicable to the Mountain Aquifer only. Smaller shared watercourses or resources also include for example Wadi Gaza (emerging from Hebron or other, minor aquifers).

Total recharge: The recharge from rain infiltration plus return flows and lateral basin inflows minus lateral outflows.

Watercourse: Defined under Article 2(a) of the 1997 UN Watercourses Convention “a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus.”

Watercourse State: Defined under Article 2(c) of the 1997 UN Watercourses Convention as “a State Party to the [UN Watercourses] Convention in whose territory part of an international watercourse is situated” (see [Watercourse; International watercourse](#)).

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IV. Abbreviations

ARIJ	Applied Research Institute – Jerusalem	NEAB	North-Eastern Aquifer Basin
CMWU	Coastal Municipalities Water Utility	NRO to the PA	the Netherlands Representative Office to the Palestinian Authority
EAB	Eastern Aquifer Basin	NWC	National Water Carrier
EWASH	Emergency Water, Sanitation and Hygiene group	OPT	Occupied Palestinian Territory
HRW	Human Rights Watch	PA	Palestinian Authority
HIS	Hydrological Service of Israel	PARC	Palestinian Agricultural Relief Committee
ICBS	Israeli Central Bureau of Statistics	PCBS	Palestinian Central Bureau of Statics
ICC	International Criminal Court	PHG	Palestinian Hydrology Group
ICJ	International Court of Justice	PLO	Palestine Liberation Organisation
ICCPR	International Covenant on Civil and Political Rights	PWA	Palestinian Water Authority
ICESCR	International Covenant on Economic, Social and Cultural Rights	UN	United Nations
ICRC	International Committee of the Red Cross	UN CESCR	UN Committee on Economic, Social and Cultural Rights
IHL	International Humanitarian Law	UNGA	United Nations General Assembly
IHRL	International Human Rights Law	UNHRC	United Nations Human Rights Council
ILC	International Law Commission	UNRWA	United Nations Relief and Works Agency
IWL	International Water Law	UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
JD	Jordanian Dinar	UNSC	United Nations Security Council
JWC	Joint Water Committee	WAB	Western Aquifer Basin
JWU	Jerusalem Water Undertaking	WASH	water, sanitation and hygiene
lpcd	litres <i>per capita</i> daily	WBWD	West Bank Water Department
mcm	million cubic metres	WHO	World Health Organisation
mcm/yr	million cubic metres per year		
mm/yr	millimetres per year		



Al-'Oja Spring, Jordan Valley, March 2013 – Tony Kane©.

V. Executive Summary:

Water For One People Only: Discriminatory Access and 'Water-Apartheid' in the OPT

Israeli *per capita* consumption of water for domestic use is four to five times higher than that of the Palestinian population of the Occupied Palestinian Territory (OPT). In the West Bank, the Israeli settler population, numbering more than 500,000, consumes approximately six times the amount of water used by the Palestinian population of almost 2.6 million; this discrepancy is even greater when water used for agricultural purposes is taken into account.

Contrary to popular belief, water is not, and has not been, scarce in the region, which contains three main sources of natural fresh water. As water does not follow territorial boundaries, the Jordan River, the Mountain Aquifer and the Coastal Aquifer are shared between Israel and Palestine.

The level of unrestricted access to water enjoyed by those residing in Israel and Israeli settlers demonstrates that resources are plentiful and that the lack of sufficient water for Palestinians is a direct result of Israel's discriminatory policies in water management.

Israel's Illegal Exercise of Sovereign Rights over Water Resources

At present, the water sector in the OPT and Israel is characterised by highly asymmetrical overexploitation of damageable shared water resources, exhaustion of long-term storage, deterioration of water quality and increasing levels of demand driven by high population growth, accompanied by decreasing *per capita* supplies. However, the burden is disproportionately borne by the Palestinian population, who are impeded from exercising

effective control over the development and management of the available water resources in the region.

Since 1967, Israel has exerted considerable military and political efforts, including the establishment of settlements, to illegally exercise sovereign rights over Palestinian water resources. A series of military orders – still in force and applicable only to Palestinians – integrated the water system of the OPT into the Israeli system, while at the same time denying Palestinian control over this vital resource.

This integration was significantly advanced in 1982 by the transfer of ownership of Palestinian water infrastructure in the West Bank to Israel's national water company 'Mekorot,' which has forced Palestinians to rely on the company to meet their annual water needs. The company supplies almost half the domestic water consumed by Palestinian communities in the West Bank, making it the largest single supplier in the West Bank. In addition to Israel's exclusive control over water resources, 'Mekorot' directly extracts water from the Palestinian share of the water resources in order to supply copious amounts to Israeli settlements.

The conclusion of the Oslo Accords, contrary to Palestinians' expectations, did not result in greater access to the water resources in the OPT, but merely formalised a discriminatory management regime that was largely already in place. In reality, the Oslo II water regime is a continuation and preservation of Israel's exclusive control over the Mountain Aquifer and facilitates its illegal exercise of sovereign rights over the water resources in the OPT. In contrast, 'Mekorot' routinely reduces Palestinian supply – sometimes by as much as 50 per cent – during the summer months in order to meet consumption needs in the settlements.

Current Israeli Methods to Maintain Hegemony

In parallel, Israel actively prevents the construction and maintenance of water infrastructure in 59 per cent of the West Bank, earmarked Area C. This has primarily been achieved through the systematic denial of permits for any construction or rehabilitation of water infrastructure. Any water structure built without a permit from the Israeli authorities – permits that are virtually impossible to obtain – risks demolition. In contrast, Israeli settlers are not required to obtain a permit from the Israeli Civil Administration and, unlike Palestinian communities, all settlements in the OPT are connected to a water network.

The Israeli military authorities regularly target water collection systems for confiscation and destruction, including those provided by humanitarian organisations. They do so on the pretext that such systems were constructed without an Israeli permit. In the Gaza Strip, destruction of water infrastructure frequently occurs during Israeli military operations, such as air strikes and ground incursions.

Furthermore, due to the absence of any policy coordination between Israel and the Gaza Strip with regard to the Coastal Aquifer, both authorities are currently over-extracting. The over-extraction and pollution of the Coastal Aquifer have resulted in a progressive deterioration of the water quality in the Gaza Strip. The groundwater levels in the aquifer have fallen

below sea level and saline water and sewage have infiltrated the aquifer, rendering 90 to 95 per cent of the water it supplies unfit for human consumption.

Legal Analysis

As the Occupying Power sharing a considerable portion of the region's water resources with the Palestinians, Israel's governance and use of transboundary water resources must be conducted not only in compliance with general principles of international law and customary international law, but also in accordance with the rules provided by international humanitarian law (IHL), international human rights law (IHRL) and international water law (IWL).

Under IHL, the Occupying Power does not acquire sovereign rights over the occupied territory and the natural resources therein. As such, Israel acts merely as the *de facto* administrator of the occupied territory. The administration of the territory must preserve the sovereign rights of the occupied population – thus protecting the occupied population and their property from exploitation and depletion by the Occupying Power. In particular, IHL imposes strict limitations on the Occupying Power's use of property and natural resources available in the occupied territory, thereby preventing the Occupied Power from exploiting the wealth of the occupied territory to benefit its own economy.

Israel has extensively and unlawfully appropriated Palestinian water resources in the OPT for the sole benefit of those residing in Israel and Israeli colonies, while maintaining a practice of extensive destruction of Palestinian water infrastructure. These policies and practices are aimed at forcibly transferring Palestinian communities from their homes, thereby emptying the most fertile and water-rich areas of the West Bank of its Palestinian inhabitants, which is instrumental to Israel's unlawful transfer of its own civilian population into occupied territory.

As such, Israel is in violation of Articles 43, 46, 53 and 55 of the Hague Regulations and Articles 49 and 53 of the Fourth Geneva Convention. As a High Contracting Party to the Geneva Conventions, Israel has an obligation to put an end to all violations of IHL and investigate and prosecute those responsible for violations of the Conventions.

Through its policies, Israel illegally exercises sovereign rights over Palestinian natural sources. This demonstrates the existence of a governmental policy aimed at dispossessing the Palestinian population of their natural wealth. This orchestrated dispossession constitutes an infringement on the right of the Palestinian people to self-determination and to permanent sovereignty over their natural resources.

In addition, Israel consistently fails to meet its obligations under IHRL by refusing to respect, protect and fulfil the right of the Palestinian people to water, which is derived from existing human rights treaties, to which Israel is a State party. Israel excessively and relentlessly extracts far beyond its equitable and reasonable share of the transboundary waters, thereby causing significant harm through increased pollution and salination of the watercourses. Israel also refuses to cooperate in the maintenance, protection and preservation of transboundary

watercourses and water installations. Thus, Israel is in violation of its obligations vis-à-vis Palestine as a watercourse State under the customary principles of international water law.

In order to meet its obligations under these international legal frameworks, the Israeli authorities must immediately cease all internationally wrongful acts, offer appropriate guarantees of non-repetition and make full reparations for the injury caused, including material or moral damages.

Colonialism and 'Water-Apartheid'

Israel's policies and practices in the OPT have created a situation of occupation in which natural resources are unlawfully exploited and appropriated. Israel's water policies represent only one element of an irreversible structural process that can only be described as colonial. Israel's intention to permanently change the status of the occupied territory, *de facto* exercising sovereignty, reveals itself through the establishment and expansion of settlements in the West Bank (currently over 200) and by the creation of a network of roads and flourishing agricultural enterprises for their benefit. The presence of settlements aims to permanently deny the Palestinian population the exercise of their right to self-determination by fragmenting the OPT and preventing the Palestinian people from exercising sovereignty over natural resources, in particular land and water.

A troika of key legislative measures and institutionalised policies and practices have enabled Israel to illegally exercise sovereign rights over Palestinian water resources, with the ultimate goal of satisfying its own interests. As such, these policies and practices have laid the foundations and underpin the three principal pillars of Israel's 'water-apartheid.'

The first pillar requires the identification of two distinct racial groups; the Palestinians and 'Jewish-Israelis,' meaning 'Israelis with Jewish identity.' The second pillar is comprised of policies and practises that facilitate the demarcation along racial lines of the two groups. This has allowed Israel to maintain a system intended to segregate the population into different geographical areas. Jewish-Israelis are privileged, as they have an uninterrupted and abundant supply of water, while Palestinians are denied their basic right to water and full development as a group. The third pillar upon which Israel's 'water-apartheid' rests is its use of the pretext of 'security' to justify the commission of inhuman acts against the Palestinians as a group. Israel's policies and practices in relation to water do not occur in a vacuum, but are integrated in an institutionalised system of Jewish-Israeli domination and oppression of the Palestinians as a group – thus amounting to a system of 'water-apartheid.'

These violations amount to breaches of peremptory norms of international law, including the right to self-determination, the prohibition of extensive destruction and appropriation of property, as well as the international legal prohibitions of colonialism and apartheid.

Legal Consequences for Third-Party States

By virtue of Israel's breaches of peremptory norms of international law, certain obligations arise for third-party States. Article 41 of the International Law Commission Draft Articles on State Responsibility, which reflects customary international law, affirms that in the case of breaches of peremptory norms of international law, all States are under an obligation not to recognise the situation as lawful, not to render aid or assistance in maintaining the illegal situation, and to actively cooperate in order to bring it to an end.

Conclusion and Recommendations

While the violations of international law set out in this study entail responsibilities for Israel and for third-party States to bring the illegal situation to an end, the current state of the water sector in the OPT and Israel will not improve unless structural changes are made to the use and management of the shared water resources. These changes, in the intermediate term, should include removing physical and administrative restrictions on Palestinian access to and use of the shared water resources, as well as halting the extraction of water from the Palestinian share of the transboundary water resources by corporations and agents acting under Israel's authority. However, ultimately, lasting structural changes will require bringing Israel's occupation of the OPT to an end and substantially reforming the relationship to one of equal partnership in the administration of water resources based on reasonable and equitable standards. To ensure that Palestinians can exercise their full rights in the OPT, the access to, use and allocation of shared water resources must not be determined on the basis of one side's dominant negotiating power over the other, but must strictly abide by international legal norms.

1. Introduction

For many years, the Palestinian population of the West Bank, including East Jerusalem, and the Gaza Strip, has suffered from a shortage of clean, safe water. However, despite alarming predictions of insufficient drinking water supplies by 2040, based on the expected population growth in the Occupied Palestinian Territory (OPT), Jordan and Israel, water is not and has not been scarce in the region.¹

At present, the water sector in the OPT and Israel is characterised by highly asymmetrical overexploitation of damageable shared water resources, exhaustion of long-term storage, deterioration of water quality and increasing levels of demand driven by high population growth and accompanied by decreasing *per capita* supplies. However, the burden is disproportionately borne by the Palestinian population, who are impeded from exercising effective control over the development and management of the available water resources in the region.²

Measures taken by the Israeli authorities, including the relentless expansion of settlements,³ continue to deprive Palestinians of vital water resources necessary for a dignified standard of living. Palestinian communities are left fragmented and confined to shrinking areas. These areas resemble a land-locked archipelago of territory in which essential human rights, and more specifically the right to water, are continuously denied.

Israel's illegal exercise of sovereign rights over the water resources in the West Bank and the Gaza Strip attests to its 'self-interested administration' of the region's shared water resources.⁴ Israel's water supply system, allocation of available water resources and denial of Palestinian access to and control over shared water resources have become a clear testament to its colonial and apartheid motives. The "creeping annexation" of Palestinian lands facilitates the territorial integration of the West Bank into Israel.⁵ Meanwhile, Israeli interests are simultaneously served through Israel's disproportionate share of water supplies, which are allocated to those residing in Israel proper and in Israeli colonies in the OPT at the expense of Palestinians entitled to access to the same water resources.⁶

¹ I Scobbie, 'Natural Resources and Belligerent Occupation: Mutation through Permanent Sovereignty' in S Bowen (ed.) *Human Rights, Self-Determination and Political Change in the Occupied Palestinian Territories* (Martinus Nijhoff Publishers, The Hague, 1997) 221.

² G Abouali, 'Natural Resources Under Occupation: The Status of Palestinian Water Under International Law' (1998) 10 *Pace International Law Review*, 422.

³ Settlements and colonies are used interchangeably throughout this study.

⁴ J Stein, 'Waging Waterfare: Israel, Palestinians, and the Need for a New Hydro-Logic to Govern Water Rights Under Occupation' (2011) 44 *New York University Journal of International Law and Politics*, 174.

⁵ International Fact-Finding Mission on Settlements, 'Report of the independent international fact-finding mission to investigate the implications of the Israeli settlements on the civil, political, economic, social, and cultural rights of the Palestinian people throughout the Occupied Palestinian Territory, including East Jerusalem' Advanced Unedited Version (January 2013) UNHRC 22nd session, paragraph 101.

⁶ J Selby, 'Joint Mismanagement: Reappraising the Oslo Water Regime' (2006) in H Shuval and H Dwick (eds), *Proceedings of the Second Israeli-Palestinian International Conference on Water for Life in the Middle East* (Antalya, Turkey, 10-14 October 2004) (Israel/Palestine Centre for Research and Information, Jerusalem).

2. Geography and Hydrology of Water Resources in the OPT

The region has three main sources of natural fresh water; the Jordan River, the most important shared surface water resource for the five riparian States;⁷ the Mountain Aquifer⁸ and the Coastal Aquifer, two major productive groundwater resources shared between Israel and Palestine.⁹

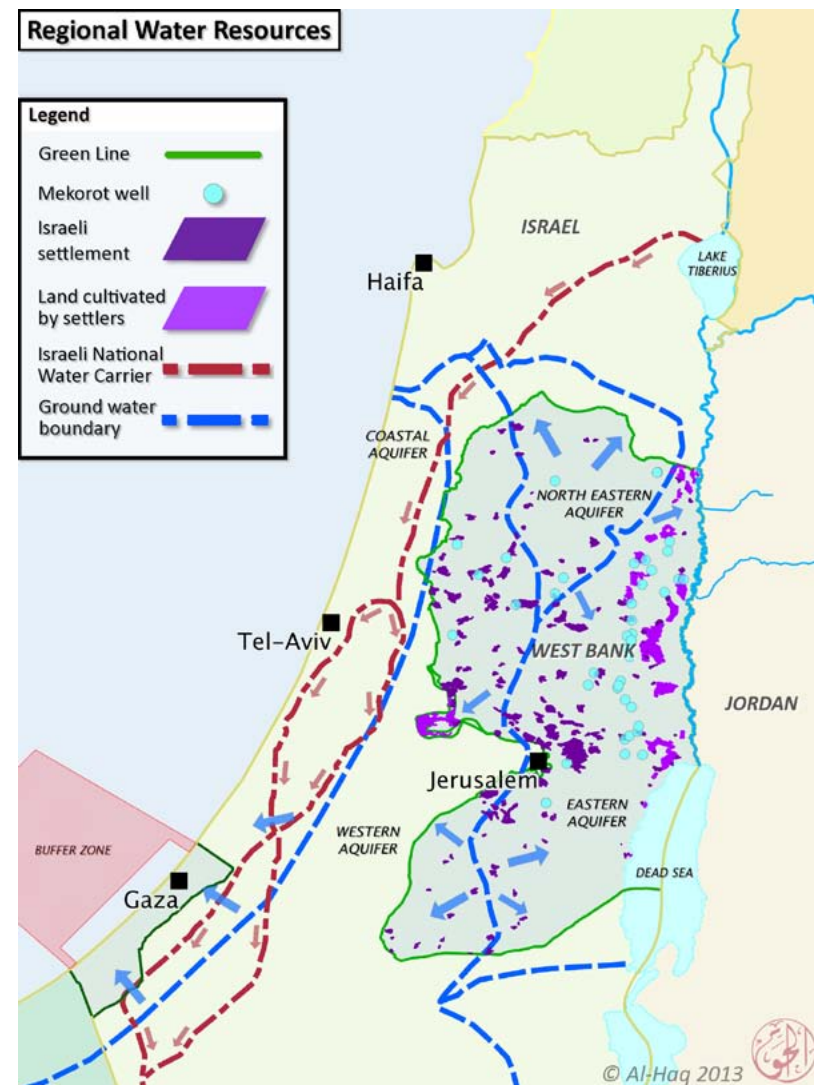


Figure 1: Map of all water resources in the region – Al-Haq©.

7 The five riparian States are Lebanon, Syria, Israel, Palestine and Jordan.

8 By virtue of its geographical location, hydrological qualities and productivity, as well as the importance assigned to it by the Oslo Accords, this study considers the Mountain Aquifer as the principle groundwater resource.

9 This study does not include the unshared water resources in the region. Unshared water basins, such as the Eocene aquifers around Nablus-Jenin, the Pleistocene aquifers in the Jordan Valley and the Neogene aquifers in Wadi Fari'a, are often of shallow depths and are fully used. They are not included in the shared water resources as defined under the Oslo Accords, which only deal with the Mountain Aquifer. See further, C Messerschmid, 'Back to the Basics – Policy Options for Palestinian Water Sector Development' (2011) Draft Paper Presented at Birzeit University Conference: "Water in Palestine" (1 November 2011) 1.

2.1. Jordan River



Figure 2: Map of the Jordan River.¹⁰

Originating from three main springs,¹¹ the Jordan River is around 360 kilometres in length,¹² with a surface catchment area of about 18,500 square kilometres, of which 37 per cent is located in upstream riparian Israel,¹³ 10 per cent in upstream riparian Syria, 4 per cent in upstream riparian Lebanon, 40 per cent in downstream riparian Jordan, and 9 per cent in downstream riparian West Bank (see Figure 3).¹⁴ The total natural pre-utilisation flow available from the Jordan River surface water stream is estimated to be between 1,213 and 1,399 mcm annually.¹⁵

The Upper Jordan River flows south into Lake Tiberias, which provides the largest freshwater storage capacity along the Jordan River. Lake Tiberias drains into the Lower Jordan River, which winds further south through the Jordan Valley to its terminus in the Dead Sea.¹⁶

10 Food and Agriculture Organisation (FAO), 'Irrigation in the Middle East Region in Figures - AQUASTAT Survey – 2008' (FAO Water Reports 34) (2009) 83.

11 The Banias in the occupied Golan Heights, the Dan in northern Israel and the Hasbani in southern Lebanon.

12 S McCaffrey, *The Law of International Watercourses* (2nd ed.) (Oxford University Press, New York, 2007) 308.

13 This includes the surface catchment area located in the occupied Golan Heights.

14 FAO (n 10) 82.

15 D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 1. Clarification of the Allocations in the Johnston Plan' (2007) 32 *Water International*, 27; D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 2. Potential Future Allocations to the Co-Riparians' (2007) 32 *Water International*, 45, 47, 49. Other plans proposed for allocation of the Jordan River water resources between the five riparian States have estimated the potential volume of the basin as high as 1,503 mcm/yr. See D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 1. Clarification of the Allocations in the Johnston Plan' *Ibid.*, 26-27.

16 S McCaffrey, *The Law of International Watercourses* (n 12) 309.

Location of Surface Catchment Area

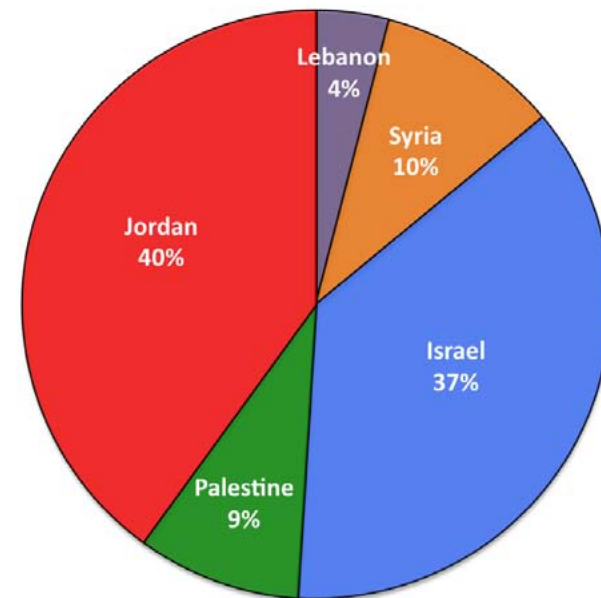


Figure 3: Surface catchment area Jordan River.¹⁷

The Jordan River is recognised as the eastern border of Palestine, but since Israel occupied the West Bank in 1967, it has denied its Palestinian inhabitants physical access to the riverbanks and to their 'equitable and reasonable share' of the Jordan River's water resources.¹⁸ While only 37 per cent of the surface catchment area of the Jordan River Basin is located in Israel, it exploits around 50 per cent of this shared water resource.¹⁹

Since Israel occupied the West Bank in 1967, it has denied its Palestinian inhabitants physical access to the riverbanks and to their 'equitable and reasonable share' of the Jordan River's water resources.

Israel diverts the Jordan River's flow upstream through Israel's National Water Carrier (NWC), a project crucial to Israel's planned growth and development of the coastal and desert regions.²⁰ The Jordan River supplies up to 700 mcm every year of water to Israel,²¹ which,

according to some commentators satisfies, one third of Israel's total water use.²²

The diversion of the flow upstream has not only deprived Palestinians of this crucial source of water, but has also contributed to a rapid and unprecedented drop in the Dead Sea's water levels,²³ thereby scarring the landscape, polluting the environment and has irrevocably damaged dependent ecosystems.²⁴

2.2. Mountain Aquifer

The Mountain Aquifer extends across both sides of the 1949 Green Line and is therefore shared between Israel, the downstream riparian, and Palestine, the upstream riparian. It is the largest water resource in the region and provides the highest quality of natural groundwater, from an estimated potential yield officially set and agreed upon politically under the Oslo Accords at 679 mcm annually.²⁵ Approximately 80 per cent of the water that annually recharges the aquifer comes from the West Bank. The Mountain Aquifer is divided into three basins: the Western Aquifer Basin (WAB), North-Eastern Aquifer Basin (NEAB) (also known as Northern) and Eastern Aquifer Basin (EAB).

Approximately 80 per cent of the water that annually recharges the aquifer comes from the West Bank.

The Western Aquifer Basin is the largest and most productive aquifer. With the politically identified figure for its estimated potential set at 362 mcm annually, it yields more water than the North-Eastern and Eastern Aquifer Basins put together.²⁶ The majority of the Western Aquifer's water originates from the West Bank, which holds 80 per cent of its recharge area. However, 80 per cent of the Western Aquifer Basin's storage area is located inside Israel.²⁷

²² D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 2. Potential Future Allocations to the Co-Riparians' (n 15) 55. Other commentators have estimated that the Jordan River supplies at least 800 mcm per year of water to Israel, and arguing that Israel utilises Jordan River water to satisfy much more than one third of its total water use.

²³ According to Human Rights Watch, "the level of the Dead Sea is dropping by one meter per year." Human Rights Watch (HRW), 'Separate and Unequal: Israel's Discriminatory Treatment of Palestinians in the Occupied Palestinian Territories' (December 2010) 17.

²⁴ In some areas, the shores have retreated nearly half a kilometre. Al-Haq, 'Pillage of the Dead Sea: Israel's Unlawful Appropriation of the Natural Resources of the Occupied Palestinian Territory' (September 2012) 17 fn. 22.

²⁵ The 'estimated potential' of 679 mcm/yr is the overall politically identified figure under the Oslo Accords from which a portion is to be allocated to the Palestinians. Based on this figure, the Oslo Accords identify specific figures for the 'estimated potential' of each basin. It has been alleged that Israel has used a lower figure during the negotiations of the Oslo Accords in order to prevent Palestinians from using the water resources of the North-Eastern and Western Aquifer, which it claims were fully utilised at the time of conclusion of the Oslo Accords. (See Amnesty International, 'Troubled Waters: Palestinians Denied Fair Access to Water' (October 2009) 18.) Apart from such political considerations, the total natural discharge of the Mountain Aquifer is subject to extreme seasonal and annual variations. Therefore, when using the figure of 679 mcm/yr, it must be born in mind that this is a political figure and not necessarily a scientifically accurate representation of the recharge capacity of the resource. The World Bank estimates the Mountain Aquifers' recharge capacity between 620-887 mcm/yr. World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development', Sector Note (April 2009) 11.

²⁶ For an overview of the annual recharge capacity from rainfall in the Western Aquifer Basin, see G Weinberger, 'The Natural Water Resources between the Mediterranean Sea and the Jordan River' (2012) (Hydrological Service of Israel (HSI)) <http://www.water.gov.il/Hebrew/ProfessionalInfoAndData/Data-Hidrologeime/DocLib4/water_report-MEDITERRANEAN-SEA-AND-THE-JORDAN.pdf> accessed 22 March 2013.

²⁷ Applied Research Institute - Jerusalem (ARIJ), 'Water resource allocations in the occupied Palestinian territory: Responding to Israeli claims' (June 2012) 6. See also Amnesty International, 'Troubled Waters' (n 25) 18; and World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) 7, 11.

¹⁷ FAO (n 10) 82.

¹⁸ See Section 5.4. of this study.

¹⁹ D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 2. Potential Future Allocations to the Co-Riparians' (n 15) 49.

²⁰ The National Water Carrier (NWC) is a pipeline of three meters in diameter, carrying some 1 mcm of water per day from Lake Tiberias in the north Israel to the coastal cities of Haifa and Tel Aviv and to the Negev Desert in the south. The NWC continues to severely affect the water supply for Israel's neighbouring countries, especially Jordan as the lower reaches of the Jordan River were reduced to "a saline trickle, leaving Jordanian farms along its east bank desperately short of water." S McCaffrey, *The Law of International Watercourses* (n 12) 21, ft. 145. See also, FAO (n 10) 85, 219.

²¹ D Phillips, S Attili, S McCaffrey and J Murray, 'The Jordan River Basin: 2. Potential Future Allocations to the Co-Riparians' (n 15) 49. Of the total average annual inflow of water from the Jordan River into Lake Tiberias, some 250 mcm/yr serve consumers in the region, while about 450 mcm/yr are withdrawn to serve consumers throughout Israel by means of the NWC. See FAO (n 10) 219.

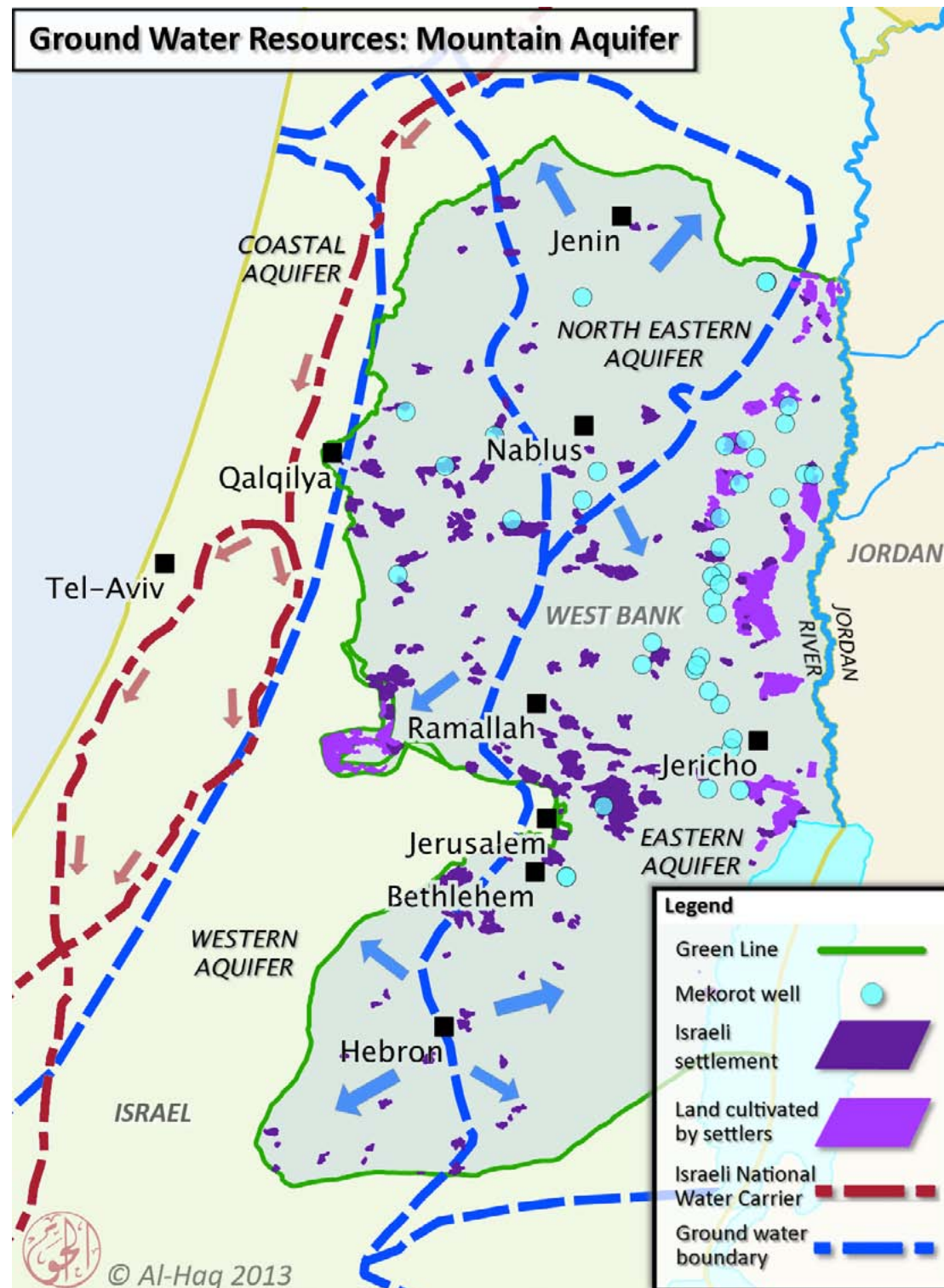


Figure 4: Map of the Mountain Aquifer – Al-Haq©.

