Corporate Liability
The Right to Water and the War Crime of Pillage
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In Palestine, a region rich in groundwater, Israel’s discriminatory water policies have led to water shortages in Palestinian towns and villages, no access to running water in rural communities, and waterborne diseases as a major cause of death in Gaza. Israel illegally appropriates Palestinian land, pillaging Palestinian water and then discriminatorily allocates water supplies to its citizens and to illegal Israeli settlements at the expense of Palestinians, who own and are entitled to access these water resources. As a result, Israel’s ‘water-apartheid’ facilitates gross and systematic denial of Palestinians’ rights to adequate water, institutionalizing a fragmentary regime of racial domination and oppression over the Palestinian people.

This report focuses on Palestinians’ right to water, as enshrined in international law, its illegal pillage that qualifies as a war crime. The pillage of natural resources not only illustrates economic motivations for the maintenance of occupation, but also embodies the implicit mechanism that serves to maintain the socio-economic, political and intellectual relationship of dispossession and dependency of oppressed Palestinian communities. Further, the systematic exploitation of Palestinian natural resources is part of an intention of maintaining hegemony and dependence that amounts to a crime against humanity of apartheid.

Corporations increasingly enable this appropriation by sustaining the ongoing dispossession of the already restricted water access to Palestinian communities. Israel’s parastatal institutions have actively taken part in the pillaging of water from the Occupied Palestinian Territory (OPT), to then sell the stolen water back to Palestinians at ever-increasing prices, rendering Palestinians dependent on Israel to meet their water needs. The infringement of the Palestinian people’s right to water triggers the responsibility of multinational corporate actors to comply with their enhanced due diligence obligations in the context of the heightened and foreseeable risk of human rights abuses during military occupation.


First, a restrictive permit system, along with the destruction and confiscation of hydraulic structures, curtails Palestinian communities in the West Bank from accessing their rich autochthonous groundwater resources.

Second, excessive water extraction by companies operating under Israeli license and diversion of the extracted water from the Jordan River drastically reduces the availability and accessibility of water resources for Palestinian communities, resulting in a man-made water crisis. This runs counter to the right to water, the right to self-determination and the recently announced right to a clean, healthy and sustainable environment, as well as the principle of prevention against environmental damage and the principle of equitable and reasonable allocation of transboundary water resources.

Third, Israel’s strategy involving private actors along the water supply chain focuses on selling increasingly expensive water to Palestinians as consumers in a captive market. This captive market has been fostered by a miscalculation in the Oslo Accords providing for minimal water allocation to Palestinians, in addition to the discriminatory water network integration that promotes annexation and appropriation practices contrary to international law. Companies have profited from Israel’s prolonged occupation and regime of apartheid, which perpetuates water dependency, practices of racial profiling, and maintainance of a discriminatory system of water distribution and access.

The report concludes that companies such as Mekorot Water Company Ltd., Hagihon Company, TAHAL Group International B.V., and IDE Technologies (as well as Hyundai, Caterpillar Inc., JC Bamford Excavators Ltd., and Volvo Car Group, whose machinery has been used for demolitions of the Palestinian water structures) are complicit in the violation of Palestinian right to self-determination and permanent sovereignty over natural resources, as well as the war crime of pillage, and inhumane acts of expropriation of natural resources amounting to the crime of apartheid. While the employees, managers, and directors of Mekorot, Gihon, and Tahal International must be held criminally accountable for their actions, the companies and their respective home and host states must provide the affected Palestinian population with access to effective remedies, for the harm they have suffered.

By denying Palestinian sovereignty over their natural resources, Israel continues to deny the Palestinian people their inalienable right to self-determination. Israel’s control over all aspects of water in the OPT renders the Palestinian economy captive and entrenches an apartheid regime of discriminatory and segregating laws and policies. This allows Israeli domestic corporate actors to profit from the water shortage that is disproportionately borne by the Palestinian population. In a world that wants to uphold equality and the right to live with dignity, there is no place for water-apartheid.
Based on the findings of the report, we propose the following recommendations:

To Mekorot:

a. Immediately cease any activities that contribute to pillaging water from Palestinian communities in the OPT;
b. Immediately cease the provision of water to illegal Israeli settlements, the confiscation and demolition of Palestinian water structures, and the overexploitation of transboundary water resources within and beyond the Green Line which deplete water resources available for Palestinians and cause irreparable environmental damage;
c. Cease any other operation that violates applicable IHL rules, as well as the right to water, and disengage from business relationships where adverse human rights impacts cannot be mitigated;
d. Cooperate with judicial mechanisms to hold managers responsible for pillaging of water accountable;
e. Any water illegally extracted from the OPT and running through Mekorot’s water pipelines has to be provided to Palestinian communities for free, accessible in sufficient quantities and constantly available, in order to comply with Palestinians’ right to water; where Mekorot provides water tanks as a result of the lack of water system integration, these water tanks should be provided for free;
f. The groundwater development must be handed over to Palestinians to preside over their own natural resources and decide on water distribution and development according to applicable international law.

Hagihon Company, IDE Technologies, Hyundai, Caterpillar Inc., JC Bamford Excavators Ltd., Volvo Car Group, and other corporate Actors involved in pillage and other violations of International Law must:

a. Stop any violations of international law, particularly complicity in the pillaging of water;
b. Identify and assess any actual or potential adverse human rights impacts with which you may be involved as a result of your business relationships with Mekorot.4

c. Prevent and mitigate adverse impacts on human rights,5 and if already committed, cease those and provide effective and prompt remedies for the damage caused.6 This includes remedies, not only for individuals, but for the collective Palestinian people as a whole;7
d. Engage with applicable grievance mechanisms to enable individuals affected by adverse human rights impacts to access effective remedies.

5 UN Guiding Principles, Principles 11 and 13 (b).
6 UN Guiding Principles, Principles 22 and 25.
To the Palestinian Authority:

a. Initiate intensive groundwater development instead of increasing the purchase of additional quantities of water provided by state and corporate actors. The import of water is not sustainable for comparatively poor Palestinian communities and cisterns and rainwater harvesting facilities implemented mostly by international donors, do not compensate for the access to Palestinian autochthone groundwater resources.
b. Facilitate equal distribution of the Mountain Aquifer’s groundwater resources and the Palestinian Water Authority’s sovereignty over control of well pumping and spring flow, drilling of new wells and their proper maintenance.

To the Government of Israel:

a. Immediately cease and actively prevent the war crime of pillage and any corporate operations complicit in it;
b. Provide measures of restitution and reparation to Palestinian land owners and Palestinian communities that comply with international law standards;
c. Immediately halt the price increase for water supply through Mekorot and Gihon to Palestinian communities that consume water for their basic needs, and bring an end to any commercial means that deprive Palestinians of their inalienable water rights.
d. Immediately allow Palestinians to drill their own wells without any restrictions other than those imposed by applicable international legal frameworks, e.g. international environmental law;
e. Stop the implementation of harsh restrictions on Palestinian planning and movement as well as water quotas, since these practices harm the livelihoods of the occupied Palestinian population and severely infringe upon their rights, including their right to self-determination;
f. Immediately allow for Palestinians full access to the Jordan River as they are full riparians and therefore are entitled to hold full access to a reasonable and equitable allocation of transboundary water resources;
g. Immediately grant access to the Mediterranean Sea for fishing, port development, and shipping and to the Dead Sea to Palestinian communities;
h. Offer appropriate assurances and guarantees of non-repetition to the Palestinian population and to make full reparation for the injury caused;
i. End the illegal occupation of the Palestinian territory and take immediate steps to dismantle the settler colonial apartheid regime.
To the international community, including the High Contracting Parties to the Geneva Conventions, and Third States:

a. Ensure that Israel is held accountable for violations of international law, having recourse to the relevant mechanisms of international accountability, including UN mechanisms, the International Court of Justice and the International Criminal Court;  
b. Take concrete measures, including lawful countermeasures, to pressure Israel to halt its violations of international humanitarian and human rights law; and not provide any form of assistance towards such violations, including by maintaining business relationships with economic actors allegedly involved in pillage, in the OPT;  
c. Cooperate to bring to an end through lawful means the violation of the right to self-determination as jus cogens norm, and refrain from recognizing as lawful a situation created by this breach, nor render aid or assistance in maintaining that situation;  
d. Ensure that business enterprises operating in conflict affected areas or cooperating with businesses operating in those contexts, are not involved in human rights abuses, by exerting adequate oversight and if necessary, denying them access to public support and services.8

To the European Union:

a. Comply with its own guidelines on promoting compliance with international humanitarian law, which foresees the European Union’s responsibility in ensuring Israel’s compliance with international humanitarian law provisions. Further, to provide for the possibility of adopting sanctions and countermeasures in case of their violation;  
b. Adopt restrictive measures on the import of Israeli products originating from the settlements in the OPT, where the illegal appropriation of water resources is used for settlement land irrigation and production. Such acts represent serious violations of peremptory norms of international law that settlements and their related infrastructure entail, such as the violation of Palestinian right to self-determination. By facilitating the entry of such products into their internal market, the EU and its national authorities are in breach of their duty of non-recognition of Israel’s unlawful conduct in the OPT. By trading goods coming from Israeli settlements, the member States of the EU are actively cooperating with and supporting the maintenance of the illegal situation created by the Israeli authorities in the occupied territory, in clear violation of their legal obligations under international law.

8 UN Guiding Principles, Principle 7(c).
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>EAB</td>
<td>Eastern Aquifer Basin</td>
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<tr>
<td>HIS</td>
<td>Hydrological Service of Israel</td>
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<tr>
<td>ICA</td>
<td>Israel Civil Administration</td>
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<tr>
<td>ICC</td>
<td>International Criminal Court</td>
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<tr>
<td>ICJ</td>
<td>International Court of Justice</td>
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<tr>
<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
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<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<tr>
<td>ICRC</td>
<td>International Committee of the Red Cross</td>
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<tr>
<td>IHL</td>
<td>International Humanitarian Law</td>
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<tr>
<td>IHRL</td>
<td>International Human Rights Law</td>
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<tr>
<td>IWL</td>
<td>International Water Law</td>
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<td>JWC</td>
<td>Joint Water Committee</td>
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<td>JWU</td>
<td>Jerusalem Water Undertaking</td>
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<tr>
<td>l/d/c</td>
<td>Litres per capita daily</td>
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<tr>
<td>mcm</td>
<td>Million cubic metres</td>
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<tr>
<td>mcm/y</td>
<td>Million cubic metres per year</td>
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<tr>
<td>cm</td>
<td>One cubic meter</td>
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<td>NEAB</td>
<td>North-Eastern Aquifer Basin</td>
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<td>NIS</td>
<td>Shekel</td>
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<td>NWC</td>
<td>National Water Carrier</td>
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<td>OPT</td>
<td>Occupied Palestinian Territory</td>
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<td>PA</td>
<td>Palestinian Authority</td>
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<td>PWA</td>
<td>Palestinian Water Authority</td>
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<td>Abbreviations</td>
<td>Full Name</td>
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<tr>
<td>UN CESCR</td>
<td>UN Committee on Economic, Social and Cultural Rights</td>
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<tr>
<td>UNGA</td>
<td>United Nations General Assembly</td>
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<tr>
<td>UNHRC</td>
<td>United Nations Human Rights Council</td>
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<tr>
<td>UNSC</td>
<td>United Nations Security Council</td>
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<tr>
<td>WAB</td>
<td>Western Aquifer Basin</td>
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<td>WBWD</td>
<td>West Bank Water Department</td>
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<tr>
<td>WEAB</td>
<td>West-Eastern Aquifer Basin</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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1. Introduction

1.1. Purpose and methodology

This report provides an overview of Israel’s laws, policies and practices governing the Palestinian water sector, since the start of the military occupation in June 1967. The report provides updated information on the current structure of discriminatory policies and practices that prevent Palestinian communities from accessing their rich groundwater resources and highlights the corporate complicity in those structures. In addition, the report examines how private water actors’ profit from the implementation of desalination projects in the Palestinian water sector. In doing so, the report draws from desk and field research undertaken by Al-Haq. This report utilises legal research and analysis in the complementary fields of international humanitarian law (IHL), international human rights law (IHRL) and international criminal law (ICL). It also includes the collection and analysis of information from public resources, company records, publications, scholarly articles, newspapers, and publication by state authorities. The report draws on interviews with NGOs and international organisations dealing with human rights and humanitarian violations in the OPT, statistics and collected data provided by individual researchers, field research of the Palestinian Water Authority (PWA), the Palestinian Central Bureau of Statistics (PCBS), the Palestinian Hydrology Group (PHG), the Land Research Center (LRC), and Al-Haq records. Due to the global coronavirus pandemic, it is important to note that the data acquired for this report was not able to be updated per the date of publication.

Map 1 - Shared Waters of Israel, Palestine, and Jordan

The coronavirus pandemic exacerbated the water crisis in the Occupied Palestinian Territory (OPT). The demolition of water structures by Israeli Occupying Forces (IOF) amidst the pandemic, as well as increased territorial access restrictions, advanced the ongoing man-made water crisis into a health crisis. Restrictions to potable water in adequate and sufficient quantities, compounded with a lack of equipment to treat COVID-19, contributed significantly to this public health crises, leading to Palestinian loss of life.10

By analysing the major corporate actors in the water sector of the OPT (Mekorot, Hagihon, Tahal Group International and IDE Technologies), as well as other companies involved in the confiscation and demolition of water structures, this report illustrates how corporate actors contribute to the commission of pillage and related violations of IHL and IHRL. Furthermore, corporate actors in the water desalination sector, such as IDE Technologies, benefit from the created water dependency of Palestinian communities by profiting from the sale of desalinated water.

1.2. Overview of Water Resources in Palestine

There are three main water sources in Palestine: the Jordan River, the Mountain Aquifer, and the Coastal Aquifer (see Map 1). The West Bank, with the exception of the Jordan Valley, is classified as a semi-arid, even sub-humid, region with an excellent groundwater potential.11 There is no natural water supply crisis that would make Palestinians particularly vulnerable to corporate sale of water at high prices. On the contrary, the region is water-rich.12 However, Israel, the Occupying Power has continually reduced the number of Palestinian wells being renewed or drilled.13 The various discriminatory practices, including physical barriers that obstruct Palestinians’ freedom of movement, as well as the appropriation and confiscation of Palestinian land, plays a preventative role in Palestinians ability to extract their own groundwater resources. Palestinians in the West Bank rely on groundwater resources because there are no surface waters and Israel has denied access to their only river, the River Jordan.14 Additionally, the natural flow of the groundwater, transports water to Israeli territory beyond the Green Line, making Palestinian water more easily available for Israeli water extraction, while less water can be extracted from Palestinian wells in the OPT.

14 Messerschmid (n. 11) at 2.
The appropriated land in the OPT is ultimately designated for settlement expansion, leaving little land or structures for water collection to be implemented or operated.\textsuperscript{15} Israel ensures its control and disproportionate maximal usage of this transboundary resource by preventing Palestinians from accessing their groundwater resources.\textsuperscript{16} In fact, from January 1998 until April 2020, approximately 19,828 demolition orders have been issued for Palestinian-owned structures in Area C of the West Bank, including those related to water located on private Palestinian land.\textsuperscript{17}

**Mountain Aquifer\textsuperscript{18}**

The mountain aquifer should be a critical water resource for the OPT. For example, about 90 percent of the aquifer’s recharge occurs within the West Bank, while its Eastern basin exists in an autochthonous Palestinian area.\textsuperscript{19} Yet, of the total Mountain Aquifer water extractions, only 10 percent is controlled by Palestinians. Between 1999 and 2000, Palestinian control over all three West Bank aquifers amounted to 72.3 million cubic metres per year (mcm/\text{y}), while Israel’s total extractions was ten times that amount, at 725.3 mcm/\text{y}.\textsuperscript{20} By 2016, the quantity of water pumped from Palestinian wells in the West Bank [from the Eastern Aquifer Basin (EAB), West-Eastern Aquifer Basin (WEAB) and the North-Eastern Aquifer Basin (NEAB)] had only minimally increased to 84.4 mcm/\text{y}, with an additional 29 mcm/\text{y} water discharge from Palestinian springs.\textsuperscript{21} While Palestinian water extraction accounted for only minimal increases, in 2018, it was estimated that the total extractions inside the West Bank and Israel had increased beyond the figure of 725.3 mcm/\text{y} in 1999/2000,\textsuperscript{22} indicating that the significant increases in water extraction may be stemming from the supply of water to the Israeli settlements.

**Coastal Aquifer**

In contrast, Palestinians in Gaza do not face a scarcity of water,\textsuperscript{23} but instead a very low water quality. More than 97 percent of the water pumped from the coastal aquifer in the Gaza Strip does

\textsuperscript{15} This is done under varying pretexts, including abandoned land, ‘State’ land, closed military zones and firing zones, and nature reserves. See Mercedes Melon, ‘Settling Area C: the Jordan Valley Exposed’ (Al-Haq 2018).
\textsuperscript{16} Koek (n. 13).
\textsuperscript{17} UN Office for the Coordination of Humanitarian Affairs, ‘Demolition Orders against Palestinian Structures in Area C – Israeli Civil Administration Data’ <https://www.ochaopt.org/page/demolition-orders-against-palestinian-structures-area-c-israeli-civil-administration-data>.
\textsuperscript{18} The Mountain Aquifer is divided into the Eastern Aquifer basin (EAB), the Western Aquifer basin (WAB) and the North-Eastern Aquifer basin (NEAB). With the exception of the Jordan Valley, where rain water is below 200 mm/a, the Mountain Aquifer’s Recharge Area has a recharge rate above 30% of total rainfall.
\textsuperscript{19} Messerschmid (n. 11).
\textsuperscript{20} Ibid.
\textsuperscript{22} The Israeli Hydrology Service stopped publishing reliable data on this subject in 2013/14 and there is no access on the exact quantities that illegal Israeli settlements are extracting from the OPT. Therefore, only estimations can be made.
\textsuperscript{23} Gaza’s climate is semi-arid. Its average area groundwater recharge (97mm) is higher than that of neighbouring Sinai (7mm) and Israel (49mm, due to its large Negev portion).
not meet the water quality standards of the World Health Organisation (WHO). 24 Only four percent of household members in the Gaza Strip have access to safely managed water that is free of pollution. 25 This situation has deteriorated over the years, leading to appalling sanitary conditions that were exacerbated during the COVID 19 pandemic. 26 Due to the appalling water quality and restrictions on importing materials to (re-) build adequate water infrastructure, Gazans must buy additional amounts of water from Israel’s state-owned company Mekorot. Progressive tariff systems of end consumer prices for water in Gaza range between 0.3 and 2.5 NIS/m3, which is unaffordable for many Gazan families who already spend one third or more of their income on water consumption. 27 Moreover, the occurrence of waterborne disease is a major cause of poverty and death. 28

Furthermore, Israel controls the aquifer’s upstream portions, while granting the Palestinian Authority (PA) sole responsibility for the downstream Gaza portions. 29 Notably, the 1995 Interim Agreement on the West Bank and the Gaza Strip (Oslo II) did not accord Israeli-Palestinian coordination over either of the transboundary riparian resources (the Jordan River and the Coastal Aquifer) in which Israel controls upstream portions. 30 There are no mechanisms by which the PA can limit Israeli extractions from the Coastal Aquifer, even though these extraction levels impact the downstream Gaza sections of the aquifer. 31 For Gazans, to rely exclusively on the PA’s portion of the Coastal Aquifer is insufficient to satisfy even the most basic needs of the population.

Jordan River

The Jordan River is the main surface water resource in the OPT. The river holds an estimated potential of 1340 mcm/y. 32 Under the 1954 Johnston Plan, the Palestinian share of the Jordan River was agreed upon as 254 mcm/y. However, Israel unilaterally exploits the waters of the Jordan River at levels that far exceed the quantities enshrined under the Johnston Plan. Since the 1964 construction of the National Water Carrier (NWC), Palestinians have been denied access to any water extraction. 33 In fact, 98 percent of the historical flow of the Jordan River is estimated to be

24 Palestinian Central Bureau of Statistics (n. 21).
25 Ibid. See also ‘Only 4% of Gaza household have access to safe water’, Middle East Monitor (22 March 2021) <https://www.middleeastmonitor.com/20210322-only-4-of-gaza-household-have-access-to-safe-water/>.
26 Moss and Majadle (n. 10) at E1127.
27 Clemens Messerschmid, ‘False Promises for Gaza: Desalination is Not a Sustainable Solution,’ http://thisweekinpalestine.com/false-promises-gaza/.
30 Ibid.
31 Ibid.
33 Palestinian Central Bureau of Statistics (n. 21).
diverted by the water enterprises of Israel, Syria and Jordan. Due to these practices, the river’s annual flow has dropped to around 20-30 mcm a year.