The North-Eastern Aquifer Basin is the smallest of the three aquifers with a politically agreed upon estimated potential yield of 145 mcm annually.²⁸ More than 80 per cent of the North-Eastern Aquifer Basin lies in the West Bank, and the remainder crosses into Israel. While the North-Eastern Aquifer Basin is entirely recharged inside the West Bank, Palestinians have access less than 20 per cent of the aquifer's annual yield for both irrigation and domestic purposes.²⁹

The Eastern Aquifer Basin, with politically agreed upon estimated potential yield of 172 mcm annually,³⁰ lies almost entirely within the West Bank territory, with no relevant in- or outflows from Israel.³¹ Despite this, Israel exerts exclusive control over more than 70 per cent of all water produced by the Eastern Aquifer Basin, thereby preventing Palestinians from accessing their rightful share of this resource.³²

The Mountain Aquifer's water resources are currently under near exclusive privileged use by Israeli wells and Jordan Valley settler wells.

Since 1967, Israel has expanded its control over the Mountain Aquifer, and has especially aimed to conserve its absolute control over the recharge areas of the Western, North-Eastern and Eastern Aquifer Basins, which are almost entirely located in the West Bank. Crucially, Israel does not only exercise full control, but also prevents any Palestinian use of these shared water resources by continuously diverting the flow of water into Israel. Figure 5 shows that the Mountain Aquifer's water resources are "currently under near-exclusive privileged use by Israeli wells and Jordan Valley settler wells."³³ While the water flows from the North-Eastern and the Eastern Aquifer Basin are located almost entirely in the West Bank, as is more than two-thirds of the Western Aquifer Basin's recharge area, a simple mathematical equation demonstrates that Israel extracts 89 per cent of the water from the Mountain Aquifer system annually, leaving a mere 11 per cent to the Palestinians.³⁴

²⁸ The World Bank estimates the North-Eastern Aquifer Basin's recharge capacity between 130-200 mcm/yr. World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) 11.

²⁹ ARIJ, 'Water resource allocations in the occupied Palestinian territory: Responding to Israeli claims' (n 27) 6. See also Amnesty International, 'Troubled Waters' (n 25) 18; and World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) 7, 11.

³⁰ The World Bank estimates the Eastern Aquifer Basin's recharge capacity between 155-237 mcm/yr. World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) 11.

³¹ It was long thought that the Eastern Aquifer was located entirely in the West Bank and as such not shared with Israel. However, more recent hydrological maps suggest that the Eastern Aquifer Basin stretches southwards from the West Bank, just crossing the Green line into Israel. S McCaffrey, *The Law of International Watercourses* (n 12) 319. See further, ARIJ, 'Water resource allocations in the occupied Palestinian territory: Responding to Israeli claims' (n 27) 6; and, G Abouali, 'Natural Resources Under Occupation: The Status of Palestinian Water Under International Law' (n 2) 420.

³² See Section 5.4. of this study for a further elaboration on the principle of 'equitable and reasonable utilisation' under international water law.

³³ C Messerschmid, 'Back to the Basics' (n 9) 1.

³⁴ International Fact-Finding Mission on Settlements (n 5) paragraph 81. This figure is also published in, M Richard and J Isaac, 'The Water Regime in the West Bank' *This Week in Palestine* (October 2012) <<http://www.thisweekinpalestine.com/details.php?id=3844&ed=211&edid=211>> accessed 22 March 2013.

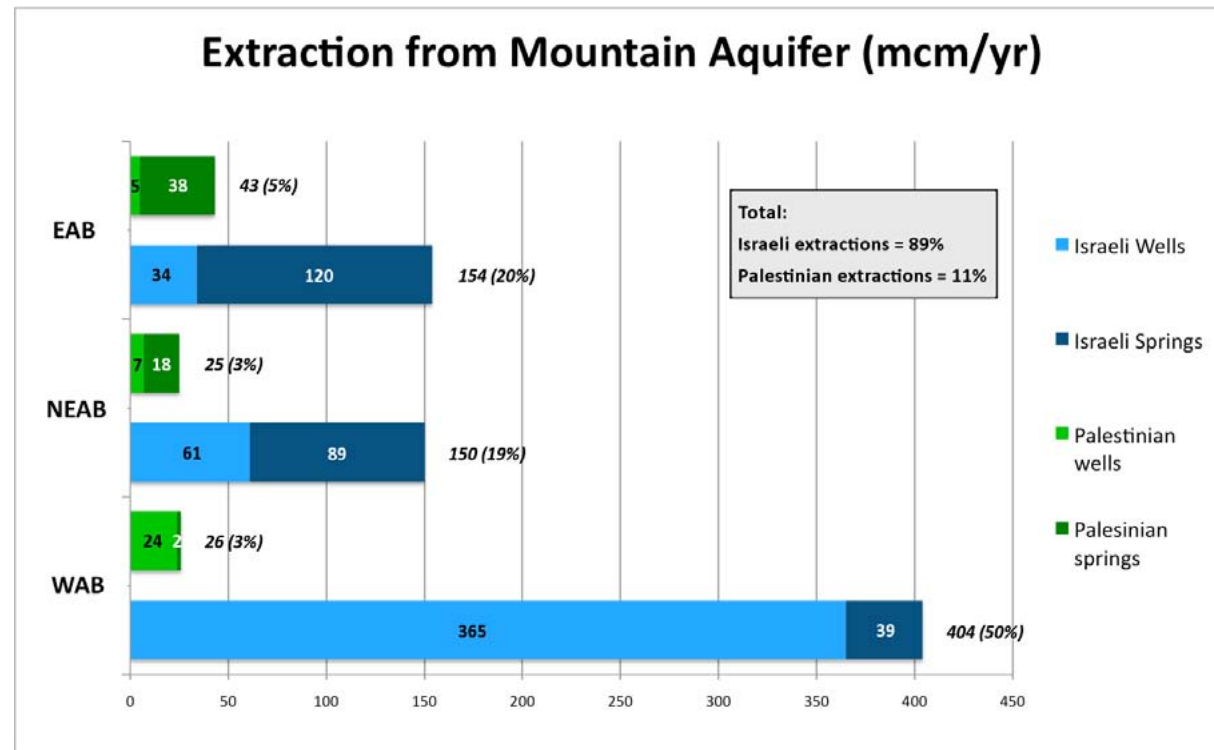


Figure 5: Palestinian and Israeli extractions and controlled spring flows from the shared Mountain Aquifer. The figures represent the average outflows between 1995 and 2007 (in mcm/yr unless otherwise stated).³⁵

2.3. Coastal Aquifer

The Coastal Aquifer is located under the coastal plain of Israel, the Gaza Strip, and the Sinai Peninsula.³⁶ As a shared transboundary water resource, Israel and the Gaza Strip both rely on this aquifer for their water supply. The 1.6 million Palestinians living in the Gaza Strip are dependent on extraction from the southern end of the Coastal Aquifer, which is the only source of natural water available to the Gaza Strip.³⁷ Israel, on the other hand, has several other water resources available.³⁸

1.6 million Palestinians living in the Gaza Strip are dependent on extraction from the southern end of the Coastal Aquifer.

³⁵ Information is courtesy to Clemens Messerschmid and collected from the Palestinian Water Authority (PWA) Data Base and the HIS (2008). All West Bank figures are cross-calculations from PWA- and HIS-data. C. Messerschmid, 'Back to the Basics' (n 9) 19.

³⁶ Relevant for this study is its 120 kilometres extension along the Mediterranean coastline from the Gaza Strip in the south to Mount Carmel in the north.

³⁷ Palestinian Central Bureau of Statics (PCBS), 'On the Eve of the International Population Day 11/7/2011' (Press Release) (11 July 2011) <<http://www.pcbs.gov.ps/Portals/pcbs/PressRelease/InternationalPopDay2011E.pdf>> accessed 22 March 2013.

³⁸ For instance, Israel's use of the Jordan River as discussed in Section 2.1. of this study and its use of the water resources of Lake Tiberias in northern Israel (see fn. 20 above). According to 'Mekorot', Israel's national water company, Lake Tiberias supplies "approximately 30 per cent of Israel's drinking water supply, [some] 242 million cubic meters in 2006." See official 'Mekorot' website <<http://www.mekorot.co.il/Eng/Mekorot/Pages/IsraelsWaterSupplySystem.aspx>> accessed 22 March 2013.

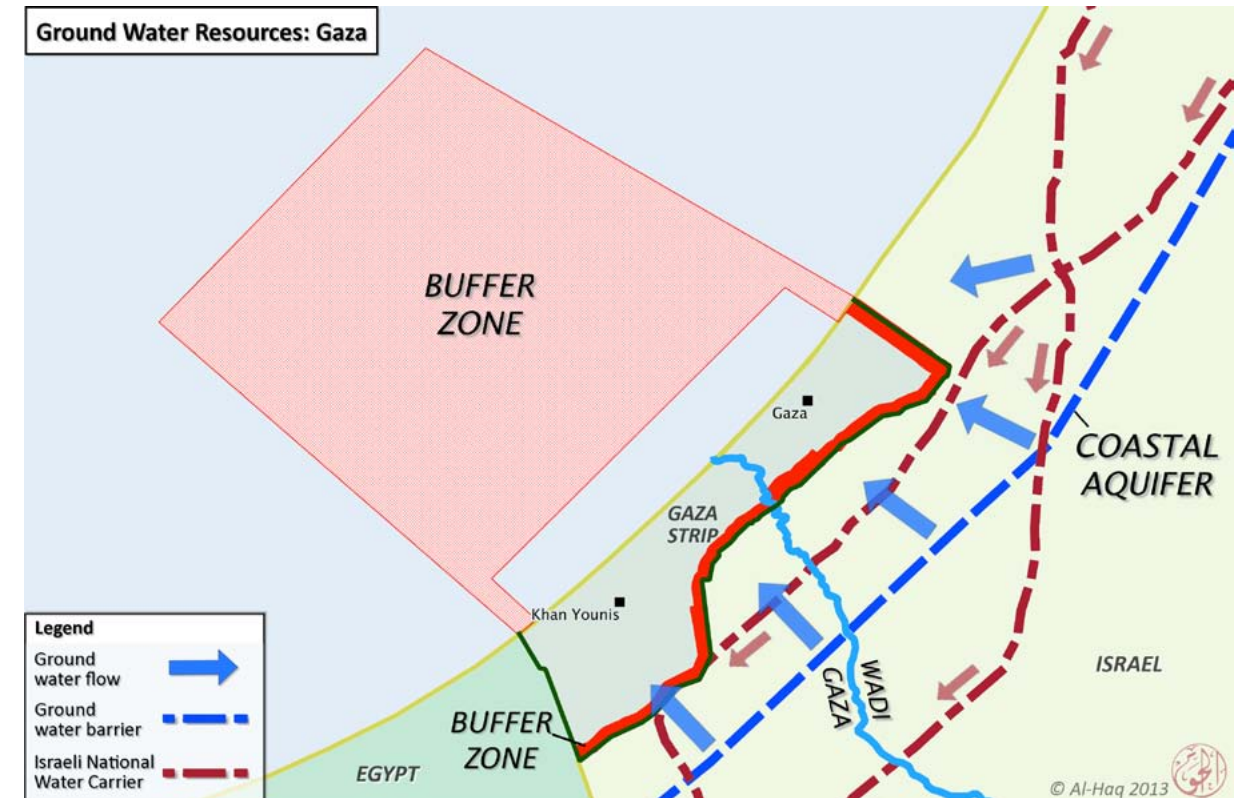


Figure 6: Map of the Coastal Aquifer –Al-Haq©.

The Coastal Aquifer is not only replenished by direct rainfall, but also by artificial recharge,³⁹ agricultural return flows, lateral groundwater infiltrations and seawater intrusions. This brings its total average annual recharge capacity up to 426 mcm in Israel, and some 146 mcm per year in the Gaza Strip.⁴⁰ While Israel extracted 39 mcm per year beyond its average recharge capacity in 2006-2007,⁴¹ total extractions in the Gaza Strip exceeded average recharge capacity by 31 mcm (more than 20 per cent) per year in 2008-2009.⁴²

Conclusions on the Gaza Strip's use of the Coastal Aquifer:

1. One fifth of the Gaza Strip's total extraction is not covered by the yield from the Coastal Aquifer.
2. The Gaza Strip enjoys only one quarter of total extractions from the Coastal Aquifer.⁴³

The Palestinians cannot limit Israel's over-extraction upstream of the Gaza Strip and are effectively forced to be water-resource self-sufficient. Due to the lack of any policy coordination

³⁹ Artificial recharge from wells, reservoirs and wastewater effluents.

⁴⁰ C. Messerschmid, 'Water in Gaza – Problems & Prospects' in M. Larudee (ed.) *Gaza – Palestine: Out of the Margins* (Ibrahim Abu-Lughod Institute of International Studies – Birzeit University, Birzeit, 2011) 140.

⁴¹ Approximately 9 per cent above the average recharge capacity. *Ibid.*, 175.

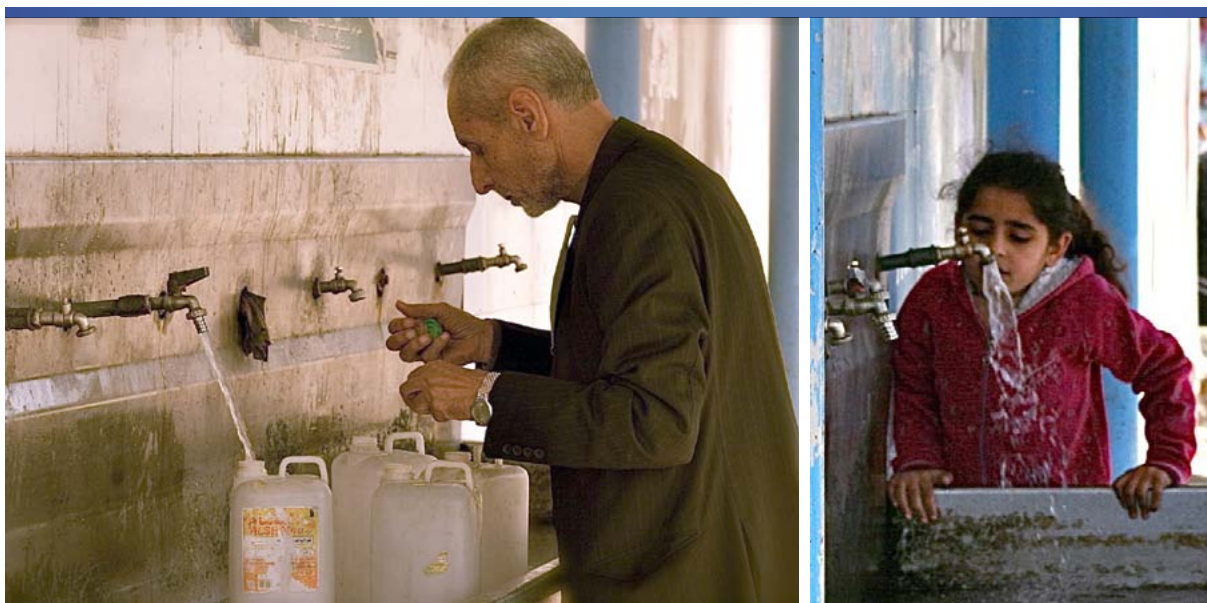
⁴² *Ibid.*

⁴³ *Ibid.*, 141, 175.

between Israel and the Gaza Strip with regards to the Coastal Aquifer,⁴⁴ both authorities are currently over-extracting.⁴⁵ The over-extraction of the Coastal Aquifer and pollution have resulted in a progressive deterioration of the water quality in the Gaza Strip.⁴⁶ The groundwater levels in the aquifer have fallen below sea level and saline water and sewage have infiltrated the aquifer, rendering 90 to 95 per cent of the water it supplies unfit for human consumption.⁴⁷ It is important to note that this deterioration is also partly due to Israel's policy of denying construction materials for wastewater treatment plants and other water-related infrastructure into the Gaza Strip.

The over-extraction of the Coastal Aquifer and pollution have resulted in a progressive deterioration of the water quality in the Gaza Strip.

According to the Department of Health of the UN Relief and Works Agency (UNRWA), waterborne diseases are increasingly common and diarrhoea is a major cause of death in the refugee population of the Gaza Strip.⁴⁸



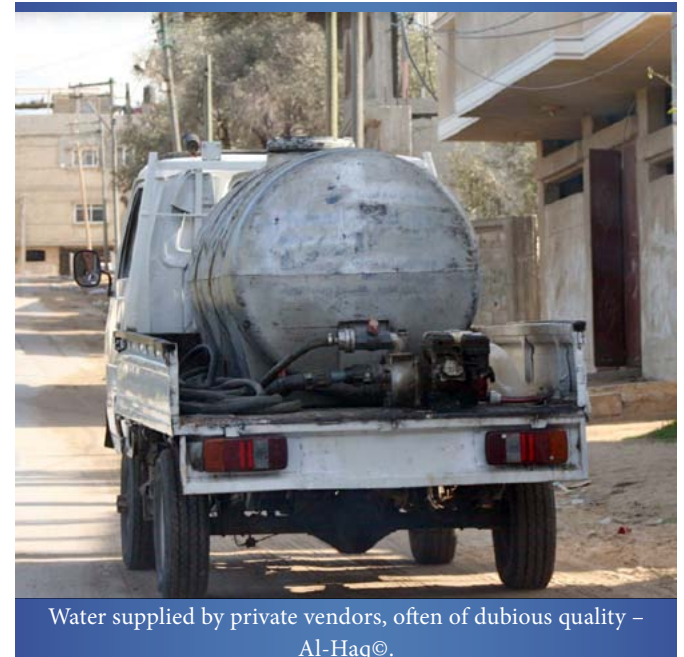
Residents of Yhan Kounis, North Gaza governorate, rely on desalinated water supplied by the municipality as tap water is too polluted for human consumption – Al-Haq©.

Given that tap water is too polluted, the vast majority of residents of the Gaza Strip purchase water for personal consumption from external vendors. Others rely on desalinated water supplied by the Coastal Municipalities Water Utility (CMWU), which costs around 50 NIS

44 The Oslo Accords only deal with those parts of the Mountain Aquifer that are located in the West Bank. See Section 3.3. of this study.
 45 J Selby, 'Cooperation, Domination and Colonialism: The Israeli-Palestinian Joint Water Committee' (2013) 6 Water Alternatives, 5.
 46 Other forms of pollution include lateral groundwater inflows (36.4 mcm/yr inflow of brackish water), surface pollution in the form of untreated wastewater and agricultural returns. C Messerschmid, 'Water in Gaza' (n 40) 175.
 47 UN Country Team in the occupied Palestinian territory, 'Gaza in 2020: A Liveable Place?' (August 2012) 11.
 48 UNRWA, 'Epidemiological Bulletin for Gaza Strip' (February 2009).

(approximately 13 USD) per cubic metre. In an environment where high rates of poverty and unemployment are already prevalent, some families spend one third of their income on water.⁴⁹

As a result of the over-five-year-long Israeli illegal regime of closures imposed on the Gaza Strip, the population therein does not have access to the majority of the materials necessary to maintain the water and sanitation infrastructure,⁵⁰ nor to the amount of fuel necessary to keep the wastewater treatment and desalination plants operating. Until Israel allows access to the necessary building materials, it is estimated that the quality of water in the Coastal Aquifer will continue to deteriorate and may become unusable by 2016, when, in the absence of any alternatives, the Gaza Strip could become unfit for human habitation.⁵¹



Water supplied by private vendors, often of dubious quality – Al-Haq©.

In the absence of any alternatives, the Gaza Strip could become unfit for human habitation.

With access to a mere 11 per cent of the Mountain Aquifer's resources, a quarter of total extractions from the shared Coastal Aquifer, and no access to surface water, Palestinians in the OPT only have access to 10 per cent of all available water in the region. The remaining 90 per cent is retained by Israel.

49 UNICEF and Palestinian Hydrology Group (PHG), 'Water, Sanitation and Hygiene Household Survey – Gaza (April 2010).
 50 As of July 2011, there were 17 water and sanitation projects placed on indefinite hold due to Israel's refusal to admit the required building materials. See UN Office for the Coordination of Humanitarian Affairs (UN OCHA), 'The Monthly Humanitarian Monitor' (July 2011). See also on the need for water infrastructure in Gaza, World Bank, 'Stagnation or Revival? Palestinian Economic Prospects' (Economic Monitoring Report to the Ad Hoc Liaison Committee) (21 March 2012) 23-26.
 51 Damage to the Coastal Aquifer may become irreversible by 2020. See UN Country Team in the occupied Palestinian territory (n 47) 3, 11. See also on the economic effect of the illegal regime of closures on the Gaza Strip, UN General Assembly (UNGA), 'Report of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories' (14 September 2012) UN Doc. A/67/372, paragraph 5: "[...] Israel continued barring the entry of several items that are vital for the process of reconstruction and economic recovery (e.g., construction materials, spare parts for water and sanitation projects)."

Wastewater that has undergone basic treatment finds its way to the sea through sewage outlets. However, if there is not enough fuel to operate at full capacity, the sewage is directly pumped into the sea without so much as basic treatment – Al-Haq©.



East Jerusalem and the Gaza Strip.⁵⁴ Since 1967, Israel has exerted considerable military and political efforts, including the establishment of colonies, in order to unlawfully exercise sovereign rights over the water resources and, as a result, Palestinian access to and use of their water has been severely restricted.

"Is it possible today to concede control of the [Mountain] [A]quifer [in the West Bank], which supplies a third of our water? Is it possible to cede the buffer zone in the Jordan Rift Valley? You know, it's not by accident that the settlements are located where they are."⁵⁵

Former Prime Minister of Israel, Ariel Sharon, in response to the question of whether withdrawal of Israeli settlers from the West Bank would ever be possible.

3.2. Integrating the Water System of the OPT into the Israeli System

3.2.1. Military Orders in the OPT

The consolidation of all water resources began immediately after the 1967 war. In this regard, one commentator has noted: "[t]he importance of the shared aquifers to Israel is such that one of Israel's first acts after the 1967 war was to declare the water resources of the West Bank and Gaza to be under military control."⁵⁶ To this end, Israel issued a series of military orders – still in force today and applicable to Palestinians only – that integrated the water system of the OPT into the Israeli system, while at the same time denying Palestinian control over this vital resource.⁵⁷

On 7 June 1967, Israel issued Military Proclamation No. 2, declaring all water resources in the region to be State property.⁵⁸ The three military orders that followed in the first 18 months of the Israeli occupation of the OPT amended Jordanian and British Mandate laws in place prior to 1967.

⁵⁴ R Mukhar, 'The Jordan River Basin and the Mountain Aquifer: The Transboundary Freshwater Disputes between Israel, Jordan, Syria, Lebanon and the Palestinians' (2006) 12 Annual Survey of International and Comparative Law, 59-85. See also B Hollinder, 'A Golden State Solution to the Israeli-Palestinian Water Conflict' (n 52) 103-130.

⁵⁵ A Shavit, 'Sharon Is Sharon Is Sharon' *Haaretz Magazine* (12 April 2001) <http://www.cephasministry.com/israel_sharon_sharon.html> accessed 22 March 2013, in J Stein, 'Waging Waterfare' (n 4) 174, fn. 33.

⁵⁶ S McCaffrey, *The Law of International Watercourses* (n 12) 320.

⁵⁷ The military orders discussed in this section are applicable to the West Bank water system only. However, Israel introduced similar legislative measures in relation to water in the Gaza Strip, such as Military Order No. 498 of 4 November 1974 (Gaza) amending the laws in place prior to the occupation of the Gaza Strip.

⁵⁸ Military Proclamation No. 2 endowed the Area Military Commander in the West Bank with full legislative, executive and judicial authorities over the West Bank, and declared that the law in force prior to the occupation remained in force as long as it did not contradict Proclamation No. 2 or any new military orders. Furthermore, all moveable and unmoveable property that belonged to the State was subjected to the administration of the Area Military Commander in the West Bank. See Proclamation No. 2: 'Proclamation Regarding Regulation of Administration and Law' (7 June 1967) in Jerusalem Media and Communications Centre (JMCC), *Israeli Military Orders in the Occupied Palestinian West Bank 1967-1992* (JMCC, Jerusalem, 1995) vii.

3. Control and Integration of the Water Resources in the OPT

3.1. Gaining Control over Water Resources in the OPT: the Six Day War (1967)

While water is certainly not the only reason for the conflict between Israel and Palestine, control over water resources has been identified as one of the major causes of the Six Day War of June 1967. After its establishment in 1948, Israel began implementing plans to exploit the water of the Jordan River through the NWC. The neighbouring Arab States saw the NWC as a threat, because it diverted large amounts of water from the Jordan River, and soon after the completion of the NWC in 1964, tensions continued to escalate until the outbreak of the Six Day War in June 1967.⁵²

During the Six Day War, Israeli forces captured and occupied lands strategic for their natural water resources.

During the Six Day War, Israeli forces captured and occupied lands strategic for their natural water resources,⁵³ thereby securing access to and control over the major surface and groundwater resources of the region. Israel's direct control over water resources increased by nearly 50 per cent as an immediate result of its occupation of the West Bank, including

⁵² B Hollinder 'A Golden State Solution to the Israeli-Palestinian Water Conflict' (2006) 30 Hastings International and Comparative Law Review, 103-130. See further, FAO (n 10) 86.

⁵³ Israel occupied the West Bank, including East Jerusalem, the Gaza Strip, the Sinai Peninsula, and the Golan Heights.

- Military Order No. 92 transfers complete authority over all water resources and water-related issues in the OPT to the Israeli military authorities.⁵⁹
- Military Order No. 158 requires that a permit be issued for the construction of any new water installation, without which any water structure is subject to confiscation or demolition by Israel. This military order not only forbade the unlicensed construction of any new water installation, including the drilling of wells, but also vested the Israeli military authorities with the power to deny any applicant a permit or revoke a permit at their discretion, without the need to provide any explanation.⁶⁰
- Military Order No. 291 declares all prior settlement of disputes concerning water to be invalid.⁶¹

Subsequent military orders allowed Israel to establish new regulations for particular districts, which consistently curb Palestinian access to water.⁶²

Furthermore, Israel declared the banks of the lower Jordan River to be a closed military zone, thereby denying Palestinian access, whilst also destroying existing Palestinian pumps and irrigation ditches tapping the Jordan River.⁶³

By making use of its military power, Israel laid the foundations for a system of water governance that remains in place today and is characterised by Israel's unlawful exercise of sovereign rights over all the water resources of the OPT.

3.2.2. Management of the West Bank Water System pre-Oslo Accords

Prior to the Oslo Accords, Israel's integrated water supply network across the West Bank, which connected Israeli colonies and Palestinian towns and villages within a single integrated supply network, sharply discriminated between the two populations. Palestinian storage reservoirs were much smaller and the West Bank's supply lines were often of narrower diameter if placed to feed Palestinian communities.⁶⁴

Israel established an institutionalised regime for managing the Palestinian water sector. While the Israeli military authorities (later the Israeli Civil Administration) retained overall

⁵⁹ Military Order 92: 'Order Concerning Jurisdiction over Water Regulations', issued on 15 August 1967, is an amendment to Jordanian law concerning water.

⁶⁰ Military Order 158: 'Order Concerning the Amendment to the Supervision Over Water Law', issued on 19 November 1967, is an amendment to Water Law 31, 1953.

⁶¹ Military Order 291: 'Order Concerning Settlement of Disputes over Land and Water', issued on 19 December 1968, is an amendment to the Land and Water Regulation Law 40, 1952.

⁶² Other military orders vested the Military Commander with the power to appoint local water authority members or change the composition of the local water authority. For instance, Military Order 484: 'Concerning Water Works Authority (Bethlehem, Beit Jala and Beit Sahour)', issued on 15 September 1972, which established a water authority and specified its functions and jurisdiction. Military Order 484 was subsequently amended by Military Orders 494 and 715, before being superseded by Military Order 1376: 'Order Concerning the Water and Sewage Authority (Bethlehem, Beit Jala and Beit Sahour)', issued on 24 July 1992, which also made projects and functions of this authority subject to the Israeli Military Commander in charge, granting the Military Commander full authority over the local water authority.

⁶³ UN Economic and Social Council, Report of the Secretary-General prepared in pursuance of General Assembly decision 39/442 (17 June 1985) UN Doc. A/40/381-E/1985/105, paragraph 202. "In the early days of the occupation, Israeli authorities under the claim of security blew up 140 Arab pumps installed on the West Bank of the River Jordan. As a result of that action, the Arab farmers were prevented from pumping water from the river for agricultural irrigation whereas the Israeli settlers in the area were allowed to continue to do so."

⁶⁴ J Selby, 'Joint Mismanagement' (n 6).

regulatory control over the water resources in the West Bank, various Palestinian institutions, such as the West Bank Water Department (WBWD), were responsible for maintaining distribution lines, opening and closing supply valves to Palestinian communities, and for billing Palestinian communities. None of the institutions had any power over or responsibility for the Israeli settlers. Rather, they operated as an interface between the occupied Palestinian civilian population and the water sector of Israel's military regime.⁶⁵ According to Jan Selby, this has enabled "Israel to pursue its colonial and apartheid water policies without having any direct contact with the Palestinian users."⁶⁶

According to Jan Selby, this has enabled "Israel to pursue its colonial and apartheid water policies without having any direct contact with the Palestinian users."

3.2.3. 'Mekorot' – Israel's National Water Company

From 1967 to 1982 the West Bank water system was under the management of the Israeli military authorities. In 1982, then Minister of Defence Ariel Sharon transferred ownership over all West Bank water supply systems to 'Mekorot,' of which the State of Israel owns 50 per cent.⁶⁷ In exchange for ownership over all Palestinian-owned water infrastructure with an estimated value of 5 million USD, 'Mekorot' made a symbolic payment of one NIS (approximately 0.25 USD),⁶⁸ whereby the integration of the OPT's water system into the metropolitan Israeli network was completed.

3.3. The Impact of the Oslo Accords on Water Allocation and Control

Following the signing of the *Declaration of Principles on Interim Self-Government Arrangements* (Oslo I) between Israel and the Palestine Liberation Organisation (PLO) in 1993,⁶⁹ Israeli and Palestinian delegations met in 1995 to further develop plans for the management of the water resources of the West Bank and the Gaza Strip. This resulted in the inclusion of Article 40: "Water and Sewage" in the *Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip* (Oslo II).⁷⁰

The Oslo II water regime is geographically limited to only those parts of the Mountain Aquifer that underlie the West Bank and focuses solely on groundwater resources.⁷¹ The remainder

⁶⁵ Thus, collection of water fees from 'door to door' in towns and villages fell upon the 'Palestinian' WBWD on behalf of and under direct order and supervision of the Israeli Civil Administration.

⁶⁶ J Selby, 'Joint Mismanagement' (n 6).

⁶⁷ Levi Eshkol founded the Water Authority, 'Mekorot' in 1937 as a joint venture between the Jewish Agency, the Jewish National Fund and a 'Histadrut' (trade union association) subsidiary company to provide water for Jewish settlements in support of the Zionist movement. Following the establishment of Israel in 1948, 'Mekorot' became the official Israeli Water Authority and fell under the joint ownership of the Government of Israel and its original founders. COHRE and Badil, *Ruling Palestine: A History of the Legally Sanctioned Jewish-Israeli Seizure of Land and Housing in Palestine* (May 2005) 46.

⁶⁸ J Selby, 'Joint Mismanagement' (n 6). See also I Scobbie, 'Natural Resources and Belligerent Occupation: Mutation through Permanent Sovereignty' (n 1) 264-265.

⁶⁹ *Declaration of Principles on Interim Self-Government Arrangements* (Oslo I) (13 September 1993).

⁷⁰ *Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip* (hereafter Oslo II) (28 September 1995). The legality of the Oslo Accords is subject to dispute as they contain norms that clearly violate international humanitarian law. As such, the Oslo Accords as a whole cannot be considered as a fully legal instrument.

⁷¹ Note that approximately 80 per cent of the recharge area is located in the West Bank.

of the Mountain Aquifer, as well as the shared Jordan River and the Coastal Aquifer where Israel is upstream and the OPT downstream, are subject to unilateral Israeli management without any Palestinian input or agreed upon limits of extraction.⁷² Article 40 of Oslo II lays out the principles of the water-sharing agreement based on the “existing quantities of utilization” plus additional quantities that the Palestinian side could develop from the Eastern Aquifer Basin.⁷³

The Oslo II water regime is geographically limited to only those parts of the Mountain Aquifer that underlie the West Bank and focuses solely on groundwater resources.

Under Article 40, Israel recognised undefined Palestinian water rights⁷⁴ and passed the responsibility of supplying the Palestinian population on to the Palestinian Authority (PA),⁷⁵ which charged the Palestinian Water Authority (PWA) with the responsibility of “ensuring equitable use, sustainable management and development of Palestinian water resources.”⁷⁶

Oslo II further limited the PA ability to supply water to the Palestinian population to only Areas A and B.⁷⁷ Indeed, while 95 per cent of the Palestinians reside in Areas A and B, the infrastructure upon which they depend lies inside or crosses into Area C. Furthermore, Area A and B are not contiguous, but fragmented into enclaves surrounded by Israeli colonies. Israel’s jurisdiction over Area C therefore cements its 46 years of exclusive control over water resources in the area and makes integrated planning and management of these vital resources virtually impossible for the PA.⁷⁸

While Israel has in principle recognised Palestinian water rights, its conduct suggests otherwise, and, contrary to Palestinians’ expectations, the Oslo Accords did not result in greater access to the water resources of the OPT. In fact, Palestinian water supplies have dropped from 118 mcm per year pre-Oslo to 98 mcm in 2010.⁷⁹ Up to the present day, Israel continues to illegally exercise sovereign rights over the water resources in the OPT, thereby denying the PWA the possibility of developing the water and sanitation sector or the possibility to put in place more efficient extraction systems and distribution networks to supply the Palestinian population.⁸⁰

72 There is no mechanism to facilitate policy coordination between Israel and the Palestinians over the Jordan River. Equally, the Palestinian Authority (PA) holds unilateral responsibility for water resource management in the Gaza Strip, while Israel unilaterally manages the rest of the Coastal Aquifer. J Selby, 'Cooperation, Domination and Colonialism' (n 45) 5-6. See further, M Zeitoun, C Messerschmid, S Attili, 'Asymmetric Abstraction and Allocation: The Israeli-Palestinian Water Pumping Record' (2009) 47 Ground Water.

73 *Ibid.*, 152.

74 Oslo II, Annex III, Appendix 1, Article 40: "1. 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 various water resources."

75 Oslo II, Annex III, Appendix 1, Article 40: "The Israeli side shall transfer to the Palestinians side, and the Palestinian side shall resume, powers and responsibilities in the sphere of water and sewage in the West Bank related solely to the Palestinians, that are currently held by the military government and its Civil Administration."

76 The PWA was formally established as a result of Presidential Decree no. 90 for 1995 (issued 26 April 1995). Its form and functions were codified in Palestinian Law no. 2 for 1996: Concerning the Establishment of the PWA (issued by President Arafat, 18 January 1996).

77 Oslo II stipulated three jurisdictional zones in the West Bank (excluding East Jerusalem) known as 'Area A,' 'Area B,' and 'Area C.' See glossary.

78 World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) vii.

79 PWA, 'Water Supply Report 2010' (March 2012) 15, 23.

80 G Abouali, 'Natural Resources Under Occupation: The Status of Palestinian Water Under International Law' (n 2) 560-561. See also Amnesty International, 'Troubled Waters' (n 25) 21.

In reality, the Oslo II water regime is a continuation and preservation of Israel’s exclusive control over the Mountain Aquifer and facilitates its illegal exercise of sovereign rights over the water resources in the OPT.

3.3.1. Unchanged Shares

Several measures contributed to the consolidation of Israeli control over water in the OPT, which violate Palestinian water rights. Oslo II ensured that there would be no reduction in the quantity of water that Israel extracts from the Mountain Aquifer (see Figure 7a). The unstated rationale was that the North-Eastern and Western Aquifer Basins were already fully utilised by Israel, thereby freezing their redistribution, and allowing Israel to continue consuming 87 per cent of the two groundwater resources, while Palestinians only consume 13 per cent (see Figure 7b).⁸¹

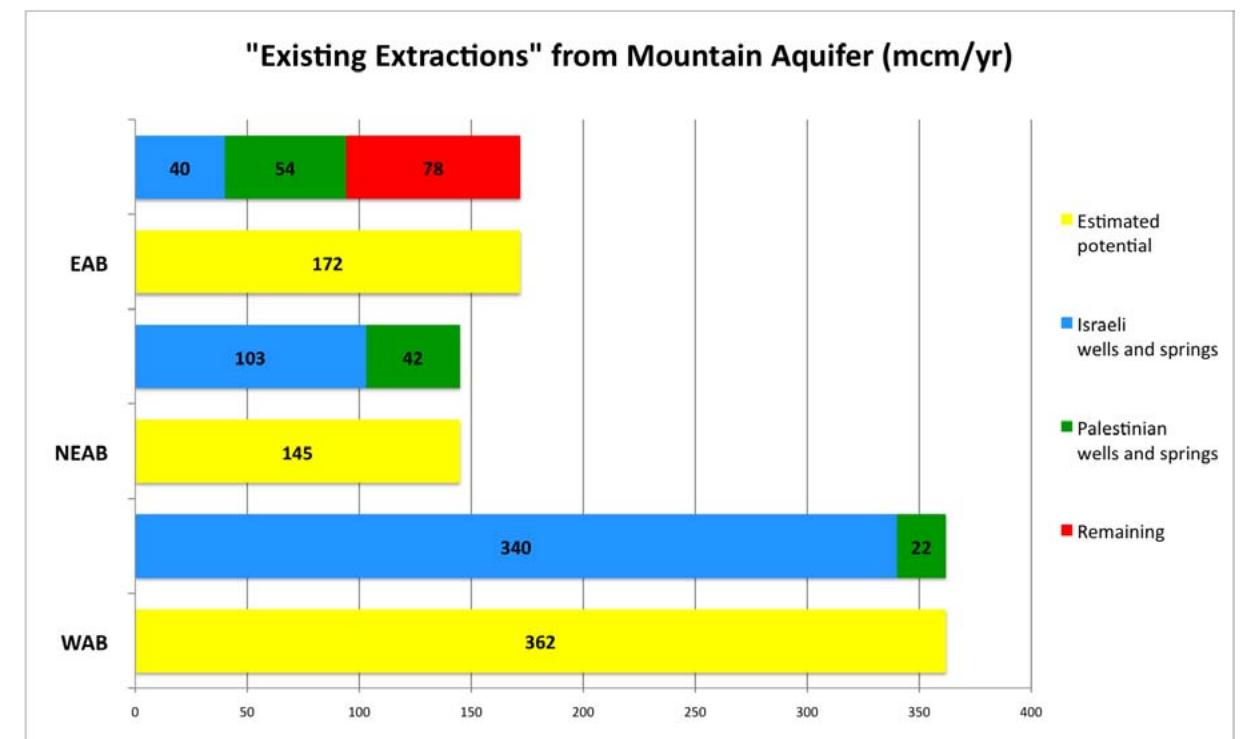


Figure 7a: “Existing extractions, utilisation, and estimated potential” according to the terms of Oslo II, Schedule 10 (in mcm/yr unless otherwise stated).⁸²

81 J Selby, 'Dressing up domination as 'cooperation': the case of Israeli-Palestinian water relations' (2003) 29 Review of International Studies, 121, 131.

82 Basic figures found in Table 1 in M Zeitoun, C Messerschmid, S Attili, 'Asymmetric Abstraction and Allocation' (n 72) 147. Additional calculations are based on the information in the analysis of this source.

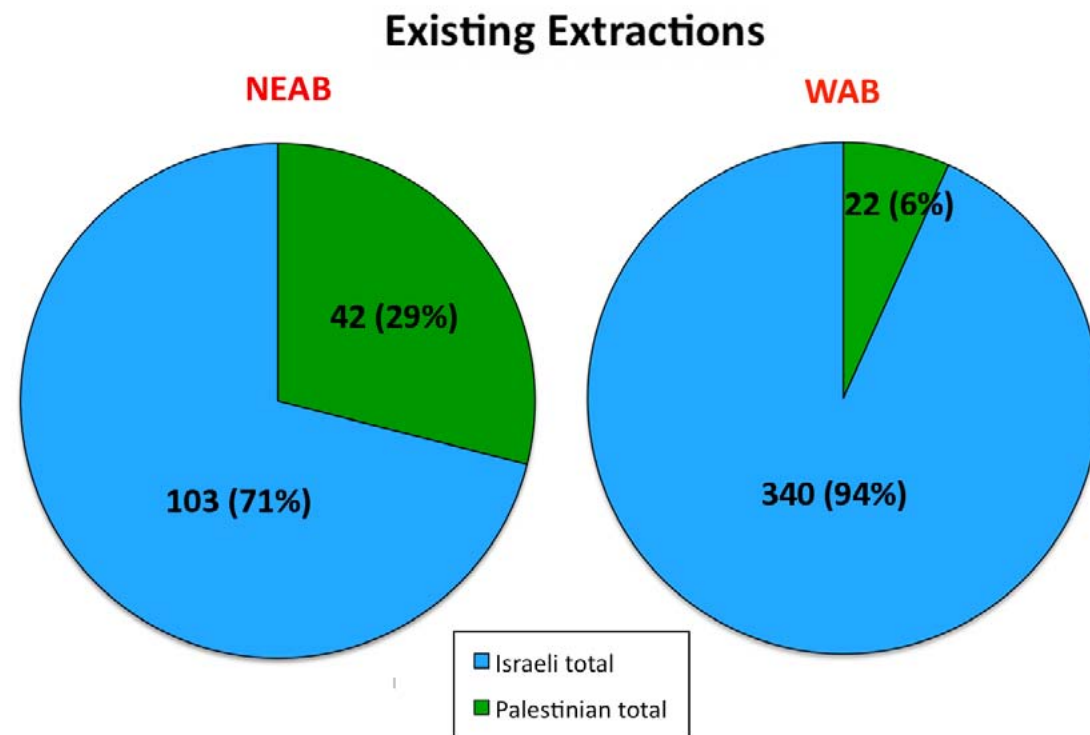


Figure 7b: "Existing extractions, utilisation, and estimated potential" according to the terms of Oslo II, Schedule 10, for the Western and the North-Eastern Aquifer Basin (in mcm/yr unless otherwise stated).⁸³

In violation of its obligations under Oslo II and in clear contradiction of its recognition of Palestinian water rights, Israel illegally exercises sovereign rights over the water resources in the OPT to the extent that Palestinians are prevented from extracting even up to pre-Oslo II levels, leaving them with only 98 mcm in 2010.⁸⁴

Palestinians are prevented from extracting even up to pre-Oslo II levels.

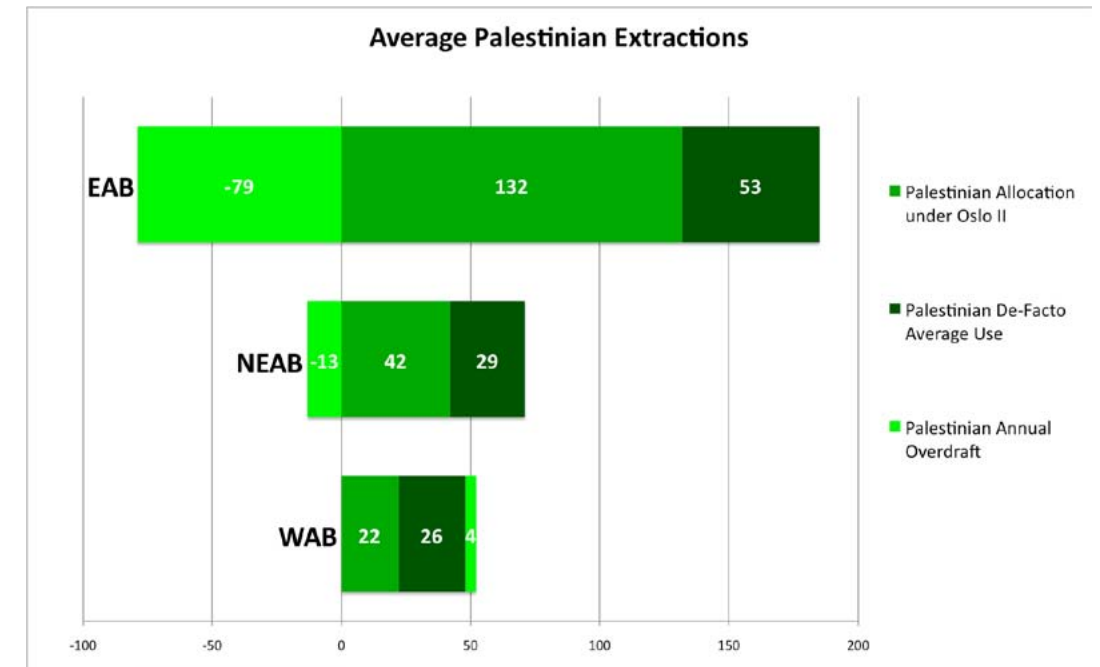


Figure 8a: Average Palestinian extractions from the Mountain Aquifer between 1995 – 2007 in comparison to amounts allocated under Oslo II (in mcm/yr).⁸⁵

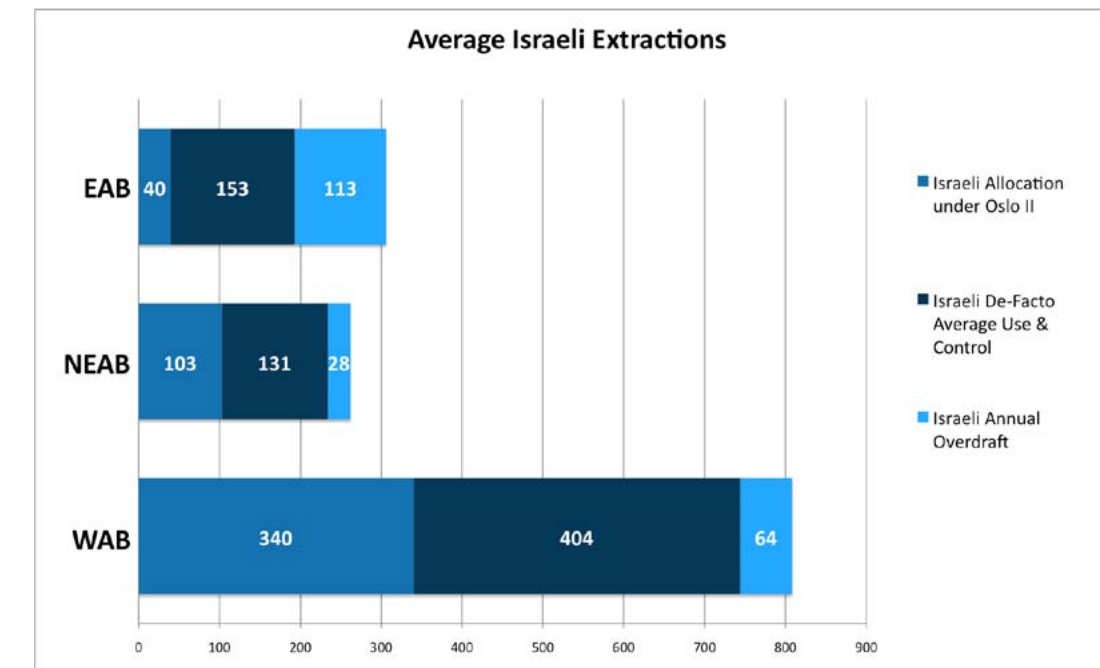


Figure 8b: Average Israeli extractions from the Mountain Aquifer between 1995 – 2007 in comparison to amounts allocated under Oslo II (in mcm/yr).⁸⁶

⁸³ Ibid.

⁸⁴ PWA, 'Water Supply Report 2010' (n 79) 15, 23.

⁸⁵ Information courtesy to Clemens Messerschmid. Official Palestinian sources suggest total Palestinian abstractions from all wells and springs in the West Bank, and from all basins and aquifers – including the minor non-mountain aquifers – as merely 98.3 mcm in 2010. See PWA, 'Water Supply Report 2010' (n 79) 15, 23. The figure of 132 is made up of the 54 mcm/yr pre-Oslo extraction levels plus 78 mcm/yr allocated for "future needs" under Oslo II. See Figure 7a and Section 3.3.2. of this study.

⁸⁶ Information courtesy to Clemens Messerschmid, based on HSI yearbooks.

3.3.2. Allocation of Water Supplies for "Future Needs"

Oslo II promised Palestinians an additional amount of 28.6 mcm per year "during the interim period" (until 1999) in order "to meet the immediate needs of the Palestinians in fresh water for domestic use,"⁸⁷ and another 70 – 80 mcm per year for "future needs," which was to be extracted from the Eastern Aquifer Basin (see Figure 7a).⁸⁸ The quantity of the estimated "future needs" was based on evolution of the population over five years, in line with the general expectation that this Interim Agreement would have been revised within a five-year period. However, this estimation of "future needs" still governs the water sector today, 18 years after Oslo II and 13 years after its expected end. Since 1995, the Palestinian population has doubled. The plans for development of the Eastern Aquifer Basin have neither been realised, nor do they seem achievable as long as Israel continues to prevent the Palestinians from accessing the most productive areas of this basin.⁸⁹

3.3.3. Joint Water Committee

One of the primary ways through which the Israeli authorities maintain control of Palestinian water resources is by virtue of their effective veto power in the Joint Water Committee (JWC) established under Oslo II as part of a five year interim arrangement, but still meeting 18 years later.⁹⁰

One of the primary ways through which the Israeli authorities maintain control of Palestinian water resources is by virtue of their effective veto power in the Joint Water Committee (JWC).

The JWC holds complete decision-making power over the coordinated joint management and development of all West Bank water resources and wastewater systems. The JWC's mandate includes granting permits for drilling and rehabilitation of wells, all increases of extraction from wells, protection of water resources and water and sewage systems, setting extraction quotas, resolution of water and sewage disputes, and cooperation in the field of water, including exchanging information. Comprised of equal numbers of Israeli and Palestinians, decisions should be made by consensus, granting either side the right to veto any proposal.⁹¹

The establishment of the JWC should have been a positive reform for Palestinians. However, the consensus system still allows for Israel to veto any proposal, including the maintenance of existing water infrastructure that has fallen in disrepair,⁹² or any alterations

87 The total quantity specified in these projects is 28.6 mcm/yr, of which 5 mcm/yr is dedicated to the Gaza Strip from the Israeli water system (Oslo II, Annex III, Appendix 1, Article 40.7.a.6, b.3), 17 mcm/yr "[...] to the Hebron, Bethlehem and Ramallah areas from the Eastern Aquifer or other agreed sources in the West Bank" (Oslo II, Annex III, Appendix 1, Article 40.7.b.2), and the remainder (6.6 mcm/yr) from a number of specified sources and systems.

88 The quantity set aside for the Palestinians from the Eastern Aquifer Basin was the full amount of the "remaining quantities" from that basin— 78 mcm/yr. Oslo II, Annex III, Appendix 1, Article 40.6.

89 In 2010, Palestinians extracted only 44 mcm/yr from the Eastern Aquifer Basin as a result of Israeli restrictions. PWA, 'Water Supply Report 2010' (n 79) 15.

90 Occupation, Colonialism, Apartheid? A re-assessment of Israel's practices in the occupied Palestinian territories under international law' (hereafter: *Occupation, Colonialism and Apartheid Study*) (Human Science Research Council, Cape Town, 2009) 142 <<http://www.setav.org/ups/dosya/24515.pdf>> accessed 22 March 2013.

91 Oslo II, Annex III, Appendix 1, Article 40 (13, 14) as cited in *Ibid.*, 143.

92 According to the PWA, some 140 Palestinian, mostly agricultural, wells are currently in disrepair or standing still for lack of permits for maintenance work.

to the *status quo ante* in the extraction levels.⁹³ Given that the JWC's mandate is limited to the West Bank water resources only and does not deal with the downstream Israeli portion of the shared transboundary groundwater resource and flow systems,⁹⁴ the Palestinians do not enjoy similar veto powers in relation to Israeli actions concerning water on its side of the Green Line, even where those actions affect joint water resources.⁹⁵

The Palestinians do not enjoy similar veto powers in relation to Israeli actions concerning water on its side of the Green Line, even where those actions affect joint water resources.

A recent study done by Dr. Jan Selby into JWC records between 1995 and 2008 demonstrates that approval rates for Palestinian projects are significantly lower than Israeli projects.⁹⁶ As Figure 9 shows, the PWA approved all Israeli proposals for wells (three) and supply network (108) and only rejected one of the 24 proposed wastewater projects.⁹⁷ Concurrently, Israel only approved half of all Palestinian proposals for wells.



Figure 9: JWC approval rate by type between 1995-2008.⁹⁸

93 Oslo II, Annex III, Appendix 1, Schedule 8 (1.b), as cited in *Occupation, Colonialism and Apartheid Study* (n 90) 143.

94 Oslo II, Annex III, Appendix 1, Article 40. See further Section 3.3. of this study.

95 J Selby, 'Cooperation, Domination and Colonialism' (n 45) 7; G Abouali, 'Natural Resources Under Occupation: The Status of Palestinian Water Under International Law' (n 2) 561.

96 This chart combines information on JWC and Israeli Civil Administration approval, as projects proposed for Area C require Israeli Civil Administration approval as well. See Section 4.3.1. of this study.

97 See for more statistics on the applications by type and project, J Selby, 'Cooperation, Domination and Colonialism' (n 45) 12.

98 *Ibid.* The 49 per cent approval rate for Palestinian well applications includes approvals on projects that were submitted up to end of 2009 and the 58 per cent approval rate for Palestinian wastewater infrastructure applications includes approvals on projects that were submitted up to end of 2011.

Upon closer inspection, 19 out of 20 proposals for monitoring wells, which are constructed to assess groundwater conditions in particular locations and at particular times, were accepted; while most, if not all, applications for well rehabilitation were rejected.⁹⁹

Up to the present day, Israel has chosen to veto all applications for Palestinian production wells in the major Western Aquifer Basin, while agreeing to 85 per cent of applications that draw from the small Eastern Aquifer Basin.¹⁰⁰

Israel has chosen to veto all applications for Palestinian production wells in the major Western Aquifer Basin.

The pattern of Palestinian JWC applications clearly demonstrates the narrow parameters in which the PWA operates. For instance, given that financial support from donors for the Palestinian water sector is conditional upon JWC approval,¹⁰¹ the PWA has opted for pipelines with a small diameter for distribution within and between Palestinian communities, rather than larger transmission networks that may incur a JWC veto.¹⁰² At the same time, Israeli colonies continue to receive lavish amounts of water. These settlements are interconnected through internal networks, for which Israel does not obtain JWC approval, and are increasingly integrated into Israel's national water network.¹⁰³

Furthermore, Israel only approves major Palestinian projects, especially wells, if the Palestinians agree to Israeli demands to construct new and enlarged water supply systems benefitting colonies in the West Bank.¹⁰⁴ According to the PWA, "[m]ore recently, Israel has begun conditioning JWC approval for urgently needed Palestinian water projects on prior Palestinian approval of water projects benefiting illegal Israeli settlements. This has since become consistent Israeli policy, in effect undermining the JWC by reducing it to a forum for blackmail."¹⁰⁵ Even when the Palestinian side exercises its right of veto through the JWC, Israel proceeds with water projects that serve the colonies.¹⁰⁶ For instance,

Even when the Palestinian side exercises its right of veto through the JWC, Israel proceeds with water projects that serve the colonies.

⁹⁹ If all applications for monitoring wells were excluded, the figure would stand at 30 per cent. If well rehabilitation applications were excluded from the calculation, the rate for approval of wells would stand at 66 per cent. *Ibid.*, 13-14.

¹⁰⁰ Palestinian National Authority (PNA), PWA, 'Palestinian Water Sector: Status Summary Report September 2012' (In preparation for the Meeting of the Ad Hoc Liaison Committee (AHLIC), 23rd September 2012, New York (September 2012) 4. See also, J Selby, 'Cooperation, Domination and Colonialism' (n 45) 13.

¹⁰¹ J Selby, 'Cooperation, Domination and Colonialism' (n 45) 14, 7.

¹⁰² Though not formally adopted in JWC procedures, practice has shown that all pipelines of greater than 2" diameter or 200 metres in length require JWC approval. *Ibid.*, 7.

¹⁰³ *Occupation, Colonialism and Apartheid Study* (n 90) 141; See also J Selby, 'Dependence, Independence and Interdependence in the Palestinian Water Sector' (2011) Draft Paper Presented at Birzeit University Conference: "Water in Palestine" (1 November 2011).

¹⁰⁴ The PWA has relatively little actual control over water produced in the West Bank and is essentially caught in an asymmetrical relationship that is very sensitive to Israeli threats of reducing cooperation with the JWC. See M Zeitoun, 'The Conflict vs. Cooperation Paradox: Fighting over or Sharing of Palestinian-Israeli Groundwater?' (2007) 32 *Water International*, 105-120. See for case studies on the explicit linkage of PA approval for Israeli settlement projects, J Selby, 'Cooperation, Domination and Colonialism' (n 45) 17.

¹⁰⁵ See PNA, PWA, 'Palestinian Water Sector: Status Summary Report September 2012' (n 100) 3.

¹⁰⁶ M Zeitoun, 'The Conflict vs. Cooperation Paradox' (n 104) 105-120.



Water pipes in the Jordan Valley- Tony Kane©.

Israel unilaterally decided to connect 'Kochav Ya'akov' and 'Psagot' settlements located in Ramallah governorate to the Palestinian wastewater treatment plant in Al-Bireh, Ramallah governorate, despite objections raised by the PWA and its German government donors.¹⁰⁷

In many ways, the current system in which Israel can and has used its veto powers to prevent the Palestinians from undertaking any substantial water projects in the West Bank mirrors the system of military orders in place prior to the conclusion of the Oslo Accords, except for the 'theoretical' Palestinian veto of settlement infrastructural projects. As such, the establishment of the JWC has allowed for the formalisation of a discriminatory management regime that was, for the most part, already in place as a result of Israel's considerable military and political efforts to exercise total control over water resources in the OPT.¹⁰⁸ Jan Selby thus concludes: "[a] joint management system in which one party has no option but to assent to the colonisation of their own land is little more than a 'dressing up' of cooperation as domination."¹⁰⁹

The establishment of the JWC has allowed for the formalisation of a discriminatory management regime.

¹⁰⁷ World Bank, 'West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development' (n 25) 112-113.

¹⁰⁸ See Section 3.2. of this study. See further J Selby, 'Dressing up domination as 'cooperation'' (n 81) 124.

¹⁰⁹ J Selby, 'Joint Mismanagement' (n 6) 12.

3.4. The Impact of the Annexation Wall on Water Resources in the West Bank

Since June 2002, Israel has been constructing the Annexation Wall on occupied territory, an exercise that has faced international condemnation on the basis of its illegality under international law.¹¹⁰ The construction of the Wall has created Seam Zones, areas of land that are caught between the Wall and the Green Line. Palestinian residents on the eastern side of the Wall have been cut off from 28 agricultural groundwater wells, with an annual yield of some 4 mcm, which constitutes more than 30 per cent of the Palestinian share in the Western Aquifer Basin as per Oslo II.¹¹¹ Upon completion of the Wall, Israel will have annexed a total of 70 per cent of the West Bank's share of the Western Aquifer Basin's recharge area, which is the only area that has any significant potential for well development and increasing water extractions in the future. The construction of the Wall does not only render Israel control over the 28 agricultural wells, but also establishes Israeli supremacy over future groundwater development in this area.¹¹² As such, the construction of the Wall in the northern West Bank reveals Israel's intent to permanently annex Palestinian water resources. Indeed, the International Court of Justice (ICJ) has expressed concern at the annexation of the Western Aquifer Basin in its 2004 Advisory Opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (Advisory Opinion on the Wall).¹¹³

The construction of the Wall in the northern West Bank reveals Israel's intent to permanently annex Palestinian water resources.

110 Al-Haq, 'The Annexation Wall and its Associated Regime' (2012) (Second Edition) 11.

111 M Richard and J Isaac, 'The Water Regime in the West Bank' (n 34).

112 C Messerschmid, 'Separating the Waters (Part 1)' *The Electronic Intifada* (1 June 2007) <<http://electronicintifada.net/content/separating-waters-part-1/6971>> accessed 22 March 2013; C Messerschmid, 'Separating the Waters (Part 2)' *The Electronic Intifada* (1 June 2007) <<http://electronicintifada.net/content/separating-waters-part-2/6970>> accessed 22 March 2013.

113 *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (Advisory Opinion) ICJ Rep 2004, paragraph 133 (hereafter: *Advisory Opinion on the Wall*). See further, Al-Haq, 'The Annexation Wall and its Associated Regime' (n 110) 26; and *Occupation, Colonialism and Apartheid Study* (n 90) 145.

4. Supply, Sale and Destruction: Current Israeli Methods to Maintain Hegemony

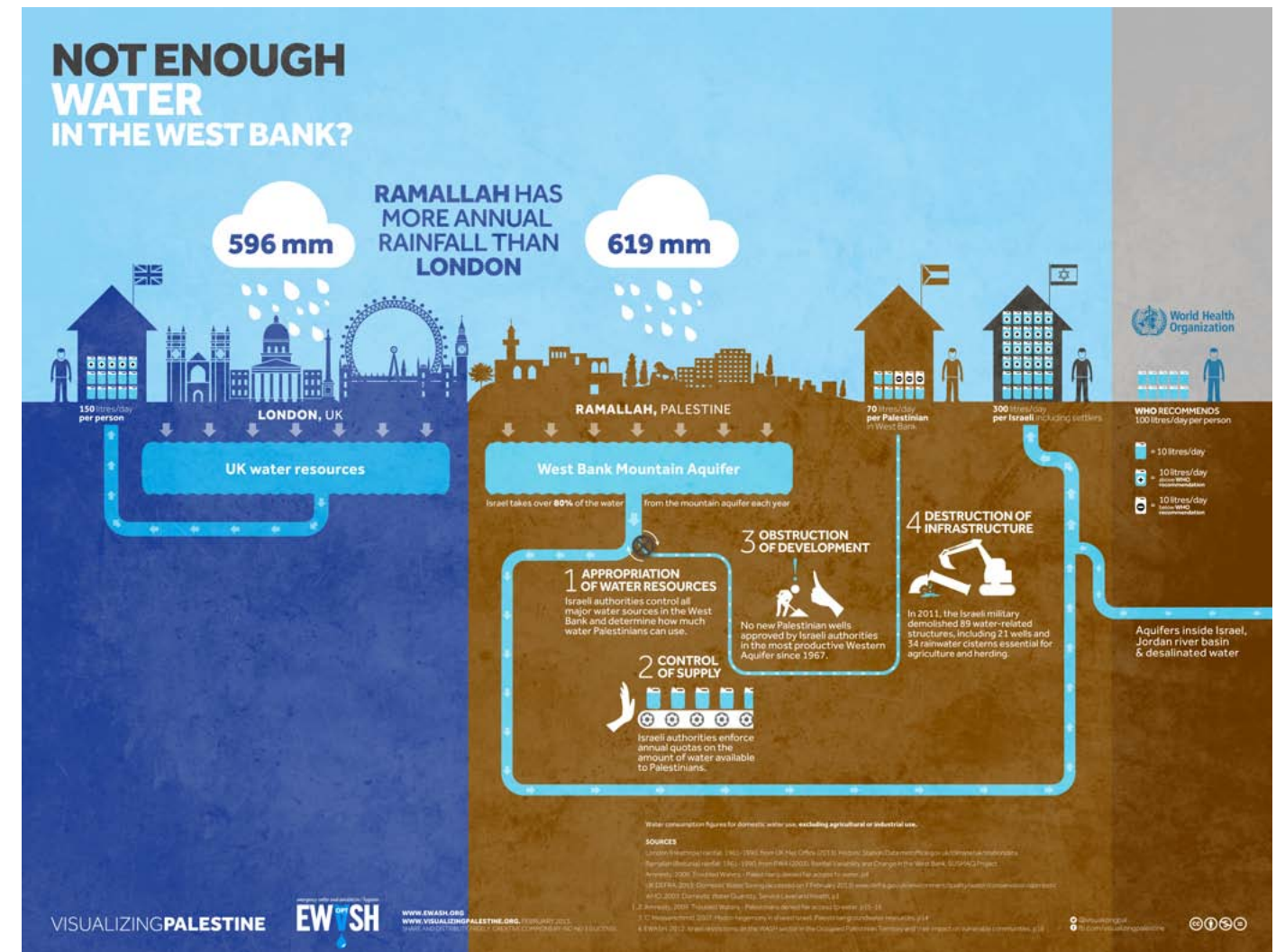


Figure 10: 'Not Enough Water in the West Bank.'¹¹⁴

4.1. Forced Water-Dependence

As a result of the transfer of control and ownership of Palestinian water infrastructure in the West Bank to 'Mekorot',¹¹⁵ Palestinians have been forced to rely on Israel's national water company to meet their annual water needs,¹¹⁶ and must purchase water against a price set by 'Mekorot.' According to the PWA, it had to purchase an additional 55.5 mcm from 'Mekorot' in 2010 "to cover the minimal and very basic needs." This means that the

114 Infographic designed by Visualizing Palestine for EWASH (March 2013).

115 See Section 3.2.3. of this study.

116 Also recognised by the International Fact-Finding Mission on Settlements (n 5) paragraph 83.

Palestinians had to rely on Israel for more than a third of their water needs in 2010.¹¹⁷ In its January 2013 report, the International Fact-Finding Mission on the Impact of Israeli Settlements on the Civil, Political, Economic, Social and Cultural Rights in the Occupied Palestinian Territory (International Fact-Finding Mission on Settlements), appointed by the UN Human Rights Council, estimated that “Mekorot supplies almost half the water consumed by Palestinian communities.”¹¹⁸

Mekorot supplies almost half the water consumed by Palestinian communities.