1.3. Corporate involvement in the water sector

“Water should not be taken for granted. We make it happen, in Israel and in the world” - EMS Mekorot

While the State of Israel continues to play a central role in perpetuating the colonisation of water resources through its laws, practices and policies, corporations increasingly enable this appropriation by sustaining the ongoing dispossession of and restricted water access to Palestinian communities. Private actors in the water industry appropriate and pillage groundwater resources from the West Bank in order to sell them back to Palestinian communities at ever-increasing rates, essentially forcing Palestinians to buy back stolen water. The Oslo Accords transferred the overall administration of Palestinian water resources in the West Bank to Israel. The accords provided for water allocation to both Palestine and Israel, but stopped the provision of additional water supplies to Palestinians (beyond those stipulated in the accords) – a shortcoming that has been exploited by private actors. Israel utilizes Palestinian water to maintain control over the Palestinian population, deepen its fragmentation, and hold the Palestinian economy captive, amounting to economic annexation. While zoning policies control all use of transboundary waters in the West Bank and East Jerusalem, the commercial sale of water at high prices also restricts water accessibility to Palestinians. Israel and private actors use this man-made ‘water scarcity’ in the OPT in order to exploit the captive Palestinian market. Palestinian communities are forced to buy water as they have been barred from drilling their own wells.

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34 Eyal Hareuveni, ‘Dispossession and Exploitation: Israel’s Policy in the Jordan Valley and Northern Dead Sea’ B’Tselem (2011) 20. Of Israel’s water extraction and diversion of the Jordan River, 80% was allocated for agricultural use and 20% for drinking water for Israel.
37 Koek (n. 13) at 36.
1.4. Corporate Actors Directly Involved in the Water Sector

The Mekorot Water Company Ltd (Mekorot) was founded in 1937, under the joint ownership of the Jewish Agency for Israel, the Jewish National Fund, the Nir company, and the Agricultural Centre. In 1949, the company’s shares were purchased by the State and it became a government company. In 1982 the West Bank water infrastructure controlled by the Israeli Occupying Forces (IOF) was sold to Mekorot for the symbolic amount of 1 NIS. Since then, Mekorot has been the largest single water supplier for Palestinians and has taken over the entire water supply in the West Bank, in violation of the Palestinian inalienable rights of self-determination and permanent sovereignty over their natural resources. Currently, 20 percent of available water in Palestine is purchased from Mekorot. Through Mekorot, the Israeli Civil Administration (ICA) has retained overall regulatory control of the West Bank’s water sector and water infrastructure.

Mekorot operates under the authority of the Ministry of Energy, the auspices of the Water Authority, and supplies water to the domestic, agricultural and industrial sectors to the Kingdom of Jordan and the Palestinian Authority. Across Israel, Mekorot operates approximately 3,000 facilities relating to enterprises such as water supply, water quality, water infrastructure, wastewater treatment, and desalination. Mekorot’s water supply system unifies most of the regional water plants (the National Water Carrier and Yarkon-Negev plant) and draws water from the Sea of Galilee, aquifers, boreholes, seawater, desalinated water, and brackish water. Under the Oslo Accords the company may extract up to 80 percent of the Mountain Aquifer’s water, the only source of underground water in the OPT, for use within Israel proper and in Israeli settlements.
The Tahal Group International was created in 1952 by the Israeli government, merging the Water Resources Department of the Ministry of Agriculture with the engineering division of Mekorot. Founded under Israel’s company law, the Israeli government holds the major share (52 percent) in Tahal; the rest of the shares are divided equally between the Jewish Agency (JA) and Jewish National Fund (JNF). After planning and designing Israel’s National Water Carrier, Tahal was appointed as a National Consultant for the Water and Sewage Authority, the Municipal Water Administration, and the National Sewerage Project. The Tahal Group website states that it is “a leading global provider of sustainable infrastructure development projects in developing countries worldwide” that “covers all stages of the project value chain – including planning, engineering design, financing, supervision, management, construction, implementation, operations and maintenance.”

Hagihon is a private Israeli water and sewage corporation founded in 1996 by the Jerusalem Municipality and became independent in 2003. It is responsible for supplying water within the Jerusalem Municipality, including to Palestinian neighborhoods in Jerusalem. However, residents of Ras Hamis, Ras Shahada, Dahyat a-Salam, and the Shuafat Refugee Camp, which have been cut off from the rest of the city by the construction of the Separation Wall, suffer from a chronic water crisis. In 2014, these residents petitioned the Israeli High Court of Justice, after Hagihon stopped regularly supplying water to them, leaving an estimated 60,000-80,000 Palestinians without continual running water.
water crisis. In 2014, these residents petitioned the Israeli High Court of Justice, after Hagihon stopped regularly supplying water to them, leaving an estimated 60,000-80,000 Palestinians without continual running water.50 Through its subsidiary, Purification and Sewage Plants- Jerusalem Ltd, the company manages several sewage treatment plants and very large-scale projects, such as the Fifth water line to Jerusalem, construction of a water reservoir in Sacher park, Integration with urban projects such as the light rail and the entrance to Jerusalem.51

IDE Technologies is an Israeli company founded in 1965 that provides services related to desalination and industrial water treatment plants. IDE, jointly owned by the ALFA Water Partner groups,52 is responsible for the design of the large-scale Sorek sewage treatment plant (third largest plant in Israel), treating 90,000 cubic metres of sewage per day. This plant receives sewage from settlements in the occupied West Bank, including Beitar Illit, Givat Zeev and Gush Etzion. The treated water they produce is then used in irrigation for agriculture in Israeli towns within the Green Line.53

2. Appropriation of Palestinian Water Resources

2.1 Curtailment of Water Access

Israeli and international corporate actors exploit Israel’s ongoing military occupation, apartheid and colonisation of the West Bank, including East Jerusalem and the Gaza Strip to dispossess Palestinian water resources in the OPT. Restricting Palestinians’ access to water is part of a three-step process to deprive and dispossess Palestinian communities from their ground and surface water resources, which enables state-owned and private corporate actors to resell large quantities of water to Palestinian communities.

53 Who Profits (n. 50).
The curtailment and rationing of water derive from military orders implemented in the aftermath of 1967,\(^\text{54}\) as well as from the unequal outcome of the Oslo II accords, which denies Palestinians their international law right to an equitable share of water resources. These restrictions are further enforced by the purchase by the Joint Water Committee (JWC) and the ICA of expensive quantities of water from the Israeli public and private water sector.

### Historical Overview of Local Palestinian Water Laws

In Palestine, a number of legal provisions govern natural resource ownership as part of the regime of property rights, preceding the 1967 military occupation. Water rights derived from land ownership. The Ottoman Majalla, a legal codification that was customary water law in Palestine during the Ottoman time continues as the applicable residual domestic legislation governing water in the OPT.\(^\text{55}\) This water regime solidified principles of ownership by capture.\(^\text{56}\) Captured Water (by pumping the water out of the ground or by placing a vessel out to catch rainwater) is considered private property (mulk).\(^\text{57}\) Thus, water on a piece of land or extractable through a spring or well located on that land was considered the private property of that land’s owner, which could be registered as a private right to water under Article 17 of the Jordanian Law for the Settlement of Titles to Land and Water.\(^\text{58}\)

Accordingly, (uncaptured) groundwater resources were public. A river becomes only mulk property if its waters enter into channels, which are owned as shares.\(^\text{59}\) The general regime of water law in the modern Middle East provides that the right to water of the state or community comes first, whereas those of the individual or corporations are residual. Communal waters, according to Ottoman law, did not belong to the Sultan or government but were vested directly in the communities. As such communal water entered the category of communal-private.\(^\text{60}\) This was the legal regime in effect in the West Bank, Jerusalem and the Gaza Strip at the time of the occupation in 1967.\(^\text{61}\)
During the British Mandate, full powers of public ownership over “any of the natural resources of the country” fell within the competence of the British Administration of Palestine.62 Yet, land or real property remained governed by the Ottoman Land Code.63 The Ottoman Land Code (21 April 1858), defined five classes of land ownership, of which Miri land, crown lands belonging to the State exchequer, encompassed the largest portion of Palestinian land.64 The Tapu Law of 1859 provided that, “[n]o one in the future for any reason whatsoever will be able to possess miri without a title-deed”.65 Unregistered land therefore remained public.

In 1966 with the Natural Resources Law, the Jordanian government replaced the jurisdiction of the Central Water Authority with that of the Natural Resources Authority, which was charged with the design and operation of irrigation and drinking water projects. This law also declared natural resources to be public property. Order No. 88 of 1966, maintained that private rights to water pumped from an aquifer underneath private land would need to be registered as miri land. Importantly, although water supplied by wells and springs were considered to be attached to the land and could be registered as aforementioned,66 only one-third of all land in the West Bank had been registered by 1967.67 This meant that any unregistered right to water attached to land ownership, passed into the hands of the Occupying Power as public property.

Later, water resources often became incorporated into Israel through declared “State land,” introducing severe changes to the Palestinian water regime. Across the Green Line, Israel declared all surface and groundwater the property of the state under its domestic Water Law of 1959.68 Meanwhile in the OPT, Israeli Military Order No 88 introduced new procedures for Palestinians to obtain a licence for drilling a new well. Although Jordanian regulations remain in force today,69 their interpretation is aligned with the Palestinian Legislative Council Law No. (1) of 1999 for Natural Resources, which stipulates that territorial waters are public property according to Article 6.70

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62 The Mandate for Palestine (12 August 1922) C529M314, art. 11.
67 Eisenman (n. 65) at 63.
69 Published in Jordan Gazette (Jordanian Rule), Issue No. 1943, 16/08/1966, at 1599.
70 Palestinian Legislative Council (PLC) Law No. (1) of 1999 for Natural Resources, Chairman of the Executive Committee of Palestine Liberation Organization (PLO) President of the Palestinian National Authority, Chapter One, 1.
Article 1 of Palestinian Legislative Council Law No. (1) of 1999 for Natural Resources defines natural resources as “territorial waters, dead sea, regional economic zone and geology and movement of underground water”.\(^71\) Article 13 stipulates that no ordinary person or corporate body is permitted to search, excavate, extract or utilize any natural resource within the Palestinian lands and territorial waters. According to Article 18, the title to natural resources,\(^72\) within the OPT vests solely with the Palestinian people.\(^73\) Furthermore, Article 3 of decree-law No. 14/2014 regarding water stipulates that “all water sources in Palestine are considered public, and the authority has the right to manage these sources, while ensuring equity and efficiency in distribution”.\(^74\)

2.1.1 Legal Architecture of Discrimination and Apartheid

A set of discriminatory laws, policies and practices make it impossible for Palestinians to access their groundwater resources. Since their implementation in 1967, Israeli military orders have provided for 99 percent control over the Palestinian water sector. The military orders constitute the groundwork for the routine ICA denial of permits for drilling new wells or rehabilitating existing wells in Area C, as well as the implementation of stringent quotas on Palestinian water usage enforced by the metering of all wells.\(^75\) Each of these military orders departs substantially from the legal systems that were in force prior to the Israeli occupation, such as Ottoman, British and Jordanian laws (see box below).

Israel has amended the local water laws in the OPT with the following Military Orders:

<table>
<thead>
<tr>
<th>Military Order No. 92</th>
<th>Order Concerning Powers for Water Concerns</th>
<th>7 June 1967</th>
<th>Along with Proclamation No. 2 of June 7, 1967, transferred authority of government, legislation, appointment and administration over all water resources to the Israeli military.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Order No. 158</td>
<td>Order Concerning Amendment of the Supervision Over Water Law</td>
<td>19 November 1967</td>
<td>Implemented installations of water infrastructure without prior approval by the Israeli authorities at risk of demolition, while prohibiting the construction or ownership or management of a water installation without the renewal of an official permit, including</td>
</tr>
</tbody>
</table>

\(^71\) Ibid. \(^72\) Article 85, 2002 Basic Law (29 May 2002). \(^73\) Article 6, 1994 Draft Basic Law (1 May 1994). \(^74\) Private/ Public: Decree-law No. 14/2014, Regarding Water: Similar to the rest of the Palestinian territory, the customary water law applicable in the Gaza Strip conferred the right to use water upon the owner of the land and upon those needing it for basic necessities, e.g., personal consumption and irrigation. Relevant authorities in the Gaza Strip have also not made any relevant changes to its water laws during Egyptian rule, and there is no general government-administered water permit system. Abouali (n. 55) at 455. \(^75\) Alwyn Rouyer, Turning Water into Politics: The Water Issue in the Palestinian-Israeli Conflict (Palgrave, 2000) 48.

Ibid. n. 75.


Planning to Fail: The Planning Regime in Area C of the West Bank: An International Law Perspective (Diakonia, 2013) 14.

Military Order No. 291
Order Concerning Settlement of Disputes Over Land and Water
19 December 1968
Declared all previous water dispute settlements invalid and declared water resources in the West Bank to be Israeli state property.

Military Order 418
Order Concerning Urban and Rural Planning
23 March 1971
Centralised decision-making under a High Planning Council. In the 1980s, the latter requested that Palestinian consumption of West Bank water resources shall be limited to 125 mcm of the Mountain Aquifer.

The shortage of water became a notorious tool to justify the implementation of additional military orders that would further restrict Palestinian agricultural and commercial sectors. Israeli Military Order No. 59, for example, established the incorporation of private Palestinian land by declaring it 'Public Land' or 'State Land' under the direction of the 'Custodian of Absentee Property.' These military orders also served to incorporate the Palestinian wells that had been established on these so-called 'absentee' lands. As legal tools in furthering the apartheid regime, these military orders do not extend to Israeli settlers in the West Bank, who are subject to civil law transposed by the military commander, granting them political, social and economic rights, that are denied to Palestinians.

77 Ibid. n. 75.
78 Sharif Elmusa, Water Conflict (Washington: Institute for Palestine Studies, 1997) 266.
80 Planning to Fail: The Planning Regime in Area C of the West Bank: An International Law Perspective (Diakonia, 2013) 14.
81 Ibid. For example, Military Order No. 1015, Order Concerning Planting of Fruit Trees (27 August 1982), prevented Palestinians from planting certain types of fruit trees, and Military Order No. 1039, Order Concerning Control over the Planting of Fruit Trees (5 January 1983), prohibited the planting of certain types of vegetables for commercial purposes in the Jericho district of the Jordan Valley. See also:
82 See Military Order No. 59, Order Concerning State Property (31 July 1967).
83 Israeli Military Order No. 783, Order Concerning Administration of Regional Councils (25 March 1979);
Israeli Military Order No. 892, Order Concerning Administration of Regional Councils (Settlements) (1 March 1981).
Prior to the 1995 Oslo II agreements, Palestinian water consumption per capita was at 25 percent of Israeli consumption levels.85 Already, in the 1980s the military orders limited Palestinian consumption of water resources in the West Bank to 125 mcm/y (per Military Order 418).86 Meanwhile the 1995 Oslo Accords were promoted as a ground breaking advance in the development of additional water supplies for Palestinians, establishing a ‘coordinated management’ of the West Bank’s water resources, and a ‘transfer of authority’ for all water supply and management systems in the West Bank.87

Although Oslo II acknowledged Palestinians’ undefined right to water, they did not terminate the applicability of the Israeli Military Orders, nullifying the feasibility to develop such water rights. Instead, Oslo II merely limited the geographical scope of the Military Orders to Area C (60 percent of the West Bank). The delineation of water quantities provided to Palestinians, enshrined in Article 40, Oslo II, limited responsibilities over water-related concerns to the Palestinian Water Authority (PWA) to Areas A and B.88 Yet, most water infrastructure existed in Area C, which under the Oslo Accords, fell under full Israeli civil and military control.89 This created almost complete Palestinian water dependency on Israel, the Occupying Power, and hampered Palestinians’ inalienable rights to self-determination and sovereignty over their natural resources, including the right to water.

<table>
<thead>
<tr>
<th>Mountain Aquifer water basins</th>
<th>Total annual recharge</th>
<th>Amount for Palestinians</th>
<th>Amount for Palestinians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Aquifer Basin (WAB)</td>
<td>362 mcm/y</td>
<td>22 mcm/a (6%)</td>
<td>340 mcm/y (94%)</td>
</tr>
<tr>
<td>North Eastern Aquifer Basin (NEAB)</td>
<td>150 mcm/y</td>
<td>42 mcm/y (29%)</td>
<td>103 mcm/y (71%)</td>
</tr>
<tr>
<td>Eastern Aquifer Basin (EAB)</td>
<td>172 mcm/y</td>
<td>132 mcm/y (77%)</td>
<td>40 mcm/y (23%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>679 mcm/y</strong></td>
<td><strong>196 mcm/y</strong></td>
<td><strong>483 mcm/y</strong></td>
</tr>
</tbody>
</table>

Table 1 - Quantity of water from annual recharge of the Mountain Aquifer, assigned by the Oslo II agreements

As presented above, the amount of water assigned in Oslo II led to Israel’s continuous consumption of 87 percent of the combined yield of the WAB and NEAB. Note that the WAB is the water basin with the best access to and highest quality of water.90 Additionally, as the EAB was not considered fully exploited, Israel also allowed 40 mcm/y from the EAB to be used to supply to illegal

85 Abouali (n. 55) at 106.
87 Peace Agreements and Related, Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip (Oslo II) 28 September 1995 https://www.refworld.org/docid/3de5ebbc0.html.
88 Ibid at 163.
89 Ibid. Article 40; Palestinian Law No. 2.
settlements in the West Bank’s Jordan Valley.\textsuperscript{91} Hence, rather than allocating an equitable share of water resources from the outset, the Oslo II Accords solidified Israeli control and discriminatory regime over Palestinian water resources.\textsuperscript{92}

2.1.2 Restrictions on Drilling New Wells and Renovating Existing Wells

Prior to Oslo II, the process to establish a new well was rather lengthy. For example, the water utility company serving Ramallah, the Jerusalem Water Undertaking, applied for a permit to drill a municipal well in 1982, but did not receive the permit until 1990. Even the number of agricultural wells being drilled was very low.\textsuperscript{93} Wells for municipalities, such as Salfit, did not receive approval for their projects despite several attempts over decades.\textsuperscript{94} Not a single permit for well drilling or repair in the most productive basin (the WAB) was approved during the pre-Oslo period of occupation.\textsuperscript{95} After Oslo II, and the establishment of the Joint Water Committee (JWC), applications for wells in Area C not only needed approval from the JWC, but also the ICA, which was often delayed to the point that the allocated budget had already expired.\textsuperscript{96} Rejections of permit applications continued, reasoned by the ‘overexploitation’ of the WAB and the NEAB- an overexploitation which was perpetuated by Israel itself.\textsuperscript{97}

Similar difficulties arose when seeking permits for the maintenance and the repair of existing wells.\textsuperscript{98} Most of the existing wells were drilled before 1967, during the Jordanian or British Mandate period.\textsuperscript{99} Wells prior to 1967, are not very deep, as most only tapped the upper Cenomanian layer of the mountain aquifer, which, if not repaired, results in gross water loss through leakages. Obtaining a permit in order to deepen a well is almost impossible. In contrast, some of Mekorot’s wells in the West Bank have been drilled 900 metres deep, according to PWA’s documentation. Since Palestinians are denied drilling and rehabilitating their existing wells on a routine basis, there is a decrease in the quantity of water provided by Palestinian wells and increased salinity of water, which has affected the type of crop that farmers are able to plant.\textsuperscript{100}

Four wells located in the WAB\textsuperscript{101} barely extract large water quantities and major overexploitation is carried out beyond the Green Line, since the hydrological conditions for drilling in the WAB underlying the West Bank are disadvantageous (see section 3.1.4). Four wells,\textsuperscript{102} are located in the NEAB, from which the Taffuh (Beita), extracts about 400 cm per hour. The rest, all Mekorot-

\textsuperscript{91} Oslo II (n. 87); Zeitoun et al (n. 90) at 152.
\textsuperscript{92} Oslo II (n. 87).
\textsuperscript{93} Elmusa (n.78) at 86-87
\textsuperscript{94} Interview with A.L., 9 May 2019.
\textsuperscript{95} Rouyer (n. 75) at 48.
\textsuperscript{96} Interview with I.B., 10 April 2019.
\textsuperscript{97} Elmusa (n.78) at 88;
\textsuperscript{98} Rouyer (n. 75) at 49.
\textsuperscript{99} Elmusa (n.78) at 84.
\textsuperscript{100} Ibid. at 90.
\textsuperscript{101} Shabtin No.5 (Shabtin), Karni Shamrun (Jinsafut), Salfet (Kafr Sur) Are‘ail (Marda).
\textsuperscript{102} Kadumeem (Kafr Qaddum), Machaneh Horon (Huwwara), Taffuh (Beita), Army Well No.5 (Sanur).
owned wells located in the EAB are 1,500 meters deep, whereas Palestinian wells usually range from only a dozen to 200 meters deep.\(^{103}\)

<table>
<thead>
<tr>
<th>Basin of the Mountain Aquifer in the West Bank</th>
<th>Number of wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Eastern Aquifer Basin (NEAB)</td>
<td>4</td>
</tr>
<tr>
<td>Eastern Aquifer Basin (EAB)</td>
<td>34</td>
</tr>
<tr>
<td>Western Aquifer Basin (WAB)</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2 - Number of wells in the basins of the Mountain Aquifer in the West Bank.