While under Oslo II the Israeli commitment to supply water directly to the PWA in the West Bank stands at 31 mcm per year,¹¹⁹ this amount continues to grow and is likely to double in the coming years.¹²⁰ In practice, the PWA is purchasing water from an Israeli company, when legally, this water should have been allocated to the Palestinians by virtue of their riparian share in the West Bank’s aquifer system.

Since 1967, Israel has developed wells (mainly located in the Jordan Valley and run by ‘Mekorot’ to supply the colonies), as well as a water network that is linked with the Israeli national network. According to the PWA, there are 38 Israeli wells located in the West Bank, 29 of which are in the Jordan Valley.¹²¹

117 In 2010, 98.3 mcm was extracted from local wells and springs in the West Bank. According to the PWA, “[t]he total purchased amount in 2010 formed 36 per cent of the total water supplied in that year, with almost 55.5 mcm distributed over the 11 governorates.” PWA, ‘Water Supply Report 2010’ (n 79) 31.

118 International Fact-Finding Mission on Settlements (n 5) paragraph 84.

119 Israeli Water Authority (IWA), ‘The Issue of Water between Israel and the Palestinians’ (March 2009) 36 <<http://www.mfa.gov.il/NR/rdonlyres/71BC5337-F7C7-47B7-A8C7-98F971CCA463/0/IsraelPalestiniansWaterIssues.pdf>> accessed 22 March 2013.

120 The PWA has had to purchase 51.8 mcm in 2008 and 53 mcm in 2009. For comparison, the Palestinians bought some 40 mcm in 2003 and 37.2 mcm in 1999. For figure 2008, see *Ibid.*, 36. For figure 2009, see PWA, ‘Water Supply Report 2010’ (n 79) 17. For figures 2003 and 1999, see M Zeitoun, C Messerschmid, S Attili, ‘Asymmetric Abstraction and Allocation’ (n 72) 156.

121 The Eastern Aquifer is located underneath the Jordan Valley. Israel drilled only 6 wells in the Western and North-Eastern Aquifer Basin, as they naturally drain downstream into Israel, where pumping is much easier than in the West Bank.

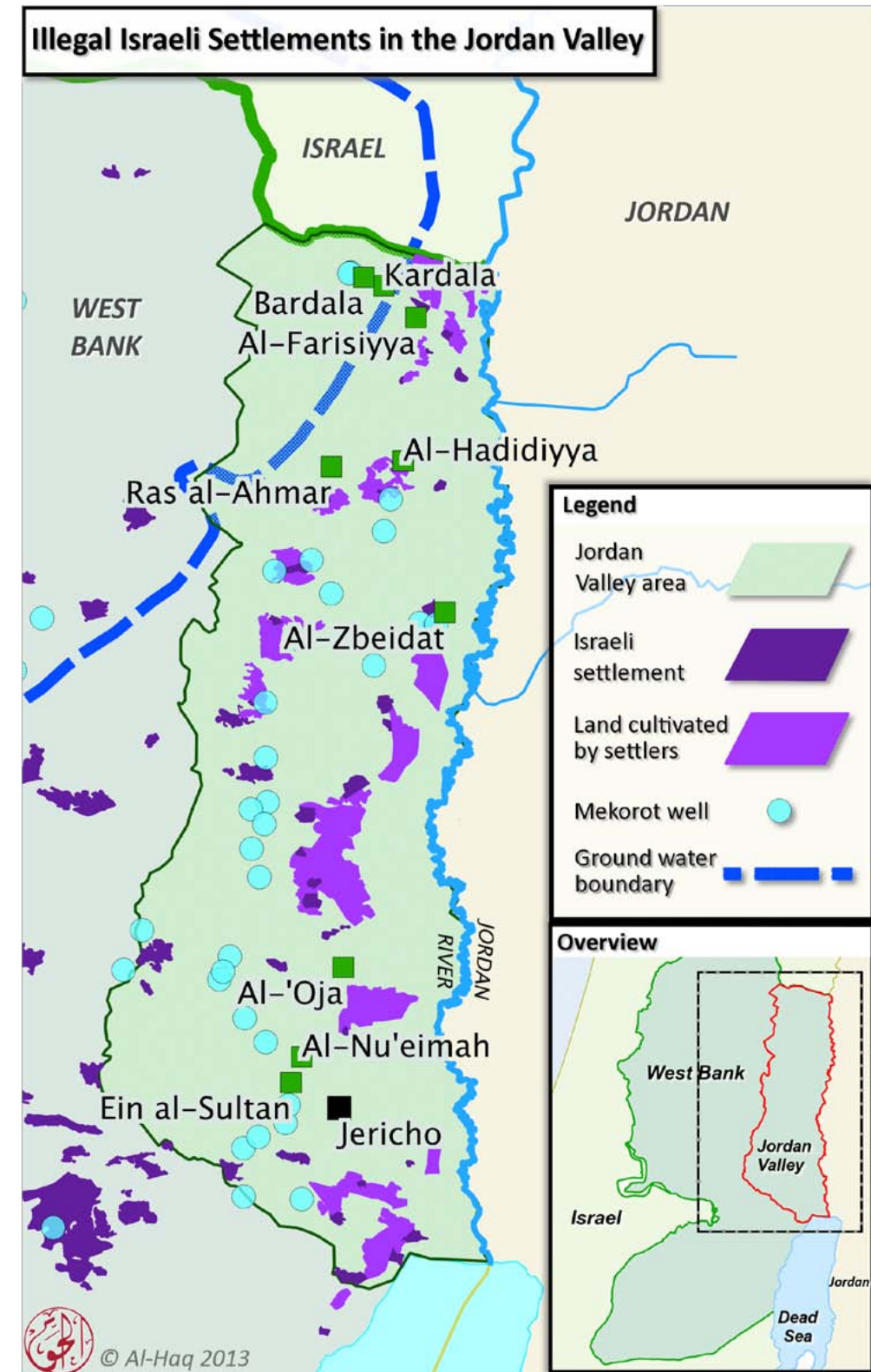


Figure 11: Map of the Jordan Valley – Al-Haq©.

In 2005, 'Mekorot' extracted 44.1 mcm – making up 77 per cent of all Israeli West Bank extractions – in order to supply copious amounts of water to sparsely populated, yet flourishing agricultural colonies in the Jordan Valley.¹²² The water is intended for irrigation of high-intensive and specialised agricultural products, which are mainly designated for export.¹²³



'Mekorot' pumping station, Jordan Valley – Tony Kane©.

In addition, 'Mekorot' routinely reduces Palestinian supply – sometimes by as much as 50 per cent – during the summer months in order to meet consumption needs in Israel and the colonies.¹²⁴

Case Study 1: *Kufr al-Deek: dry and contaminated*

The residents of Kufr al-Deek village, Salfit governorate have a water supply of merely 23 litres *per capita* daily (lpcd), which is almost entirely supplied by 'Mekorot'.¹²⁵ Kufr al-Deek is located 300 metres from 'Ariel', one of the largest Israeli colonies in the West Bank.¹²⁶ When supplies of water are low in the summer months, 'Mekorot' closes the valves that supply Kufr al-Deek so as not to affect 'Ariel's' supplies. 'Ariel' is strategically built over the Western Aquifer Basin and sits on top of the hill above the 'Ein al-Matwi spring and the Palestinian towns of Salfit, Bruqin, Kufr al-Deek and Farkha. As is the case in numerous Palestinian communities within the West Bank, local springs make up a vital source of water for these towns. Recently however, the 'Ein al-Matwi spring has become contaminated. The settlement of 'Ariel' threatens the very source of water that these communities rely on for drinking purposes, as it routinely discharges wastewater in an inappropriate manner. In doing so, 'Ariel' is adversely affecting not only the health of the Palestinian communities directly, but also the local agriculture and the environment in the immediate vicinity.¹²⁷

Due to the severe water cuts and the limited coverage by the water network in the OPT, many communities have had to resort to purchasing expensive water delivered by water tankers. This form of supply increases the price of water to an average of eight times or more what Israeli settlers pay.¹²⁸

Case Study 2: *Khirbet al-Hadidiyya residents pay five times more for tankered water*

"In Khirbet al-Hadidiyya, we do not have a water network. The Israeli occupying authorities refuse to approve the installation of a water network, ostensibly because the village lacks a master plan. The Israeli occupying authorities do not recognise our presence in the area. Therefore, we are forced to purchase water and transport it to our houses by water tank trucks. For example, I have to purchase 400-500 cubic metres of water per month. A cubic metre costs 25 NIS [approximately 6.5 USD]. If a water network was available in Khirbet al-Hadidiyya, the price of a cubic metre of water would not exceed 5 NIS [approximately 1.25 USD]. The village residents and I purchase water from the area of Tammoun, 35 kilometres west of Khirbet al-Hadidiyya village. Water is transported by private tank trucks, increasing the price of water. In the village, we do not have any water wells or collector wells. We store water in metal tanks and use it very cautiously for drinking and watering livestock."

- Excerpt from Al-Haq Affidavit No. 7163/2012. Given by 'Abd-al-Rahim Husein 'Bsharat, a livestock breeder and resident of al-Hadidiyya village, Toubas governorate, West Bank, on 23 February 2012.

¹²² C Messerschmid, 'What price cooperation? – Hydro-Hegemony in shared Israeli/Palestinian groundwater resources' (2007) Paper Presented at International Conference Sustainable Development of Water in Palestine (House of Water & Environment, Ramallah, 2007) 347-364.

¹²³ World Bank, 'The Underpinnings of the Future Palestinian State: Sustainable Growth and Institutions' (Economic Monitoring Report to the Ad Hoc Liaison Committee) (21 September 2010) 16.

¹²⁴ UNGA, 'Report of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs in the Occupied Territories' (8 June 2007) UN Doc. A/61/500Add.1, paragraph 29. Also recognised by the International Fact-Finding Mission on Settlements (n 5) paragraph 84. See also PHG, 'Water for Life: "The Inequitable Abstraction, Allocation and Consumption of Water Resources in the occupied Palestinian territory"' (2008) 38.

¹²⁵ Video produced by Israel Social TV, between min. 04:41-09:01. Israel Social TV, 'A-Dik is drying out' (7 July 2012) <<http://tv.social.org.il/en/a-dik-is-drying-out>> accessed 22 March 2013.

¹²⁶ Founded in 1978, Ariel is located almost exactly halfway between the Green Line and the Jordan River, at a distance of 16.5 kilometres from the Green Line. See B'Tselem, 'Ariel Settlement Fact Sheet' (last updated July 2012).

¹²⁷ PHG, 'Wastewater from Ariel Settlement Pollutes Palestinian Water Supply in Salfit' (2010).

¹²⁸ A Hass, 'Someone tell the Palestinians: It's the occupation, stupid!' *Haaretz* (10 September 2012) <<http://www.haaretz.com/news/features/someone-tell-the-palestinians-it-s-the-occupation-stupid-premium-1.463777>> accessed 22 March 2013.

According to data collected by the PWA, the average expenditure of tankered water was around 12 NIS (approximately 3 USD) per cubic metre in 2010.¹²⁹ Palestinians connected to the water networks pay 2.64 NIS (approximately 0.7 USD) per cubic metre in the West Bank and 2.38 (approximately 0.6 USD) per cubic metre in the Gaza Strip.¹³⁰



Water tanker with a volume of 500 litres, Al-Jiftlik, Jordan Valley – Tony Kane©.

4.2. Discriminatory Allocation: “Sharing” Between Two Peoples

As a result of Israel’s water policies and practices in the OPT, the total amount of water available for domestic consumption by almost 2.6 million Palestinian inhabitants in the West Bank (excluding East Jerusalem)¹³¹ was 98 mcm in 2010.¹³² In comparison, it was reported that more than half a million settlers in the West Bank are consuming 150 mcm of water annually for domestic use.¹³³ The total amount of water available for domestic, agricultural and industrial use by some 7.6 million Israelis (residing in Israel proper and in colonies)¹³⁴

¹²⁹ PWA, 'Water Supply Report 2010' (n 79) 8.

¹³⁰ The amounts are what the Palestinians paid Israel per cubic metre in 2012. A Hass, 'Palestinian Authority: Israel violating Oslo deal on water prices' *Haaretz* (11 October 2012) <<http://www.haaretz.com/print-edition/features/palestinian-authority-israel-violating-oslo-deal-on-water-prices.premium-1.469290>> accessed 22 March 2013.

¹³¹ PCBS, 'On the Eve of the International Population Day 11/7/2011' (n 37).

¹³² The average of surface and groundwater under Palestinian control in the West Bank ranges from 98 mcm in 2010 (26.8 mcm from springs and 71.6 mcm from wells), 107 mcm in 2008, and 105.9 mcm in 2007. The PWA purchased an additional 55.5 mcm from 'Mekorot', bringing to total amount to 153.8 mcm available for Palestinians in the West Bank. See PCBS, 'Annual Available Water Quantity in the Palestinian Territory by Region and Source, 2010' (2010) <http://www.pcbs.gov.ps/Portals/Rainbow/Documents/water/Water_Tabel_E_tab2.htm> accessed 22 March 2013.

¹³³ An additional 50 mcm/yr was used for agricultural purposes. ARIJ, 'Israeli-Palestinian Water Relationships: Paternalistic Neocolonialism' (2009) 11.

¹³⁴ Israeli Central Bureau of Statistics (ICBS), 'Statistical Abstract of Israel 2011' (2011) 86 <http://www1.cbs.gov.il/reader/shnaton/templ_shnaton_e.html?num_tab=st02_01&CYear=2011> accessed 22 March 2013.

was 2,020 mcm in 2010,¹³⁵ compared to 331.1 mcm for more than 4.1 million Palestinians in the OPT.¹³⁶

4.2.1. West Bank: Minimum Amount for “Short-Term Survival”

While the World Health Organisation (WHO) recommends a minimum domestic consumption of 100 lpcd, water consumption by Palestinians in the West Bank is an average of 73 lpcd,¹³⁷ compared to about 300 lpcd¹³⁸ for Israelis in Israel proper and 369 lpcd for Israeli settlers residing in colonies in the OPT.¹³⁹ Therefore, the *per capita* consumption of water for domestic use by those residing in Israel proper is four to five times higher than the Palestinian population’s *per capita* domestic consumption in the OPT.¹⁴⁰ More than 500,000 Israeli settlers in the West Bank consume approximately six times the amount of water used by a Palestinian population of almost 2.6 million.¹⁴¹

¹³⁵ The average water production in Israel ranges from 2,020 mcm in 2010, 1,849 mcm in 2009 and 2,140 mcm in 2008. These amounts include agricultural and industrial needs. Figures include water from 'Mekorot' wells, the NWC and water desalination. ICBS, 'Agriculture in Israel: The Industry Account Price Indices of Output and Input 2010-2011' (Publication No. 1499) (August 2012) 50 <<http://www1.cbs.gov.il/publications12/haklout11/pdf/t11a.pdf>> accessed 22 March 2013. 'Mekorot' figures indicate that during the first eight months of 2012, water consumption totalled 944 mcm, compared to 895 mcm in 2011. Z Rinat, 'Water consumption in Israel up 6 percent in 2012' *Haaretz* (12 September 2012) <<http://www.haaretz.com/news/national/water-consumption-in-israel-up-6-percent-in-2012.premium-1.464364>> accessed 22 March 2013.

¹³⁶ Palestinians in the Gaza Strip had 177.3 mcm in 2010 and Palestinians in the West Bank (excluding East Jerusalem) had 153.8 mcm, made up out of 98 mcm from the Mountain Aquifer and the remainder purchased from Mekorot. PCBS, 'Annual Available Water Quantity in the Palestinian Territory by Region and Source, 2010' (n 132). The total population of the OPT was at mid 2011 4.17 million, see PCBS, 'On the Eve of the International Population Day 11/7/2011' (n 37).

¹³⁷ Palestinians in the Gaza Strip have approximately 90 lpcd, but while they have more water per person daily available than Palestinians in the West Bank, only 5 per cent of the water in Gaza is fit for human consumption. (Amnesty International, 'Troubled Waters' (n 25) 29). UN OCHA, 'How Dispossession Happens, The Humanitarian Impact of the Takeover of Palestinian Water Springs by Israeli Settlers' (2012) 13. See also PWA, 'Water Supply Report 2010' (n 79) 13.

¹³⁸ UN OCHA, 'How Dispossession Happens' (n 137) 13. See also Amnesty International, 'Troubled Waters' (n 25) 4.

¹³⁹ J Isaac and J Hilal, 'Palestinian Landscape and the Israeli-Palestinian Conflict' (2011) 68 *International Journal of Environmental Studies*, 422-423.

¹⁴⁰ UNGA, Department of Public Information, 'Arbitrary Detention, Excessive Force, Israeli Settlement Activity Increasing Palestinian Hardship, Regional Commission Chief Tells Second Committee' (26 October 2011) Second Committee, 23rd & 24th Meetings UN Doc. GA/EF/3319.

Al-Haq and EWASH, 'Joint Parallel Report submitted by the Emergency Water, Sanitation and Hygiene group (EWASH) and Al-Haq to the Committee on Economic, Social and Cultural Rights on the occasion of the consideration of the Third Periodic Report of Israel' (September 2011) paragraph 24 <http://www2.ohchr.org/english/bodies/cescr/docs/ngos/EWASH-Al-Haq_Israel_CESCR47.pdf> accessed 22 March 2013.

¹⁴¹ *Ibid.*, paragraph 27.

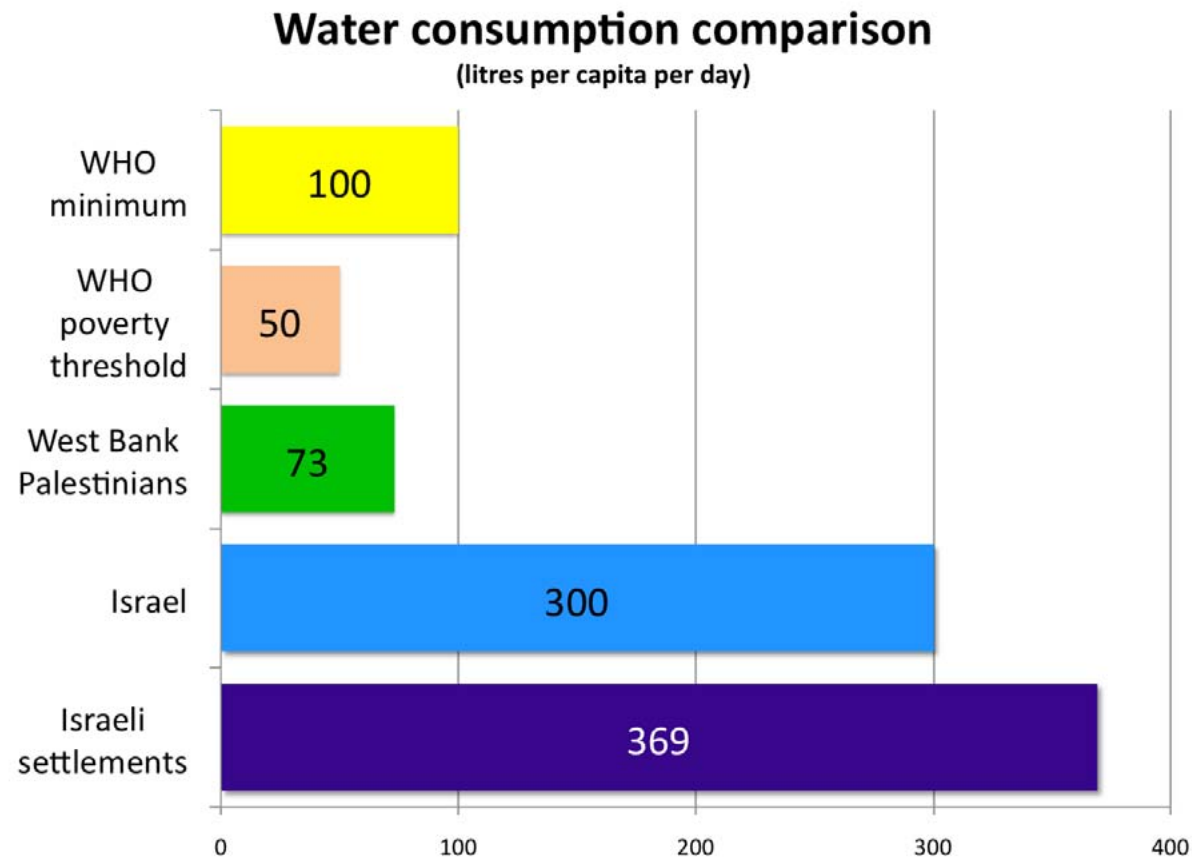


Figure 12: Water consumption comparison in the region.

This discrepancy in water use is even greater when water used for agricultural purposes is taken into account. Settlers in the Jordan Valley and Dead Sea colonies have up to 18 times more water available than Palestinians in the West Bank, with 1,312 lpcd allocated to these settlers in 2008, mostly for agricultural use.¹⁴² The settlers in the Dead Sea settlements of 'Mitzpe Shalem' and 'Qalya,' for instance, are allocated approximately 700 lpcd, while settlers residing in the Jordan Valley settlements of 'Ro'i,' 'Argaman,' and 'Niran' enjoy more than 400 lpcd for domestic use only. The nearby Palestinian village of al-Hadidiyya, a herding community with a population of around 200, struggles with only 22 lpcd for domestic purposes.¹⁴³

142 B'Tselem, 'Dispossession and Exploitation: Israel's Policy in the Jordan Valley and Northern Dead Sea' (May 2011) 25.

143 Al-Haq, 'The Right to Water - A Policy of Denial and Forced Displacement in the Occupied Palestinian Territory' (November 2011).

Water consumption comparison Al-Hadidiyya

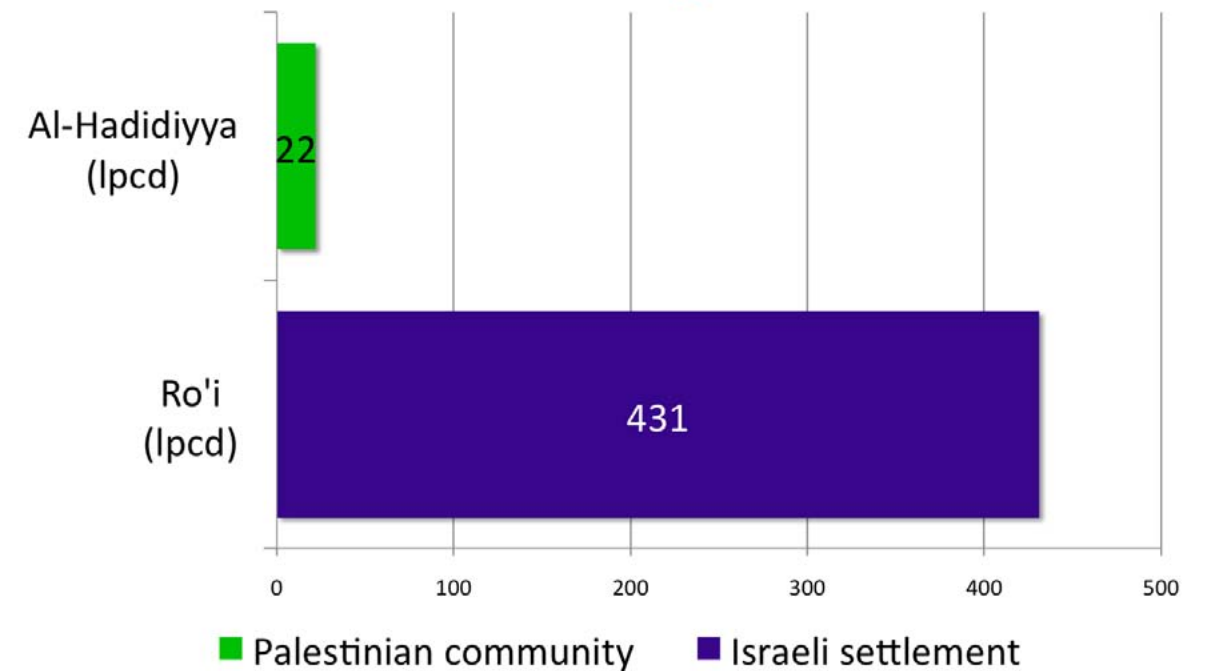


Figure 13: Comparison between Palestinian village al-Hadidiyya and Israeli settlement 'Ro'i'.

Case Study 3: Water for Israeli colonies only

"Water pipelines that transmit water to Israeli settlements in the area surrounding Khirbet al-Hadidiyya are near our houses, but we are not allowed to access a single drop of the water they transport. In 1980, the Israeli occupying authorities constructed a water well about 20 metres from the centre of Khirbet al-Hadidiyya. Water is pumped from that well to Israeli settlements, including the settlement of 'Ro'i,' about 150 metres west of our village; the settlement of 'Beqa'ot,' about four kilometres southwest of the village; and the settlement of 'Hemdat,' about six kilometres northeast of the village. Additionally, the Israeli occupying authorities seized control of another water well near Khirbet Humsa village, about three kilometres south of Khirbet al-Hadidiyya. Water is also pumped from the well to the settlements mentioned above. These are agricultural settlements. The Israeli occupying army oversees these wells on a permanent basis. They are surrounded by barbed wire fences and monitored by surveillance cameras. Water transmission pipelines are installed across Palestinian houses. They pass in front of our own eyes and underneath our feet to settlements. At the same time, we are forced to purchase water at exorbitant prices from remote areas, because the Israeli occupying authorities do not recognise our presence on our land. [...] Settlers have seized our water and yet they are more entitled to it in the eyes of the Israeli occupying authorities."

- Excerpt from Al-Haq Affidavit No. 7163/2012. Given by Abdul Rahim Hussein Bisharat, a resident of al-Hadidiyya village, Toubas governorate, West Bank, on 23 February 2012.

Water consumption comparison Al-Zbeidat

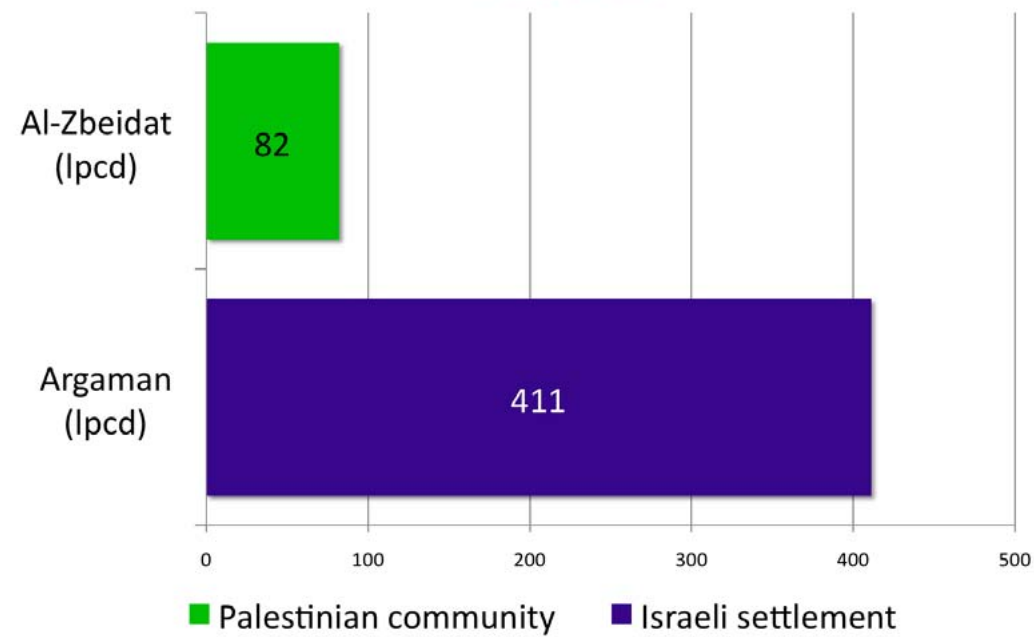


Figure 14: Comparison between Palestinian village al-Zbeidat and Israeli settlement 'Argaman'.

Water consumption comparison Al-'Oja

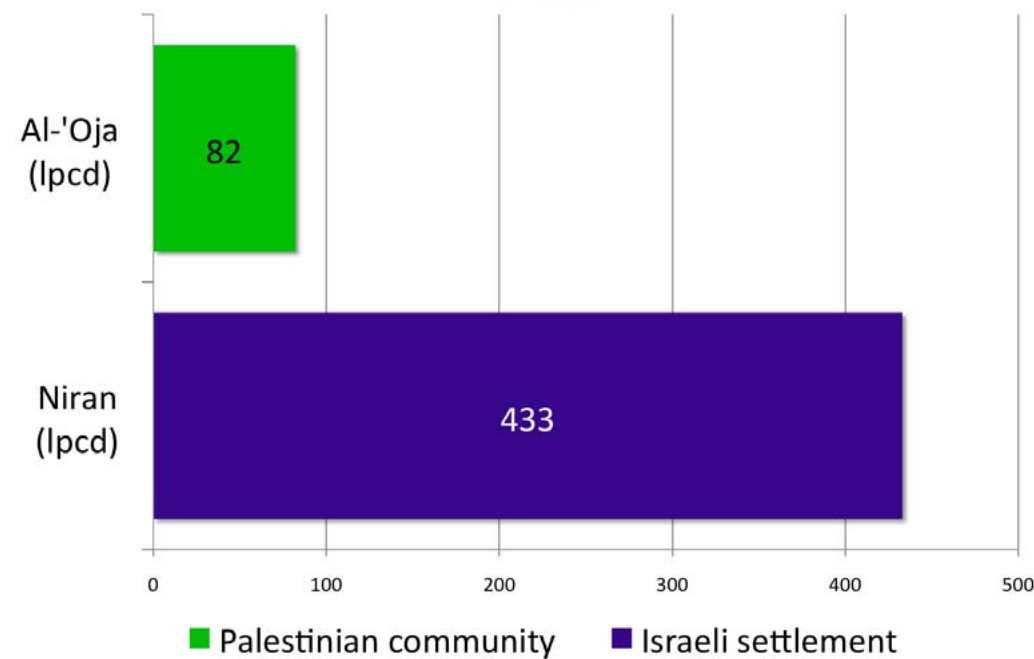


Figure 15: Comparison between Palestinian village al-'Oja and Israeli settlement 'Niran'.

Household consumption: Palestinian villages vs Israeli settlements (litres per capita per day)

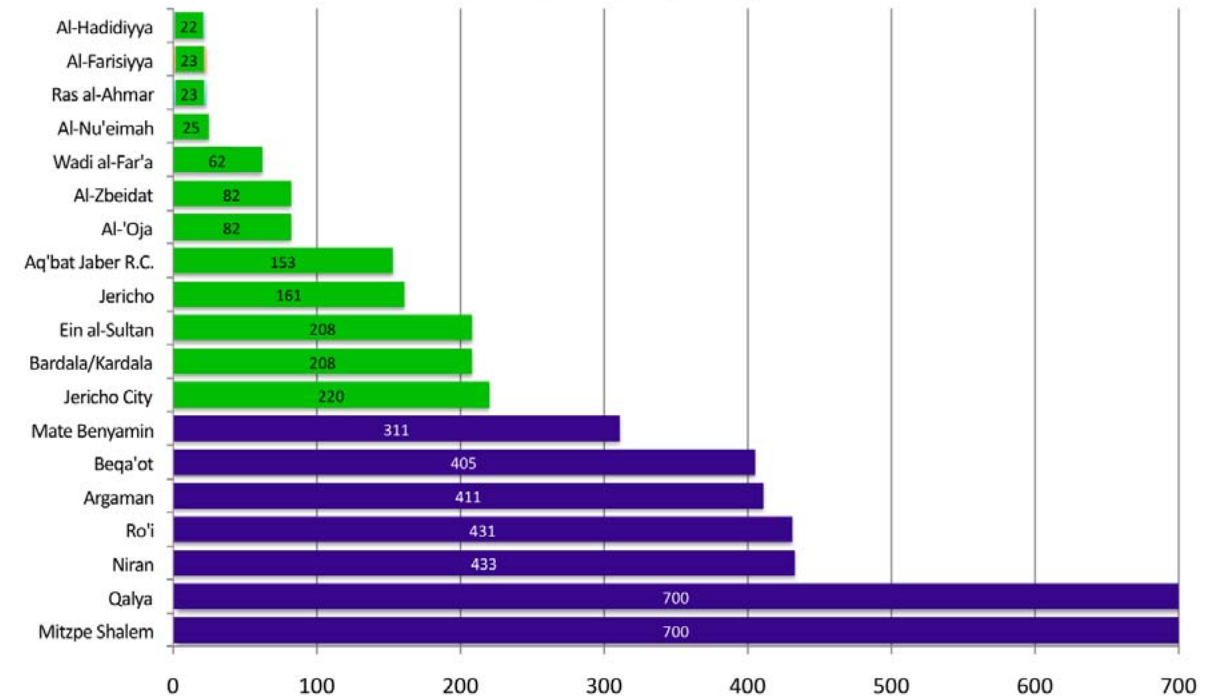


Figure 16: Household comparison of per capita consumption between settlers and Palestinian communities in the Jordan Valley.¹⁴⁴

The average water use for domestic purposes ranges from 200–300 lpcd in most European countries, with Italy consuming 385 lpcd and the United Kingdom 150 lpcd. The United States average consumption is 575 lpcd and it in Australia it is 495 lpcd. By contrast, average use in countries such as Mozambique (10 lpcd), Haiti, Rwanda and Uganda, Angola, Cambodia, and Ethiopia (20 lpcd) is well below the water poverty threshold of 50 lpcd. Below this level, people are constrained in their ability to maintain their physical well-being and dignity.¹⁴⁵

As of September 2011, in the West Bank, some 313,000 Palestinians across 113 communities were not connected to a water network, and were considered at high risk of water scarcity.¹⁴⁶ Furthermore, some 50,000 Palestinians in 151 communities¹⁴⁷ live on less than 20 lpcd, which is the minimum amount recommended by the WHO for “short-term survival” in emergency and disaster situations.¹⁴⁸ In stark contrast, all Israeli colonies situated in the West Bank,

144 Graph and information is courtesy to Clemens Messerschmid, based on the figures in B'Tselem, Dispossession and Exploitation (n 142).
 145 UN Development Programme (UNDP) 'Human Development Report 2006 - Beyond scarcity: Power, poverty and the global water crisis' (2006) 34.
 146 UN OCHA, 'How Dispossession Happens' (n 137) 13; Diakonia, 'Israel's Administrative Destruction of Cisterns in Area C of the West Bank' (September 2011) 4.
 147 Al-Haq and EWASH (n 140) paragraph 24.
 148 EWASH, "Down the Drain": Israeli restrictions on the WASH sector in the Occupied Palestinian Territory and their impact on vulnerable communities (March 2012) 8.

including East Jerusalem, are connected to a water network,¹⁴⁹ and serviced by 'Mekorot,' which itself extracts water flowing from the groundwater resources lying beneath the West Bank.¹⁵⁰

Case Study 4: Farmers and shepherd forced to abandon their jobs



"In al-'Aqaba village, [located in the Northern Jordan Valley] all the residents [some 300] and institutions lack access to local water sources. There is no water network or even a water cistern in the village. The Israeli occupying authorities do not allow the village residents to construct a water network. At the same time, Israeli water pipelines, which supply water to Israeli settlements and military camps in the Northern Jordan Valley (known as the 'Mekorot' network), are installed in the vicinity of the village, at a distance of only seven kilometres from the village houses. The Israeli occupying authorities do not allow the village residents to construct any artesian wells. Therefore home owners, institutions and societies, are forced to purchase water from external sources at their own expense. Tank trucks transport water from adjacent areas, including al-Far'a and Tammoun, at a cost of 150 – 200 NIS [approximately 40 – 50 USD] per tank. Almost every week, each house and each society in al-'Aqaba village needs a full tank of water, at a cost of 15 – 20 NIS [between some 4 – 5 USD] per cubic metre. Water supplied by 'Mekorot' costs less than 1 NIS per cubic metre. The Israeli occupying authorities, however, refuse to supply al-'Aqaba with water through 'Mekorot,' forcing citizens to pay exorbitant amounts every month. A number of al-'Aqaba residents work in the agriculture sector and breed livestock. Farmers and shepherds pay significant amounts to irrigate crops and provide water for their livestock. A large number of farmers and shepherds have had to abandon their jobs. Farmers were unable to irrigate their crops and shepherds were forced to sell their livestock, as they lacked the financial resources to provide water for their animals."

- Excerpt from Al-Haq Affidavit No. 6371/2011. Given by Sami Sadeq Sbeih, a resident al-'Aqaba village, Toubas governorate, West Bank, on 31 May 2011.

"These are mere tactics that are intended to remove residents and seize control of the land. Israeli practices are not limited to demolitions, but affect all aspects of our life. Under the same pretext, the Israeli occupying authorities refuse to allow the installation of a water network in the village. Therefore, we are forced to purchase and transport water by water tank trucks to our houses. This overburdens people, especially given the harsh economic and financial conditions of al-'Aqaba village."

- Excerpt from Al-Haq Affidavit No. 7115/2012. Given by Ma'moun Mahmoud Dabak, a resident of al-'Aqaba village, Toubas governorate, West Bank, on 11 February 2012.

The level of unrestricted access to water enjoyed by those residing in Israel proper and in Israeli settlers demonstrates that resources are plentiful and that the lack of sufficient water for Palestinians is a direct result of Israel's discriminatory policies in water management.

 **The lack of sufficient water for Palestinians is a direct result of Israel's discriminatory policies in water.** 

4.2.2. East Jerusalem: Severed and Disconnected

Palestinians living in occupied East Jerusalem, which has been illegally annexed by Israel in 1967 and is under its civil rather than its military administration, also suffer from Israel's discriminatory policies in the allocation, availability of and access to water. This is primarily due to the Jerusalem Municipality's strict housing and urban planning regime, which places stringent and unrealistic criteria on entitlement to water services.¹⁵¹ Over half of the Palestinians living in East Jerusalem, some 160,000 persons, do not have legal water connections as Israeli law does not allow them to connect to the water network, mainly because the required housing permits are not issued.¹⁵² Palestinian households in East Jerusalem are thus forced to resort to unlicensed connections. In theory, however, they are entitled under Israeli law to full and equal services provided by the municipality and other authorities in Israel by virtue of their residency within the Israeli unilaterally-established municipal boundaries of Jerusalem.¹⁵³

Furthermore, some Palestinian areas of East Jerusalem, especially those on the eastern side of the Wall, have been excluded from the boundaries of the city, leaving their residents without access to municipal services, including water and sanitation. This applies, for instance, to Beit Iksa, Kufr Aqab, and Shu'fat refugee camp. Consequently, the latter two and the Palestinian neighbourhood of Beit Hanina in northern Jerusalem rely on the Ramallah-based Jerusalem Water Undertaking (JWU) for their water.¹⁵⁴ Meanwhile, the JWU faces a host of problems, including its forced dependence on water sourced from Israel.¹⁵⁵ The JWU must also acquire permits from the Jerusalem municipality to carry out repair and maintenance of water infrastructure in East Jerusalem.¹⁵⁶

4.3. Water Infrastructure: Consistently at Risk

As an Occupying Power, Israel is responsible for the occupied population's well-being.¹⁵⁷ However, instead of administering the territory and fulfilling its international legal obligations,

¹⁵¹ Bimkom, 'The Planning Deadlock: Planning Policy, Land Regularization, Building Permits and House Demolitions in East Jerusalem' (2006).

¹⁵² International Fact-Finding Mission on Settlements (n 5) paragraph 85; Al-Haq and EWASH (n 140) paragraph 54.

¹⁵³ EWASH, 'Factsheet 9: Water and Sanitation in East Jerusalem' 1.

¹⁵⁴ The Jerusalem Water Undertaking is a Ramallah-based company with authority to develop new water resources and control all water projects in the area and with the responsibility of providing the population with potable water.

¹⁵⁵ Despite repeated requests, the 85,000 cubic meters per month available to the JWU is not sufficient to serve approximately 4,500 East Jerusalem households, especially in the summer months. EWASH, 'Factsheet 9' (n 153) 3.

¹⁵⁶ Obtaining permits for repair and maintenance work is time consuming and uncertain. Furthermore, due to the restrictions placed on movement within the West Bank, especially East Jerusalem and the rest of the West Bank, labour is often outsourced to costly Jerusalem-based contractors, instead of using its own employees. *Ibid.*

¹⁵⁷ 'Occupied population' and 'local population' are used interchangeably throughout this study and refer only to protected persons as understood by Article 4 of the Fourth Geneva Convention (1949).

¹⁴⁹ Ma'an Development Center, 'Draining Away: The Water and Sanitation Crisis in the Jordan Valley', (2010) 4.

¹⁵⁰ See Section 4.1. of this study. HRW, 'Separate and Unequal' (n 23) 17-18.

Israel continues to further its own needs in pursuit of its ultimate goal: to drive the occupied population from their lands, thereby purging the most fertile and water resource rich areas of the West Bank of its Palestinian residents.

The International Fact-Finding Mission on Settlements concluded that “[t]he denial of water is used to trigger displacement, particularly in areas slated for settlement expansion, especially since these [Palestinian] communities are mostly farmers and herders who depend on water for their livelihoods.”¹⁵⁸

4.3.1. Denial of Permits to Construct and Rehabilitate Water Infrastructure

Although the PWA technically has authority over West Bank wells, the regulatory authority and ultimate control reside with Israel. Israel has actively prevented the construction and maintenance of water and sanitation infrastructure in the West Bank. This has primarily been achieved through Israel’s exercise of its effective veto at the JWC, as well as the Israeli Civil Administration’s systematic practice of denying permits for the construction or rehabilitation of water infrastructure in 59 per cent of the West Bank, earmarked Area C. Any water structure built without a permit from the Israeli authorities – permits that are virtually impossible to obtain – faces the risk of demolition.

Case Study 5: Destruction of a well affecting 18 people

“Because the water supplied by the Hebron Municipality’s public network is frequently cut off, I decided to drill a collector well on our land to the east of the house. I completed drilling of the well in 2009. [...] In early 2010, I found a notice for cessation of construction of the well signed by the Israeli Zoning Council, despite the fact that construction had been completed the previous year. Later in April, I found another notice for demolition of the well, allegedly because it had been drilled without the required licence. [...] In the summer of 2010, Israeli military forces [...] destroyed the well, collected rubble from the surrounding area, and dropped it into the well. Construction of the well cost me 17,000 Jordanian Dinars [(JD)] [some 24,000 USD]. Considering the water crisis, especially during summertime, I had to reconstruct the well. Water is supplied to the house by the Municipality’s public network only once a month. [...] On 10 October 2012, I started to reconstruct the well. [...] On Sunday, 22 October 2012, [...] a large loader and hydraulic excavator arrived to the area. I realised that they had come to destroy the water well. [...] An officer asked why I had reconstructed the well. “Because I need water.” I replied. I asked the officer why they had come without giving prior notice. He said that the notices for cessation of construction and demolition, which had been dispatched back in 2009, would be effective indefinitely. [...] The loader and hydraulic excavator demolished the well and filled it with rubble. [...] Reconstruction of the well had cost me almost 25,000 NIS [approximately 6,500 USD].”

- Excerpt from Al-Haq Affidavit No. 8304/2013. Given by Muhammad Yousef Muhammad Sa’id Ja’bari, a resident of Wadi al-Ghrous neighbourhood, Hebron city, West Bank, on 14 January 2013.

¹⁵⁸ International Fact-Finding Mission on Settlements (n 5) paragraph 88.

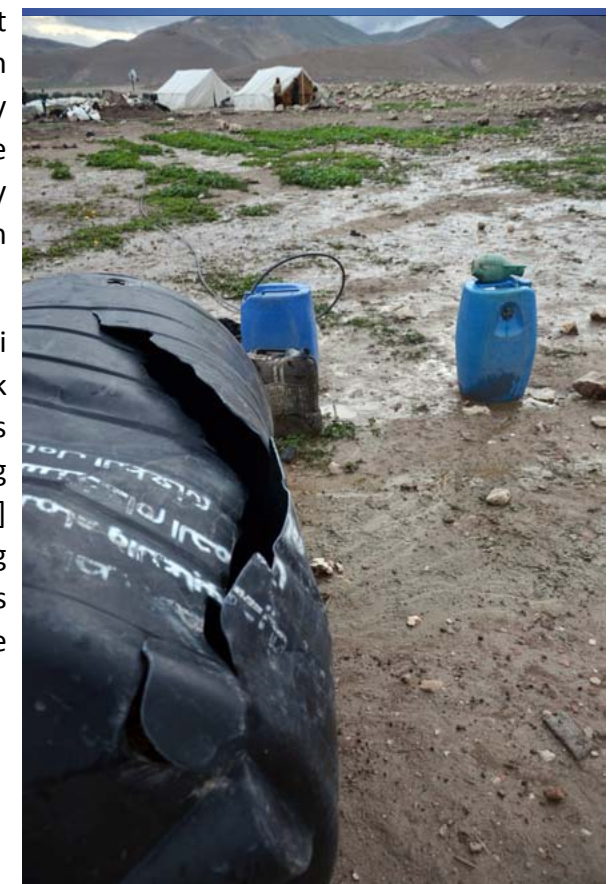
Under Oslo II, the Israeli Civil Administration in the West Bank holds complete decision-making power regarding land use and planning in Area C to the extent that all new water facilities in this area require not just JWC, but also Israeli Civil Administration approval.¹⁵⁹ In practice, this system is one that grants Israel double veto powers for most of the West Bank – first through the JWC, then the Israeli Civil Administration – over Palestinian development of water resources and supplies.¹⁶⁰ The permission for and construction of several water development projects, particularly those in areas outside urban centres, is thus dependent on Israeli interests.¹⁶¹

In practice, this system is one that grants Israel double veto powers for most of the West Bank.

4.3.2. Confiscation and Destruction of Water Infrastructure

The Israeli military authorities regularly target water collection systems for confiscation and destruction, including those provided by humanitarian organisations. They do so on the pretext that such systems, whether or not they are permanent, were constructed without an Israeli permit.

Some structures pre-date the 1967 Israeli occupation of the OPT, but are equally at risk of demolition when rehabilitation projects are initiated. The International Fact-Finding Mission on Settlements has found that “[d]estruction of water infrastructure, including rainwater cisterns, by Israeli authorities has increased since the beginning of 2010; double in 2012 compared to 2011.”¹⁶²



Water infrastructure destroyed by the Israeli military due to lack of permit, Al-Jiftlik, Jordan Valley – Tony Kane©.

¹⁵⁹ See also, International Fact-Finding Mission on Settlements (n 5) paragraph 81.

¹⁶⁰ J Selby, ‘Dependence, Independence and Interdependence in the Palestinian Water Sector’ (n 103). See further PNA, PWA, ‘Palestinian Water Sector: Status Summary Report September 2012’ (n 100) 3; International Fact-Finding Mission on Settlements (n 5) paragraph 81.

¹⁶¹ M Zeitoun, ‘The Conflict vs. Cooperation Paradox’ (n 104) 105-120.

¹⁶² International Fact-Finding Mission on Settlements (n 5) paragraph 88.

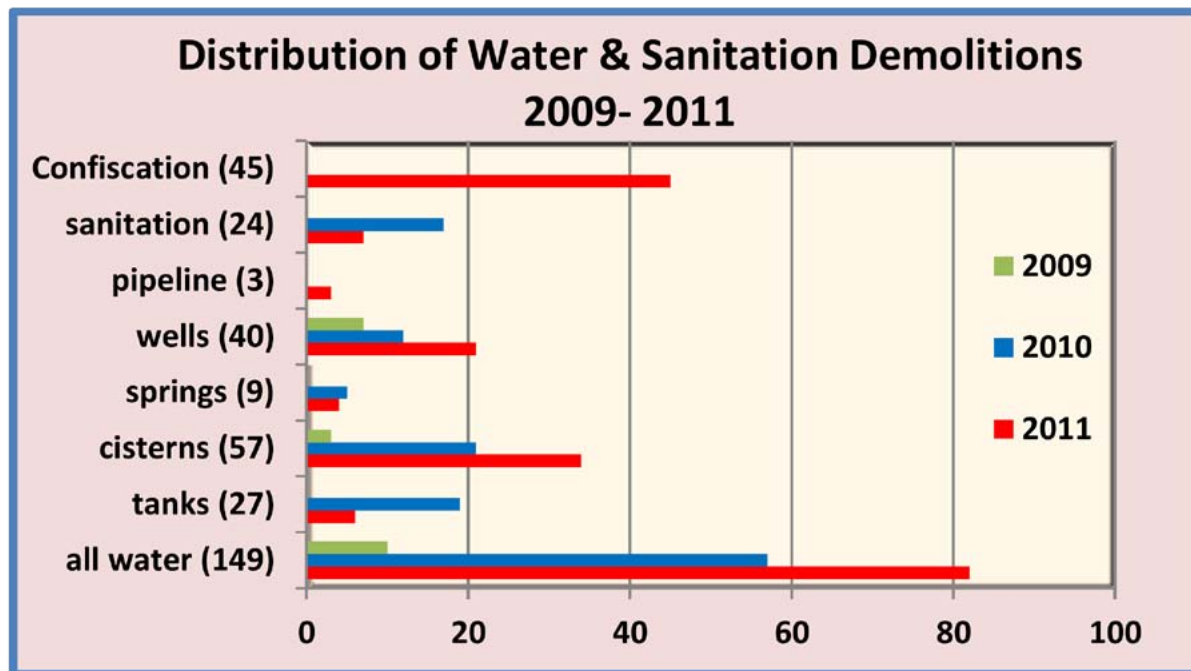


Figure 17: Demolitions and confiscations of WASH structures between 2009 and 2011.¹⁶³

In 2011, According to data collected by EWASH, Israel demolished 89 water, sanitation and hygiene (WASH) structures,¹⁶⁴ and 45 WASH-related confiscations were recorded in the West Bank (excluding East Jerusalem), affecting 977 Palestinians.¹⁶⁵ The destructions largely consisted of cisterns privately constructed for civilian use or part of humanitarian aid projects. These are indispensable to the survival of rural and herder Palestinian communities in the West Bank who rely on such infrastructure to provide water for livestock and crops and sometimes for domestic usage in the absence of an adequate water network.¹⁶⁶

Case Study 6: Destruction of wells due to lack of permit

"I have a piece of agricultural land, measuring about 150 dunums, on Marj Ben 'Amer plain, which is immediately opposite the village of Kufr Dan, [west of Jenin city]. [...] In early 2000, I constructed an artesian well to supply water for the land. At around 6:00 am on Wednesday, 24 October 2012, when I was at my home in Kufr Dan village, I received a telephone call from a farmer who had been on my land. He told me that an Israeli military force had arrived to my land and that a bulldozer, which accompanied it, had demolished my artesian well. I immediately rushed to my land. [...] When I arrived, the wheel loader had already finished destroying the well. Meanwhile, a number of soldiers were taking up positions in the area to provide protection to the wheel loader. "Why have you done this?" I asked a soldier. Another soldier hit me with a black baton on my right

163 WASH, 'WASH Cluster oPt Monthly Situation Report: December 2011' (December 2011) 6.

164 This includes the destruction of 7 sanitation structures.

165 Demolitions include 21 wells, which farmers depend on for their livelihoods, and 34 rainwater-harvesting cisterns located in communities of Area C unconnected to the water network. EWASH, "Down the Drain" (n 148) 16. During the last three years, WASH-related demolitions have been sharply on the rise, with 89 water-related demolitions recorded in 2011, compared to 57 in 2010 and 10 in 2009. WASH (n 163) 1.

166 Diakonia (n 146) 2.

shoulder and hand, causing me severe pain. He uttered blasphemous expressions and shouted that I cannot get any closer. [...] I had not received any notice before my artesian well was destroyed. Destruction of my well will consequently cause damage to the crops I have cultivated. [...] After the Israeli occupying authorities destroyed my artesian well, all these crops are now threatened because an alternative water source is not available for irrigation."

- Excerpt from Al-Haq Affidavit No. 7800/2012. Given by 'Umar Saleh 'Abed, a resident of Kufr Dan village, Jenin governorate, West Bank, on 24 October 2012.¹⁶⁷

*"I have an artesian well on my land, which I constructed eight years ago. I use it to irrigate crops, as well as for drinking water purposes. I also supply poultry farms of the Palestinian Poultry Company (AZIZA) northeast of my land. AZIZA purchases water from me for cooling and watering approximately 35,000 chickens. At around 9:00 am on Thursday, 7 June 2012, I was surprised by an Israeli military force that came to the area surrounding my land. [...] The Israeli force surrounded the land and soldiers were deployed around it. The wheel loaders immediately started to destroy the water well mentioned above. I quarrelled with an Israeli army officer. "The well is being destroyed because water is stolen." He told me in Arabic. The officer said he had instructions from the higher command to destroy the well, allegedly because it had been constructed without the required licence. [...] It should be noted that I had not received any notice to destroy the well, which is located in Area B according to the Oslo Agreement signed between the Palestinians and the Israelis. This area is under the administrative control of the Palestinian Authority. [...] The construction cost of the well totalled about 50,000 JD [approximately 70,500 USD], including excavation, installation of the pump, pipelines, electrical wirings, and iron coating. Finally, I would like to note that the Israeli force destroyed five other wells in the vicinity of the villages of Deir Abu-D'eif and Beit Qad, east of Jenin city. These were destroyed under the same pretext – construction without the required licence."*¹⁶⁸

- Excerpt from Al-Haq Affidavit No. 7484/2012. Given by 'Isam 'Izat Yasin, a resident of Deir Abu-D'eif village, Jenin governorate, West Bank, on 7 June 2012.

While demolitions and confiscations in 2011 largely targeted WASH structures used for personal and domestic functions such as tanks and cisterns, in 2012 Israeli occupying forces increasingly targeted livelihood WASH structures, such as agricultural wells, irrigation pipes and wells used by shepherds. Al-Haq's documentation indicates that at least 32 demolitions

167 On the same day, the Israeli military force demolished four more wells, all located in the Kufr Dan village area that are relied upon for the irrigation of more than 150 dunums of agricultural land. Al-Haq, 'Five Water Wells Demolished in Jenin' (Weekly Focus) (1 November 2012) <<http://www.alhaq.org/documentation/weekly-focuses/637-five-water-wells-demolished-in-jenin>> accessed 22 March 2013.

168 The other wells destroyed in the area belong to Mahmoud Sharif 'Abd-al-Razeq, also a resident of Deir Abu-D'eif village, Jenin governorate (Al-Haq Affidavit No. 7485/2012), Abd-al-Min'em Midraj Daraghma, a resident with two wells from Beit Qad village, Jenin governorate, Ahmad Muhammad al-Qadi, and Mahmoud Saleh Hithnawi, a resident of Jenin city whose well was located on his agricultural land in Deir Abu-D'eif village, Jenin governorate, West Bank. Al-Haq, 'A Thirst for Justice: Six Palestinian Wells Demolished in Jenin' (Weekly Focus) (15 June 2012) <<http://www.alhaq.org/documentation/weekly-focuses/589-a-thirst-for-justice-six-palestinian-wells-demolished-in-jenin>> accessed 22 March 2013.

of water structures took place between January and October 2012.¹⁶⁹

Case Study 7: Confiscation of irrigation pipes in Wadi al-Baq'a area, Hebron city

"At around 9:00 am Monday, 21 May 2012, I was in my house near the land. An Israeli force, including 15 Border Police officers, came to our land. Staff members of the Israeli Water Authority (IWA) and ten workers from a private company, which is contracted by the Israeli army, also arrived with the Israeli force. While the Border Police officers dispersed around the land, workers removed irrigation pipelines. As they moved around, they trod on crops and on grape seedlings. My mother, brothers and I tried to talk to the Israeli soldiers and IWA employees, but it was to no avail. Within one hour, workers removed all the irrigation pipelines. [...] The irrigation pipelines confiscated from our land cost approximately 3,000 NIS [790 USD], which exceed our profits. To keep the crops, I had to buy new irrigation pipelines and install them on the agricultural land. [...] To make a living, residents of our area rely on agriculture. The area is located east of the settlements of 'Kiryat Arba' and 'Givaat Kharsina.' The Israeli occupying authorities try to dry the area [where Palestinians live] in order to transfer residents and expand the settlements."

- Excerpt from Al-Haq Affidavit No. 7451/2012. Given by Nimer Fahmi Jaber, a resident of Wadi al-Baq'a area, Hebron city, West Bank, on 31 May 2012.



Case Study 8: Confiscation of two tractors in 'Ein al-Mayta area, Toubas governorate

"The soldiers and officers surrounded two tractors belonging to me and to Ibrahim Abu-Sabha. I own a tractor with a water tank. I use it for agricultural purposes and to transport water to the area where I live. Because the area lacks a water network, we transport water by tanks drawn by tractors. [...] The Civil Administration officers tied the tractor to a military jeep with a rope. After it had started, a Civil Administration officer drove the tractor away. I begged Hayim [a Civil Administration officer] to change his decision to seize my tractor. "The tractor and water tank help us survive in this area. There is no water source or any means of transportation in this area." I explained, but it was in vain. I saw another Civil Administration officer driving the tractor of Ibrahim Abu-Sabha to a nearby Israeli military camp, called al-Maleh Camp. It is located less than two kilometres to the east. I saw the officers driving the two tractors into the military camp. About an hour later, I saw a large trailer leaving of the military camp and carrying the two tractors away. It travelled to an unknown place. Before he left the area, Hayim handed two confiscation orders to me and to Ibrahim Abu-Sabha. [...] This is the first time the Israeli occupying authorities confiscate our tractors. By these practices, they intend to tighten their grip on us and force us to leave the area."

- Excerpt from Al-Haq Affidavit No. 7618/2012. Given by 'Ayed Salman Zawahri, a resident of 'Ein al-Mayta area, Toubas governorate, West Bank, on 8 August 2012.

In the Gaza Strip, destruction of water infrastructure frequently occurs during Israeli military operations, such as air strikes and ground incursions. Israel enforces the so-called buffer

zone by levelling land and destroying or damaging private property located therein.¹⁷⁰ According to the UN Office for the Coordination of Humanitarian Affairs (UN OCHA), since the imposition of the illegal regime of closures in 2005, more than 300 water wells¹⁷¹ have been destroyed in the buffer zone, amounting to a total cost of replacement estimated at 9 million USD.¹⁷² In 2011 alone, the total cost of the damage to water and sanitation infrastructure in the Gaza Strip as a result of air strikes was approximately 1.3 million USD, according to EWASH.¹⁷³

 **In the Gaza Strip, destruction of water infrastructure frequently occurs during Israeli military operations.** 

Furthermore, during the Israeli offensive code-named 'Operation Cast Lead' in 2008-2009, an additional 6 agricultural water reservoirs were destroyed in the buffer zone, all of which remain unrepaired largely due to Israel's illegal regime of closures.¹⁷⁴ Other organisations have reported that during 'Operation Cast Lead' some 919 water wells, 229 irrigation pools and 243 water pumps were destroyed.¹⁷⁵

4.3.3. Destruction of Humanitarian Aid

Lacking any alternative, communities as well as humanitarian agencies, are left to proceed without the required construction permits. EWASH estimates the cost of demolished infrastructure in the West Bank to have exceeded 100,000 USD in 2011 alone.¹⁷⁶

Case Study 9: Demolitions of Dutch-funded wells and cisterns

"I work as a Project Coordinator at the Palestinian Agricultural Relief Committee [PARC] in the Salfit governorate. In cooperation with the Ministry of Agriculture, in 2010 we received a grant from the Netherlands Representative Office to the Palestinian Authority to reclaim and rehabilitate land. [...] On Monday, 21 April 2012, some farmers in Salfit and Kufr al-Deek informed me that the Israeli occupying authorities had destroyed water collection wells [...] on land covered by the project. In Kufr al-Deek, the Israeli occupying army destroyed a well belonging to farmer Majed Subhi 'Ali. The well had a capacity of 70 cubic metres, and the construction costs totalled 3,103 USD. Of this, 'Ali paid 1,490 USD. The Israeli army also [...] destroyed a bored well on land belonging to farmer 'Allam Taleb. As construction was still at an initial phase, the bored well cost almost 450 USD, of which Taleb paid 350 USD."

- Excerpt from Al-Haq Affidavit No. 7306 /2012. Given by Bakr Hammad Rizqallah, Project Coordinator at PARC, Salfit Office, and a resident of Farkha village, Salfit governorate, West Bank, on 30 April 2012.

¹⁷⁰ The buffer zone is a military no-go area that extends within the OPT along the entire Gaza Strip's border with Israel and exists at sea as well as on land. See for more information, Al-Haq, 'Shifting Paradigms Israel's Enforcement of the Buffer Zone in the Gaza Strip' (June 2011).

¹⁷¹ UN OCHA, 'Between the Fence and a Hard Place: The Humanitarian Impact of Israeli-Imposed restrictions on Access to Land and Sea in the Gaza Strip', Special Focus (August 2010) 19, in Al-Haq, 'Shifting Paradigms Israel's Enforcement of the Buffer Zone in the Gaza Strip' (n 170) 10.

¹⁷² EWASH, "Down the Drain" (n 148) 17-18.

¹⁷³ *Ibid.*, 17.

¹⁷⁴ EWASH, 'Factsheet 11: Water & Sanitation in the Access Restricted Areas of the Gaza Strip' 1.

¹⁷⁵ Al Mezan Centre for Human Rights, 'Cast Lead in Numbers' (2009) 40.

¹⁷⁶ EWASH, "Down the Drain" (n 148) 16.

¹⁶⁹ Al-Haq, 'Five Water Wells Demolished in Jenin' (n 167).



The Netherlands Representative Office funded a project in al-Khader, Bethlehem governorate, for land reclamation – Al-Haq©.