In the pre-Oslo period, the approval rates of new wells, granted by Mekorot, Tahal and the Ministry of Agriculture was only 5 percent.\(^{104}\) In the period of 1995 to 2008, **Israel approved the drilling of new wells for Israelis in 100 percent of cases, whereas Palestinian drilling was approved in only 30 percent of cases.**\(^{105}\) Installed by the Israeli-controlled West Bank Water Department as early as 1975, and later on controlled by Mekorot, water-metres often contribute to restricted well quota allocation.\(^{106}\)

Water allocation quotas were set when water use was still low due to the 1967 war and the subsequent demolition of infrastructure. Importantly, water quotas for Israelis, which were determined according to supply and demand, were significantly higher than those for Palestinians.\(^{107}\) Moreover, the high extraction of water by Mekorot renders Palestinian wells extremely vulnerable to water level drops. Consequently, Palestinian wells often dry out or only contain salty water.\(^{108}\) Further, Israel often has control over wells that it did not drill.

2.1.3 Israel’s Use of the Natural Groundwater Flow

The WAB and NEAB are the regions where natural groundwater flows over the green line. Restricting Palestinian usage of the Mountain Aquifer maximizes the amount of water that flows downstream, where it is exploited for near-exclusive Israeli use by powerful Mekorot wells. This creates man-made areas of water scarcity, where supply from remote water service points is difficult, increasing the need for external water provision by corporate actors. As the natural groundwater flow of the WAB and NEAB passes over the Green Line, Israel pumps water from these basins within the Green Line, benefitting from more favourable pumping conditions in less mountainous and rocky topography.\(^{109}\)

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103 Internal Document, received from PWA, in March 2019.
104 Elmusa (n. 78) at 87.
106 Elmusa (n. 78) at 88; Conversation with the Municipality of Bardala.
107 According to a Jordanian report, in 1977 the 88 Arab wells in the Jordan Valley were limited to 9.9 mcm/y; the 17 Jewish wells were allowed 17 mcm/y”. See Thomas Naff and Ruth Matson, Water in the Middle East: Conflict or Cooperation (Westview Press, 1984) 48.
108 Ibid.
109 Clemens Messerschmid, What Price Cooperation? – Hydro-Hegemony in Shared Israeli/Palestinian
This region is also the only region of the Mountain Aquifer where the natural groundwater flow does not carry the underground water beyond the Green Line. As this water remains in the West Bank, Israeli companies, such as Mekorot, use groundwater extraction. This extracted water is then supplied to Israel’s illegal settlements, in violation of the Fourth Geneva Convention.\footnote{Report of the UN Special Rapporteur on the Situation of Human Rights in the Palestinian Territory Occupied since 1967 (15 March 2019) A/HRC/40/73, para. 51 <https://undocs.org/A/HRC/40/73>.} \textbf{These water rich areas have then been incorporated into Israeli firing zones and military areas to maximise unimpeded drilling of the wells and water extraction, while denying Palestinian access.} \footnote{Interview with D.A., May 2019.}

In the Jordan Valley, there were 89 active Palestinian wells in 2008, while, prior to 1967, there were 209.\footnote{Hareuveni (n. 34) at 21.} In 2008, 10.37 m$^3$ of water were drawn from Palestinian wells. According to the PWA, over the past decade, these wells produced an average of 12 million m$^3$ a year.\footnote{Ibid. at 21.} Due to the over-exploitation of other wells, such as the wells in Wadi al-Far’a, in the central Jordan Valley, and al-A’uja, a village north of Jericho, the available water quantities first decreased and then ceased, due to Mekorot drillings nearby, which directly affected water quantity and quality for Palestinians.\footnote{Ibid.} According to data from the PWA, the average extraction from wells and springs for Palestinians between 1995 and 2017 highlights the declining water quantities.\footnote{Palestinian Central Bureau of Statistics, ‘Selected Indicators for Water Statistics in the West Bank, 2010-2018’ (State of Palestine, 2018) https://www.pcbs.gov.ps/Portals/_Rainbow/Documents/water/%E2%80%8F%E2%80%8FWater-E-selected-indicator-in-West-Bank.html.}

<table>
<thead>
<tr>
<th>Year</th>
<th>Palestinian water production from wells and springs (Mountain Aquifer)</th>
<th>Palestinian Population of (the West Bank and Gaza Strip)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>118 mcm/y of water</td>
<td></td>
</tr>
<tr>
<td>1997-2007</td>
<td>107 mcm/y (average)</td>
<td>2,615,682 (average)</td>
</tr>
<tr>
<td>2010-2017</td>
<td>92,4 mcm/y (average)</td>
<td>4,378,413 (average)</td>
</tr>
<tr>
<td>2011</td>
<td>86,9 mcm/y (lowest in the period)</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>109,3 mcm/y (highest in the period)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 - Overview of water extraction by Palestinians from the Mountain Aquifer (PWA) and growth of Palestinian population between 1995-2017 (PCBS).
As presented above, the highest figure between 2010 and 2017 was 109,3 mcm/y of extracted water from springs and wells in 2017, and the lowest was 86,9 mcm/y pumped water from groundwater wells and springs in 2011.\textsuperscript{116} This is far below the 118 mcm/y pumpage from Palestinian wells and springs at the time of the Oslo II Accords. In 2021, the Palestinian population more than doubled (5,227,193 persons) since the Oslo II Accords (2,783,084 persons).\textsuperscript{117} From 1996 to date, Israel’s obligation as enshrined in Oslo II has been to provide 200 mcm of water (118 mcm + 78 mcm) to Palestinians, yet only 95 mcm had been made available by 2018.\textsuperscript{118}

It is important to mention that the Oslo II water regime merely applies to the portions of the Mountain Aquifer that underlies the West Bank, not to the Jordan River, Coastal Aquifer, nor Israeli parts of the Mountain Aquifer. During these agreements, Palestinians were not empowered to either regulate or limit Israeli extractions from the Mountain Aquifer on the Israeli side of the Green Line. To this day, \textit{these water extractions provide corporate actors, such as Mekorot, with water quantities to be resold to Palestinians in the West Bank}.\textsuperscript{119} Although Israel has acknowledged the ‘humanitarian’\textsuperscript{120} need for Palestinians to have drinking water, they refused to divert any water from the illegal settlements in the West Bank for Palestinian agricultural needs.\textsuperscript{121}

Ultimately, through the construction of the Annexation Wall, Israel gained control over groundwater development of the Western Aquifer Basin’s recharge area.\textsuperscript{122} More than 40 Palestinian wells fell under Israeli control through the construction of the Annexation Wall. The annexation wall appropriated 15 percent of West Bank land so Palestinians were prevented from the use of the most important basin areas in the region. Further, it was agreed under Oslo II that Israel would maintain its “existing quantities of utilisation” from all the three basins of the aquifer. These quantities of utilization serve both Israelis inside the Green Line and Israeli settlers in the West Bank, expropriating Palestinian water resources in a systematic and discriminatory manner. This has been achieved by installing integrated and monopolized water systems that deprive the Palestinian people of permanent sovereignty over their natural resources.

\textbf{2.1.4 Overexploitation and Environmental Damage}

Through Mekorot, Israel continuously overexploits the share of water resources allocated to them by Oslo II. It is important to note that no official sources exist to track water extractions made by the illegal Israeli settlements in the OPT which are available for the Palestinian public or/and researchers.

\begin{thebibliography}{99}
\bibitem{116} Ibid.
\bibitem{117} Palestinian Central Bureau of Statistics, ‘Estimated Population in Palestine Mid-Year by Government, 1997-2021’ (State of Palestine) https://www.pcbs.gov.ps/Portals/_Rainbow/Documents/%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A7%D8%AA%20%D8%A7%D9%86%D8%AC%D9%84%D9%8A%D8%B2%D9%8A%2097-2017.html.
\bibitem{118} Interview with S.A., January 2019. In the hydrological year 2013/14, the Israeli Hydrology Service stopped publishing data in relation to the allocation of water from the Mountain Aquifer.
\bibitem{119} Selby (n. 29) at 5-6.
\bibitem{120} Ibid. at 142.
\bibitem{121} Rouyer (n. 75) at 195.
\bibitem{122} Clemens Messerschmid, ‘Separating the Waters (Part 1)’ The Electronic Intifada (1 June 2007) https://electronicintifada.net/content/separating-waters-part-1/6971.
\end{thebibliography}
Though, according to its own documentation, in the hydrological year of 1998/99 Israel had extracted 608 mcm from the WAB, 294 mcm above the permitted amount allocated for Israel per Oslo II. As the table below demonstrates, between 1995 and 2007, Israeli usage of the Mountain Aquifer averaged a 200 mcm/y over-abstraction, in excess of Israel’s share per year under the Oslo Accords. In 2013/2014 the Israeli water extraction rate was reported at 398 mcm, which is 58 mcm above the permitted amount of extraction.

<table>
<thead>
<tr>
<th>Extraction per</th>
<th>WAB</th>
<th>EAB</th>
<th>NEAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Extraction Rate (1995-2007)</td>
<td>340 mcm/y</td>
<td>404 mcm/y</td>
<td>64 mcm/y</td>
</tr>
<tr>
<td>Excess Extraction</td>
<td>340 mcm/y</td>
<td>404 mcm/y</td>
<td>64 mcm/y</td>
</tr>
</tbody>
</table>

Table 4 - Actual water abstraction for Israel (documented by Israeli Hydrology Department, Annual Report, Hebrew)

It is important to understand that the over-abstraction by an aquifer’s downstream riparian, limits the water quantities available to the upstream riparian. Israeli over-exploitation from both the WAB and the NEAB constitutes the reason for the low water level observed in the West Bank portions of these basins. For instance, over-abstraction from numerous deep WAB wells drilled along the Green Line inside Israel has lowered the overall water table throughout the basin, which has had a direct impact on the water availability on the West Bank side of the Green Line. Israel has also over-exploited the wells located in settlements in the EAB, which has lowered the overall water level in this region. As water levels have dropped below pump installation levels and old Palestinian wells (for which rehabilitation has been denied) run dry or carry water with high salinity levels, Palestinians’ water consumption has declined below the scarce water allocation of 6 percent of the WAB (22 mcm). In the summer and dry seasons, when municipalities such as Yatta and Bethlehem register water supply shortages, Mekorot actually increases water abstractions to supply Israeli settlements. This results in an even lower water table, often leaving Palestinian wells dry.

124 Ibid. Israel’s extraction rate has been increasing up until 2013/2014, in which year the Israeli Hydrology Department stopped documenting Israeli water extractions in the West Bank.
126 Messerschmid (n. 109) at 8.
127 Elmusa (n. 78) at 120.
128 Messerschmid (n.109) at 8.
129 Rouyer (n. 75) at 62.
130 Messerschmid (n. 109) at 8; Zeitoun et al (n. 90) at 154.
131 Zeitoun et al (n. 90) at 154.
2.2 Practices of Policing Palestinian Communities

In order to implement discriminatory laws and agreements which restrict Palestinians’ access to water resources, a water management system has been created to restrict and police Palestinian access to water.

2.2.1 JWC-ICA Cooperation: Relinquishing Control over Water Resources

Through the implementation of restrictive policing and zoning, alongside the Joint Water Committee (JWC) and Israeli Civil Administration’s (ICA) restrictions on water infrastructure projects, Palestinian abstraction from the Mountain Aquifer has declined. Palestinians abstracted an average of 107 mcm/y from the “Mountain Aquifer” during 1995-2007. Thus, Palestinian usage of the aquifer reduced to 10 mcm below the Oslo-assumed quantity of 118 mcm/y.132

A bureaucratic system created to control Palestinian access to water impedes the right to water and enables corporate actors to exploit the Palestinian water sector. According to Jan Selby, Professor of Politics and International Relations at the University of Sheffield, the Joint Water Committee (JWC) involves the most highly intrusive form of transboundary regulation anywhere in the world. The JWC was supposed to serve as an interface for both the Palestinian Authority (PA) and the Israeli settlements for negotiations, management, maintenance, and monitoring of water projects. It was also supposed to regulate the development of ‘additional supplies’ of water as promised to Palestinians. As widely reported, the JWC, along with the Israeli Civil Administration, denies Palestinians permits to drill wells in the basin’s most promising locations and has otherwise prohibited Palestinian development of the ‘remaining quantities’.133 In the JWC, all matters are decided by consensus.134 Thus, each side has veto power over the other’s projects.

After Oslo II, any development or modification of water supply and sewage infrastructure, no matter how minor, required permission from the JWC.135 The system has long been used to pressure the Palestinian side – burdened with urgent water needs for the Palestinian population – to grant approval to Israeli settlement water projects in return for approval for Palestinian projects.136 Palestinians submitted over four times as many applications to the JWC, as the Israelis between 1995 and 2008.137 The permit and zoning regimes of the JWC and the ICA have contributed to the decrease in Palestinian water consumption by systematically denying Palestinian applications to drill new wells, substitute agricultural wells, or rehabilitate existing agricultural wells.138

132 As with Oslo, ‘estimated potential’ figures for the mountain aquifer, Oslo figures for the ‘existing’ Palestinian and Israeli usage of the aquifer are highly contested. Oslo II (n. 87).
133 Messerschmid (n. 109) at 16; interviews with D.A.
134 Interim Agreement (n. 45).
135 Selby (n. 29) at 7.
136 Koek (n. 13).
137 Selby (n. 29).
138 The World Bank, Assessment of Restrictions on Palestinian Water Sector Development (The World Bank 2009) 26. “All agricultural wells date from before 1967… no new agricultural wells have been licensed.”
The JWC-ICA approval process requires various applications. The Civil Administration often vetoes or indefinitely delays JWC-approved Palestinian projects. Since Israeli planning authorities do not recognize 88 percent of Palestinian villages in Area C, the Civil Administration automatically rejects proposals for any sort of infrastructure to serve these villages. Settlement proposals, on the other hand, are approved. Civil Administration planning policy not only supports settlement development but rests on the foundational principle that Area C of the West Bank “is intended almost exclusively for Israeli use.” Permits are also required for the import of equipment and the transport of this equipment. Moreover, the PWA needs a separate permit for each pumping station along a well’s supply route. Hence, an ICA approval is not only needed for Area C water projects, but also for water projects that are constructed in Areas A and B that pass through roads in Area C. After issuing a construction order for a water-related project to the Civil Administration’s Water Affairs Officer, thirteen different Civil Administration departments, along with the Israeli national water company Mekorot, must approve the application. From this lengthy process, various hurdles for the project implementation can arise in the form of a ‘security risk’. For example, if a proposed supply line is too close to an illegal settlement or an Israeli military base, or if there are existing excavations being carried out in the region.

Case Study: Kafr’ Aqab

Kafr’ Aqab is located 12 km south of Ramallah. The population has increased dramatically from 6,000 in 1998 to 80-90,000 people living in Kafr’ Aqab today. However, the water infrastructure since then has not been renovated. The old water network was originally supposed to provide water to about 5,000 people. According to the municipality, any request to rehabilitate the water network for JWC had been regularly denied. The temporary solution implemented by the municipality was to split the water supply: each neighbourhood is supplied with water on a different day of the week. However, even when rehabilitation of the old water network was granted, the municipality was not supplied with enough water for daily consumption. The domestic water consumption rate amounts to 80 l/d/c., while the domestic needs consumption rate amounts to at least 100 l/d/c. The municipality sells the water provided by Mekorot for 5 NIS/ m³ to Kafr’ Aqab’s inhabitants.

139 Messerschmid (n. 109) at 9.
141 Rouyer (n. 75) at 225.
142 World Bank 2009 Report (n. 138) at 53.
143 Rouyer (n. 75) at 226.
144 Field visit, Kufr Aqab Municipality.
All Israeli usage and control of the EAB, where the water supplies illegal Israeli settlements, occurs inside the West Bank,\textsuperscript{145} and therefore falls within the scope of the JWC’s authority. For instance, the approval of six Palestinian production wells (three in 2003 and three in 2008) was expressly conditioned on PWA approval for two wells for Israeli illegal settlements. Understandably, the PWA has refused to approve the drilling of new wells for illegally transferred-in settlers. In response, the Israeli authorities, including the ICA, have prevented contractors for approved Palestinian well-drilling projects from carrying their drilling equipment through the West Bank to the drilling sites.\textsuperscript{146}

In addition, Israel has unilaterally installed pipelines outside settlement peripheries denounced by Palestinians at JWC meetings.\textsuperscript{147} As a unilateral action ignoring the PWA disapproval, Israel connected the settlements of Cochav Yacov and Psagot to the Al Bireh plant in 1999.\textsuperscript{148} Israel has constructed the Wadi Nar/Kidron Valley wastewater treatment plant without PWA approval, providing wastewater treatment to illegal Israeli settlements in Jerusalem.\textsuperscript{149} Meanwhile, when the PWA formulated a plan, at a cost of $400 million USD, for the pumping and desalinisation of Ein Fashkha Spring for the residents of the Bethlehem and Hebron governorates, the project was not approved by the Israeli component of the JWC.

Case Study: Asawia Municipality (Salfit Governorate)
The village of Asawi in Salfit has 6,500 inhabitants. It consumes 18,000 cm per month. Traditionally the inhabitants relied on springs established in the Ottoman times. The main water source according to Asawi Municipality is water provided by Mekorot. The water network was financed through USAID. Some households in Asawi additionally receive water from their private rainwater harvesting resources. Asawai village had six functioning springs in 1967. In the following years, the inhabitants became dependent on Mekorot’s water grid. The municipality applied several times to the PWA and the JWC in order to get access to wells located in Area C between Arafat and Asawi, but, as of this publication, has not received approval.

The municipality has enough water access, receiving around 150 l/c/d per average household consumption and the water supplied through the water grid is 80 m\textsuperscript{3} per hour. However, since the old water grid has been damaged over years of use and no new approval for reparations has been issued by the PWA, the municipality loses about 30 percent of this water.

The surrounding Israeli settlements of Bet Arye, Kana’, and Megendan have increasingly extracted water from groundwater resources, which has led to the drying out of Palestinian wells in Asawi. The settlements are directly connected to the same water pipeline, which supplies Asawai with water.