Similarly, on 16 July 2012, two Palestinian families were handed cessation of construction orders for their recently-built water wells in the al-Qanoub area in Sa'ir, eastern Hebron. The wells were both built through the 'Improving Livelihood in the Occupied Palestinian Territories Program,' funded by the Netherlands Representative Office to the Palestinian Authority, administered by PARC, and implemented by Land Research Centre.¹⁷⁷

"My brother Basem, the rest of my brothers and sisters and I own approximately 100 dunums of land in al-Qanoub area north of our town, Sa'ir, [eastern Hebron]. The land is cultivated with trees, but lacks a water source. About two years ago, my brother Basem and I submitted an application [...] for construction of a water well on the land. In the context of a project funded by the Government of The Netherlands, the application was approved. We constructed a well with a capacity of 80 cubic metres [...] and completed construction works about a year and a half ago. [...] On Monday morning, 16 July 2012, [...] my brother Basem arrived at the land at around 11:00 am. He saw officers from the Israeli Planning and Zoning Council and Israeli Water Authority [who] handed my brother a notice entitled "Notice for Cessation of Work (Construction)" regarding the water well on our land. The notice stated: "Whereas you are the owner/ contractor/ disposer/ manager of work on the said real estate on which work has been or is being performed as is detailed above without a license/ in contravention of the content of the

license/ in violation of the regulations, orders and instructions in force and/or in breach of the scheme of the land of construction/ height/ number of stories/ site/ setback line/ a prohibited construction, you are therefore required in accordance with Article 38(1) T(3) of the Law on the Planning Cities, Villages and Buildings No. 79 of 1966 to cease construction immediately as is detailed above." [...] My brother Basem and I support our families that comprise 20 members, including 11 children. [...] Destruction of the well will cause us an exorbitant financial loss and will negatively affect productivity of the trees on the land. Construction works cost us more than 15,000 NIS [approximately 11,500 USD]. My brother and I paid more than two thirds of this amount."

- Excerpt from Al-Haq Affidavit No. 7573/2012. Given by 'Umar Khalil al-Shalalda, a resident of Wadi al-Shraq area, Sa'ir, Hebron governorate, West Bank, on 23 July 2012.

"My brothers and I own approximately 150 dunums of land in al-Qanoub area north of our town, Sa'ir, [eastern Hebron]. [...] With support from the Government of The Netherlands, I received a grant to reclaim five dunums of land with the Land Research Centre. The project provided for building stone walls, cultivating tree seedlings and constructing a collector well to irrigate seedlings. [...] On Monday morning, 16 July 2012, my relative Basem Khalil Shalalda [...] found a notice for cessation of construction works on my well. [...] The notice claimed that I had constructed the well without the required license. It should be noted that I completed construction of the well about a year and a half ago. We have title deeds that prove our ownership of the land. [...] Agriculture is my sole source of income. My family comprises nine members aged between five and 18 years old. [...] Destruction of the well will cause us an exorbitant financial loss."

- Excerpt from Al-Haq Affidavit No. 7572/2012. Given by Shafer Na'im 'al-Shalalda, a resident of Wadi al-Shraq area, Sa'ir, Hebron governorate, West Bank, on 23 July 2012.

Case Study 10: Demolition of Polish-funded water cistern in al-Rihiyya, Hebron governorate

Last year, on 13 February 2012, the Israeli military forces demolished an ancient water cistern in the village of al-Rihiyya, Hebron governorate. The Polish NGO Humanitarian Action had restored the water cistern with funding from the Polish Foreign Ministry. The Israeli authorities claimed, once again, that the Polish charity had no legal permission from the Israeli administration to carry out the project.¹⁷⁸

177 -- 'Israeli Authorities Hand Demolishing Orders for Two Cisterns, Hinder Development in Areas Classified 'C'' *Palestine News Network* (18 July 2011) <<http://english.pnn.ps/index.php/national/2211-the-land-research-center-israeli-authorities-hand-demolishing-orders-for-two-cisterns-hinder-development-in-areas-classified-c>> accessed 22 March 2013.

178 P Gentle and H Hacoen, 'Israeli army destroys West Bank well restored by Polish charity' *TheNews.pl* (15 February 2012) <<http://www.thenews.pl/1/10/Artykul/90243%2cisraeli-army-destroys-West-Bank-well-restored-by-Polish-charity>> accessed 22 March 2013; D Bauwens, 'EU Feels Force of Israeli Demolitions' *Inter Press Service* (16 May 2012) <<http://www.ipsnews.net/redir.php?idnews=107802>> accessed 22 March 2013.



Demolished Polish-funded water cistern in Al-Rihiyya, Hebron governorate – EWASH/PAH©.

In October 2011, a member of the European Parliament asked the European Commission for details regarding the destruction of EU-funded development projects in the OPT between 2001 and 2011.¹⁷⁹ In response, the European Commission made public a list of “physical damages inflicted by IDF attacks on EU-funded development projects”¹⁸⁰ and further elaborated that “the total cost of physical damage inflicted by Israeli armed forces attacks on EU-funded Development Projects amounted to approximately EUR 49.14 million for the period from 2001-2011, with the estimated EU-funded share in the loss amounting to EUR 29.37 million.”¹⁸¹

¹⁷⁹ Question for written answer to the Commission, Rule 117, Chris Davies (ALDE) (17 October 2011) <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2011-009278+0+DOC+XML+V0//EN&language=EN>> accessed 22 March 2013.

¹⁸⁰ Available on the website of British Member of European Parliament (MEP) Chris Davies <<http://chrisdaviesmep.org.uk/?p=1079>> accessed 22 March 2013.

¹⁸¹ Answer given by Mr Füle on behalf of the Commission (12 March 2012) <<http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2012-000053&language=MT>> accessed 22 March 2013.

Case Study 11: Demolitions and confiscations in Sousiya, South Hebron Hills

In the village of Sousiya, located in the South Hebron Hills, residents rely on rainwater harvesting cisterns, as the community is not connected to the water network and there are no nearby water filling points. However, according to Sousiya’s Village Council, since 2001, the Israeli authorities have demolished 12 cisterns in and around the village and have issued demolition orders against 20 others. Two of these cisterns were demolished in 2011. As a result, many residents are increasingly dependent on purchasing expensive tankered water, leaving the average household to spend one-third of its income on water per year. Water consumption in Sousiya is 28 lpcd, which is significantly less than the 73 lpcd consumed by the average Palestinian in the West Bank and well below the WHO minimum domestic standard of 100 lpcd.¹⁸² In Sousiya, Israel conducted four separate demolitions in 2011 and confiscated 10 water tanks supplied by humanitarian agencies to relieve those who had had their cisterns demolished.¹⁸³

4.3.4. Confiscation of Water Resources by Settlers

A number of water springs upon which some Palestinian communities depend for their sole source of fresh water have been taken over by Israeli settlers with the support of the Israeli military. This phenomenon was highlighted in a UN report that surveyed 56 springs.¹⁸⁴ Thirty were found to be under full settler control, and the other 26 at risk of settler takeover.¹⁸⁵ Palestinians were barred from accessing the spring areas by acts of intimidation, threats and violence by the settlers.¹⁸⁶

Case Study 12: Settlers of the Havat Ma’on outpost bathe in Palestinian well

Since 27 June 2012, settlers from the ‘Havat Ma’on’ outpost in the South Hebron Hills have been using a Palestinian-owned water well as a public bath and have scared local shepherds away from this crucial source of water for their flocks. Settlers, gathering near the well frequently, have vandalised it with graffiti, scrawling slogans such as “death to Arabs” and “we want a Jewish state” across the well.¹⁸⁷

¹⁸² UN OCHA, ‘The Monthly Humanitarian Monitor’ (February 2012).

¹⁸³ EWASH, “Down the Drain” (n 148) 18.

¹⁸⁴ At least 47 of the 56 springs are located on Palestinian privately owned land. UN OCHA, ‘How Dispossession Happens’ (n 137) 5.

¹⁸⁵ Also reported by the International Fact-Finding Mission on Settlements in its report, highlighting that “[s]ome of the seized springs are turned into “tourist attractions” or recreational sites, which receive Israeli government support.” International Fact-Finding Mission on Settlements (n 5) paragraph 87.

¹⁸⁶ UN OCHA, ‘How Dispossession Happens’ (n 137) 2, 5-8.

¹⁸⁷ -- ‘IN PHOTOS: Settlers vandalise, bathe in Palestinian water well’ *Alternative News* (12 July 2012) <<http://www.alternativenews.org/english/index.php/news/west-bank-and-settlers-violence/4756-in-photos-settlers-vandalise-bathe-in-palestinian-water-well.html#>> accessed 22 March 2013.

5. Legal Analysis

As the Occupying Power sharing a considerable portion of the region's water resources with the Palestinians, Israel's governance and use of transboundary water resources must be conducted not only in compliance with general principles of international law and customary international law, but also in accordance with the rules provided by international humanitarian law (IHL), international human rights law (IHRL) and international water law (IWL).

5.1. International Humanitarian Law

Israel's obligations under IHL are enshrined in the Regulations Annexed to the Hague Convention IV Respecting the Laws and Customs of Wars on Land of 1907 (Hague Regulations), reflective of customary international law, and in the Fourth Geneva Convention Concerning the Protection of Civilian Persons in Time of War of 1949 (Fourth Geneva Convention), for the most part reflective of customary international law,¹⁸⁸ and all the customary norms included in the Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (1977) (Additional Protocol I).

Countless resolutions of the UN General Assembly and the UN Security Council, as well as statements issued by governments worldwide have all affirmed the *de jure* applicability of the Fourth Geneva Convention to the OPT.¹⁸⁹ Israel continues to maintain a practice that is contrary to this near universal position,¹⁹⁰ which has also been confirmed by the ICJ in its 2004 Advisory Opinion on the Wall.¹⁹¹ Furthermore, ICJ jurisprudence¹⁹² and practice confirm that obligations stemming from human rights conventions ratified by the Occupying Power also apply – without discrimination – to all people in the occupied territory.¹⁹³

5.1.1. The Responsibility of the Occupying Power

Article 43 of the Hague Regulations: The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country.

¹⁸⁸ UN Security Council (UNSC) Letter Dated 24 May 1994 from the Secretary-General to the President of the Security Council (27 May 1994) UN Doc. S/1994/674, paragraph 53.

¹⁸⁹ UNGA Res 56/60 (10 December 2001) UN Doc. A/RES/56/60 and UNGA Res 58/97 (17 December 2003) UN Doc. A/RES/58/97. See also UNSC Res 1544 (19 May 2004) UN Doc. S/RES/1544.

¹⁹⁰ The Israeli Government has declared that it will only abide by some 'humanitarian provisions' enshrined therein, without specifying which provisions it regards as having humanitarian character. See Al-Haq, 'Legitimising the Illegitimate? The Israeli High Court of Justice and the Occupied Palestinian Territory' (25 November 2010) 11-13.

¹⁹¹ *Advisory Opinion on the Wall* (n 113) paragraph 101.

¹⁹² *The Legality of Threat or Use of Nuclear Weapons* (Advisory Opinion) ICJ Rep 1996, paragraph 25; *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* ICJ Rep 2005, paragraph 175 (hereafter: *Armed Activities Congo/Uganda*); *Advisory Opinion on the Wall* (n 113) paragraph 102-113.

¹⁹³ This position was espoused by the UNGA in its Res 2675 (XXV) (9 December 1970) UN Doc. A/RES/2675(XXV), the UN Human Rights Committee ('Concluding Observations: Israel' (18 August 1998) UN Doc. CCPR/C/79/Add.93, paragraph 10) and the European Court of Human Rights (*Loizidou v Turkey*, Judgment, 18 December 1996, 23 European Human Rights Reports, 513 in E Benvenisti, 'Water Conflicts during the Occupation of Iraq' (2003) 97 American Journal of International Law, 863, fn. 18).

Article 43 of the Hague Regulations provides the general framework for the responsibility of the Occupying Power in the occupied territory. It requires the Occupying Power to undertake all measures in its 'power to restore and ensure public order and safety,' and requires the Occupying Power to 'respect the laws and administrative rules in force in the occupied territory, unless absolutely necessary.'¹⁹⁴

The legislative changes introduced in the OPT have imposed a comprehensive system of control over water resources in the hands of the Occupying Power,¹⁹⁵ and as such must be measured against the principle enshrined in Article 43 of the Hague Regulations. While derogations from existing legislation are admissible if required for "the legitimate needs of the population," the veneer of legitimacy vanishes upon consideration of the discriminatory access, control and allocation meted out to the Palestinian population. In reality, Israel's assumption of control over allocation and use of water is blatantly discriminatory and aimed at fostering the Occupying Power's domestic interests.¹⁹⁶

Since occupation is by definition temporary, the Occupying Power does not acquire sovereignty over the occupied territory and the natural resources therein. While the sovereign rights over the territory remain with the occupied population, their ability to exercise these rights is restricted by the regime of occupation, which prevents them from fully controlling their territory and natural resources. Under the law of occupation, the Occupying Power acts merely as the *de facto* administrator of the occupied territory.¹⁹⁷ The administration of the territory must preserve the sovereign rights of the occupied population – thus protecting the occupied population and their property from exploitation and depletion by the Occupying Power.¹⁹⁸ In particular, IHL imposes strict limitations on the Occupying Power's use of property and natural resources available in the occupied territory, thereby preventing the Occupied Power from exploiting the wealth of the occupied territory to benefit its own economy.¹⁹⁹

The measures adopted by the Occupying Power in the occupied territory must meet two important criteria: (i) the fulfilment of its own military necessity and (ii) respect for the interests of the local population.²⁰⁰ Under no circumstances may Israel administer the occupied territory

¹⁹⁴ The Occupying Power is not required to comply blindly with existing local laws, for instance if compliance would neglect human rights. Y Arai-Takahashi, *The Law of Occupation: Continuity and Change of International Humanitarian Law, and its Interaction with International Human Rights Law* (Martinus Nijhoff Publishers, Leiden/Boston, 2009), 106, fn. 53. See also E H Schwenk, 'Legislative Power of the Military Occupant under Article 43, Hague Regulations' (1945) 54 Yale Legal Journal 393, 403.

¹⁹⁵ Israel has defeated the original regime of private rights to water, abolished pre-existing Jordanian laws and institutions, incorporated Palestinian water into Israel's metropolitan water network, and excluded any Palestinian role in the management of water resources at a regional or national level. See Section 3. of this study.

¹⁹⁶ I Scobbie, 'Natural Resources and Belligerent Occupation: Mutation through Permanent Sovereignty' (n 1) 277.

¹⁹⁷ I Scobbie, 'Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law' in S Akram, M Lynk, I Scobbie and M Dumper (eds), *International Law and the Israeli-Palestinian Conflict: a rights-based approach to the Middle-East conflict* (Routledge Publishers, London/New York, 2010) 231.

¹⁹⁸ *Ibid.*, 229; E Benvenisti, *The International Law of Occupation* (Princeton University Press, New Jersey, 1993) 28.

¹⁹⁹ *United States of America v A. Krupp et al.*, US Military Tribunal at Nuremberg (Judgment, 31 July 1948), 15 Annual Digest, 622-623. The Occupying Power is not entitled to interfere in the economic activity of the territory under its control, unless such interference meets its own military or security needs; defrays the expenses involved in the occupation; or protects the interests or well-being of the inhabitants of the occupied territory. A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' in E Playfair (ed.), *International Law and the Administration of the Occupied Territories* (Clarendon Press, Oxford, 1992), 422.

²⁰⁰ The local population does not include settlers residing in colonies, established in contravention of international law.

to benefit its own interests.²⁰¹ The Occupying Power is allowed to adopt measures to counter threats to the security of its personnel and property (or administration) stationed in the occupied territory.²⁰² However, these military necessities cannot result in trumping the needs of the occupied population.

Under no circumstances may Israel administer the occupied territory to benefit its own interests.

5.1.2. The Property Protection Regime of the Hague Regulations

In times of belligerent occupation, the property of the occupied population is protected from exploitation and destruction by the Occupying Power. IHL distinguishes between public and private property, prohibiting the Occupying Power from seizing and destroying both movable and immovable property, barring exceptional circumstances of absolute imperative military necessity.²⁰³

Wells, pumps and other water installations are considered as privately owned property, even if owned by municipalities,²⁰⁴ while communally held or transboundary water resources, such as the Mountain and Coastal Aquifers and the Jordan River, are included in the regime of publicly owned immovable property.²⁰⁵

5.1.2.1. Legal Considerations for Water as Private Property

Article 46 of the Hague Regulations prohibits the Occupying Power from confiscating private property in occupied territory. This near absolute prohibition of seizure of private property is tempered only by the Occupying Power's right to demand "[r]equisitions in kind and services [...] for the needs of the army of the occupation."²⁰⁶ The Occupying Power's subjection of privately owned property to its military needs must be compensated and can "only be in proportion to the resources of the country."²⁰⁷ Arguably, it is incumbent on the Occupying Power to prove that military necessity justifies the requisitioning of private property, especially because such requisition is an exception to a rule contained in Article 46.²⁰⁸

201 *United States of America v A. Krupp et al.*, US Military Tribunal at Nuremberg (Judgment, 31 July 1948), in *Trials of War Criminals before the Nuremberg Military Tribunals*, Vol. IX, 1342-1343. See further, A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 420; C Greenwood, 'The Administration of Occupied Territory' in E Playfair (ed.), *International Law and the Administration of the Occupied Territories* (Clarendon Press, Oxford, 1992) 247.

202 O Ben-Naftali, 'Pathological Occupation: Normalising the Exceptional Case of the Occupied Palestinian Territory and Other Legal Pathologies' in Ben-Naftali (ed.), *International Law and International Human Rights Law* (Oxford University Press, Oxford/New York, 2011) 140 and Y Arai-Takahashi, *The Law of Occupation* (n 194) 124.

203 Y Dinstein, *The International Law of Belligerent Occupation* (Cambridge University Press, Cambridge, 2009) 211.

204 Hague Regulations (1907) Article 56(1).

205 A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 431; I Scobbie, 'Natural Resources and Belligerent Occupation: Mutation through Permanent Sovereignty' (n 1) 279; M Tignino, 'Rethinking the protection of Water Rights for the Palestinian People: The Need for a Comprehensive Approach' in C Messerschmid, L El-Jazairi, I Khatib and A Al Haj Daoud (eds), *Water - Values & Rights* (Palestine Academy Press, Ramallah, 2009) 2:155; M Tignino, 'Water, International Peace, and Security' (2010) 92 *International Review of the Red Cross*, 663.

206 Hague Regulations (1907) Article 52.

207 Hague Regulations (1907) Article 52.

208 After all, the doctrine of military necessity has never been internationally recognised as "an unqualified license to disregard the well-being of an occupied people or as a pretext to undermine their underlying sovereign rights." R Falk and BH Weston, 'The Relevance of International Law to Israeli and Palestinian Rights in the West Bank and Gaza' in E Playfair (ed.), *International Law and the Administration of Occupied Territories* (Clarendon Press, Oxford, 1992) 137-138; A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 439.

Israel's requisitions of water subsequently allocated to settlers constitute a double illegality. On the one hand is the water used to serve and consolidate the presence of colonies in the OPT rather than "for the needs of the army of the occupation," or for the benefit of the occupied population in line with the general principles of IHL. On the other, the discrepancies in the *per capita* allocation and consumption rates between settlers and the occupied Palestinian population clearly reveal Israel's failure to manage the water "in proportion to the resources of the country."²⁰⁹

Israel's requisitions of water subsequently allocated to settlers constitute a double illegality.



Al-'Oja Spring, Jordan Valley in March 2013 – Tony Kane©.

5.1.2.2. Legal Considerations for Water as Public Property

The term public property is used to indicate the assets belonging to the State of the occupied territory and includes both moveable and immovable property. The relevant provisions of the Hague Regulations protecting publicly owned water resources are Articles 53 and 55, which respectively give the Occupying Power the right to seize public moveable property "for military purposes"²¹⁰ and reflect the usufruct rule applicable to public immovable property.

209 I Scobbie, 'Natural Resources and Belligerent Occupation: Mutation through Permanent Sovereignty' (n 1) 278-279.

210 See for examples, M Tignino, 'Water, International Peace, and Security' (n 205) 664.

Article 55 of the Hague Regulations (1907): “The occupying State shall be regarded only as 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.”

Under the usufructary rule,²¹¹ the Occupying Power may administer public property situated in the occupied territory and enjoy the use of real property.²¹² For instance, the Occupying Power is entitled to use the ‘fruits’²¹³ that arise out of the property in question, but is at the same time prohibited from decreasing its value or exploiting it in a manner that leads to its destruction.²¹⁴

Similar to agricultural estates and forests, groundwater systems, such as the Mountain Aquifer and the Coastal Aquifer, supply a given annual yield of water provided that the quality of the underlying asset does not deteriorate.²¹⁵ Based on the determination of groundwater systems as public immovable property, Israel would have the right to enjoy the ‘fruits’ of the OPT’s groundwater systems, provided that it is used to meet its security needs, defray the expenses of the occupation (not intended as the overall costs of the military operations)²¹⁶ and promote the needs of the local population.²¹⁷ It is strictly forbidden to use State property of the occupied territory to draw economic benefits for Israel’s economy or inhabitants.²¹⁸ Moreover, Israel is limited in its use to the extent that the capital of the property must be safeguarded. However, its practice of consistent overexploitation and pollution has caused significant and irreparable damage to the aquifers,²¹⁹ and has rendered groundwater a non-renewable resource.²²⁰

It is strictly forbidden to use State property of the occupied territory to draw economic benefits for Israel’s economy or inhabitants.

211 This concept originated in ancient Roman law, which defined ‘usufruct’ as “[t]he right of using and enjoying the property of other people, without detriment to the substance of the property.” See MB Clagget and OT Jr. Johnson, ‘May Israel as a Belligerent Occupant Lawfully Exploit Previously Unexploited Oil Resources of the Gulf of Suez?’ (1978) 3 American Journal of International Law, 567-568.

212 JS Pictet, *Commentary on the Fourth Geneva Convention* (ICRC, Geneva, 1958) 301.

213 For example, consumption of the crops harvested from the agricultural lands belonging to the occupied territory. Y Arai-Takahashi, *The Law of Occupation* (n 194) 198.

214 *Ibid.*; Y Dinstein, *The International Law of Belligerent Occupation* (n 203) 213-218; I Scobbie, ‘Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law’ (n 197) 280.

215 H Dichter, ‘The Legal Status of Israel’s Water Policies in the Occupied Territories’ (1994) 35 Harvard International Law Journal, 582.

216 The economy of the occupied territory can only be required to “bear the expenses of the occupation.” *Goering et al.*, Judgement, 1 October 1946, in *Trial of Major War Criminals before the International Military Tribunal, Nuremberg*, (1947) Vol. 1 239.

217 A Cassese, ‘Powers and Duties of an Occupant in Relation to Land and Natural Resources’ (n 199) 428; E Benvenisti, ‘Water Conflicts during the Occupation of Iraq’ (n 193) 869.

218 *Goering et al.*, (n 216); *Flick et al.*, US Military Tribunal at Nuremberg (1947) 14 Annual Digest, 226; *United States of America v A. Krupp et al.*, (n 199); *N.V. de Bataafsche Petroleum Maatschappij and others v The War Damage Commission*, 23 ILR 810 (Court of Appeal Singapore, 1956) 65.

219 Especially the Coastal Aquifer, see Section 2.3. of this study. Overexploitation of aquifers and the subsequent lowering in their levels is at the origin of seawater intrusion, which, as well as the upward diffusion of deeper saline water in the Gaza Strip, leads to a deterioration of groundwater quality and the depletion of the aquifers in the long term. FAO (n 10) 86; E Benvenisti, ‘Water Conflicts during the Occupation of Iraq’ (n 193) 870.

220 I Scobbie, ‘Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law’ (n 197) 279-282.



The wastewater treatment plant in Beit Lahiya, North Gaza governorate, has been operating beyond its capacity for many years. Wastewater that has received basic treatment flows into lagoons from where it then seeps into the groundwater. In North Gaza, Israel has prohibited the construction of sewage outlets into the sea, because of the risk of pollution that the partially treated wastewater poses to the southern beaches of Israel. The partially treated wastewater is thus forced back into the groundwater system, further polluting the Coastal Aquifer – Al-Haq©.

According to the most accredited interpretation, resources that are not renewable but finite, such as oil, minerals and hydrocarbons, cannot be considered as ‘fruits,’ but should rather be treated as immovable assets protected by Article 55 of the Hague Regulations.²²¹ Groundwater, which bears many similarities to oil in the ground and is considered as public immovable property,²²² must therefore not be considered as ‘the fruit of the tree, but as the tree itself’ and, as such, part of the occupied territory’s capital. Hence, it is protected by the rules of usufruct and cannot be depleted, damaged or destroyed by the Occupying

Groundwater, which bears many similarities to oil in the ground and is considered as public immovable property, must therefore not be considered as ‘the fruit of the tree, but as the tree itself’

221 In *N.V. de Bataafsche Petroleum Maatschappij and others v The War Damage Commission*, the Court of Appeal of Singapore ruled that crude oil in the ground was ‘immovable property,’ because it requires extraction from underground reservoirs and a refining process before becoming of any use. Therefore, it was not considered to fall within the meaning of fruits of Article 53 of the Hague Regulations. See *N.V. de Bataafsche Petroleum Maatschappij and others v The War Damage Commission* (n 218) and *Guano* case, award 5 July 1901, 15 RIAA 77, 367, in Y Arai-Takahashi, *The Law of Occupation* (n 194) 212, 196-197, fn 6. See also DA Graber, *The Development of the Law of Belligerent Occupation 1863-1914: A Historical Survey* (Columbia University Press, New York, 1949) 170; ER Cummings, ‘Oil Resources in Occupied Arab Territories under the Law of Belligerent Occupation’ (1974) 9 Journal of International Law and Economics, 533, 563, 565.

222 M Tignino, ‘Water, International Peace, and Security’ (n 205) 663, fn. 94; H Dichter, ‘The Legal Status of Israel’s Water Policies in the Occupied Territories’ (n 215) 565, 582, 592-593; A Cassese, ‘Powers and Duties of an Occupant in Relation to Land and Natural Resources’ (n 199) 431; I Scobbie, ‘Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law’ (n 197) 279.

Power.²²³

In light of the temporary nature of the situation of occupation, Israel must also guarantee that the use of the property remains in line with its status prior to the occupation. Israel is prohibited from both exploiting groundwater resources more rapidly than the level of extraction carried out by the occupied population prior to the occupation²²⁴ and from creating infrastructure for extraction that did not exist prior to 1967,²²⁵ unless this is done for sole benefit of the occupied population.

5.1.3. Administrative Destruction of Water Infrastructure

Article 53 of the Fourth Geneva Convention prohibits the Occupying Power from destroying all property, whether public or private, situated in the occupied territory for any reason other than imperative military necessity.²²⁶ While imperative military requirements may permit the Occupying Power to carry out destruction, in whole or in part, of certain private or public property in occupied territory, it must act in good faith to interpret the provision in a reasonable manner that respects the principle of proportionality.²²⁷ In these instances, this principle must be applied restrictively as the military necessity has to be absolute.

Destruction of enemy property not justified by military necessity constitutes a war crime.²²⁸ This crime amounts to a grave breach of the Fourth Geneva Convention when carried out unlawfully or wantonly, and when extensive in nature.²²⁹

The ostensible administrative nature of Israel's destruction of water infrastructure makes it apparent that such destruction is not justified by military necessity, thereby constituting *prima facie* evidence of its unlawfulness. Furthermore, while it has been argued that the Occupying Power's responsibility to ensure and maintain public order and civil life includes the exercise of administrative powers, such powers must be exercised

Israel has rendered any reasonable access and use of water resources in the OPT practically impossible for the occupied population.

²²³ The right provided for under Article 55 of the Hague Regulations does not "[i]nclude the privilege to commit waste or strip off the property involved, nor it is conceivable that the administrator or usufructuary [the Occupying Power] may with impunity so use the property as to ruin or destroy the economy of the occupied territory, or to deprive its inhabitants of [...] coal, oil, iron, steel [...]" as this would amount to unlawful spoliation. *United States of America v E. Von Weizsaecker et al.*, US Military Tribunal at Nuremberg (Judgment, 14 April 1949), in *Trials of War Criminals before the Nuremberg Military Tribunals*, Vol. XIV, 747.

²²⁴ I Scobbie, 'Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law' (n 197) 234-235; G Von Glahn, *The Occupation of Enemy Territory: A Commentary on the Law and Practice of Belligerent Occupation* (University Of Minnesota Press, Minnesota, 1957) 177.

²²⁵ M Leigh, 'Department of State Memorandum of Law on Israel's Right to Develop New Oil Fields in Sinai and the Gulf of Suez' (1977) 16 International Legal Materials, 734, 737, 741. "An occupant's [usufructuary] rights under international law do not include the right to develop a new oil field, to use the oil resources of the occupied territory for the general benefit of the home economy or to grant oil concessions."

²²⁶ Article 53 of the Fourth Geneva is therefore a reinforcement of the rules enshrined in the Hague Regulations, Articles 46 and 56 according to which private property and the property of municipalities must be respected. See JS Pictet, *Commentary on the Fourth Geneva Convention* (n 212) 301

²²⁷ *Ibid.*, 302.

²²⁸ ICC Statute (1998) Article 8(2)(b)(xiii).

²²⁹ Fourth Geneva Convention (1949) Article 147 and ICC Statute (1998) Article 8(2)(a)(vii).

for the benefit of the occupied population.²³⁰ Instead – and in violation of its duty of good governance²³¹ – Israel has rendered any reasonable access and use of water resources in the OPT practically impossible for the occupied population. Seen in this light, the current practice of demolishing water infrastructure, premised on the specious lack of permits, is a clear abuse of the obligation to administer the occupied territory for the benefit of the occupied population. Similarly, Israel's regime of illegal closures in the Gaza Strip, which obstructs access to essential construction materials to rehabilitate water and sanitation infrastructure that was demolished during military operations, is premised on violations of Israel's legal obligations as an Occupying Power.



According to the International Committee of the Red Cross (ICRC), "[t]he whole of Gaza's civilian population is being punished for acts for which they bear no responsibility. The closure therefore constitutes a collective punishment imposed in clear violation of Israel's obligations under international humanitarian law."²³² Instead, Israel administers all Palestinian water resources and infrastructure in a manner designed to realise a specific goal: the extensive appropriation of water resources so that they can be allocated solely to those residing in Israel proper and in Israeli colonies in the OPT.

5.1.4. Forcible Transfer of the Palestinian Population

The effects of Israel's discriminatory policies and practices have virtually deprived the Palestinian population in the OPT of essential means of livelihood, at the same time

²³⁰ Hague Regulations (1907) Article 43.

²³¹ In this study, the duty of good governance must be understood as to refer to full respect of human rights and the rule of law by Israel.

²³² International Committee of the Red Cross (ICRC), 'Gaza Closure: not another year!' News Release (14 June 2010) <<http://www.icrc.org/eng/resources/documents/update/palestine-update-140610.htm>> accessed 22 March 2013.

ensuring the de-development of local communities. Some Palestinian communities, in particular in the Jordan Valley – 90 per cent of which is classified as Area C – and the South Hebron Hills, struggle to survive, as the lack of water has not only completely crippled their agricultural and herding economy,²³³ but has left them parched, without 'sufficient, accessible and affordable water.'²³⁴ Through the extensive deprivation of water, Israel has made it nearly impossible for some Palestinians to remain in their communities and has effectively forced the transfer of the protected population from their homes.²³⁵

Israel has made it nearly impossible for some Palestinians to remain in their communities and has effectively forced the transfer of the protected population from their homes.

Consequently, as an Occupying Power in the OPT, Israel is contravening the prohibition of forcible transfer of protected persons set out in Article 49(1) of the Fourth Geneva Convention, which foresees the evacuation of an area only "if the security of the [occupied] population or imperative military necessity so demand."²³⁶ For instance, Israel has the right, in some instances even a duty, to partially or wholly evacuate an area if this area in danger as a result of military operations. However, evacuation is only permitted for the duration of the hostilities in the area, after which the occupied population must be brought back to their homes.²³⁷

Neither exception has been or can be invoked in this context, as it is clear that Israel's aim is to remove Palestinian communities from certain areas and confine them to specific areas of the OPT with minimum resources available, in order to further its own interests of exercising sovereign rights over the occupied territory and appropriating the natural resources for its own economic benefit.²³⁸ The violation of the prohibition of forcible transfer of protected persons amounts to a grave breach of the Fourth Geneva Convention and it is considered as a war crime under Article 8(2)(a)(vii) of the ICC Statute.

Israel's aim is to remove Palestinian communities from certain areas and confine them to specific areas of the OPT with minimum resources available.

The forcible displacement of the protected Palestinian population is instrumental to Israel's unlawful transfer of its own civilian population into the occupied territory—a transfer expressly

233 International Fact-Finding Mission on Settlements (n 5) paragraph 89-90. See also, EWASH, 'Factsheet 14: Water of Agriculture in the West Bank' (March 2013) 1.

234 See for a comprehensive legal analysis of Israel's practices in the Jordan Valley: Al-Haq, 'The Silent Annexation of the Jordan Valley, Israel's Illegal Appropriation of Palestinian Land' (April 2013) (forthcoming).

235 The ICTY case of *Prosecutor v Krstić* held that the term forcible transfer is not restricted to physical force, but may include threat of force or coercion, such as that caused by fear of violence, duress, detention, psychological oppression or abuse of power against such person or persons or another person, or by taking advantage of a coercive environment. *Prosecutor v Krstić* (Trial Chamber), Judgment of 2 August 2001, paragraph 529-530. See also, HRW, 'Separate and Unequal' (n 23) 5, 19, 67.

236 Fourth Geneva Convention (1949) Article 49(2).

237 JS Pictet, *Commentary on the Fourth Geneva Convention* (n 212) 280-281.

238 A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 431, 432. See also *Occupation, Colonialism and Apartheid Study* (n 90) 274.

prohibited by Article 49(6) of the Fourth Geneva Convention regardless of its motive.²³⁹ The transfer of Israeli nationals into the OPT is directly imputable to the Occupying Power's consecutive governments, which have consistently been heavily involved in the planning, implementation and financing of the transfer of Israel's own civilian population into the OPT. Ultimately, the absolute prohibition of transfer of Israel's nationals into the OPT strengthens the prohibition on using natural resources belonging to the occupied territory or its inhabitants for the furtherance of Israel's own interests.²⁴⁰ The Israeli settlement enterprise in the OPT is therefore in direct contravention of the absolute prohibition of transfer of the Occupying Power's nationals into occupied territory. The prohibition encompasses any political, military or financial measure enacted by the Occupying Power to bolster the establishment or the expansion of colonies, including the encouragement and financial support to develop industries, such as agricultural enterprises, in the occupied territory.²⁴¹

239 M Cottier, 'Article 8, War Crimes' in O Triffterer (ed.), *Commentary on the Rome Statute of the International Criminal Court – Observers' Notes, Article by Article* – (2nd edn) (Beck and Hart Publishers, Oxford, 2008) marginal 92.

240 A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 431, 432.

241 The 2004 ICJ *Advisory Opinion on the Wall* has confirmed that Israeli settlements in the OPT are illegal and constitute a blatant breach of international law. Additionally, it clarifies that the term "transfer" encompasses any measures taken by an Occupying Power in order to organise or encourage transfers of parts of its own population into the occupied territory. See *Advisory Opinion on the Wall* (n 113) paragraph 115-120. Numerous UN resolutions have confirmed the ICJ's position. See UNSC Res 237 (14 June 1967) UN Doc. S/RES/237, UNSC Res 271 (15 September 1969) UN Doc. S/RES/271, UNSC Res 446 (22 March 1979) UN Doc. S/RES/446 and UNSC Res 465 (1 March 1980) UN Doc. S/RES/465. See also, UNGA Res 56/60 (n 189) and UNGA Res 58/97 (n 189).



Settlement in the Jordan Valley - Tony Kane©

5.2. Right to Self-determination and the Principle of Permanent Sovereignty over Natural Resources

Through Israel's policies that have resulted in the complete integration of the OPT's water system into its own, Israel illegally exercises sovereign rights over Palestinian natural sources. This demonstrates the existence of

Israel illegally exercises sovereign rights over Palestinian natural sources. This demonstrates the existence of a governmental policy aimed at dispossessing the Palestinian population of their natural wealth.

a governmental policy aimed at dispossessing the Palestinian population of their natural wealth. As such, this constitutes an infringement on the right of the Palestinian people to self-determination and to permanent sovereignty over their natural resources.

The right to self-determination constitutes an essential principle of international law and its realisation is an indispensable condition for the effective guarantee and observance of individual human rights.²⁴² The right to self-determination holds that all people have the right "freely to determine, without external interference, their political status and to pursue their economic, social and cultural development, and every State has the duty to respect this right in accordance with the provisions of the [UN] Charter."²⁴³ Rooted in the United

242 UN Human Rights Committee, General Comment 12: The Right to Self-Determination of Peoples (Art. 1) (13 March 1984) UN Doc. CCPR/C/21/Rev.1.

243 Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations. UNGA Res 2625 (XXV) (24 October 1970) UN Doc. A/RES/2625(XXV).

Nations Charter²⁴⁴ and embodied in common Article 1 of the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), it is recognised as a peremptory international legal norm from which no derogation is permitted.²⁴⁵ Consequently, the obligation to ensure the enjoyment of the right to self-determination is owed by each State to the international community as a whole.²⁴⁶

Since 1948, UN bodies, including the General Assembly²⁴⁷ and the Security Council,²⁴⁸ have reiterated the right of the Palestinian people to self-determination, at the same time condemning the continuous violation of this right by Israel.²⁴⁹ In addition, the General Assembly often linked this right with the fundamental principle of customary international law concerning 'permanent sovereignty over natural resources,' clarifying that it is a fundamental component of the right to self-determination.²⁵⁰

The principle of permanent sovereignty over natural resources prohibits the Occupying Power from unlawfully exploiting and disposing of the occupied territory's natural resources.²⁵¹ Considered as an essential and inherent element of sovereignty, the principle protects the occupied population's ability to freely dispose of their natural wealth and resources in accordance with their interests of national development and well-being.²⁵² This includes the right to use, conserve and manage natural resources to promote national development; to explore, develop and market them; and the right to an equitable share in transboundary water resources. The occupied Palestinian population will only be able to fully exercise these rights once Israel's occupation of the OPT is brought to an end. Until then, Israel is under an obligation not to interfere with the exercise of permanent sovereignty by the occupied population.

The occupied Palestinian population will only be able to fully exercise these rights once Israel's occupation of the OPT is brought to an end.

The right of the occupied population to permanent sovereignty over its natural resources becomes even more relevant when considering the situation of prolonged occupation, since the Occupying Power's right to use and 'consume the fruits' deriving from the occupied territory's property cannot last for an indefinite period. It should be noted that a situation of occupation is intended to be of a temporary nature and that Article 55 of the Hague

244 UN Charter (1945) Articles 1(2) and 55.

245 *Armed Activities Congo/Uganda* (n 192) paragraph 64; *Ibid.*, Separate Opinion of Judge Ad Hoc Dugard, paragraphs 4, 10. See also A Cassese, *Self-Determination of Peoples: A Legal Reappraisal* (Cambridge University Press, Cambridge, 1995) 320; Y Arai-Takahashi, *The Law of Occupation* (n 194) 66.

246 See further C Tams, *Enforcing Obligations Erga Omnes in International Law* (Cambridge University Press, Cambridge, 2005) 263-305.

247 UNGA Res 58/163 (22 December 2003) UN Doc. A/RES/58/163.

248 UNSC Res 242 (22 November 1967) UN Doc. S/RES/242.

249 *Advisory Opinion on the Wall* (n 113) paragraph 118.

250 UNGA Res 3175 (XXVIII) (17 December 1973) UN Doc. A/RES/3175(XXVIII); UNGA Res 1803 (XVII) (14 December 1962) UN Doc. A/RES/1803(XVII); *Armed Activities Congo/Uganda* (n 192) paragraph 244-245.

251 Declaration on Permanent Sovereignty over Natural Resources. *Ibid.*, UNGA Res 1803 (XVII).

252 A Cassese, 'Powers and Duties of an Occupant in Relation to Land and Natural Resources' (n 199) 426.



Regulations supports a narrow understanding of the concept 'enjoy the fruits.' However, Israel's *carte blanche* interpretation of this notion effectively produces an incentive to prolong the occupation in order to maintain, *inter alia*, control over the water resources located in the OPT and to exploit them for its own benefit. As a result, this practice directly compromises the Palestinians people's right of permanent sovereignty over their natural resources and risks enabling the Occupying Power to exploit these resources 'indefinitely,' in clear defiance of the occupied population's right to self-determination.²⁵³

5.3. International Human Rights Law

The right to water, although not explicitly recognised as a self-standing human right in international treaties, is nonetheless protected by IHRL, which entails specific obligations on States that relate to the access to safe drinking water for personal and domestic use.²⁵⁴

In November 2002, the UN Committee on Economic, Social and Cultural Rights adopted its General Comment No. 15 on the right to water,²⁵⁵ stating that "[t]he human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses."²⁵⁶ Recognised as a component of the right to an adequate standard of living under Article 11 of the ICESCR, the right to water is also essential to the realisation of other rights, such as the rights to food and to adequate housing (Article 11(1) ICESCR), and the right to the highest attainable standard of health (Article 12(1) ICESCR).²⁵⁷

In July 2010, the UN General Assembly formally recognised "the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights."²⁵⁸ Subsequently, the UN Human Rights Council stated that the right to drinking water and sanitation is legally binding and is linked to existing human rights treaties.²⁵⁹ The Council further affirmed "that the human right to safe drinking water and sanitation is derived from the right to an adequate standard of living and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human

 **The right to drinking water and sanitation is legally binding and is linked to existing human rights treaties.** 

253 O Ben-Naftali, 'PathoLAWgical Occupation' (n 202) 154.

254 This is defined as "water for drinking, personal sanitation, washing of clothes, food preparation, and personal and household hygiene." UN Office of the High Commissioner for Human Rights (UN OHCHR), 'The Right to Water' (Fact Sheet No. 35) (2010) 3.

255 General comments provide an authoritative interpretation by an expert body on provisions under various international covenants, including the International Covenant on Economic, Social and Cultural Rights (ICESCR).

256 UN Committee on Economic, Social and Cultural Rights (UN CESCR), General Comment 15, The right to water (arts. 11 and 12) (20 January 2003) UN Doc. E/C.12/2002/11, paragraph 2.

257 *Ibid.*, paragraph 3.

258 UNGA Res 64/292 (8 July 2012) UN Doc. A/RES/64/292, paragraph 1. The UNGA makes explicit reference to the UN CESCR's General Comment No. 15 (2002) on the right to water.

259 Making explicit reference to the ICESCR, the Convention on the Elimination of All Forms of Racial Discrimination against Women, the Convention on the Rights of the Child, and the Convention on the Rights of Persons with Disabilities. UN Human Rights Council (UNHRC), 'Human rights and access to safe drinking water and sanitation', Resolution (6 October 2010) UN Doc. A/HRC/RES/15/9.

dignity" enshrined in the ICCPR.²⁶⁰

While the ICESCR obliges States to progressively realise the full enjoyment of the right to water, thereby recognising the constraints that may exist as a result of limited resources, there are nonetheless core obligations that are immediately incumbent upon States. These core obligations, specified in General Comment No. 15, are non-derogable and no justification can be made for non-compliance.²⁶¹ Furthermore, States may not under any circumstances actively introduce policies or practices that run counter to the requirements of the ICESCR, such as policies promoting unequal and discriminatory access to water resources.

Key Elements of the Right to Water

The right to water contains both freedoms and entitlements. These include non-discrimination and non-interference with regard to access to existing water supplies,²⁶² as well as access to a minimum amount of safe drinking water to sustain life and health and to meet basic needs.²⁶³

- Availability: entitles all to sufficient and continuous water supply for domestic and personal usage.
- Quality: water must be safe – free from hazardous substances that could jeopardise human health – and of an acceptable colour, odour and taste for each personal or domestic use.
- Accessibility: water services and facilities must be within safe physical reach and affordable to all – in law and in fact and without discrimination.²⁶⁴

General Comment No. 15 identifies three types of obligations incumbent upon States parties, namely, the obligations to respect, protect and fulfil.²⁶⁵

There to, Israel must respect the right of the Palestinian people to water by "refrain[ing] from interfering directly or indirectly with the enjoyment" of their right. As such, Israel's policies that result in, for instance, wilful and systematic destruction of Palestinian rainwater cisterns and other water infrastructure, pollution of water resources, or reduce water provision to certain areas in order to meet demands in other areas for the benefit of its citizens only, are in violation of its obligation to respect the right of the Palestinian people to water.²⁶⁶

260 UN Human Rights Council (UNHRC), 'Human rights and access to safe drinking water and sanitation', Resolution (6 October 2010) UN Doc. A/HRC/RES/15/9.

261 UN CESCR, General Comment 15 (n 256) paragraph 37, 40.

262 *Ibid.*, paragraph 37(b) "To ensure the right of access to water and water facilities and services on a non-discriminatory basis, especially for disadvantaged or marginalized groups."

263 *Ibid.*, paragraph 37(a) "To ensure access to a minimum essential amount of water, that is sufficient and safe for personal and domestic uses to prevent disease."

264 *Ibid.*, paragraph 10, 12 17, 37, 40.

265 *Ibid.*, paragraph 20.

266 *Ibid.*, paragraph 21, 22, 32, 44.



Wadi Gaza, the Gaza Strip, February 2013 – Al-Haq©.

Israel must further protect the right of the Palestinian people to water by preventing third parties from interfering in any way with the enjoyment of their right. This includes preventing individuals, such as Israeli settlers in the OPT, corporations and agents acting under State authority, such as 'Mekorot,' or others, from "polluting and inequitably extracting from water resources, including natural sources, wells and other water distribution systems."²⁶⁷ Furthermore, "water should never be used as an instrument of political and economic pressure."²⁶⁸ Israeli efforts to withhold water as a means of forcible transfer of Palestinian communities in pursuit of its own goal of illegally exercising sovereign rights over land and natural resources in the OPT constitutes use of water as an instrument of political and economic pressure.

Water should never be used as an instrument of political and economic pressure.

Professor Iain Scobbie notes that: "while international humanitarian law prohibits an occupant's use of water resources for reasons other than the needs of the army of occupation, an unlawful extraction made to benefit the occupant's home population could also be seen as an inequitable extraction, which the occupant has a duty to prevent, or as an arbitrary interference with established arrangements of water allocation, and consequently a breach of its duty to ensure the right to water."²⁶⁹

²⁶⁷ *Ibid.*, paragraph 23, 44.

²⁶⁸ *Ibid.*, paragraph 32.

²⁶⁹ I Scobbie, 'Natural Resources and Belligerent Occupation: Perspectives from international humanitarian and human rights law' (n 197) 241-242.

Finally, Israel must fulfil the right of the Palestinian people to water by adopting the necessary measures that facilitate enjoyment of the right, promote education concerning use of water and the preservation of water resources, and provide means to those unable to realise their right. The positive obligation to assist in the realisation of this right includes a duty to ensure that water is affordable, and to allow for the development of water infrastructure, including the acquisition of the necessary tools to construct or rehabilitate rainwater harvesting structures and wells.²⁷⁰

5.4. International Water Law

Whilst IHL and IHRL constitute legally binding standards that States have a duty to uphold in relation to the population of territories under their effective control, IWL regulates the relationship between watercourse States.

IWL regulates the relationship between watercourse States.

Relevant provisions of IWL are codified in the 1966 Helsinki Rules, reflective of customary international law,²⁷¹ and the 1997 UN Watercourses Convention²⁷² and the 2008 Draft Articles on Transboundary Aquifers.²⁷³ The latter two treaties contain essential customary rules pertaining to shared water resources, as well as several procedural and substantive obligations States must abide by in their respective use of shared watercourses.²⁷⁴

The Mountain and Coastal Aquifers and the Jordan River, individually, form international watercourses as described by Article 2 of the UN Watercourses Convention. As such, watercourse States must utilise international watercourses in accordance with the prevailing principle of equitable and reasonable utilisation.²⁷⁵ The UN Watercourses Convention

Watercourse States must utilise international watercourses in accordance with the prevailing principle of equitable and reasonable utilisation.

²⁷⁰ UN CESCR, General Comment 15 (n 256) paragraph 25-28, 44. Further examples of violations of the right to water explicitly mentioned in General Comment No. 15 (2002) include arbitrary or unjustified disconnection or exclusion from water services or facilities; pollution and diminution of water resources affecting human health; failure to enact or enforce laws to prevent the contamination and inequitable extraction of water; failure to protect water distribution systems (e.g., piped networks and wells) from interference, damage and destruction; failure to adopt or implement a water policy designed to ensure the right to water for everyone; the failure to take measures to reduce the inequitable distribution of water facilities and services; and failure to ensure that the minimum essential level of the right is enjoyed by everyone.

²⁷¹ S Salman, 'The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law (2007) 23 Water Resources Development, 625-640.

²⁷² Convention on the Law of the Non-Navigational Uses of International Watercourses, annexed to UNGA, Res 51/229 (21 May 1997) UN Doc. A/RES/51/229 (hereafter: UN Watercourses Convention). While Israel has not acceded or ratified the UN Watercourses Convention, its conduct is nonetheless subject to the obligations enshrined therein due to its customary nature. The ICJ declared that the UN Watercourses Convention, in its entirety, and Article 5 in particular, reflect "[t]he modern development of international law," which in turn "reflect in an optimal way the concept of common utilization of shared water resources." *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)* (Judgement) ICJ Rep 1997, paragraph 78, 85, 147 and 150. See further for the customary nature of the principle of equitable and reasonable utilisation, O McIntyre, *Environmental Protection of International Watercourses under International Law* (Ashgate, Aldershot, 2007) 53-76.

²⁷³ Draft Articles on The Law of Transboundary Aquifers, annexed to UNGA Res 63/124 (15 January 2009) UN Doc. A/RES/63/124 (hereafter: Draft Articles on Transboundary Aquifers).

²⁷⁴ The Pulp Mills case demonstrated that procedural and substantive rules are "intrinsically linked" and that the former may derive customary status from its role in giving effect to the latter. *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)* (Judgement) ICJ Rep 2010, paragraph 68, 121.

²⁷⁵ UN Watercourses Convention (1997) Article 5; Draft Articles on Transboundary Aquifers (2008) Article 4. See further, S McCaffrey, *The Law of International Watercourses* (n 12) 384-405; and, *Draft Articles on Transboundary Aquifers with Commentaries* (2008) <http://untreaty.un.org/ilc/texts/instruments/english/commentaries/8_5_2008.pdf> accessed 22 March 2013.

includes a non-exhaustive list of factors to be considered in determining equitable apportionment. Among the factors, whose relative priority will vary depending on the context of a specific situation, great emphasis is consistently placed on human dependence upon the watercourse in question. Other relevant factors are the natural character of the water sources, social and economic needs, and availability of alternative water sources.²⁷⁶ Naturally, these and other variables underlying the allocation of water between watercourse States will affect the determining factors for equitable apportionment, and a need might arise to adjust the allocation of water.²⁷⁷

In addition to the cardinal rule of equitable and reasonable utilisation, watercourse States are bound under customary international law to “take all appropriate measures to prevent the causing of significant harm to other watercourse States.”²⁷⁸ Such harm may take its form in, for instance, a diminution in the quantity of the water as a result of excessive pumping of groundwater, or of the quality of water due to pollution or increased salination. However, the scope of the ‘no-harm rule’ is not limited to one State’s direct use of the watercourse causing harm to another State’s use thereof, but could also be indirect, for example through a diversion of the flow of the watercourse.²⁷⁹

Take all appropriate measures to prevent the causing of significant harm to other watercourse States.

A further well-established customary obligation requires States to cooperate in order to “attain equitable and reasonable utilisation and adequate protection of an international watercourse.”²⁸⁰ This obligation extends beyond the watercourses to include a duty to cooperate in the maintenance and protection of “installations, facilities and other works related to an international watercourse,”²⁸¹ and provides a consultation mechanism if a watercourse State has “reasonable grounds to believe that it may suffer significant adverse effects.”²⁸²

Duty to cooperate in the maintenance and protection of “installations, facilities and other works related to an international watercourse.”

Irrefutably, Israel extracts far beyond what is to be considered “equitable and reasonable utilisation,” restricting Palestinian usage of groundwater supplies, and preventing Palestinians

276 UN Watercourses Convention (1997) Article 6(1).

277 O McIntyre, *Environmental Protection of International Watercourses under International Law* (n 272) 155-189; J Stein, ‘Waging Waterfare’ (n 4) 185.

278 UN Watercourses Convention (1997) Article 7; Draft Articles on Transboundary Aquifers (2008) Article 6. See for the customary nature of the general obligation to prevent harm, *Ibid.*, 87-92.

279 *Ibid.*, 93.

280 Cooperation must occur “on the basis of sovereign equality, territorial integrity, sustainable development, mutual benefit and good faith.” UN Watercourses Convention (1997) Article 8; Draft Articles on Transboundary Aquifers (2008) Article 7.

281 UN Watercourses Convention (1997) Article 26 (1): “1. Watercourse States shall, within their respective territories, employ their best efforts to maintain and protect installations, facilities and other works related to an international watercourse.”

282 UN Watercourses Convention (1997) Article 26 (2): “2. Watercourse States shall, at the request of any of them which has reasonable grounds to believe that it may suffer significant adverse effects, enter into consultations with regard to: (a) The safe operation and maintenance of installations, facilities or other works related to an international watercourse; and (b) The protection of installations, facilities or other works from wilful or negligent acts or the forces of nature.”

from increasing their exploitation of the groundwater resources to – even at bare minimum – extraction levels as agreed under Oslo II. Moreover, as noted above, Israel’s practice of consistent overexploitation and pollution has caused extensive and irreparable damage to international watercourses in violation of its obligation not to cause significant harm. Further harm has been caused by Israeli colonies’ discharge of wastewater and sewage in an inappropriate manner, leading to pollution of the groundwater resources underlying the West Bank.²⁸³ Additional harm was caused during ‘Operation Cast Lead’ in 2008-2009, when heavy destruction of wastewater infrastructure caused significant amounts of sewage to percolate into the groundwater, thereby contaminating the Coastal Aquifer.²⁸⁴ Lastly, Israel’s efforts to paralyse infrastructural development are illustrative of its refusal to cooperate in the management of joint water resources. Such cooperation would assist in achieving equitable apportionment and in providing appropriate protection and preservation of international watercourses. Its policies of administrative destruction of Palestinian water installations and facilities serves as an indication of State conduct that is inconsistent with the well-established principle to cooperate in their maintenance and protection.

Israel’s efforts to paralyse infrastructural development are illustrative of its refusal to cooperate in the management of joint water resources.



The Khan Younis wastewater treatment plant in the Central Area governorate of the Gaza Strip provides for the basic treatment of sewage as long as there is enough electricity to operate – Al-Haq©.

283 See for specific cases, PHG (n 127); G Hale, ‘Experts probe reach of toxins from West Bank landfill’ *Ma’an News Agency* (10 March 2013) <<http://maannews.net/eng/ViewDetails.aspx?ID=573286>> accessed 22 March 2013; M Richard and J Isaac, ‘The Water Regime in the West Bank’ (n 34); and --- ‘Settlers Pump Waste Water Into Palestinian Lands’ *Wafa* (24 October 2012) <<http://english.wafa.ps/index.php?action=detail&id=20937>> accessed 22 March 2013.

284 ARIJ, ‘Water resource allocations in the occupied Palestinian territory: Responding to Israeli claims’ (n 27) 25.

6. The Colonial Nature of Israel's Occupation of the OPT

Israel's policies and practices in the OPT have created a situation of occupation in which natural resources are unlawfully exploited and appropriated. Israel's water policies represent only one element of an irreversible structural process that can only be described as colonial.²⁸⁵ Colonialism can be distinguished from other forms of foreign domination by an open claim to sovereignty by the dominant power or where a dominant power adopts measures that deliberately deny – or demonstrate an intention to permanently deny – the people of the territory the full exercise of their sovereign rights and their right to self-determination.²⁸⁶

Israel's water policies represent only one element of an irreversible structural process that can only be described as colonial.

Israel's intention to permanently change the status of the occupied territory, *de facto* exercising sovereignty, reveals itself through the establishment and expansion of colonies in the West Bank (currently over 200) and by the creation of a network of roads and flourishing agricultural enterprises for their benefit. The presence of settlements aims to permanently deny the Palestinian population the exercise of their right to self-determination by fragmenting the OPT²⁸⁷ and preventing the Palestinian people from exercising sovereignty over natural resources, in particular land and water.

The prohibition of colonialism, codified in the UN General Assembly's Declaration on the Granting of Independence to Colonial Countries and Peoples of 1960²⁸⁸ (Declaration on Colonialism), rejects all forms of colonial domination on the grounds that it violates fundamental norms of human rights and is a threat to international peace and security. The Declaration on Colonialism "solemnly proclaims the necessity of bringing to a speedy and unconditional end colonialism in all its forms and manifestations." Similarly, the UN General Assembly's Declaration on Friendly Relations and Co-operation among States stresses the duty of every State to promote, through joint and separate action, the realisation of the principle of equal rights and self-determination of peoples through, *inter alia*, "bringing a speedy end to colonialism."²⁸⁹ Declaratory of customary international law and drawing on several principles of international law, especially the right of peoples to self-determination and the prohibition of annexation by use or threat of force, these two UN General Assembly

Colonialism is absolutely contrary to international law.

²⁸⁵ *Occupation, Colonialism and Apartheid Study* (n 90) 120-121. See also Russell Tribunal on Palestine, 'Findings of the South African Session' (5-7 November 2011) 14 (hereafter: *RToP, Findings of the South African Session*) <<http://www.russelltribunalonpalestine.com/en/wp-content/uploads/2011/11/RToP-Cape-Town-full-findings3.pdf>> accessed 22 March 2013.

²⁸⁶ *Occupation, Colonialism and Apartheid Study* (n 90) 120-121.

²⁸⁷ *RToP, Findings of the South African Session* (n 285) 19.

²⁸⁸ UNGA Res 1514 (XV) (14 December 1960) UN Doc. A/Res/1514(XV).

²⁸⁹ UNGA Res 2625 (XXV) (n 243).

resolutions reiterate that colonialism is absolutely contrary to international law.²⁹⁰

While from the outset of the occupation Israel has denied Palestinians their sovereign rights over the water resources, its colonial enterprise reached its zenith with the conclusion of the Oslo Accords. Instead of providing for greater access to water, they preserved and formalised Israel's unilateral control over the shared water resources and facilitated its illegal exercise of sovereignty over Palestinian water resources.

²⁹⁰ *Occupation, Colonialism and Apartheid Study* (n 90) 120, 42.

7. Israel's Policies and Practices Amount to 'Water-Apartheid'

7.1. The Prohibition of Apartheid

Reflective of customary international law,²⁹¹ the prohibition of apartheid is a peremptory norm of international law, creating obligations owed by each State to the international community as a whole (obligations *erga omnes*).²⁹² Although inspired by the South African apartheid regime, its application extends beyond the situation as it existed between 1948 and 1994 in southern Africa.²⁹³ However, many parallels can be drawn, specifically with regard to the South African policy of 'Grand Apartheid,' which provided for the establishment of separate 'self-governing' entities, labelled 'Homelands' or 'Bantustans' into which the denationalised black majority was transferred and forced to reside.²⁹⁴

The prohibition of apartheid has been codified in various international legal mechanisms, such as the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), adopted in 1965, which holds that "States Parties particularly condemn racial segregation and apartheid and undertake to prevent, prohibit and eradicate all practices of this nature in territories under their jurisdiction."²⁹⁵

Further, the International Convention on the Suppression and Punishment of the Crime of Apartheid (Apartheid Convention) expressly declares apartheid – as a distinct and severe form of racial discrimination – unlawful.²⁹⁶

A distinct and severe form of racial discrimination.

²⁹¹ The UN General Assembly consistently condemned the practice of apartheid during the apartheid era of South Africa (1948 – 1994) as contrary to Article 55 and 56 of the Charter of the United Nations, bolstered by condemnation from the UN Security Council after 1960. The UN General Assembly further labelled apartheid as a crime against humanity in 1966, which the UN Security Council endorsed in 1984, and the practice of apartheid was formally codified as a crime against humanity in the Rome Statute of the International Criminal Court (ICC Statute) in 1998. UNGA Res 2202 (XXI) (16 December 1966) UN Doc. A/RES/2202(XXI); UNSC Res 556 (23 October 1984) UN Doc. S/RES/556.

²⁹² *Occupation, Colonialism and Apartheid Study* (n 90) 51-52.

²⁹³ This is evidenced by the explicit reference to apartheid in Article 3 of the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) (1965). The Committee on the Elimination of Racial Discrimination articulated in its General Recommendation No. 19 that "[t]he reference to apartheid may have been directed exclusively to South Africa, but the article as adopted prohibits all forms of racial segregation in all countries." (UN Committee on the Elimination of Racial Discrimination (UN CERD), General Recommendation No. 19: Racial Segregation and Apartheid (art. 3) (18 August 1995) UN Doc. A/50/18 at 140, paragraph 1) and by the inclusion of the phrase "similar policies and practices of racial segregation and discrimination as practiced in southern Africa" in Article 2 of the International Convention on the Suppression and Punishment of the Crime of Apartheid (1973) (Apartheid Convention).

²⁹⁴ The 'Bantustans' were never recognised by the African National Congress (ANC) or the international community. The UN consistently condemned the 'Bantustans' as violations of both South Africa's territorial integrity and of the right of the African people of South Africa as a whole to self-determination. The forced residence in the 'Bantustans' facilitated and preserved white supremacy over the majority of the territory of South Africa. See further, *Occupation, Colonialism and Apartheid Study* (n 90) 20.

²⁹⁵ ICERD (1965) Article 3. See further, Article 2 of the Universal Declaration of Human Rights (1948) and the preamble of the Convention on the Elimination of Discrimination Against Women (1979), which states that "[...] the eradication of apartheid, all forms of racism, racial discrimination, colonialism, neo-colonialism, aggression, foreign occupation and domination and interference in the internal affairs of States is essential to the full enjoyment of the rights of men and women."

²⁹⁶ The UNGA adopted the Apartheid Convention on 30 November 1973 with 91 votes in favour, four against (South Africa, Portugal, the United States and the United Kingdom) and 26 abstentions. The Apartheid Convention entered into force on 18 July 1976 and, as of November 2012, 108 States have ratified it, notably not including Israel.

Article 2 of the Apartheid Convention:

For the purpose of the present Convention, the term "the crime of apartheid", which shall include similar policies and practices of racial segregation and discrimination as practised in southern Africa, shall apply to the following inhuman acts committed for the purpose of establishing and maintaining domination by one racial group of persons over any other racial group of persons and systematically oppressing them:

(a) Denial to a member or members of a racial group or groups of the right to life and liberty of person:

(i) By murder of members of a racial group or groups;

(ii) By the infliction upon the members of a racial group or groups of serious bodily or mental harm, by the infringement of their freedom or dignity, or by subjecting them to torture or to cruel, inhuman or degrading treatment or punishment;

(iii) By arbitrary arrest and illegal imprisonment of the members of a racial group or groups;

(b) Deliberate imposition on a racial group or groups of living conditions calculated to cause its or their physical destruction in whole or in part;

(c) Any legislative measures and other measures calculated to prevent a racial group or groups from participation in the political, social, economic and cultural life of the country and the deliberate creation of conditions preventing the full development of such a group or groups, in particular by denying to members of a racial group or groups basic human rights and freedoms, including the right to work, the right to form recognized trade unions, the right to education, the right to leave and to return to their country, the right to a nationality, the right to freedom of movement and residence, the right to freedom of opinion and expression, and the right to freedom of peaceful assembly and association;

d) Any measures including legislative measures, designed to divide the population along racial lines by the creation of separate reserves and ghettos for the members of a racial group or groups, the prohibition of mixed marriages among members of various racial groups, the expropriation of landed property belonging to a racial group or groups or to members thereof;

(e) Exploitation of the labour of the members of a racial group or groups, in particular by submitting them to forced labour;

(f) Persecution of organizations and persons, by depriving them of fundamental rights and freedoms, because they oppose apartheid.

The prohibition of apartheid as enshrined in the Apartheid Convention and its proclamation of apartheid as a crime against humanity²⁹⁷ supplement the general prohibition under the ICERD, and were followed by the inclusion of the crime of apartheid in Article 85(4)(c) of Additional Protocol I,²⁹⁸ and Article 7(2)(h) of the ICC Statute.²⁹⁹

The three core elements of the definition of “the crime of apartheid” require that³⁰⁰ (1) two distinct racial groups be identified; (2) ‘inhuman acts’ are committed against the subordinate group;³⁰¹ (3) such acts of systematic oppression are committed in the context of an institutionalised regime³⁰² of domination by one group over the other.