\textsuperscript{145} Israeli usage/control of the eastern basin consists almost entirely of settler well abstractions in the Jordan Valley region of the West Bank and Israeli control of the Dead Sea springs.
\textsuperscript{146} Interview with I.B., 10 April 2019. He refers to a Nablus area well site in the 2000s.
\textsuperscript{147} Selby (n. 29) at 17; Rouyer (n. 75) at 247; Interview with D.A.
\textsuperscript{148} World Bank 2009 Report (n. 138) at 112-113.
\textsuperscript{149} Selby (n. 29) at 11-12, 17; Interview with I.B., 10 April 2019.
The settlements take water from the Shafrat and from Shilon wells. The Israeli association PARC refused any permit to construct a pipeline from the Shafrat well because the pipeline route would go through an area of the Annexation Wall. The water amount that the municipality disposes of, is enough for household water use, but it does not cover agricultural use. As a result, the municipality could not irrigate 3,800 dunams of land anymore.

The JWC suspended its activities between 2012 and 2017, as the committee could not reach an agreement. The Israeli side continued to hinder the development of the water sector by withholding licensing permits in Area C for Palestinians. Following an unpublished agreement, “Renewal of the JWC’s Activity,” on 15 January 2017, announcing that the JWC will reconvene, the agreement specified that projects require approval by the JWC when they involve:

1) any drilling upgrading, substituting wells, or increasing quantities of extractions beyond the limits set up by Oslo II;
2) supply of additional water quantities from the Israeli side to the Palestinian side with respect to projected future needs beyond what was committed in Article 40 of Oslo II;
3) financial and pricing concerns.

The agreement further stated that the Palestinian Water Authority may implement other projects without any prior approval from the JWC. In this limited sense, the agreement gave Palestinians greater autonomy in water management, as mutual approval was no longer needed to construct new water pipelines. Projects “that can have an impact on the aquifer such as drilling wells, upgrading wells, substituting wells, [and] increasing quantities of extraction beyond the Interim Agreement allocations,” still need JWC permission. Moreover, the agreement from the outset did not regulate or prohibit the drilling and establishment of water infrastructure within illegal Israeli settlements, which Israel continues to do. Through the agreement, the Palestinian Authority relinquished their veto power, allowing Israel to lay as many new supply lines for settlements as it wishes in areas A, B and C - all of them supplied with water by Mekorot. Although Palestinians may also lay water pipelines, the allocated water supply will not increase if Palestinians have no access to their groundwater resources. Hence, the new agreement hinders new abstractions of groundwater resources and only reduces points of contact between Palestinian and Israeli authorities. Consequently, the PWA lost their only point of leverage to pressure Israel on

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150 Selby (n. 29).
152 Ibid. The agreement also includes under 4) Trans-boundary water issues and 5) principal issues such as joint supervision and cooperation.
155 Unpublished Agreement received December 2018 (n. 151).
their settlement politics. One PWA official explained, “We will be discussing [only] Palestinian projects on the JWC”. The agreement fails to account for the most essential problem, highly inequitable distribution of groundwater resources and transboundary water resources while increasing Palestinian dependence on the Israeli water sector and corporate actors such as Mekorot.

After three years, on 10 January 2022, the JWC finally convened a meeting. At the meeting, as the PWA official had previously warned, the parties discussed only Palestinian projects, although they did agree to consider further mutual requests. As reported by the Office of the Quartet, the parties:

- Provided an in-principle approval for the location for the construction of Tulkarem WWTP in Area C, with proposed design capacity of 25,000 CM/day;
- Agreed to the supply of an additional 18-25 MCM/Y through the As Samoua bulk water connection point and an in-principle approval for the route of the As Samoua water system; and
- Agreed on starting the hydrological discussions (subsequently started in April) and agreed to consider mutual requests regarding a number of wells which are under discussion.

Once again, the agreement saw the institution of long-term dependence on Mekorot, with the company slated to supply additional water quantities of 18 - 25 MCM/y to the southern and southwestern communities of Hebron, by 2027.

2.2.2 Discriminatory Practices: Policing Water Supply

The main discriminatory practices exercised by JWC, ICA, and Mekorot against Palestinian communities consist of abstraction limits, denials of drilling permits, and the prevention of rehabilitating old water structures. Corporate actors are frequently involved in these discriminatory practices through water infrastructure demolitions, confiscations, and archaeological excavations, hindering Palestinians’ access to their share of the existing water resources. Despite justification by the Israeli government that demolitions and confiscations serve the preservation of the Mountain Aquifer from overexploitation, these practices are retaliatory practices that directly violate the basic rights of the Palestinian people. Further, they impede the abstraction of minuscule amounts of water in comparison with the overall vast Israeli water extractions.

By building high-tech water infrastructure to serve Israeli settlements while demolishing the remaining scarce water infrastructure for Palestinians in the West Bank, corporate actors contribute to the discriminatory allocation of water resources in the OPT amounting to the crime of apartheid.

157 Interview with J.S., December 2018.
160 Ibid, at 33.
Palestinians import over 50 percent of the water they consume from Israel.162

The WHO recommends a minimum of 100 litres per person of domestic water use per day – in emergency situations.163 Almost one quarter of the Palestinian communities who are connected to the water network receive less than 50 litres per person per day.164 The daily consumption of water in the West Bank for instance in Jenin was as low as 44.1 l/c/d in 2016.165 Bedouin communities in the Jordan Valley consume only 20 litres per person a day.166 About 113,000 Palestinians living in 70 communities, 50,000 of them in Area C are not connected to a water supply network at all.

The discriminatory access to water is also exemplified in relation to the higher costs paid for one cubic meter of water by Palestinian communities in comparison with Israelis beyond and within the Green Line. In 2010, according to the World Bank, the average monthly expenditure for water by a Palestinian family was 283 NIS, which represents 8 percent of the family’s monthly expenditures, a percentage four times as high as the 2.4 percent average in European Union member states. In 2018, the Knesset announced that the average expenditure for an Israeli household for water had decreased to one percent of the overall expenditure of Israeli households167 In Palestinian communities not connected to a running-water system in the West Bank, the expenditure for water amounts to half of the family’s monthly expenses – 1,744 shekels.168 These communities must rely on water tanks provided by Mekorot and sold through the municipality, private water suppliers, or the collection of rainwater in cisterns and larger basins on their own.169 For illegally transferred-in settlers, the Israeli government allocates a 75 percent

162 United Nations Conference on Trade and Development ‘The Economic Costs of the Israeli Occupation for the Palestinian People and Their Right to Development: Legal Dimensions’, UNCTAD (2018) 3; Palestinians extracted 109.3 mcm/y in 2017 and purchased 72.6 mcm/y from Mekorot in the West Bank. See Palestinian Central Bureau of Statistics, ‘Table 7: Quantity of Water Purchased From Israeli Water Company (Mekorot) in Palestine by Governorate and Year, 2010 – 2017’ State of Palestine https://www.pcbs.gov.ps/Portals/Rainbow/Docu_ments/%d8%ac%d8%af%d8%a7%d9%88%d9%84%20%d8%a7%d9%84%d8%a8%d9%8a%d8%a7%d9%86%d8%a7%d8%aa%20%d8%a7%d9%84%d9%85%d8%a7%d8%a6%d9%8a%d8%a9%20%d9%84%d9%84%d8%b9%d8%a7%d9%85%2017.pdf.
164 PWA Internal Document received in March 2019. In 2019, the daily allocation from consumed water for domestic purposes was 81.9 litre/capita/day in Palestine, 85.6 (l/c/d) in the West Bank, and 77 (l/c/d) in the Gaza Strip, with a decreasing trend. See Palestinian Central Bureau of Statistics (n. 21). In 2018, Israeli settlers in the West Bank consumed 400 litres of water for domestic use per day. See Mennonite Central Committee, ‘A Cry for Home: When You Don’t Have Enough Water’ Mennonite Central Committee (2018) <https://mcc.org/stories/fact-sheet-water>.
168 Hareuveni (n. 34) at 25.
169 The price of a cubic meter of water varies between 25 and 40 NIS, which is up to three times the highest rate Israelis pay for water for household consumption. B’Tselem, ‘Undeniable discrimination in the amount of water...
discount to their monthly water bills, which is estimated to amount to NIS 1,058 for settler families.\textsuperscript{170}

### Personal Impact:
On 10 February 2021, in Khirbet Jabet- Al-Mughir, Ramallah district, a concrete water basin erected in June 2020 with the support of a foreign institution, JVC, to restore an old well to collect rainwater was demolished and the well was completely filled in. One of the reasons for the demolition was the expansion of an Israeli outpost. The affected families stated that after the demolition of the well, they must rely on buying water in tanks for drinking and agricultural use which will be very expensive for them.\textsuperscript{171}

In 2020, there were approximately 220,000 Israeli settlers living in the eastern part of Jerusalem, while the settler population in Area C of the West Bank is approximately 441,600.\textsuperscript{172} This brings the Israeli settler population in the West Bank to around 647,800 individuals in some 170 settlement locations and some 134 outposts.\textsuperscript{173}

### Case Study: Dura Municipality

Dura city is located in the Southern area of the West Bank, to the West of Hebron City with a population of 40,000 inhabitants. Groundwater is the main source of water drawn from deep wells by the PWA. Dura is supplied with water with an annual quantity of 0.65 mcm/y, which is only for domestic use. The city is provided with water only once a week for a period of 36 hours with a total quantity of 10,000-12,000 cm. The daily per capita consumption of households is, as an absolute minimum, 30 l/d/c. The water coverage of the city is about 70 percent. Most of the water systems and pipelines are old and the water leakage is estimated to be between 20-30 percent. Additionally, the poor quality of water results from cracks in the water pipelines. Especially for households in Area C neighbourhoods that are not connected to the main water grid and, therefore, depend on much more expensive water tanks. The application for permission to renew these water structures at the JWC were repeatedly unsuccessful.

In 2018, the region of the Northern Jordan Valley was comprised of seven official water connections: six water connections in Bardala and Ein Al Beida and one in Kardala. Between July

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\textsuperscript{171} Affidavit 113 (2021) on file with Al-Haq.
\textsuperscript{173} Ibid.
and September, the Israeli authorities closed nine unlicensed water openings in Bardala. According to a 1973 agreement, those Palestinian water wells were to extract a cumulative 6.3 mcm/y. Palestinian communities should therefore get 720 m3/hour (divided 6,300,000/365 days/24 hours). However, the current water extraction by Palestinian communities amounts to only 564 m3/hour, which is 4.9 mcm/y.

**Case Study: Kardala**

The Northern Jordan Valley, where Kardala is located, has five underground water wells: one well in Farisiya (1630 m3/hour), two wells in Bardala (1200 m3/hour), one well in Humsa Al Baqai’a (200 m3/hour) and one well in Al Hadidiya (950 m3/hour). Israeli settlers have access to 500 underground water wells. In 2018, their water extraction rate was 4,550 m3/hour and 40.0 mcm/y. This amount is eight times more water than the water supplied to Palestinian communities from the same region, which receives 564 m3/hour. Palestinians used to cultivate 15,000 dunums in this area in 2000. By the end of 2018, they only cultivated 8,000 dunums. Israeli settlers in the region currently cultivate 10,000 dunums.

The area of Kardala comprises 500 people on a land of 2,000 agriculturally used dunams. The community receives 5 m3 water per hour, both for agricultural and drinking use, which amounts to 36,000 m3/a. According to the Kardala municipality, the needs of the community correspond to 50-70 m3/h, from this amount 5-10 m3/h is allocated for drinking water. The water shortage amounts to 45 m3/h, which especially harms economic activities due to the lack of water for agricultural needs. Only 1200-1300 dunams of the 2000 dunams have been irrigated over the past year. Mekorot supplies the water through the Israeli-controlled water wells in the neighbouring village of Bardala at a price of ½ NIS/m3.

The capacity of the two water wells in Bardala consists of 1500 m3/h. Palestinian villages in the area are allocated 400 to 500 m3/h. The rest of the water allocation, around 2/3 of the complete water supply, is allocated to the surrounding Israeli settlements. Since the last request to drill a water well in the 1980s was denied, no new Palestinian well has been drilled in the region. In contrast, when Mekorot drilled their first new water well in the area in 1976 one Palestinian well in the area went dry. The price increased from ½ NIS/3 m3 in 1985 to ½ NIS/1 m3 in 2018. Moreover, the Palestinian municipalities cannot access the water counters by Mekorot. The economic impact is significant since every non-irrigated dunam amounts to a loss of 3000-5000 NIS per year according to the Kardala municipality.

### 2.2.3 Corporate Complicity in the Demolition of Water Infrastructure

Israeli authorities alongside corporate actors have increasingly confiscated water pipelines and other water-related structures. In the months after the Israeli occupation in 1967, the Israeli military destroyed numerous agricultural wells in Jericho, Jiftlik, the region of Hebron, and other areas of the Jordan Valley.
Water wells within the so-called seamline are often subject to demolition as their Palestinian owners have limited access to their lands. For those demolitions, there is no immediate solution that can quickly provide communities with water.

### Demolition in Numbers

- From 2014 to 2018, in Area C, 53 wells were destroyed, as well as 2 water cisterns.
- From January to June 2019, one well and two water pipelines were demolished in the West Bank.
- Between June 2019 and April 2022, 78 private wells and 12 public wells were demolished.

The demolition of wells cannot be compensated with a rain-harvesting cistern - a strategy favoured by international organizations and donors. The average West Bank cistern can hold a mere fifty cubic metres of water; if we assume there are approximately 6,000 functioning cisterns in the West Bank, this would amount to a total capacity of only 300,000 cubic metres or 0.3 mcm. By comparison, a single deep well can produce 1.7 mcm. Moreover, rainwater harvesting systems such as cisterns can create microbiological and physicochemical contaminants, which could lead to the creation of waterborne diseases.

The Al-Hadayah District, for example, lacks any connection to a water network, electricity grid or other services, and gets their water from Ein al-Baida, which is more than 15 kilometres away. Israeli military forces repeatedly sabotage and destroy water lines in this district:

- In May 2016, the ICA confiscated water pipelines donated by the Palestinian government. In these cases, the demolitions were carried out by the companies Bobcat and JCB.
- In February 2017, the ICA, accompanied by the Israeli army and several bulldozers destroyed a water pipeline supplied by donors that provided water for over 200 people. The demolition came without prior notice from the authorities.

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177 Affidavit 2015/10750. Downtown/Surif District: Hebron. Demolitions are also carried out at night. See Affidavit 2017/739, Tammoun District, Tubas (28 September 2017).

178 Internal Field Research Documentation on file with Al-Haq. From January to November 2018, a further 19 water structures were demolished, nine of them in the month of July, when the water scarcity was at its yearly highest.

179 Internal Field Research Documentation Al-Haq.

180 World Bank Fact Sheet 2018 (n. 39).

181 Messerschmid (n. 12) at 14.

182 Ibid.


187 Affidavit 2017/141, Farms resident, Al-Hadidiya District, Tubas (21 February 2017); for the general overview of the situation in Al Hadidiya, see Melon (n. 15).
In December 2017, in the Tammoun district south of the city of Tubas, a water carrier line donated by Action Against Hunger was demolished. The 6-inch diameter water line was owned by Al-Furat Agricultural Company and used to irrigate agricultural lands.188

On 8 March 2021, a water collection well was demolished by the ICA, Israeli military and workers of a private company accompanied with Volvo bulldozers, and Hyundai excavators, in the Hebron area.189

On 8 June 2021, in the district of Bardala in Tubas, a tin pond for collecting water with a capacity of about 250 cubic meters, which was used to collect water from a private water source to pump into the fields for agricultural use, was demolished. Agricultural crops are the only source of livelihood in these areas. The well was demolished by the Israeli military and ICA accompanied by Volvo and Caterpillar bulldozers. In addition, some of the water pipes were demolished and destroyed.190

Although the availability of safe WASH services is crucial for the prevention of infectious diseases, including COVID-19, the destruction of Palestinian WASH infrastructure by systematic attacks by the Israeli occupiers leads to virtually no water and material availability, no sewage systems, as well as a reduction in water quality.191

Similarly, in 2017, in the village of the Nabi Elias district, the PWA supplied the village with 400 metres of 10-inch water pipes for the extension of an already existing water pipeline in order to provide farmers with water to irrigate their lands. The 29 pipelines, each 12 metres in length, were confiscated by the ICA.192 As a consequence, inhabitants grappling with a severe shortage of water due to these demolitions resorted to tapping holes in existing water pipelines or by digging themselves water ponds and springs out of necessity. In return, the water pond’s pumps are often subject to confiscation by the ICA.193 In February 2015, the ICA, accompanied with two bulldozers, landfilled several rainwater pools installed by the Jericho Agriculture Directorate.194 Often Palestinian wells are destroyed under the pretext that they lack a license or that the water wells are located on ‘State land’. This is part of a broader strategy of harassment against Palestinian farmers to stop their agricultural activities.195 This strategy has a significant impact on the Palestinian economy.196

188 Affidavit 017/20/ Head of Local Council / resident of Tammoun District, Tubas (12 January 2017). This water line continued from Khirbat Yerza to Einun village in the northern Jordan Valley, east of the city of Tubas.
189 Affidavit 212 (2021).
194 Affidavits 2015/10454, Jericho District: Jericho (10 February 2015).
195 Affidavit 2017/535, Ain al-Bayda District, Tubas (19 July 2017). On 30 November 2020, a concrete water well was demolished in Jabal Al-Jamma in the Halhul district in Hebron governorate, because it was located on ‘State land’. See Affidavit 505 (2020).
196 It is estimated that the ongoing occupation of Area C imposes a cost on the Palestinian economy of about 35 per cent of gross domestic product (GDP) and close to $1 billion in lost tax revenue. See UNCTAD (n. 162) at 3.
Case Study: Bardala

In the district of Tubas, Bardala located in the Northern Jordan Valley, Israeli forces imposed a security cordon searching for ‘illegal’ water holes that farmers used to get water from. On 12 July 2018, the Israeli Civil Administration, accompanied by employees of Mekorot, and two bulldozers began drilling underground lines. Consequently, many farmers stopped using their land out of fear of interruption in the middle of the next agricultural season.

Earlier, in May 2017, the ICA, accompanied by workers from Mekorot, cut off water pipelines in the village claiming that would take from the water supply line of nearby settlements. They additionally confiscated transport equipment.

The ICA refuses to recognize 88 percent of Palestinian villages in Area C and, thus, categorically denies them permission to build any infrastructure including water wells even though they are necessary to sustain the population. For instance in April 2018, a water network in cooperation with the PWA and the municipality of Nahalin, planned for the area of Wadi Salem, was prevented from construction because of the lack of a permit in Area C. On this occasion 26 trucks were confiscated. Other confiscations included 500 metres of water lines which forced farmers to leave that area, while Israeli settlers were allowed to extend and use water carriers.

In areas declared as closed military zones, the nearby Palestinian farmers and communities are particularly deprived from accessing land located within those military zones, which often leads to the confiscation of water structures. Arbitrary measures of confiscating water pumps from communities in the Jordan Valley, who heavily depend on agriculture, are highly detrimental economically for the inhabitants. Those measures often leave entire Palestinian communities no choice but to work on the lands of illegal Israeli settlements – lands that were expropriated from Palestinian families. In the northern Jordan Valley and in the Deir area, Palestinian farmers had to abandon their agricultural activities due to the confiscation of their water pumps, whereas the land controlled by the Mechola settlement in the northern Jordan Valley receives unlimited amounts of water. Military exercises within firing zones are another reason for the destruction of water infrastructures in those zones. Confiscations also include water structures donated by international donors such as the World Food Organization (FAO).

Personal Impact: On 14 April 2021, a water catchment basin in Area C, which served agricultural purposes, was demolished by the Israeli military near the town of Ya’bad, south of Jenin. About one kilometer away is a fixed Israeli military
checkpoint known as ‘Dotan’ checkpoint. The destroyed building was a basin for collecting and storing water. The water collection basin represented an important source of livelihood for the owner and his family, especially since he relied on the water collection basin to irrigate his crops and seedlings, so the loss of the water source led to the loss of crops and thus caused significant economic loss. The owner and ten other farmers cultivated about 200-250 dunums of land and all of them depended on the water catchment basin.207

In the Jordan Valley, the Israeli military declared 30,000 dunums as a closed military zone.208 Those areas were used instead for the expansion of illegal Israeli settlements. The new wells drilled by Mekorot inside the settlements were not negotiated through the JWC mechanism. Once Palestinians returned to their lands, they were forbidden by the Israeli army to repair their wells.209 In the Jordan Valley, according to the Water Sector Regulatory Council, only 37 percent of Palestinians are connected to Mekorot’s water supply system and therefore need to buy expensive water tanks ranging in cost between 14-37.5 NIS/m3.210 In some households, almost 40 percent of the income is used to purchase water. While the Jordan Valley Council continues to reject proposals by Palestinians to repair old wells, the ICA confiscates water transporters belonging to communities, which, as a result, raises the price of water tanks.