7.2. The Three Pillars of Israel’s ‘Water-Apartheid’

Three core elements of the crime of apartheid are reflected in the legislative measures and institutionalised policies through which Israel implements its apartheid regime. These laws and policies form the matrix on which the three pillars of Israel’s apartheid regime stand.³⁰³

A troika of key legislative measures and institutionalised policies and practices have enabled Israel to illegally exercise sovereign rights over Palestinian water resources, with the ultimate goal of satisfying its own interests. Thereto, Israel has exerted considerable military and political efforts (1) to gain, maintain and consolidate exclusive access to Palestinian water resources, (2) to appropriate water resources for the sole benefit of Israelis, including settlers, and (3) to paralyse Palestinian water infrastructure development in the OPT, aimed at forcibly transferring Palestinian communities. As such, these policies and practices have laid the foundations and underpin the three principal pillars of Israel’s ‘water-apartheid.’

7.2.1. The First Pillar: Demarcation of the Population Along Racial Lines

The first pillar mirrors the first core element of the definition of the crime of apartheid, which requires the identification of two distinct racial groups. The determination of a racial group under international law is a practical question and demands nothing more than ‘an identifiable group.’ This is either based on self-perception or identification by others, for

297 Apartheid Convention (1973) Article 1. The legal analysis of Israel’s water regime in the OPT draws primarily on the formulation of the prohibition of apartheid in the Apartheid Convention, informed by the codification in the ICC Statute. Individual criminal responsibility for the crime of apartheid, however, is beyond the scope of this study.

298 Additional Protocol I (1977) Article 85(4)(c): “In addition to the grave breaches defined in the preceding paragraphs and in the Conventions, the following shall be regarded as grave breaches of this Protocol, when committed wilfully and in violation of the Conventions or the Protocol: (c) practices of ‘apartheid’ and other inhuman and degrading practices involving outrages upon personal dignity, based on racial discrimination.”

299 *Occupation, Colonialism and Apartheid Study* (n 90) 48-52.

300 Contained in Article 2 of the Apartheid Convention and Article 7(2)(h) of the ICC Statute.

301 Article 2 of the Apartheid Convention lists of ‘inhuman acts’ that constitute apartheid. The purpose of the list of ‘inhuman acts’ set out in Article 2 is illustrative and not exhaustive or exclusive. Furthermore, not all acts have to be committed to lead to a positive finding of practices of apartheid. *Occupation, Colonialism and Apartheid Study* (n 90) 271, 49. See also *RToP, Findings of the South African Session* (n 285).

302 The word “regime” must be understood in a broader sense as to include a system institutionalised by a group or groups other than a government. See C Hall, ‘Article 7, Crimes Against Humanity’ in O Triffterer (ed.), *Commentary on the Rome Statute of the International Criminal Court – Observers’ Notes, Article by Article* – (2nd edn) (Beck and Hart Publishers, Oxford, 2008) marginal 122.

303 The precedent of Namibia reveals that a State may breach the prohibition of apartheid in territory that lies beyond its borders, but which is under its jurisdiction. *Occupation, Colonialism and Apartheid Study* (n 90) 277.

example through ethnicity,³⁰⁴ national identity, religion,³⁰⁵ or discriminatory measures.³⁰⁶

The first group identified are the Palestinians. This group has been sub-divided across the geographic expanse mainly through imposed constructed legal status into Palestinians citizens of Israel, the occupied population in the OPT, and Palestinian refugees in exile.³⁰⁷ Nonetheless, Palestinians, because of their identity as the indigenous people of Historic Palestine, the country in which they resided and were entitled to rights and guarantees under the British Mandate, remain a single people entitled to their universally recognised collective right to self-determination.³⁰⁸

The second group is composed of ‘Jewish-Israelis,’ meaning ‘Israelis with Jewish identity.’ This is an official category imposed and monitored by the State of Israel. It does not define a person as Jewish by virtue of religious observance, but recognises a person as a member of the global Jewish community, thereby granting Jewish people certain rights, such as immigration and residency.³⁰⁹ They are a group unified by Israeli Basic Laws through their identification as ‘Jewish nationals’ and thus entitled to the privileged status of ‘Jewish nationals and citizens’ in Israel.³¹⁰ Membership of the dominant Jewish-Israeli group can only be acquired by birth and is thus experienced as immutable and incontestable for its members.³¹¹

7.2.2. The Second Pillar: Segregation into Different Geographical Areas

The demarcation along racial lines allows Israel to maintain a system intended to segregate the population into different geographical areas. Jewish-Israelis are privileged, as they have an uninterrupted and abundant supply of water, while Palestinians are discriminated against.³¹²

Inside Israel, the distinction between the two racial groups is used to restrictively grant citizenship to only those Palestinians who remained inside Israel after 1948 and at the same

304 Defined as the fact or state of belonging to a social group that has a common origin and culture.

305 ICERD (1965) Article 1(1). The ICERD applies a broad construction of the meaning of the term ‘racial discrimination’ which includes discrimination “based on race, colour, descent, or national or ethnic origin.”

306 The Committee on Elimination of Racial Discrimination has identified groups, which would not be considered ‘races’ in the traditional sense of the word, for instance caste groups from South Asia, non-citizens such as migrant workers, and nomadic peoples. See D Keane, ‘Elements of the Definition of Apartheid: Racial Groups under International Law’ (Evidence to be presented before the Third International session of the Russell Tribunal on Palestine, Cape Town, 5 to 7 November 2011) (Written Testimony).

307 Israel has constructed complex and integrated legal and physical barriers that continue to prevent Palestinian refugees and their descendants to return to their homes, thereby denying Palestinians the exercise of their collective right to self-determination.

308 UNGA Res 3236 (XXIX) (22 November 1974) UN Doc. A/RES/3236(XXIX). See further Section 5.2. of this study.

309 See for a detailed overview of the rights afforded to Jewish Israelis under Israeli Basic Laws, H Zoabi, ‘Arabs and Jews in Palestine: different reality, different law, different set of rights in the same territory and in the same state’ (Evidence to be presented before the Third International session of the Russell Tribunal on Palestine, Cape Town, 5 to 7 November 2011) (Written Testimony).

310 The 1950 Law of Return allows any member of the Jewish community to immigrate to Israel and gain citizenship. See World Zionist Organisation-Jewish Agency (Status) Law, 5713-1952 <<http://www.geocities.com/savepalestinnow/israelaws/fulltext/jewishagencystatuslaw.htm>> accessed 22 March 2013. See further *Occupation, Colonialism and Apartheid Study* (n 90) 159-162.

311 R Greenstein, ‘Israeli Jews, Palestinian Arabs and the Apartheid Question’ (Evidence to be presented before the Third International session of the Russell Tribunal on Palestine, Cape Town, 5 to 7 November 2011) (Written Testimony).

312 The focus of this study is to identify how Israel’s policies and practices in relation to water have laid the foundations for Israel’s regime of ‘water-apartheid.’ It is, therefore, beyond its scope to address discriminatory water access and allocation in Israel proper. Nonetheless, issues such as the lack of water supply to Bedouin communities in the Negev due to Israel’s non-recognition of these communities, the decreased access to water for Palestinian farmers in the north of Israel, and lack of water supply to Palestinian communities in Israel, support the analysis of Israel’s ‘water-apartheid.’

time to extend Israeli citizenship beyond its territory to all Jews, regardless of their geographical location, personal history or affiliation to the territory.³¹³ However, the demarcation along racial lines is more apparent inside the OPT, where the physical separation and segregation has facilitated the creation of two parallel and unequal societies. The first is a Jewish-Israeli settler society that resides in colonies with better living conditions. Israeli domestic laws and institutions are operating in the OPT to afford them special rights and privileges, thereby ensuring that Jewish-Israelis maintain, *inter alia*, greater access to the natural resources of the OPT.³¹⁴

The physical separation and segregation has facilitated the creation of two parallel and unequal societies.

By contrast, a second and disadvantaged Palestinian society living in the same territory is denied most of its basic rights. Palestinian use of and access to water has been severely restricted through Israel's illegal exercise of sovereignty over water resources. Its imposition of a discriminatory permit regime and policies of confiscation and destruction furthermore have systematically thwarted all Palestinian infrastructural development, thereby paralysing it. As a result, Palestinians are forcibly confined to a land-locked archipelago of territory with minimum water resources available. This has caused the economic and agricultural de-development of Palestinian communities – ultimately strangling them – and thus impeding their full development as a group.

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Palestinians are forcibly confined to a land-locked archipelago of territory with minimum water resources available.

The creation of such enclaves in which basic human rights are denied and full development of the subordinate group is impeded are listed in Article 2(d) and (c) of the Apartheid Convention as inhuman acts to which the term "crime of apartheid" shall apply. As such, the implementation and maintenance of institutionalised policies that separate the two racial groups in geographical areas across the region underpins the commission of 'inhuman acts against the subordinate group' in the sense of the second core element of the definition of apartheid.

313 R Greenstein, 'Israeli Jews, Palestinian Arabs and the Apartheid Question' (n 311).

314 *Occupation, Colonialism and Apartheid Study* (n 90) 277.

7.2.3. The Third Pillar: Use of 'Security' to Justify an Institutionalised Regime of Domination and Systematic Oppression

The third pillar upon which Israel's 'water-apartheid' rests is its 'security' laws, policies and practices.³¹⁵ Justified by security needs, Israel gained control over the shared water resources in 1967. Since then and under the same guise, Israel has pursued an aggressive settlement policy ultimately aimed at annexing the OPT's land and other natural resources.³¹⁶ Subsequent efforts undertaken to revisit the allocation of the shared water resources have merely consolidated Israel's exclusive control, thereby enabling Israel to further institutionalise a discriminatory water regime that is characterised by domination and systematic oppression of the Palestinians as a group. Any act of dissent or non-compliance is sanctioned with denial of permits, destruction and confiscation of water infrastructure. As such, the pretext of 'security' is used to justify inhuman acts that confine Palestinians to enclaves, and suppress them through the denial of basic human rights associated with water. It further purports to mask the underlying true intent of maintaining domination over and forcibly transferring the Palestinian people as a group.³¹⁷

Israel has pursued an aggressive settlement policy ultimately aimed at annexing the OPT's land and other natural resources.

Because the commission of individual inhuman acts alone is not sufficient to characterise a discriminatory regime as a system of apartheid, a correlation must exist between the individual inhuman acts and the institutionalised State policies and practices. Israel's policies and practices in relation to water do not occur in a vacuum, but are integrated in an institutionalised system of Jewish-Israeli domination and oppression of the Palestinians as a group – thus amounting to a system of 'water-apartheid.'³¹⁸

315 *Ibid.*, 275.

316 See for a more in depth discussion of Israel's use of the pretext of security for the establishment of settlements, Al-Haq, 'The Silent Annexation of the Jordan Valley: Israel's Illegal Appropriation of Palestinian Land' (April 2013) (*forthcoming*).

317 *Occupation, Colonialism and Apartheid Study* (n 90) 275.

318 *Ibid.*, 275-276.

8. Legal Consequences for Violations of International Law

8.1. Israel's State Responsibility for Violations of International Law

This study has identified how Israel's illegal exercise of sovereign rights over Palestinian water resources in the OPT are aimed at permanently denying the occupied population's sovereignty over their territory and natural resources. Israel systematically commits inhuman acts against the Palestinians as a group through the denial of access to water, which occurs in the context of an institutionalised system of Jewish-Israeli domination. These violations amount to breaches of peremptory norms of international law, including the right to self-determination, the prohibition of extensive destruction and appropriation of property, as well as the international legal prohibitions of colonialism and apartheid in the OPT.

Israel has extensively and unlawfully appropriated Palestinian water resources in the OPT for the sole benefit of those residing in Israel proper and in Israeli colonies, while maintaining a practice of extensive destruction of Palestinian water infrastructure. These practices are aimed at forcibly transferring Palestinian communities from their homes, which is instrumental to Israel's unlawful transfer of its own civilian population into occupied territory. As such, Israel is in violation of Articles 49 and 53 of the Fourth Geneva Convention. In addition to its State responsibility, these violations constitute war crimes, amounting to grave breaches.³¹⁹ As a High Contracting Party to the Geneva Conventions, Israel has an obligation to put an end to all violations of IHL and investigate and prosecute those responsible for violations of the Conventions.

Israel has an obligation to put an end to all violations of IHL and investigate and prosecute those responsible for violations of the Conventions.

Furthermore, Israel consistently fails to meet its obligations under international human rights law by refusing to respect, protect and fulfil the right of the Palestinian people to water, which is derived from existing human rights treaties. Israel excessively and relentlessly extracts far beyond its equitable and reasonable share of the transboundary waters, thereby causing significant harm through increased pollution and salination of the watercourses. Israel also refuses to cooperate in the maintenance, protection and preservation of transboundary watercourses and water installations. Thus, Israel is in violation of its obligations *vis-à-vis* Palestine as a watercourse State under the customary principles of international water law.

The Israeli authorities must immediately cease all internationally wrongful acts, offer appropriate guarantees of non-repetition and make full reparations for the injury caused, including material or moral damages.

³¹⁹ A list of all grave breaches and war crimes has been reflected in Article 8 of the ICC Statute.

In order to meet its obligations under these international legal frameworks, the Israeli authorities must immediately cease all internationally wrongful acts, offer appropriate guarantees of non-repetition and make full reparations for the injury caused, including material or moral damages. Full reparations must take the form of restitution where materially possible, compensation or satisfaction otherwise.³²⁰

8.2. The Legal Consequence for Third-Party States for Israel's Violations of International Law

By virtue of Israel's breaches of peremptory norms of international law, certain obligations arise for third-party States. Article 41 of the ILC Draft Articles on State Responsibility, which reflects customary international law, affirms that in the case of breaches of peremptory norms of international law, all States are under an obligation not to recognise the situation as lawful, not to render aid or assistance in maintaining the illegal situation, and to actively cooperate in order to bring it to an end.³²¹ Furthermore, third-party States should ensure that Israel makes full reparations for the damages caused.

All States are under an obligation not to recognise the situation as lawful, not to render aid or assistance in maintaining the illegal situation, and to actively cooperate in order to bring it to an end.

In light of Israel's violations of international humanitarian law, such as the extensive destruction of private and public property situated in occupied territory, the violation of the rule of usufruct and of Israel's responsibilities as an Occupying Power in the OPT, the forcible transfer of the occupied population from their homes, as well as the transfer of its own civilian population into the occupied territory, the High Contracting Parties to the Geneva Conventions are under an obligation to ensure, as per Common Article 1 of the Conventions, Israel's respect for international humanitarian law and must refrain from condoning or rendering support to its illegal policies in the OPT. In addition, under Articles 146 and 147 of the Fourth Geneva Convention, States have the obligation to search for and prosecute those responsible for grave breaches.

³²⁰ Articles 30, 31, 34-37 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts with commentaries, International Law Commission (ILC), United Nations, 2001 (ILC Draft Articles on State Responsibility).

³²¹ The existence of these obligations for third-party States has been recognised by the ICJ, which held that all States, irrespective of membership to the UN at the time, were deemed to be under the obligation not to recognise the validity or effects of South Africa's illegal presence in Namibia. See *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276 (1970)* (Advisory Opinion) ICJ Rep 1971, paragraph 126. The ICJ recalled the same set of obligations in its *Advisory Opinion on the Wall* in relation to the consequences arising from the construction of the Annexation Wall. See *Advisory Opinion on the Wall* (n 113) paragraph 161, 163.

9. Conclusion

For more than four decades of occupation Palestinians in the OPT have endured severe and continuous infringements of their water rights. Israel maintains a system of water governance that attests to its 'self-interested administration' of the region's shared water resources, and unlawfully exploits and appropriates Palestinian water resources for the benefit of those residing in Israel and in Israeli colonies at the expense of the protected Palestinian population in the OPT. Moreover, Israel's illegal exercise of sovereign rights over Palestinian water resources and its discriminatory policies and practices are integral elements of an institutionalised system of Jewish-Israeli domination over Palestinians as a group, in the form of a colonial and apartheid regime.

While the violations of international law set out in this study entail responsibilities for Israel and for third-party States to bring the illegal situation to an end, the current state of the water sector in the OPT and Israel will not improve unless structural changes are made to the use and management of the shared water resources. These changes, in the intermediate term, should include removing physical and administrative restrictions on Palestinian access to and use of the shared water resources, as well as halting the extraction of water from the Palestinian share of the transboundary water resources by corporations and agents acting under Israel's authority. However, ultimately, lasting structural changes will require bringing Israel's occupation of the OPT to an end and substantially reforming the relationship to one of equal partnership in the administration of water resources based on reasonable and equitable standards. To ensure that Palestinians can exercise their full rights in the OPT, the access to, use and allocation of shared water resources must not be determined on the basis of one side's dominant negotiating power over the other, but must strictly abide by international legal norms.

10. Recommendations

1. The Government of Israel, as the primary duty-bearer in the OPT, must:

- I. Immediately cease the unlawful appropriation and exploitation of Palestinian water resources, as well as confiscation, demolitions and destruction of Palestinian water infrastructure in the OPT. Thereto, Israel must:
 - A. Bring to an end all its practices of consistent overexploitation and pollution of all shared water resources and the resultant significant and irreparable damage to the international watercourses in the region.
 - B. Bring to an end its policies of systematic destruction of Palestinian cisterns, wells and other water infrastructure, as well as its reduction of water provision to certain areas in the OPT in order to benefit its national interests.
- II. Immediately lift physical and administrative restrictions on access to and use of all shared water resources and guarantee Palestinians the exercise of their sovereign rights, including permanent sovereignty over natural resources. Thereto, Israel must:
 - A. Immediately cease its discriminatory policies and practices that deprive the occupied Palestinian population in the OPT of essential means of livelihood, in particular water, and that forcibly transfer protected persons to areas with minimum resources available.
 - B. Adopt the necessary measures to ensure that water is accessible, affordable and of acceptable quality and allow for the development of water infrastructure, which includes the acquisition of the necessary tools for Palestinians to construct or rehabilitate rainwater harvesting structures, wells and other water infrastructure, especially in the Gaza Strip, in accordance with its duty under international human rights law.
 - C. Allow Palestinian access to and use of its rightful share of the Jordan River in accordance with the customary principle of 'equitable and reasonable utilisation' as codified in international water law.
 - D. Prevent Israeli settlers in the OPT from polluting and taking over wells, springs and other water distribution systems in the OPT.
 - E. Prevent corporations and agents acting under Israel's authority, such as 'Mekorot,' from inequitably extracting water from the Palestinian share of the transboundary water resources.

- F. Investigate and prosecute all companies and private individuals involved in war crimes in the OPT, including the unlawful appropriation and destruction of Palestinian water resources and infrastructure in the OPT.
- III. Comply with its customary duty to cooperate in the management, protection and preservation of joint water resources, water installations and facilities.
- IV. Extend a standing invitation to all Special Procedures of the UN Human Rights Council, specifically the Special Rapporteur on the human right to safe drinking water and sanitation.

2. The Palestinian Authority, the PWA and the CMWU must:

- I. Demand compensation from Israel for its past consumption at a rate that exceeded its rightful share of the water resources in the region, including for the extraction of water for the benefit of Israel's national economy and settlement provision in accordance with international legal norms.
- II. Reassess its involvement in the JWC. In particular, the PA must denounce this discriminatory management regime that facilitates Israel's illegal exercise of sovereign rights over Palestinian water resources.
- III. Promote a national approach to water planning and management that protects the territorial integrity of the OPT, namely the West Bank, including East Jerusalem, and the Gaza Strip.
- IV. Tackle the root causes of the water crisis in the Gaza Strip, which derive from Israel's occupation of the OPT, including its illegal regime of closures, rather than focus on short-term and costly solutions, such as desalination projects only.

3. The Member States of the United Nations must:

- I. Request that the UN General Assembly urge Israel to take all necessary measures to ensure indiscriminate access to adequate water and sanitation infrastructure, in particular in occupied East Jerusalem and Area C, and to refrain from hindering the construction of such infrastructure in the Gaza Strip.
- II. Request that the UN General Assembly urge Israel to remove all physical and administrative barriers to the protection and recovery of water resources, especially in the Gaza Strip.
- III. Urge the UN General Assembly to take action and promote mechanisms to reverse Israel's policies of forcible transfer of the Palestinian population, conducted under a racial and segregationist regime.
- IV. Request that the UN Environment Programme and, when applicable, other UN specialised agencies, conduct an assessment on the impact of the settlement enterprise on environmental, social, and economic viability in the OPT in the last 46 years.

- V. Urge the UN Security Council to be seized of the matter of Israel's discriminatory allocation of water resources in the OPT.

4. The European Union must:

- I. Comply with its customary international law obligations and act in accordance with Article 215(5) of the Treaty on the Functioning of the European Union³²² by banning produce originating from Israeli settlements in the OPT, because of the serious violations of peremptory norms of international law that settlements and their related infrastructure entail, including the access to water for Palestinians.

5. Third-Party States, including the High Contracting Parties to the Geneva Conventions, must:

- I. The High Contracting Parties to the Geneva Conventions must promptly comply with their obligation to ensure respect for the Geneva Conventions as established under Common Article 1 by adopting effective measures to pressure Israel to abide by its obligations under international humanitarian law.
- II. Uphold their obligations under Articles 146 and 147 of the Fourth Geneva Convention to search for and prosecute those responsible for grave breaches of the Fourth Geneva Convention.
- III. End all business relationships with economic actors involved or suspected to be involved in violations of international law in the OPT. Take appropriate measures to ensure that business enterprises domiciled in their territory or under their jurisdiction do not participate in violations of international law, including those relating to Palestinian water rights.
- IV. Ensure the full implementation of the recommendations of the recent report of the International Fact-Finding Mission on Settlements. In particular, States must comply with their obligations under international law to uphold their responsibilities in the face of Israel's breaches of peremptory norms of international law, such as the prohibition of colonialism, apartheid, extensive destruction and appropriation of property, and the violation of the right of the Palestinian people to self-determination.

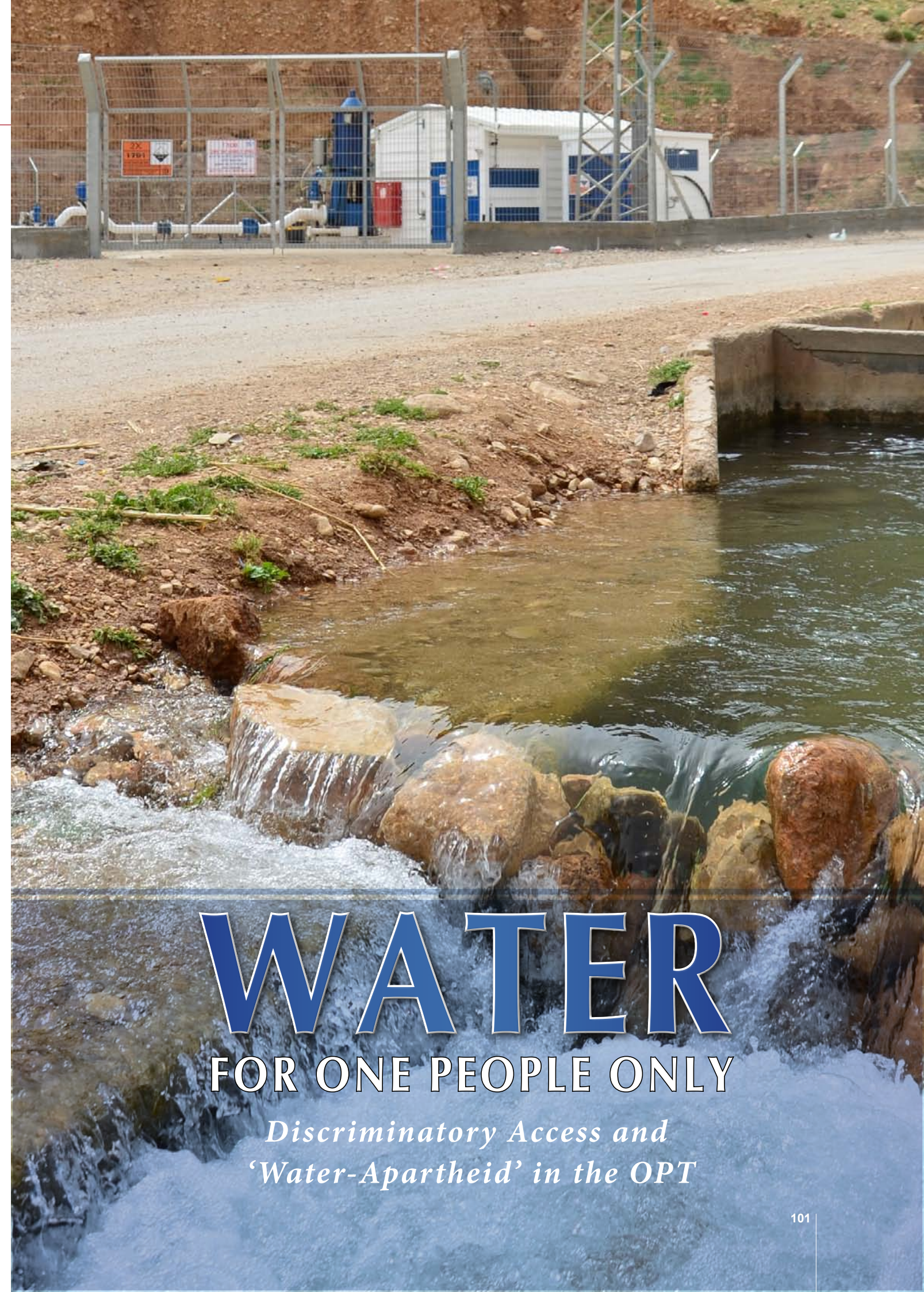
6. The international community of donors, including donor States and international and UN humanitarian and development agencies must:

- I. Abandon the practice of conditioning funding upon JWC approval for water infrastructure projects in the OPT. Emphasis on JWC approval reinforces Israel's system of domination over development of Palestinian water infrastructure, and operating within this discriminatory system may amount to recognition of a wrongful conduct under Article 41 of the ILC Draft Articles on State Responsibility. As such,

³²² This Article authorises the use of restrictive measures against individuals or legal entities, groups or non-State entities.

this discriminatory mechanism must be systematically challenged, including by refraining from cooperating with it and by prioritising development projects improving access to water without permits.

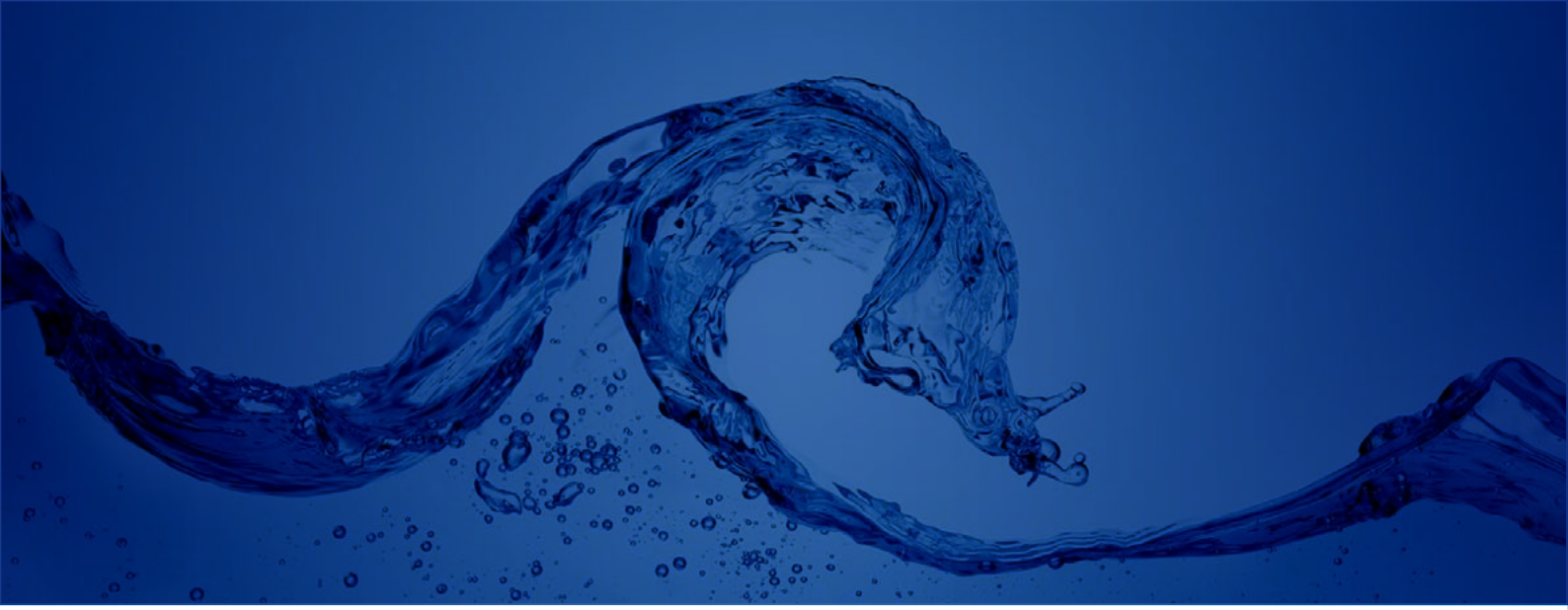
- II. Make assessments to determine to what extent their projects may in fact facilitate Israel's violations of international law and ensure that all projects are carried out in compliance with Third State responsibility under international law.
- III. Make enquiries and issue public statements challenging the legality of Israel's demolitions of Palestinian water infrastructure and demolition orders implemented and adopted by the Israeli authorities in the OPT.
- IV. Hold Israel accountable for demolitions of water infrastructure projects, including through demanding compensation from the Israeli authorities.
- V. Carry out and make public assessments to determine to what extent their humanitarian projects and programs have been adversely affected by Israeli demolitions.



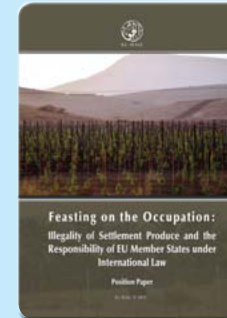
WATER

FOR ONE PEOPLE ONLY

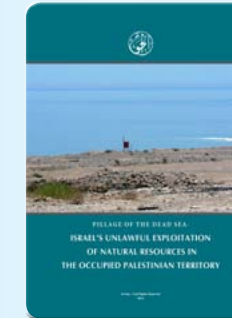
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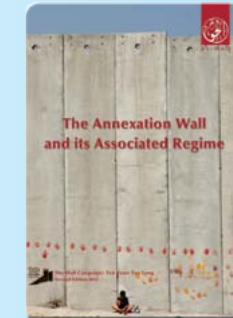
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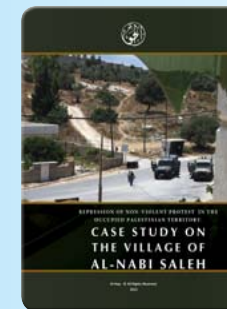
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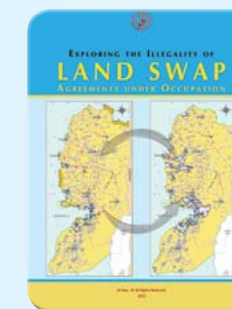
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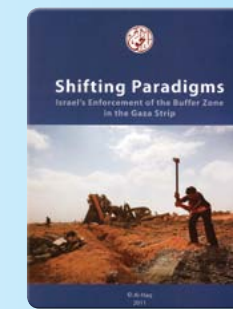
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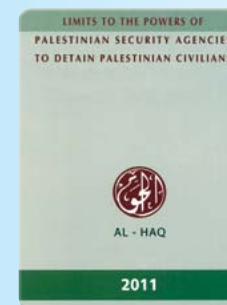
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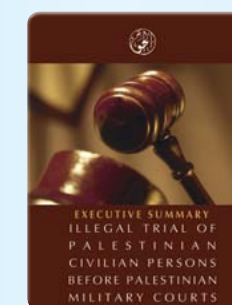
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