Case Study: Ein Al Baida 211

Ein Al Baida has about 1,700 inhabitants. In 1976, the Palestinian water consumption was 240 m3/ h. In 2001, this amount decreased to 170 m3/ h for domestic and agricultural use. The water needs of the community is 500 m3/h and around 50-60 m3 / h for drinking water according to Ein Al Baida municipality. Consequently, the water shortage amounts to 330 m3/h. The community receives their water from two Mekorot-operated water wells in Bardala. From the 8,000 dunams of the area, only 3,000 have been irrigated, as of 2018. This amounts to an economic loss of 15,000,000 NIS/a (5000 x 3000 NIS/a).

By expanding the land claimed as natural reserves and excavation territories, corporate actors and foundations contribute to the violation of water rights for Palestinian communities.212 Israel classifies more than 578,582 dunums (over 10 percent) of the West Bank as nature reserves and forest areas. For example, in the Jordan Valley and northern Dead Sea, Israel declared 26 sections of land nature reserves, which amounts to a total of 318,000 dunams – about 20 percent of the area.213

207 Affidavits 219 (2021).
208 Rouyer (n. 75) at 47; Abouali (n. 55) at 94.
209 Rouyer (n. 75) at 47-48; Abouali (n. 55) at 94.
211 Al-Haq Field Visit, Jordan Valley (21 January 2019).
212 Under “Embrace your Past – become a part of our Future” the Israel Nature and Heritage Foundation in cooperation with the Israel Nature and Parks Authority (INPA) seek to protect and foster the flora, and conserve heritage sites. However, the initiative and its activities do not respect the Green Line and subsume Palestinian autochthonous water resources into these natural reserves and excavation territories. Those practices contribute to the increasing entrenchment of occupation in the West Bank and have led to apartheid policies, particularly with regard to policies concerning the confiscation of Palestinian lands and transfer of ownership. See Nature and Heritage Foundation http://inhf.org.il/.
213 The nature reserves were installed pursuant to the Order Regarding Nature Protection (Judea and Samaria) (No. 363) 5730 – 1969, and the Order Regarding Parks (Judea and Samaria) (No. 373) 5730 – 1970. See Hareuveni (n. 34) at 15. The nature reserves are Rotem and Maskiyot, Agamit, Umm Zuqa, Haruva, Sartaba, Geshor Adam, Tirza Stream (two reserves), Waid Malha Pond (two reserves), Wadi Malha, Matzak Haetakim, Qumran National Park, Einot Tzukim, Qana and Samari, Maach Stream, Hahasmonaim Palaces National Park, Nahal Prat, Daraja Eli Stream, Yitav Stream, and Kochav Hashahar (two reserves), Peza’el, Har Tamun, Har Gadir, and Bezek Eli Stream.
Palestinians are prevented from entering those areas or must pay entry fees. Hence, they are also deprived from accessing any wells inside these nature reserves without receiving alternative water structures. One of these examples is the Ein Al Farah Spring, which has been incorporated into a Nature Reserve near the Palestinian village of Anata. Visitors are charged 29 NIS to enter the area. The well served Palestinians’ water needs before its incorporation into a Nature Reserve. Similarly, in the Bethlehem governorate, the Al Wajalah spring has been incorporated into an Israeli Nature Reserve. Since 2017, it has been completely inaccessible to the community.

Archaeological projects such as ‘The City of David’ settlement in Silwan have impacted Palestinians’ access to water resources through the implementation measures such as entry fees for communities to access their traditional water resources. The well incorporated by ‘The City of David’ settlement is the only source of water in the area for the Palestinian communities who have lived in these neighbourhoods for decades. Residents of the neighbourhood say the water coming from the Ain Silwan spring is polluted from the excavations that have been carried out at the site and can no longer be used as drinking water.

All these policies and practices of restricting and policing lead to a situation in which Palestinian communities are highly dependent on corporate actors for accessing their share of water resources. While international and Israeli corporate actors profit from the water shortage of Palestinian communities, these practices have widespread devastating economic consequences for Palestinian businesses, particularly agricultural producers. Of the 23-24 Palestinian wells drilled between 1967 and 1990, only two were agricultural wells whereas the rest were municipal wells for domestic use. According to the West Bank Data Base Project reported that only six percent of cultivated Palestinian land was irrigated in 1987. Settlement land at this time cultivated 69 percent of land. The low amount of irrigated dunums of Palestinians was due to water shortage according to the Project. In 2009, it was estimated that only 35 percent of irrigable Palestinian land is actually irrigated, costing the economy 110,000 jobs per year and 10 per cent of GDP. In 2015, only six per cent of irrigable lands were actually irrigated despite the dependence of the Palestinian economy on agriculture by 30 percent. Many settlements consume around 20,000-30,000 litres of water.

214 Affidavit, Anata (on file at Al-Haq).
215 Affidavit, Silwan Gihon Spring.
216 Elmusa (n. 78) at 87.
217 David Kahan, ‘Agriculture and Water Resources in the West Bank and Gaza’, Jerusalem Post (1987) 114; Rouyer (n. 75) at 60.
218 Kahan (n. 218) at 114.
219 The World Bank (n. 138).
water per day for agricultural production but there are some cases where more water is consumed. The settlement of Niran uses just over 65,000 litres per day.\footnote{220} Moreover, the loss of farmland trapped in the Seam Zone may amount to costs for the Palestinian economy around $2.4 million in irrigated agriculture and as many as 530 agricultural jobs.\footnote{221} The World Bank has estimated that, out of a total of 708,000 dunums of irrigable land in the West Bank and Gaza, only 247,000 dunums are irrigated, costing the Palestinian economy as much as $410.70 million USD,\footnote{222} in irrigated agriculture opportunities and 96,000 agricultural jobs.\footnote{223} The impediments for irrigated agriculture is one of the highest costs the Israeli controlling and restricting strategies bear for Palestinians.\footnote{224}

In 2005, Mekorot extracted 44.1 mcm, which constituted 77 percent of all Israeli West Bank extractions (from Palestinian water resources), all of which were designated to Israeli settlement agriculture.\footnote{225} In 2018, this figure has been increasing due to increasing settlement activities although it is difficult to estimate exact amounts due to the stop of reporting by the Israeli Hydrology Department in 2014.\footnote{226} The Israeli settlement agriculture is then used for exports. Israeli settlement agricultural produce, as well as services and industrial products, sold within Israel and around the world, generate vital income and profits that help sustain the illegal presence and growth of the settlement enterprise.\footnote{227} In this context, it is crucial to note that Israel sells copious amounts of water for agricultural use to Palestinians each year, as public company Mekorot supplies water for domestic and municipality use.\footnote{228} In 2017, the water provided for agricultural use was lower than 65,1 mcm/y, including water supplied by Mekorot and Palestinian springs and wells. In contrast, agricultural water consumption among Israelis per capita is at 200 cubic meters.\footnote{229} This is crucial considering that a dunum of irrigated Palestinian farmland in the West Bank is about 16 times more fertile than a dunum of rain-fed farmland.

\footnotesize
\begin{itemize}
\item\textsuperscript{221} World Bank 2009 Report (n. 138) at 25, 27.
\item\textsuperscript{222} Ibid.
\item\textsuperscript{223} Ibid.
\item\textsuperscript{225} Koek (n. 13).
\item\textsuperscript{226} Interview with C.M., 21 January 2019.
\item\textsuperscript{227} UN General Assembly, Situation of Human Rights in the Palestinian Territories Occupied Since 1967 (19 October 2016) A/71/554.
\item\textsuperscript{228} In 2017 Palestinians abstracted from Palestinian wells and springs in the West Bank around 109,3 mcm/y and purchased 72,6 mcm/y, supplying water for domestic water use at 116,8 mcm/y. Thus, the water provided for agricultural use is lower than 65,1 mcm/y. Palestinian Central Bureau of Statistics, ‘Quantity of Water Supply for Domestic Sector, Water Consumed, Total Losses, Population and Daily Consumption’ State of Palestine (2017) https://www.pcbs.gov.ps/Portals/_Rainbow/Documents/water-E9-2017.html.
\item\textsuperscript{229} This is World Bank 2009 figure, based on 1,400 mcm for 7 million people. This amount has been increasing since then.
\end{itemize}
The various practices employed by Israel and enshrined in policies cultivated economic dependence from external actors – Israel, foreign states and corporate actors.\textsuperscript{230} As much as corporations benefit from Palestinian water dependency, the larger impact of these practices of rationing and curtailment is the almost complete destruction of the Palestinian agricultural sector, allowing Israeli and international players to be more competitive - selling produce grown on Palestinian land. This economic dependence is crucial for the development of the Israeli water sector and for the expansion of the activities of Mekorot, Tahal, Gihon, IDE Technologies - and later the desalination sector.

\section*{2.3 Practices of Resale of Additional Water Quantities}

"Israel's Water Economy - Thinking of future generations"\textsuperscript{231}

In 1998, water resources in the West Bank met about one-third of Israel's total water consumption.\textsuperscript{232}

The water supply chain comprises several sectors and involves multiple players. The production sector includes Mekorot, Gihon, and seawater desalination facilities. Israel has been nicknamed the ‘Silicon Valley’ of water technologies.\textsuperscript{233} Local providers operate water pumps, whereas construction firms are responsible for the expansion of water pipelines used by Mekorot, including to Israeli settlements in the West Bank. Mekorot is responsible for the construction of irrigation and water supply projects and for the construction, operation, and maintenance of water systems, while Tahal is responsible for the overall planning and design of Israeli water development projects. These activities create a situation in which "the companies that plan, design and build water projects [in the OPT] are controlled by groups that serve only the [Israeli] people."\textsuperscript{234} Through the complicity of corporate actors in Israel’s discriminatory water allocation, a system of water dependency is established, maintained and expanded.

\subsection*{2.3.1 Mekorot’s Corporate Creation of Water Dependency}

Mekorot serves as a vital service provider and has a monopoly on water transportation and supply.\textsuperscript{235} However, Mekorot's integration of the network involves a flagrant double standard. Large-diameter pipes and high-capacity storage reservoirs have been installed for the Israeli settlers, while the Palestinians were supplied with much smaller half-inch pipes that carry only much smaller quantities of water.\textsuperscript{236} The Israeli Water Authority suggested in 2011, that the total amount of water provided to Israeli settlements in the Jordan valley corresponds to 39.422 mcm,
of which 19,390 mcm is from freshwater provided by Mekorot. In the absence of any public reports on this matter from the Israeli government, hydrologists estimate that the total water quantity provided to Israeli settlements by Mekorot amounts to 50,000 mcm in total. In relation to the water allocation of those communities, it is noted that Mekorot acts independently in the Jordan Valley, detached from the [Israeli] national system in which it supplies water to communities in Israel and to other settlements in the West Bank. Its pumping stations, including those on or near land of Palestinian communities, are closed and fenced.

Mekorot, as a major corporate actor, uses the produced water dependency of Palestinians to cement its own and other companies’ commercial profit. Already at the time of the Oslo Accords, water rights were transformed into water needs and the water supply was outsourced to private or semi-private actors. In this way, Israel has sidestepped accountability for the reasonable and equitable distribution of transboundary waters. Even prior to Oslo II, water purchased by Mekorot figured in the overall amount of existing use of the Mountain Aquifer by Palestinians. According to Oslo II, Israel would be responsible for providing only 4.5 mcm/y of the 23.6 mcm/y allocated to West Bank Palestinians for their ‘immediate needs’. On top of this, Mekorot would be in charge of selling 3.1 of these 4.5 mcm/y at full cost price to Palestinians deemed to be their long-term consumers. In addition, Palestinians were already purchasing 27.9 mcm/y from the Israeli national water company at the time of Oslo II. In contrast, the PA was declared to be responsible for developing the remaining ‘immediate needs’ quantity of 19.1 mcm/y as well as the 41.4-51.4 mcm/y additional allocation for ‘future needs’, all to be tapped from the EAB. At the same time the Oslo Accords by stating that the EAB would have 78 mcm/y ‘remaining potential’ and allowing for 40 mcm/y water abstraction by Israeli settlements, legitimised the continuous tapping of the EAB by Mekorot’s drillings. The Palestinians faced a financial and administrative burden because they were responsible for developing the bulk of the additional quantities enshrined in Oslo II while, additionally, those water supplies had to be tapped from the EAB, which proved to be difficult and expensive to exploit. As such, Mekorot’s control over the Palestinian water market was formalized and legitimated by the Oslo Accords, which obliged the Palestinian Authority to purchase water extracted from Palestinian lands from the Israeli company.

As shown earlier, through the denial of economic and particularly agricultural development by the Israeli water policy, permit and zoning system, the OPT became increasingly dependent on Mekorot. The stringent quotas of water consumption and the destruction and non-repair of wells coupled with the denial of permits to build new water infrastructure compelled Palestinians to purchase increasingly expensive water quantities for their basic needs.

238 Interview with D Tamimi, 16 July 2021.
239 Applied Research Institute (n. 170).
240 Messerschmid (n. 109) at 8-9.
241 Oslo II (n. 87).
242 Ibid.
244 Oslo II (n. 87).
245 Zeitoun et al (n. 90) at 116-117.
In 1974, Mekorot supplied 10 percent of water to Ramallah District’s municipal water company, the Jerusalem Water Undertaking, whereas in 1990 Mekorot provided 2/3 of the overall water supply. By 1995, Mekorot supplied more than half of Palestinian domestic water needs in the West Bank. The quantity of water purchased from Mekorot increased from 60.3 mcm/y (55.4 mcm/y for the West Bank and 4.9 mcm/y for Gaza) in 2010 to 79.1 mcm/y (69.0 mcm/y for the West Bank and 10.1 mcm/y for Gaza) in 2016. In 2018, a quantity of 83 mcm/y has been purchased from Mekorot. Parts of water provided by Mekorot have been extracted from the Mountain Aquifer underlying the West Bank. Importantly, this means that Palestinians are ‘buying back’ their own water. Mekorot also holds water drilling licenses in the occupied Syrian Golan in the Katzrin settlement from where the water brand Eden Springs is exporting settlement mineral water to European countries.

Discriminatory water disparities are evident between the indigenous Palestinian population and illegally transferred in Israeli-Jewish settlers. For instance, Palestinian villagers in Jiftlik received several thousand times less network supply than their illegally transferred in neighbours in the agricultural settlement of Hamra in 2008. The costs for 1 m3 of water have been increasing over the years. In 1998 Mekorot sold water at 1.62 NIS/m3 for domestic use and 0.351 NIS/m3 for agricultural use. In 2013, the price for additionally purchased water by Mekorot increased to 2.5 NIS/m3 for domestic water to Palestinians constituting 51 percent respectively in 2013. Those figures show the dependency of Palestinian communities on the Israeli supply and sale of water and the corporate actors involved. In 2018, Mekorot built a pipeline, connecting western to eastern Qalqilya to supply Israeli settlements in the central West Bank provinces of Qalqilya and Salfit with water. The construction affects the agricultural activities of the region where 700 olive trees are being cultivated in the area, alongside some 2,600 almond and carob trees.

Today, Mekorot and its subsidiaries have partnered with numerous countries around the world and maintain some 3,000 installations throughout Israel and the OPT for water supply, water quality, infrastructure, sewage purification, desalination, and rain enhancement. Mekorot is the biggest actor in the water field in Israel and the OPT, overseeing the operations of 691 pumping stations, including 2,565 pumps, 1,200 wells, 12,000 km of large-diameter pipes, 714 concrete and steel pools and tanks and 104 large earth reservoirs. Mekorot does not mention any explicit human rights guidelines.

246 Rouyer (n. 75) at 58.
247 Rouyer (n. 75) at 58.
248 Elmusa (n. 78) at 107, citing Jerusalem Post.
249 Palestinian Central Bureau of Statistics (n. 165).
250 PWA, internal document, received March 2019, on file with Al-Haq.
254 Mekorot’s Website 2018.
Mekorot’s main two subsidiaries are EMS Mekorot Projects and Mekorot Development and Enterprise Ltd, the latter planning to provide desalination solutions for southern California. Globally, the company partnered with India-based Jain Irrigation Systems in 2008. In 2012 a subsidiary of Mekorot entered into a major contract with a delegation from India involving the deployment of water control and smart metering systems in Uttar Pradesh.

The government of Cyprus signed an agreement with a consortium consisting of Mekorot Development and Enterprise Ltd in 2009 for the construction of a desalination plant in Limassol. Mekorot further entered into an agreement with Uganda’s National Water and Sewerage Corporation in 2011. The company has research projects in Argentina, Peru, India, Guinea and Azerbaijan and collaborates with the German-Israeli-Jordanian-Palestinian program called SMART for managing and integrating available and sustainable water resources in groundwater basins draining into the lower Jordan Valley and the northern part of the Dead Sea. Mekorot’s overall company revenues in 2022, amount to 206 million NIS.255

Water supply to the OPT is often arbitrarily reduced by Mekorot, which holds complete discretion over the water supply to Palestinian villages. For instance, communities in Hebron receive water two days per week in a rotation system.256 In the Ein Al-Beida District close to Tubas in September 2017, water supplied by Mekorot had been reduced to about 30 cups per hour.257 The Israeli liaison informed the Village Council that the water would remain reduced until water was recovered and treated in the village of Bardala in the northern Jordan Valley. After the return of water most of the crops planted for the season had dried out and were dead. Another example is the reduction of water supply to several villages in the Deir al-Hatab District close to Nablus in order to supply illegal Israeli settlements with water.258 In June 2016, Mekorot reduced the water to three villages, Deir al-Hatab, Salem and Azmut from 85 cups per hour to 30-40 cups water per hour. In return, the Deir Al-Hatab village council purchased water coupons from the Palestinian water department and gave it to citizens free of charge to alleviate the cost of a single cup. Since the amount of water lost is 14,400 cups per month, the additional costs that arose in Deir Al-Hatab owing to the prioritisation of water supply to Israeli settlements by Mekorot amounts to 576,000 NIS per month. In June 2016, the water supply stopped in the summer months in Jenin.259 Moreover, Mekorot regularly and arbitrarily reduces the water quota sold to and purchased by Palestinians after periods of low rainfall. This practice had been justified as necessary for the protection of the aquifer.260 Thus, while Israel resorts to over-pumping water to compensate for lower rainfall levels, Palestinians bear the burden of securing the aquifer’s sustainable yield in dry time periods.261

Due to increasing water shortages, Palestinian communities have no other choice than to buy water tanks sold by Mekorot through the near-by municipalities or private water suppliers. The profit of those sales goes directly to Mekorot’s managing elites as well as to the Israeli government.

256 Elmusa (n. 78) at 116.
260 Messerschmid (n. 109) at 6.
261 Messerschmid (n. 109) at 6.
Meanwhile the sale price for the end consumer in Palestine in 2017, has ranged from 2.56 to 9.29 NIS/cm. At the same time, the water network integration carried out by Mekorot has only been partial. This unequally integrated water infrastructure alongside Israeli-imposed quotas on water usage and the persistent restrictions on well-drilling through the ICA's planning and zoning policy, explain the enormous disparity in water consumption and allocation between Palestinians and Israelis.

Mega-Projects are directly or indirectly involved along the water supply chain in the development and maintenance of a water system, which strengthens Israeli control over the West Bank, favours Israeli settlers and ignores the basic needs and right to water and sanitation of Palestinian communities. Mekorot has announced that it will lead the “water revolution in Israel” by building the “New National Carrier”, carrying desalinated water from the five desalination facilities along the Mediterranean Sea and transferring them simultaneously in all directions—“from the west to east, north and south”. The New National Water Carrier is a water conduit system constructed by EMS Mekorot Projects that links all the desalination plants within Israel. Jerusalem has also been connected to the New National Water Carrier as part of this pipeline system.

The Fifth Water System to Jerusalem, as a mega-project undertaken by EMS Mekorot Project Ltd, carried out by the German-Austrian based private company Joint Venture Züblin-Jäger was approved by the National Infrastructures Committee as a national infrastructure project. The project is expected to alleviate future water supply needs for both the City of Jerusalem and its surrounding areas. The project was scheduled to be finished by the end of 2021. Estimates from the Tahal Group, who helped design the pipeline, anticipated that the Fifth Line will be able to supply 65,000 m3 of water per hour to Jerusalem. The project also supplies water to Israeli settlements in Jerusalem. The Fifth Water Pipeline’s construction is entirely within Israeli territory; however, it is connected to the general Jerusalem water infrastructure operated by Gihon Company, which supplies illegal Israeli settlements. Furthermore, the water transported through this pipeline is connected to water pipelines running through the West Bank that have been established without the approval of the JWC such as the Masouh pipeline in the Jordan Valley, the water pipeline for Mekhmas settlement, and the Beit El pipeline in Ramallah.

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262 Mohammed Said Hmaidi, [Power Point Presentation], Cost Variations: Selling Prices, slide 14.
Mekorot has projects planned in the West Bank beyond the Fifth Line to Jerusalem. As of February 2020, a bypass water pipeline was being constructed on Palestinian land in Bardala. This water pipeline is being constructed to extract water from Palestinian territory and deliver it to Israeli settlements in the West Bank, while bypassing Palestinian villages entirely. In 2019, Drawashi Subhi was announced as the winner of the NIS 2.5MM contract for the construction of a 500-metre steel pipeline, meant to connect the Bardala water source to Mekorot’s current drilling site. The Bardala pipeline is not an isolated project. The ICA, in conjunction with Mekorot, are planning a network of bypass pipelines to be constructed in the coming years. These are part Israel’s 20-year plan (2020-2040) for development of the Jordan Valley’s water resources.

Although Mekorot has guidelines for environmental protection – its depletion of Dead Sea water has resulted in immense environmental damage. As previously noted, Mekorot has not issued any human rights guidelines. Significantly, Mekorot is listed as one of the illegal enterprises on the UN Human Rights Council mandated database of business enterprises involved in the illegal settlement activities. While the database does not purport to be a judicial or quasi-judicial process, by referencing various corporate actors involved in activities that maintain and expand illegal Israeli settlements, the implementation of mega projects in the occupied Palestinian territory, and the diversion and use of Palestinian water resources for the benefit of the Occupying Power, may amount to an excessive usufruct, and the crime of pillage.

In November 2022, Israel and the Kingdom of Jordan signed an agreement that would see Jordan build a solar plant with the capacity to export 600 megawatts of energy to Israel in return for the supply of 200 mcm of desalinated water. As Israel’s national water company, this agreement further entrenches Mekorot’s corporate monopoly and strengthens dependency on its business. Additionally, this deal normalises the trading of pillaged Palestinian water for the economic stability and development of Israel, the fruits of which will not be seen by Palestinians.

2.3.2 How private water company Gihon exploits Palestinian water

Gihon is a private Israeli water and sewage corporation owned by the Jerusalem Municipality. The company develops, operates and maintains the water, sewage and drainage networks of Jerusalem. Various sewage plants operated by Gihon, such as Sorek sewage treatment plant and the Homat Shmuel purification plant treat sewage water from illegal Israeli settlements. This also includes an additional purification plant, built by Mekorot Development and Enterprise. The purification plant treats wastewater from northern East Jerusalem, Maale Adumim settlement and the Mateh Binyamin settlement regional council. In 2015, Gihon

269 Ibid.
270 Ibid.
Gihon will pay the cooperative in order to remove the solid waste from the wastewater. Meanwhile, Gihon mentions its commitment to protecting human rights in its sustainability report of 2014.

Gihon supplies water to all households in Jerusalem. As of 2017, every day the Gihon company supplies 220,000 cm of water daily to Jerusalem households. In the same year, Gihon refused to supply un-licensed Palestinian houses in East Jerusalem with water, while continuing its supply of all illegal Israeli settlements located in East Jerusalem. Worryingly, some 11,000 Palestinian households have been refused water by Gihon. Palestinian residents of Ras Hamis, Ras Shahada, Dahyvat a-Salam, and the Shuafat Refugee Camp, who are already cut off from the rest of the city by the construction of the Annexation Wall, now suffer from a chronic water crisis. In 2014, residents petitioned the Israeli High Court of Justice after the company stopped the regular supply of water, leaving an estimated 60,000-80,000 Palestinians without regular running water. The current water consumption by Palestinian households living in East Jerusalem is only 70 l/d/c - half of the recommended amount by the World Health Organization and far below the average household rate of consumption by Israeli inhabitants of West Jerusalem ranging between 100-230 liters per capita.

Gihon’s pipeline work in Jerusalem is having a deleterious impact on Palestinian families. In December 2019 and January 2020, Gihon began conducting underground work in Jerusalem’s Old City. This work led to severe leakage from Gihon’s pipelines, leading to critical water damage that compromised the structural integrity of the homes of Palestinians. Twenty-two families were issued evacuation orders. If they did not leave their homes, they would be severely fined. Further, the PA and Gihon agreed on a new sewage pipeline that would begin in the Kidron basin in Jerusalem before winding through Areas A, B, and C. This pipeline will redirect sewage toward the Og purification facility that is operated by Gihon. The project is estimated to be worth NIS 800MM.

At the same time, Gihon has increased its prices for water supply steadily. In 1998 Gihon sold water at 2,858 NIS/m3 for domestic use. In 2013, the price for additionally purchased water by Gihon rose to 4.931 NIS/m3 representing a 78 percent increase. In 2017, the overall profit of the company was 553,695,000 NIS. The company is currently partnering with the European Union.
Gihon does not carry out its own drillings but through the overall water grid it is provided with water from the Mountain Aquifer underlying the West Bank and the NWC, and originally extracted from the Jordan River. By connecting to the general water network, all water production - desalinated water from the various desalination water plants, water provided by Mekorot drillings beyond and within the Green Line and water supplied by the NWC, is connected to Gihon’s water pipelines going to illegal Israeli settlements in East Jerusalem.

2.3.3 Tahal Group International Constructs Waterwater Treatment in Settlements

The Tahal Group International, is 98.43 percent owned by Kardan N.V., a Dutch holding corporation and headquartered in the Netherlands, is a multinational engineering company specialising in water and waste-water systems. Tahal International along with its parent company Kardan N.V. is also listed in the United Nations database on business activities related to settlements in the OPT.284 Tahal, alongside Mekorot and the ICA, enforced the zoning and permit-policy through the systemic denial of permits to Palestinians for well development and rehabilitation,285 and by the frequent policing of water extractions.

The Tahal group developed the plan for sewage and wastewater treatment for Jerusalem. Moreover, the purified waste water from the Ayalon region between Jerusalem and Tel Aviv is used for irrigation of agricultural crops in the Ramla and Latrun areas, parts of which are located beyond the Green Line. Its subsidiary Tahal Consulting Engineers has carried out numerous sewage and water infrastructure projects in the settlements of Givat Zeev, Nokdim and Beitar Illit in the occupied West Bank. In 2007-2018, it was also contracted to perform sewage infrastructure works in the settlement of Har Homa for 193,469 NIS.286 In 2012-2018, it was contracted to carry out a sewage planning project in the settlement neighbourhood Neve Yaakov. The Tahal Group International was contracted between 1997 and 2018, by the Israeli Ministry of Housing and Construction to carry out several water and sewage infrastructure projects in Beitar Illit at a profit rate of 1,433,761 NIS. Sewage leaks from Beitar Illit have reportedly contaminated “large swaths of farmland” in Wadi Fukin, an agricultural village in the West Bank, causing an estimated NIS 80,000 in damage.287 The company continues to operate in West Bank settlements, with recent contracts in Beitar Illit extending into 2023. Tahal Group is also contracted to continue building sewage infrastructure in the illegal Israeli settlement Maale Adumim, which includes contracts connected to new housing projects planned for the illegal settlement.288

Tahal Group subsidiaries continue to procure contracts in illegal settlements as well. Subsidiary Tahal-Leitersdorf Ltd. (Israel), in which Tahal has a 50 percent ownership stake, procured a contract to conduct planning work on a new Jewish-only settlement town that is planned to be built

284 See A/HRC/43/71.
285 “Rehabilitation” refers to the deepening of existing wells (generally agricultural wells), “repair” refers to the maintenance and upkeep of existing wells, and “replacement” or “substitution” refers to the drilling of a new well in close proximity to a non-functioning older well for the purpose of replacing the older well.
288 WhoProfits (n. 286).
on the ruins of the Bedouin Village Umm al-Hiran. The contract was signed in 2015 to run through 2021. It is valued at NIS 941,773.\textsuperscript{289} Tahal’s clients include Mekorot and Gihon.\textsuperscript{290} The Talal Group does not mention any human rights guidelines as part of their best practices and manuals.

2.4 Clients to the Occupation: The Business of Additionally Purchased Water

To date, there are 180 Palestinian communities in rural areas in the occupied West Bank with no access to running water.\textsuperscript{291} Even in towns and villages, which are connected to the water network, the taps often run dry. Due to the increasing water shortage, Palestinian communities have no other choice but to buy water tanks sold by Mekorot through the near-by municipalities or private water suppliers.\textsuperscript{292}

The price of water purchase has been steadily increasing according to a price formula that holds that all water quantities before reaching 46 mcm annual purchase rate will be sold as 2.5 NIS/cm.\textsuperscript{293} The remaining quantities exceeding this benchmark will be sold at 3.6 NIS/cm.\textsuperscript{294} Since 2008, Palestinian water consumption and purchase has exceeded the benchmark of 46 mcm/y, which has contributed to the immediate rise of water prices in the OPT. In 2010, Palestinians bought 60.3 mcm of water from Mekorot annually. Before Oslo II, Palestinians has already purchased 28 mcm annually from Mekorot.\textsuperscript{295} In 2018, this rose to 83.3 mcm/y. Accordingly, the profit made by Mekorot has constantly increased. The result of Palestinian water pumped from Palestinian territory and sold within the Palestinian captive market by Mekorot is increased water scarcity for Palestinian communities. The Palestinian captive market is not a free market where people can take as much water as they need, rather Palestinians are allocated scarce amounts of water - which Palestinians cannot control. Whereas both, water prices and needed water quantities are increasing in the OPT, Israel has registered a steady decrease in its own water prices since 2011. In 2011, water bills amounted to some one percent of household expenditures in Israel, as compared to some 2.4 percent on average in European Union member states.\textsuperscript{296}

\textsuperscript{289} Ibid.
\textsuperscript{290} Ibid.
\textsuperscript{292} Often the different communities are supplied with water through private water suppliers as laid out in the Water Law 2014. See Affidavit 2017/455, Madma village District, Nablus (29 June 2017).
\textsuperscript{293} Ashraf Dweikat, Internal Document (PWA) received March 2019.
\textsuperscript{294} Internal document, received by PWA-Pricing Committee, in March 2019.
\textsuperscript{295} Ashraf Dweikat, Internal Document (PWA) received March 2019.
\textsuperscript{296} Avgar (n. 167) at 23.
Case Study: Salfit Municipality

Salfit, the capital of Salfit governorate located in the centre of the West Bank, with a population of 15,000, receives 80 percent of its water supply from Mekorot. Some 27.8 percent of the population pay 3.0 NIS/cm, and 44.3 percent of the population pay 3.5 NIS/cm, while the rest pay more than 4.0 NIS/cm for their water supply. Other water is supplied from the Al-Sikka Spring comprising approximately 7.5 percent of water needs, while the Al-Matwi Spring located five km west of Salfit provides 7.5 percent of its water needs. Since 18 March 2019, the community has been denied access to the spring due to a new Israeli checkpoint, which closes the area off from its surroundings. On 22 March 2019, the Israeli army damaged the well. In 2020, construction of a new well was completed in the illegal Israeli settlement Ariel along the settlement’s eastern perimeter. There is still no confirmed data about its productivity, however the productivity of the Palestinian spring in Salfit has decreased.

In 2017, the average domestic consumption in Salfit was 80 l/d/c, with water network losses of 15 percent due to the lack of rehabilitation of the pipelines. In 2011, the average water consumption was as low as 68 l/d/c with documented losses of 36 percent. By 2021, the average water consumption was 80 l/d/c for the city and 60 l/d/c for inhabitants in the villages of the Salfit governorate. The water shortage result from the both the high growth of Israeli water extraction and the increasing Palestinian population, in parallel. The old age of most of the water connections in houses and their distance from the main water line has also contributed to the water shortage. Around 20 percent of the existing water infrastructure is 30 years old and older. According to the Salfit Municipality, it applied to the JWC 15 times to rehabilitate the existing water infrastructure and to dig a new well in the city and governorate, but has only received rejections with no reasons given. Decades ago, Salfit was known as ‘the City of Springs’.

In contrast, Bir Shiloen, an Israeli well located near the town of Salfit, supplies water to Israeli settlements. Mekorot sells one cubic meter of water, including water extracted from Bir Shiloen, for around 4.5 NIS to Palestinian communities in the city, which is one of the reasons the village stopped agricultural activities that demand high amounts of water. Today, Salfit communities depend on olive trees rather than on crops, due to the coercive environment imposed by Israel’s water denials.

From June to August 2016 and 2017, Mekorot reduced the water supply by a further 20-30 percent. Additionally, there is no purification plants for the wastewater from the settlements which means that it flows into Palestinian valleys and agricultural land. The flow of wastewater from the Barkan Industrial Settlement is particularly concerning, due to industrial wastewater effluent from the chemical industry located in the settlement.297

297 Interviews with Mr. Alfaneh, 9 May 2019, and Al-Haq field researcher (9 September 2021).
2.4.1 Desalinated Water and the Introduction of Private Water Companies into occupied Palestine

Due to Israel’s imposed coercive water environment, Palestinian communities are ever more dependent on corporate actors to receive their share of water quantities. In the JWC, it was argued that costs of water supply to the OPT are even predicted to increase further because of the need for more expensive water desalination projects. This, however, contrasts with the statements made by the CEO of IDE Technologies in 2018, who posited that due to the desalination of the water sector in Israel, “there is a lot of potential for further reductions in water cost” - for Israeli consumers.298 To date, desalination has been privatised in the Israeli water sector.299 While Mekorot previously had sole responsibility for producing the vast majority of Israel’s water for various uses, by 2016 private desalination plants were producing around 50 percent of the water for private, public, and industrial use.300 As a consequence, Mekorot operates as a regional water distributor.

Israel has been battling a severe shortage of potable water since its inception in 1948. The shortage of water, which soon became a serious political threat to the parties in power, has been an incentive to create and later on expand the desalination water sector. In 1996, the Center for Middle East Peace and Economic Cooperation retained Tahal Consulting Engineers Ltd, to develop the plans for desalination plants. Israel’s, National Manufactured Water Plan from December 2002, indicates that the future production of desalinated water – according to a Tahal study – will produce water not only for Israeli consumers, but consumers in the West Bank.301 It states, “provisions for future supplies to Palestinians can be integrated and harmonized with Israel’s much larger desalination development plans” in which Mekorot figures as “the buyer from private desalination project developers”.302

In 1999, due to a severe water crisis, the Israeli government decided to prepare for seawater desalination. In 2005, the Israeli authorities, along with Mekorot, signed an agreement with private actors in the desalination sector, requiring that Israel and Mekorot purchase all quantities of desalinated water produced by the private actors operating desalination plants. The first seawater desalination facility started operating in 2005.303 In the intervening years, desalinated water has served as an important and major source of water for the water sector, in the face of Israel’s continual water shortages.304 Nearly 90 percent of the desalinated water is produced in five seawater desalination facilities—Ashkelon, Palmahim, Hadera, Sorek, and Ashdod.305

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300 Ibid. at 84.
301 Internal document, Final Report on External Water Resources Possibilities Received for the West Bank, on file with Al-Haq.
302 Ibid.
303 Avgar (n. 167) at 24.
304 Ibid. at 22.
305 Ibid.
Water Master Plan 2015 states that the consumption of desalinated water should be increased. In 2016, 604 mcm/y of desalinated water was produced in Israel. The production capacity of all desalination facilities stands at around 660 mcm of water a year. In 2020, Israel operated five desalination plants, producing some 585 mcm/y, with two more plants under constructions and expected to produce an additional 300 mcm/y.

An independent 2003 report on external water resource possibilities for the West Bank Integrated Water Resources Management Plan prepared by CH2M Hill for USAID indicates that without additional fresh water supply the gap between West Bank water supply and demand will exceed 450 mcm annually by 2025. The report observes that the promises of Oslo until 2003 have remained unfulfilled. It therefore proposes the desalination of seawater as an alternative water source for the West Bank. It also confirms that the Israeli desalination enterprise will produce more than 500 mcm/y by 2010.

According to the report, Palestinians were not willing to engage in the desalination enterprise since the conclusion of Oslo until 2000 and did not want to discuss potential water supplies from desalination. In a 1996 memorandum, the Israeli authorities had declared that the other agreed-upon source is provided through desalination, i.e., desalinated water. The slogan of this approach in the 1990s was ‘Go to the Sea’. However, Palestinians were sceptical of this approach since the West Bank is located far away from the Mediterranean Sea, without access via a land passage to the coast whatsoever and transport of desalinated water to the West Bank was considered to be too expensive.

The PWA, created through the Oslo accords, therefore held their demand for full water rights in relation to access to groundwater resources contained by the Mountain Aquifer. The use of desalination, i.e., desalinated water, was only considered as a viable option on resumption of the exercise of full sovereign rights, including water rights. In March 2019, an agreement suggested that all water provided from the Israeli system to Palestinians will come from desalination plants, which, according to the communication should not exceed 2.2 NIS/cm in average. The communication further states that:

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306 Email from Hila Gil, Director of Desalination and Chairwoman of the Water Authority’s Desalination Administration, 25 February 25 2018 [Hebrew], cited in Avgar (n. 167) at Report 2018.
310 Ibid at 10.
312 Ibid.
313 Internal Agreement, ‘Desalinated Water enterprise at the JWC (Ihab)” (حلم غيبيش) (10 April 2019) on file with Al-Haq.
a) these [water] quantities will stay connected to Israeli decisions and the possibility of using these amounts for political reasons as it is now and there are no guarantees of Israel continuing its supply for these amounts in any future situations.
b) The possibility of the Israeli part to develop the water system for settlements in order to supply these amounts.
Considering the “Israeli intervention and Israeli extortions in supplying the [water] amounts”, the Palestinian side would rather focus on obtaining a permission for digging wells in the Western Aquifer in order to control and manage water amounts themselves, which would be available at 2 NIS/cm.

**Case Study: Al Jiftlik**

In the community of Al Jiftlik in the Jordan Valley live 3,500 people, where two water pipelines are operated by Mekorot. From those resources the community received 27 m3/h in 2016. In 2018, this amount has been reduced to 13 m3/h according to the Al Jiftlik municipality, which corresponds to an hourly reduction of more than 50 percent. Whereas in 1967, 25 Palestinian wells had been registered in the municipality, by 2013 only 13 Palestinian wells remained. The water quality of several water wells deteriorated from drinking water to salty water until they went completely dry. This is partially due to the fact that Palestinian water drillings are only allowed to be 80 meters deep whereas Israeli water drillings are much deeper. The community has neither received permission to build new water infrastructure nor to repair the deteriorating wells.

In February 2015, a community close to Al-Jiftlik lost access to their rainwater harvesting basin registered on Tabu land and financed by the European Union. Two months after the beginning of the construction of the rainwater harvesting basin, the community received a demolition order with the argument that it is forbidden to collect rainwater. The subsequent demolition was operated by Caterpillar bulldozers alongside the ICA.

Due to the loss of their own water harvesting basin the community has been forced to get water from a Palestinian water resource in Frush Beit Dajan and by water tanks also from the same well provided by Mekorot. A tank costs 40 NIS for every m3 of water. The community of around 100 people owns 170 dunums. Due to the reduction and cost increase of water resources they only irrigated 120 dunums in 2018. They also changed their original crops to crops which require less water.

The huge amounts of water produced through desalination in addition to the high extraction rates of Palestinian groundwater resources altogether produce a water surplus economy in Israel. In this context Palestinian communities serve as ideal consumers of desalinated water, which in turn increases the water costs for Palestinians and the profit by private actors beyond the Green Line. In past and current JWC negotiations, since 2008, the argument that desalinated water will be sold to Palestinians was used as a way to push for a price increase for the overall water costs paid to Mekorot.

However, Palestinians have not been successful in obtaining a breakdown of the actual percentage of provided desalinated water as part of the supplied mixed water by Mekorot.

Moreover, the Red-Dead Sea agreement, signed on 9 December 2013 in Washington DC, US, fixed prices and desalination as a viable option for additional (commercial) water supply.315 The agreement, signed by three parties – Jordan, Israel and Palestine – allows for the diversion of the Jordan River’s upstream flow contributing to an irrevocable drop of the Dead Sea’s water level.316 The project focuses on the construction of a 220-kilometre (137-mile) pipeline transferring water from the Red Sea to the Dead Sea and includes plans to build a desalination plant in the Red Sea. Under this plan it was agreed that Israel will sell 33 mcm of water to the Palestinian Authority annually — 10 mcm to Gaza and 23 mcm to the West Bank.317 Whereas Mekorot sells water from regular water resources for 2.6-2.8 NIS/m3 to Palestinians in the West Bank, the new agreement suggests that the costs of the 33 mcm will amount to 3.3 NIS/m3 for the West Bank and 3.2 NIS/m3 for Gaza.318 The Israeli authorities argue that the price increase for one cubic metre of water relates to the fact that the water sold will be desalinated. In the beginning of the negotiations a price of 3.61 NIS/per m3 (excluding VAT) of mixed water with additional costs of extraction, conveyance, treatment and energy was suggested by the Israeli authorities.319 At the time of the 2015 follow-up meeting with the pricing issues in relation to the agreement, water was considered to be only available for purchase in a limited quantity, at that time around 32 mcm. Yet, the Israeli counterpart to the negotiation agreed on providing as much water as needed, but at desalination costs, which at the time was considered to be at 3.2 NIS/cm.320 A re-negotiation of the prize failed. Furthermore, the ICA involvement was an obstacle to the construction of any water infrastructure, as they would be part of the Committee.

As a consequence, the PWA rejected this proposal since the Palestinian authorities had no knowledge of or control over the type of water – freshwater or desalinated water - supplied by Mekorot. Moreover, the price allocated for water supply should not exceed the price set in the pricing protocol, i.e., 2.8 NIS/m3 for the West Bank and 2.5 NIS/m3 for Gaza based on the formula agreed upon to calculate the water price.321 The former head of the PWA stated: ‘Mekerot tries to make large profit [out of desalinated water]…water sold to Palestine is only a fraction of what Palestinians are entitled to from the Jordan River and Aquifers’.

315 Interview with I.B., 10 April 2019.
318 Ibid.
320 Interview with I.B., 10 April 2019.
Whereas the Jordanian—Israeli bilateral agreement has been signed, the Israeli-Palestinian agreement was not settled. The current agreement between Jordan and Israel risks environmental damage as a result of the transfer of seawater to the Dead Sea, (whose salinity level is significantly lower than that in the Dead Sea), which will impact the water’s colour, chemical composition, and the development of marine vegetation. The drop of the Dead Sea level by approximately one metre a year, also leads to a drop in groundwater level, damage to the ecosystem, and increased water salinity through the diversion of water by the Jordan River and the National Water Carrier. In this way, Mekorot’s operation contributes to environmental damage.

According to Israeli authorities and corporate actors involved, the price of desalinated water must be higher than freshwater due to the additional costs for desalination. Of all the desalinated water produced by Israel in various desalination plants, only 10 percent is allocated to the West Bank. Although West Bank consumers do not significantly contribute to the general profit of the companies involved, the allocation of increasing costs for additional water purchase, increases the vulnerability of Palestinian communities and amounts to a further step in systematically dispossessing Palestinian communities from their water resources.

2.4.2 Desalinated Water and Corporate Contracts

It is unknown which actors will be the ones who benefit most from these water developments. However, IDE technologies as part of the Delek Group (Israel) that holds 60 percent of the Israeli desalination sector and therefore is the leading actor in the desalination field. IDE Technologies is also leading in building desalination plants around the world. The company won the Carlsbad desalination technology supply contract in California, in the United States, in 2013 and is involved in a number of other international projects. It sells desalinated water to Mekorot, which is then provided to Palestinian consumers in the West Bank at increasing prices. As previously mentioned, IDE Technologies do not list any human rights guidelines. IDE’s revenues in 2018 were 154 million NIS. Founded in 1965 by the Israeli government, IDE is now privately owned by Israel Chemical and the Delek Group. Delek Group, Delek Israel’s parent company, is involved in extraction of natural gas from disputed maritime areas which are situated close to disputed maritime areas, with Lebanon and Palestinian territorial waters.
Several other corporate actors are involved in the violation of Palestinians’ rights to their natural resources by providing technical assistance, technology or logistical support. The Middle East Tubes Company through B Gaon Holdings (Israel), a company subsidiary (67.4 percent), is a major supplier of water tubes to Mekorot. The company also supplied equipment and services to water infrastructure projects carried out by two settlement water cooperatives in the OPT. The company Mehadrin supplies water for agricultural irrigation and pumps water from its wells for Mekorot. The company also sells drawing services and water supply to Mekorot for agricultural and domestic uses.

Minrav Projects is a group of companies specialising in construction and engineering services. Gihon contracted Minrav to build and operate a sewage treatment plant in the northern part of East Jerusalem in Nabi Musa. Moreover, David Ackerstein Ltd. (Israel) was involved in the installation of water pipes in the settlement of Har Adar. The company serves the Ma’ale Adumin Municipality, Mateh Binyamin Regional Council, Beit Aryeh Local Council, and the Economic Company for the Development of Ma’ale Adumim. The company, Einav Ahets, is carrying out water infrastructure works for Israel’s national water company Mekorot on Route 55 – the Nabi Elias Bypass Road in accordance with tender 4/14. The Nabi Elias Bypass Road is a settler road being built near the Palestinian village of Nabi Elias in the occupied West Bank. The bypass road involves the expropriation of 25 acres of Palestinian land – including a total 700 olive trees – belonging to the Palestinian villages of Izbat Tabib, Azzun, and Nabi Elias. The project is estimated at 40,000 NIS and is scheduled to be completed in November 2017.

Smaller water cooperatives contribute to the further distribution of water extracted in the West Bank or carried from the Jordan River to Israeli settlements. Mei Bikat HaYarden is a settlement water cooperative that supplies water to agricultural settlements in the occupied Jordan Valley, using primarily waste water from occupied East Jerusalem treated in the Nabi Musa water purification plant in the occupied Jordan Valley, as well as water from Tirtsa Reservoir, a settlement water reservoir built on the Palestinian stream of Wadi al-Far’a in the northern occupied West Bank is transported by water tubes by B. Gaon Holdings. Mei Vered is a subsidiary specialising in valves and water metres. Mei Vered has exclusive distribution agreements with German company Sensus GmbH Hannover and Turkish company Baylan ü Aletleri San. Tic. Ltd. Notably, Şti., the company committed to distributing Sensus and Baylan products in the occupied West Bank and Gaza Strip, receives a commission from Sensus for each sale.

Arad group, a kibbutz-owned company, specialises in the design, development and manufacture of precision water metres for domestic use, waterworks, irrigation and water management companies around the world. Meanwhile, Genesis Land Dates/N.S Water and maintenance services, and located in the settlement of Ma’ale Efraim, is an agricultural water service company,

which also grows organic Medjool dates in agricultural settlements in the occupied Jordan Valley, for export to Europe.333

Technology support for Mekorot has been provided by Atlantium (as a support for drilling activities), Agrobics (in relation to sewage), IOSight (a company operating in desalinating processes), Eviation (mapping of accurate identification of Mekorot water pipes and identification of operational liquidity and theft of water in the aquifer) and others.334

In relation to the demolition of water structures, Caterpillar Inc., the world’s leading manufacturer of construction equipment, supplies the Israeli military through Zoko Enterprises Ltd. and sells its products directly to the Israeli army through the US Foreign Military Sales program.335 It is reported that bulldozers also are supplied from the companies Volvo, Daio JCB, LiuGong and other private companies.336 JCB, for instance, dominates the Israeli market with a 65 percent market share of all excavators and a 90 percent market share of commonly used loading vehicles.337 The company Hidromek, a manufacturer of construction equipment specialises in backhoe loaders and excavators, provided equipment used for the demolition of cisterns in the South Hebron Hills.338
3. Legal analysis

A number of legal frameworks are applicable to the situation in Palestine, which must be interpreted in an interrelated manner in light of the illegal activities of corporate actors that violate international law. Importantly, international humanitarian law in armed conflict is binding not only on states, armed groups, and combatants, but also on “all actors whose activities are closely linked to an armed conflict”. International standards, enshrined in international humanitarian law (IHL), international human rights law (IHRL), international criminal law (ICL) and consideration of indigenous rights, all play a role in delineating the responsibilities of corporate actors. Corporate actors should immediately divest from any operations that constitute or contribute to human rights harms.

3.1 Appropriation of Palestinian Water Resources

The Occupying Power does not acquire sovereign rights over natural resources, but must preserve the capital of the natural resources subject to fulfilling the needs of the local population. For this reason, Israel as the Occupying Power bears the obligation to meet the needs of the protected population and safeguard its socio-economic needs. For the purposes of applying IHL, property is characterised as either public, private or mixed property. Articles 46, and 56 of the Hague Regulations (1907), Article 53 of the Fourth Geneva Convention (1907), and ICRC Rule 51 prohibit the confiscating, seizure or destruction of private property within the occupied territory. Article 53 and 55 of the Hague Regulations protect publicly owned movable and immovable water resources respectively. For example, water captured and directed into irrigation canals or pipes constitutes movable property. As enshrined in customary international law, only movable public property that can be used for military operations may be confiscated.

Water in major basins such as the Jordan River, Coastal and the Mountain Aquifer constitutes a form of immovable public property. Crucially, Article 55 limits the belligerent occupant’s role as the administrator and usufructuary to exclusively immovable property. As usufructuary the occupant is accorded certain rights of use of the property, along with an obligation to preserve the substance of the property for the returning sovereign. Those resources protected by the rule of usufruct cannot be depleted, damaged or destroyed by the Occupying Power.

341 International Committee of the Red Cross (ICRC), Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention), 12 August 1949, 75 UNTS 287, Art. 55 (1). See also Art. 56 and Art. 50.
343 CIL Rule 51.
344 However, sometimes those resources are also considered to be mubah property, which is closer to the category of private ownership. See Law for the Settlement of Titles to Land and Water (n. 56) at 471.
Corporations increasingly enable Israel’s appropriation of water by sustaining its ongoing dispossession of the already restricted water access to Palestinian communities, extracting an amount of water from the OPT that exceeds the usufruct rule of the Hague Regulations and is, thus, in violation of international humanitarian law. Further, Israel has obligations as Occupying Power,\textsuperscript{346} to respect the applicable national laws of the occupied territory and must therefore respect \textit{the preceding regimes of property rights in relation to water resources.}\textsuperscript{347}

In conclusion, the Occupying Power has the right to use groundwater systems classified as public immovable property.\textsuperscript{348} Yet, its use must correspond to the local population’s needs,\textsuperscript{349} without seeking its own economic benefit.\textsuperscript{350} Over exploitation that renders groundwater a non-renewable resource undermines those requirements. The Occupying Power may neither use nor interfere with the enjoyment of private property or public movable property unless the water categorised as such is directly usable for military purposes or is intended to help in the administration of the occupation.

\subsection*{3.2. Right to Water}

The right to water, defined as the “right to access water of adequate quality and in sufficient quantity to meet human needs,” is governed by the principles of non-discrimination and non-interference with existing water supplies.\textsuperscript{352} Over forty-five countries have amended their national constitutions adopting it as a stand-alone right.\textsuperscript{353} The right to water is legally binding,\textsuperscript{354} self-standing,\textsuperscript{355} and “entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water”\textsuperscript{356} as part of an adequate standard of living and as right to the highest standard.
of health.\textsuperscript{357} It is essential for human survival\textsuperscript{358} for the enjoyment of all human rights, including the right to life.\textsuperscript{359} Article 14(2) of the UN Convention on the Elimination of Discrimination Against Women (CEDAW), Article 14 of the UN Convention on the Rights of the Child (CRC), and Article 28 of the UN Convention on the Rights of Persons with Disabilities (CRPD) additionally provides for the right to a minimum amount of water for personal and domestic use. Obligations to respect, protect and fulfil are non-derogable and must be realisable for present and future generations.\textsuperscript{360} Non-compliance is not justifiable.\textsuperscript{361}

More specifically, the right implies access to the infrastructure for the provision of water such as "the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water."\textsuperscript{362} Water facilities and services must be accessible to all, without discrimination of any kind.\textsuperscript{363} Affordability, accessibility and availability, as human rights criteria, require that the use of water, sanitation and hygiene facilities and services are accessible at a price that is affordable to all people.\textsuperscript{364} In this context, availability means that, "the water supply for each person must be sufficient and continuous for personal and domestic uses".\textsuperscript{365} Accessibility to water services further implies physical accessibility, economic accessibility, non-discrimination and information accessibility.\textsuperscript{366} A fully-fledged implementation of the human right to water requires that all four elements be included.\textsuperscript{367} The right to water and sanitation is inextricably related to human dignity.\textsuperscript{368} While, limitations of indigenous peoples’ water access
In order to assess the (il)legality of interference with water resources by corporate entities, the right of self-determination, must first be assessed as constituting an essential principle of international law erga omnes and as a jus cogens norm. Rooted in the United Nations Charter, 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), the principle entitles a people to dispose freely of their natural wealth and resources, and contains the right to “prospect, explore, develop” their natural resources. Its realisation is also an indispensable condition for the effective guarantee and observance of individual human rights.

Since 1948, UN bodies, including the UN General Assembly and the UN Security Council, have reiterated the right of the Palestinian people to self-determination, at the same time acknowledging the continuous violation of this right by Israel. In the 1960 Declaration on the Granting of Independence to Colonial Countries and Peoples, the General Assembly expressly declared that “[t]he subjection of peoples to alien subjugation, domination and exploitation constitutes a denial of their fundamental human rights.” The right to self-determination is connected to one peoples’ sovereignty over their natural resources, their claim to a particular territorial integrity, the right to cultural integrity, the right to economic and social development and the right to exist — demographically and territorially — as a people. It also provides that all people can freely determine their political status and freely pursue their economic, social and cultural development. In this connection, it is important to note that an Occupying Power should create conditions that lead to the exercise of the right to self-determination by the protected people.
population, including those related to economic development. Importantly, the realisation of the right to self-determination is closely connected with the principle of permanent sovereignty over natural resources. The latter is understood as a precondition of a peoples’ realisation of its right to self-determination. The absence of substantive entitlements to natural resources and territorial integrity renders the right to self-determination meaningless.

As confirmed by several UN entities, “the ongoing expansion of settlements severely impedes the exercise by the Palestinian people of their right to self-determination and seriously deprives them of natural resources.”

3.3. Indigenous People’s Right to Water

Courts have increasingly recognized proprietary interests of indigenous people and determined the ownership over natural resources in conflict zones through the lens of indigenous rights. Indigenous rights spell out an ownership system that not only co-applies with IHL provisions but goes beyond the more restrictive property regime enshrined in the Hague Regulations. The ILO Convention (N° 169) concerning Indigenous and Tribal Peoples affirms indigenous peoples’ rights of ownership and possession of the lands that they traditionally occupy. Under ILO 169, the concept of land encompasses the total environment of the areas which either the whole community or individual members occupy and use. It also requires governments to safeguard those rights and to provide adequate procedures to resolve land claims. Indigenous land rights exceed ownership rights covering the total environment of the occupied territory under Article 13 ILO No. 169.

Article 26 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) inscribes the right to full recognition of indigenous management of resources. According to Article 28 UNDRIP members of indigenous communities are not required to hold a formal

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381 The elimination of the state of occupation is necessary to fully achieving the right to development. See UN General Assembly, Declaration on the Right to Development: resolution / adopted by the General Assembly, 4 December 1986, A/RES/41/128.
383 Drew (n. 380) at 651.
384 Wall Opinion (n. 375); UN General Assembly, Permanent sovereignty of the Palestinian people in the Occupied Palestinian Territory, including East Jerusalem, and of the Arab population in the occupied Syrian Golan over their natural resources: resolution / adopted by the General Assembly, 7 February 2017, A/RES/71/247; and UN Human Rights Council, Report of the independent international factfinding 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, 7 February 2013, A/HRC/22/63 § 38; UN Human Rights Council, Human rights situation in the Occupied Palestinian Territory, including East Jerusalem, 16 March 2017, A/HRC/34/38 § 20.
385 “The rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded.” International Labour Organization (ILO), Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, article 15(1).
registered ownership in order to be entitled to a remedy. It is sufficient if they traditionally owned, occupied or used the relevant territories and resources. Although the indigenous rights framework applies to indigenous persons who remain in already colonised territory, the case of Palestine represents a sui generis, whereby the entire Palestinian people, i.e., Palestinians on both sides of the Green Line, along with Palestinian refugees and exiles in the diaspora, all constitute the indigenous Palestinian peoples in an ongoing and active colonisation.

3.4 Desalination

The affordability, accessibility and availability of water, as human rights criteria, require that the use of water, sanitation and hygiene facilities and services is accessible at a price that is affordable to all people. In this context, availability means “the water supply for each person must be sufficient and continuous for personal and domestic uses.” Accessibility to water services implies physical accessibility, economic accessibility, non-discrimination and information accessibility. A fully-fledged implementation of the human right to water requires that all four elements be included. Israel’s institutionalization of desalinated water resources in the OPT does not meet these criteria.

While Israel touts the establishment of desalination plants as a solution to the water-apartheid it has forced upon Palestinians, its investment in these plants impedes economic development in the OPT and places a huge economic burden on Palestinians. Desalination plants rely on a steady supply of sophisticated spare parts and raw materials that are not easily accessible and require a massive amount of energy to function. This forces Palestinian dependence on Israeli industries, as well as foreign markets and manufacturers, further entrenching the captive market on which Palestinians must rely on, for safe and accessible water. This also enables corporate actors, such as IDE Technologies, to profit from Palestinians’ lack of water access and lack of sovereignty over their natural resources.

Further, Israel’s push for Palestinian reliance on desalinated water actively harms the environment. It has been well-documented that the hypersaline concentrate (or toxic brine) created in the process of desalination can cause substantial damage to marine ecosystems and ocean health when pumped back into rivers, seas and oceans. Additionally, the high level of energy consumption required by desalination plants negatively impacts the environment through high emission levels of air pollution and greenhouse gases. While the utilization of sustainable brine management and
sustainable energy resources can be utilized in desalination processes to mitigate environmental damage, they are costly. Such expenses would undoubtedly be imposed upon Palestinians while Israelis, including illegal settlers, would remain economically unaffected. Israel’s obligation, as the Occupying Power, not to damage the environment of the protected Palestinian population is codified by several UN General Assembly resolutions and has been specifically addressed by the UN Economic and Social Council.396

Israel and involved corporate actors economically discriminate by charging Palestinians more for desalinated water, even when it is mixed with water from aquifers, while simultaneously supplying desalinated water to Israelis at no additional cost. The resulting increase in the cost of purchased water that Palestinians must assume is a violation of the right to affordable water, especially in Gaza where households must pay exceptionally high prices for unregulated water from private entities.397 Desalination is the least economically efficient and sustainable method of managing water shortage, yet Israel continues to promote its usage as an innovative solution to acquiring water, including through its 2022 coordination efforts with Morocco in the promotion of desalination.398 Crucially, Israel’s push for reliance on desalinated water intentionally deviates from Palestinians right to their ground water resources that exists on occupied Palestinian land, as well as sovereignty over natural resources, while offering an expensive alternative, from which Israel and corporate entities will directly profit. Israel uses desalination as a tool to obscure the consequences of its occupation and longstanding water-apartheid, while actively violating Palestinians’ right to water.


397 Ibid. at 23.


Zachy Hennessey, ‘MOU between Israel, Morocco will Enable Collaboration in Drinking Water, Liquid Sanitation’, The Jerusalem Post (17 November 2022).
3.4. Prosecuting Water Appropriation, Destruction, Pillage and Apartheid

Grave breaches of IHL constitute war crimes. Companies as legal persons may also be prosecuted for violations under international criminal law in relation to their direct participation, or complicity in international crimes, or under civil law.399

3.4.2 Destruction of Property

A grave breach of Article 147 of the Fourth Geneva Convention is constituted by an “extensive destruction and appropriation of property”, not justified by military necessity and carried out unlawfully and wantonly, which similarly qualifies as war crime under Article 8(2)(a)(iv) of the Rome Statute of the International Criminal Court (ICC).400 “Extensive” destruction is a constituent element of the grave breach regime under Article 147, but it is not required for the application of Article 53 of the Fourth Geneva Convention, which states “any destruction”. Destinations of water infrastructure without military necessity, negligence of good administration and severe restrictions of water permits may qualify as extensive.401 Particularly, the damaging of water infrastructure in seasons of heat, during summer, and in regions traditionally scarce of water complies with the requirement of extensive.

3.4.3 Pillage as a War Crime

Pillage is defined as “the forcible taking of private property by an invading or conquering army from the enemy’s subjects.”402 Under IHL, departing from the Lieber Code, Articles 28 and 47 of the Hague Regulations, Article 33(2) of the Fourth Geneva Convention and the ICRC Customary International Law rule 52 provide a binding prohibition of pillage during hostilities and belligerent occupation. The jurisprudence of the ICC treats the crime of pillage as synonymous with that of “plunder of public or private property” as used in the Nuremberg trials, and in the ICTY Statute, stating “insofar as they both refer to the unlawful appropriation of property in an armed conflict”.403 While the occupant may seize and use certain private and public property, any seizure of private property outside the confines of requisition for the “necessities of the army of occupation” or requisition of public property not specifically required for military operations may amount to pillage. Similarly, the use of public immoveable property beyond the conservationist rules of usufruct for private and personal gain may amount to pillage.

403 Prosecutor v. Bemba, ICC-01/05-01/08, Trial Chamber III, Judgment, 21 March 2016, paragraph 114.
404 Internal Expert Opinion at 9.
The Elements of Crimes, to Article 8(2)(b)(xvi) of the Rome Statute of the ICC outline the cumulative elements that must be satisfied for acts to amount to the crime of pillage.

The first element entails that the appropriation of property of natural resources can occur by means of extraction, exports and sale taking possession of the resources.405 Natural resources such as water are considered to be directly expropriated through extraction or harvesting in collaboration with the Occupying Power, for example, under an illegally awarded concession agreement.406 This also includes the reliance on decrees issued by the Occupying Power.407 Another indicator for appropriation is the over-harvesting of natural resources within or around a concession lawfully granted to it.408 Natural resources are indirectly appropriated through purchasing illicit resources from an intermediary, which is confirmed by twenty-six cases from post WWII trials, as well as conceptual first principles.409

The second element requires a determination of the rightful “owner of the property” for the different types of property subject to pillage during belligerent occupation.410 Here it is notable that peoples as well as nations have a right of permanent sovereignty over their natural resources.411

As indicated in the third element, pillage is essentially appropriation of property without consent. It is essential that the company that acquired the natural resources in question operated without complying with the relevant legal requirements for conferring consent. Arguably, the context of violence and coercion associated with an armed conflict presents a situation where the granting of genuine consent by the owner may be seriously hindered.412

405 Lundberg (n. 2) at 509.
406 See the Funk case, Walther Funk for his role in the management of a commercial enterprise named the Continental Oil Company, which exploited crude oil throughout occupied Europe in conjunction with the German army. James Stewart, ‘Corporate War Crimes Begin’ Opinio Juris (14 November 2013) http://opiniojuris.org/2013/11/14/corporate-war-crimes-begin/.
407 See Paul Pleiger, the manager of Mining and Steel Works East Inc. (BHO), guilty of pillaging coal from mines located in Poland, BHO exploited these Polish coal mines after the Reich government issued a so-called trusteeship to the company. Given that the Reich government had no authority to seize these properties, Pleiger became personally culpable for the appropriation his company carried out. James Stewart, Corporate War Crimes: Prosecuting Pillage of Natural Resources (2010) para. 95 https://commons.allard.ubc.ca/cgi/viewcontent.cgi?article=1338&context=fac_pubs.
410 Although the requirement for personal and private use appears to limit the application of the crime of pillage, it can be seen to extend also to situations of ‘organized’ and ‘systematic’ seizures of property from protected persons alongside acts of looting by soldiers for private gain. SCSL-2004-16-T, Prosecutor v Brima, Kamara, Kanu (20 June 2007) para 752. See Norman Judgment of Acquittal, para. 102; and Čelebići Trial Judgment, para. 590; ICC-01/04-01/07, The Prosecutor v. Germain Katanga and Mathieu Ngudjolo Chui (1 October 2008) para 905. The Court will look to the ‘nature’ and ‘use’ of the items appropriated to establish intended personal or private use. Prosecutor v Jean-Pierre Bemba Gombo, para.643.
411 Permanent Sovereignty over Natural Resources, UN General Assembly resolution 1803 (XVII) of 14 December 1962.
412 See, for example, W Schomburg and I Peterson, ‘Genuine Consent to Sexual Violence under International Criminal Law’, 101(1) AJIL (2007) 121. In Bemba, the ICC has discussed “coercive circumstances” and a “coercive environment” in the context of the crime of rape, see Prosecutor v. Bemba, Trial Chamber III, Judgment, paragraph 103-105.
Significantly, the Bemba judgement considered that:

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\text{[I]}n \text{ certain circumstances lack of consent can be inferred from the absence of the rightful owner from the place from where property was taken. Lack of consent may be further inferred by the existence of coercion.413}
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An owner can be considered to have been coerced by establishing that a transaction that appears to be legal in form was not entered into voluntarily due to the use of pressure. In addition, there would have to be a causal link between the unlawful means used and the result brought about by the use of such intimidation.414 Importantly, in the Maya Indigenous Communities Case the Inter-American Commission on Human Rights (IACommHR) stated that without fully informed consent and fair compensation, indigenous communities maintain their right to ownership under any circumstances (see also section 3.3 above).415

According to the fourth element of pillage the illegal exploitation of property must take place “in the context of” and be “associated with” an armed conflict in order to constitute pillage. This requirement has not been defined, but is applied according to case law by international tribunals.416 In Prosecutor v Jean-Paul Akeyesu, the International Criminal Tribunal for Rwanda (ICTR) qualified the nexus requirement to the armed conflict as only demanding the existence of a link between the act and the armed conflict itself, not between the perpetrator and a party to the conflict.417

Ultimately, the awareness of the perpetrator of the factual circumstances can be proven through the extensive reporting on the human rights situation in the area concerned. To establish intent in situations of occupation where the usufruct rule applies, the focus shifts to whether companies are aware that the rule of usufruct is not satisfied. This arises when the exploitation of natural resources was not “carried out for the benefit of the local population”.418 In the context of occupation resources exploitation may be evident where the proceeds of resource rents benefit only military or political elites, or where the proceeds of illegal resource transactions are repatriated to a foreign country or region outside the occupied territory.419

414 Trial of Carl Krauch and Twenty-Two Others, p. 47.
416 See Prosecutor v. Germain Katanga and Mathieu Ngudjolo Chui, Case No. ICC-01/04-01/07, Decision on the Confirmation of Charges, para. 381 (Sept. 30, 2008) “[a]s neither the Statute nor the Elements of Crimes define the phrases ‘in the context of’ and/or ‘was associated with’, the Chamber applies the case-law of the international tribunals”.
417 Prosecutor v Jean-Akayesu, US v F. Flick et. al., United States of America v A Krupp et. al.
418 Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda); Request for the Indication of Provisional Measures, International Court of Justice (ICJ), 1 July 2000, 249.
419 Stewart (n. 409).
In certain circumstances, the receipt of products made from illicit resources may also qualify as pillage.\textsuperscript{420}

\subsection*{3.4.4 Crime of Apartheid}

The classification of apartheid as a crime against humanity under international criminal law was further propounded in the 1973 International Convention on the Suppression and Punishment of the Crime of Apartheid (hereinafter the ‘Apartheid Convention’),\textsuperscript{421} and the 1998 Rome Statute of the International Criminal Court (hereinafter the ‘Rome Statute’).\textsuperscript{422}

For a definition of apartheid, it is necessary to look at other conventions and statutes. The Apartheid Convention supplements the brief reference found in International Covenant on the Elimination of Racial Discrimination (ICERD)\textsuperscript{423} with the most detailed definition of the crime of apartheid.\textsuperscript{424} The Apartheid Convention envisages the crime as being carried out through “inhuman acts,” similar – but not exclusive – to those practiced under the apartheid regime in South Africa, committed for the purpose of establishing and maintaining a system of racial domination and oppression by one racial group over another.\textsuperscript{425} The Apartheid Convention further requires all organisations, institutions, and individuals involved in the commission of the crime of apartheid,\textsuperscript{426} to be declared as criminal, while also allowing for individual criminal responsibility for members and agents of such entities that have taken part in the commission, incitement, or abetting of the crime of apartheid “irrespective of the motive involved”.\textsuperscript{427} The definition also emphasises necessity of intent on the part of the State or organisation concerned and that once this intention has been established on the systemic level, no further interrogation is necessary for the specific, individual intention of those involved.

Apartheid is included as a crime against humanity entailing individual criminal responsibility under Article 7(1)(j) of the Rome Statute of the ICC, which defines apartheid as “inhumane acts… committed in the context of an institutionalized regime of systematic oppression and domination by one racial group over any other racial group or groups” and committed with the “intention of maintaining that regime”.

\begin{addendum}
\item See UN War Crimes Commission in the Bommer Case Trial of Alois and Anna Bommer and their Daughters, Permanent Military Tribunal At Metz, 9 Law Report of Trials of War Criminals, (February 19, 1947), p. 64; See Conviction of Representatives of the Roechling Firm for Pillage Arising out of the Commerce in Illegally Seized Scrap Metal from the German Raw Materials Rading Company (ROGES), “[k]nowingly to accept a stolen object from the thief constitutes the crime of receiving stolen goods”; convicted of pillage on the basis that he was “a receiver of looted property. France v. Roechling, 14 Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10, app. B, (1949), pp. 1117–1118 [hereafter Roechling Case], 1113, 1118.
\item Apartheid Convention (n. 3).
\item Rome Statute (n. 1).
\item UN General Assembly, A/RES/2106(XX) (21 December 1965).
\item ESCWA report, op. cit., p. 12.
\item Article II, Apartheid Convention (n. 3).
\item Article I(2), Apartheid Convention (n. 3).
\item Article III, Apartheid Convention (n. 3).
\end{addendum}
The Rome Statute defines the elements of the crime of apartheid as:

1. The perpetrator committed an inhumane act against one or more persons.
2. Such act was an act referred to in article 7, paragraph 1, of the Statute, or was an act of a character similar to any of those acts.
3. The perpetrator was aware of the factual circumstances that established the character of the act.
4. The conduct was committed in the context of an institutionalized regime of systematic oppression and domination by one racial group over any other racial group or groups.
5. The perpetrator intended to maintain such regime by that conduct.
6. The conduct was committed as part of a widespread or systematic attack directed against a civilian population.
7. The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population.

The exploitation of water resources by Zionist institutions such as the Jewish Agency (JA), Jewish National Fund (JNF), and Histadrut, who founded Merkorot in 1937, is emblematic of the broader denial of Palestinian sovereignty over natural wealth and resources and means of subsistence. Since their founding, these parastatal institutions have built upon the ideological foundation, expressed in their respective charters, that persons of Jewish faith constitute a separate “Jewish nationality”. That constructed status serves as the basis for the enjoyment of acquired land, natural resources, including water and property by the institutions while discriminating against all others, in particular, the indigenous Palestinian people. The State of Israel, its laws, and organs, formally defer to these institutions of material discrimination in all matters of legislation and policy affecting development, commerce, agriculture, access to and control over natural resources, urban planning and civil matters.

3.5. Corporate Complicity

Corporations have obligations to respect the rights of individuals and communities relating to water and other natural resources. All types of companies have obligations under the Protect, Respect and Remedy’ Framework established by the United Nations Guiding Principles on Business and Human Rights (UNGPs), which define corporate responsibility as:

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[A] global standard of expected conduct for all business enterprises wherever they operate. It exists independently of States’ abilities and/or willingness to fulfil their own human rights obligations and does not diminish those obligations.\(^{430}\)

This requires companies to properly analyse and understand their impact on human rights through applicable requirements of due diligence,\(^{431}\) human rights guidelines, external expertise, and stakeholder consultation.\(^{432}\) It also requires companies to implement a specific mechanism for ensuring compliance with the human rights due diligence process.\(^{433}\)

### Three Pillars of the UNGPs: ‘Protect, Respect and Remedy’ Framework

- The state duty to protect against human rights abuses by third parties, including businesses, through appropriate policies, regulation, and adjudication;
- The corporate responsibility to respect human rights, that is, to act with due diligence to avoid infringing on the rights of others and address adverse impacts with which they are involved; and
- The need for greater access by victims to effective (judicial and non-judicial) remedy.

Importantly, the UNGPs state that companies should treat the risk of causing or contributing to gross human rights abuses “as a legal compliance issue wherever they operate”.\(^{434}\) In this context, the UNGPs acknowledge that the risks of human rights abuses are higher in conflict-affected regions and business enterprises operating in these kinds of environments are at particular risk of “being complicit in gross human rights abuses committed by other actors”.\(^{435}\) Companies operating in conflict-affected areas, including situations of occupation, must run legal risks based on criminal liability for committing or contributing to war crimes or civil liability for damages.\(^{436}\) In situations of occupation, like the in the OPT, the standard of due diligence is higher again, as one of required “heightened” or “enhanced” due diligence.\(^{437}\)

Moreover, companies may be held liable for violations of international humanitarian law.\(^{438}\) A company is expected to ensure that its engagements with state authorities do not encourage or facilitate the state’s unlawful practices, pursuant to Principle 19 UNGPS. Neglect to do so is indicative of behaviour designed to economically rationalise the prolongation of conflict.

\(^{431}\) UN Guiding Principles, Principle 17.
\(^{432}\) UN Guiding Principles, Principle 18.
\(^{433}\) UN Guiding Principles, Principle, 15 (b).
\(^{434}\) UN Guiding Principles, Principle 23.
\(^{435}\) UN Guiding Principles, Principle 23 and Commentary.
\(^{437}\) Ibid., at 9-10.
\(^{438}\) Ibid., at 24.
In addressing human rights risks in contexts of occupation, businesses must consider terminating their operations or the business relations where appropriate if steps taken to prevent and mitigate possible human rights impacts are not effective. As stated by the UN Working Group on Business and Human Rights the provision of services that sustain and expand illegal Israeli settlements violate per se the UNGPs as well as international law.

In the context of corporate obligations under international law to access to water in situations of occupation, adverse human rights impacts may include extensive seizure of private property that disproportionately restricts access to water, over-exploitation of water resources, the sale of water by companies in violation of the principle of water affordability, and discriminatory water allocation and use of watercourses and transboundary aquifers.

It is important to note that responsibility is shared in all business relationships, including indirect business relationships, such as with minority and majority shareholding positions and investors. Shareholders and investors may be involved in actual or adverse human rights impacts when their activities infringe on the human rights of persons or groups. They could also contribute to and be complicit in human rights abuses, where their activities, commissions or omissions, assist in the perpetration of a violation.

3.6. Due Diligence

Due diligence requires the monitoring, identification, assessment, prevention and minimization of human rights violations by business activities. In this context, risks to human rights are understood to be the business enterprise’s potential adverse human rights impacts, which should be addressed through prevention or mitigation, and any negative impacts to human rights should be a subject for remediation. Where gross human rights abuses and crimes are at stake, the remediation process will require the business enterprise to cooperate with judicial mechanisms.

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439 UN Guiding Principles, Principle 19 (Commentary); Working Group Statement (n. 430) at 10; M. Farah, Business and Human Rights in Occupied Territory: Guidance for Upholding Human Rights, 69.
442 “OHCHR Response to request from BankTrack for advice regarding the application of the UNGP in the context of the banking sector” (OHCHR, 2017) <https://www.ohchr.org/Documents/Issues/Business/InterpretationGuidingPrinciples.pdf> (hereinafter, OHCHR Response to request from BankTrack for advice regarding the application of the UNGP in the context of the banking sector) 3.
443 Ibid.
446 UN Guiding Principles, Guiding Principle 22 and Commentary.
Due diligence standards are used to recognize how business operations fuel the dynamics of conflict and in identifying potentially significant risks of criminal and civil liability for corporate complicity in IHL violations.447 Risked-based due diligence refers to “the steps a company must take to become aware of, prevent and address adverse human rights impacts”.448 A company assesses risk by identifying:

- the factual circumstances of its activities and relationships and,
- evaluating those facts against relevant standards provided under national and international law.

Under Principle 12 of the UNGPs, the responsibility of enterprises to respect human rights refers to internationally recognized human rights, which are expanded to include the standards of IHL in situations of armed conflict. The Working Group on Business and Human Rights has further underscored the need for enhanced due diligence, or “heightened care” in the due diligence process, in situations of occupation, as well as an assessment of specific vulnerabilities of the protected population and “entrenched patterns of severe discrimination”.449 During conflict, heightened risk of violations of IHL and IHRL exist. States are more likely to be involved in or unable to prevent human rights abuses during conflict. In the light of these risks, corporations should make sure that their operations meet obligations of “enhanced due diligence”.450

Following principle 18 of the UNGPs, enhanced due diligence starts with a consideration of specific impacts on specific people (referring to protected population under IHL and IHRL), given a specific context of operations (referring to the contexts of occupation). “Specific Impacts” call for an analysis that considers the impact of specific practice and policies implemented by the Occupying Power along business operations, while “specific people” refer, among others, to the Palestinians inherent right to self-determination and to permanent sovereignty over their natural resources.

In the specific context of the right to water, and more broadly the principle of durable sovereignty over natural resources, it has been established that due diligence includes preventing companies from appropriating water resources beyond military needs or usufruct, and barring them from causing adverse impacts on the availability, accessibility, quality, safety, acceptability and affordability of water through their operations.451 As these are interrelated rights, companies must also prevent potential risks of adverse impacts on the right to health, the right to life, and the right to food and adequate livelihoods resulting from violations of the right to water.452

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449 Supra (n. 430) at 9-10.
450 Supra (n. 448).
For example, discharges of large water quantities by a company may impact the local and basin-level water supply, affecting local shallow wells that could lead to a heightened risk of water-borne diseases for local populations. This action would see that the company is in noncompliance with its positive obligations to prevent negative interference with the accessibility, availability, quality and affordability of water. Considering enhanced due diligence in the context of occupation, companies need to be aware that any extractions of natural resources should only be operated for the benefit of the occupied population, not for the increased profit of the Occupying Power, who can only be considered a usufructuary according to applicable IHL provisions.

The awareness of the illegality of Israeli settlements as practices that are conducive to annexation, prohibited under international law, should point corporate entities to divest from operations that expand water infrastructure to these settlements. The use of water must be in line with the needs of the protected population, guaranteeing their right to water. Otherwise, businesses fail to effectively respect their enhanced due diligence obligations relating to IHL and IHRL and might be conceived as complicit in grave breaches of IHL obligations.

3.7. Obligations and Legal Consequences for Third Party States

The Third Party States, ‘home States’ of transnational corporations tend to apply a less stringent regulatory framework when it comes to their operations abroad, including when they are involved in human rights abuses and grave violations.453 However, under Common Article 1 of the Geneva Conventions, High Contracting Parties hold the duty to respect and ensure respect for the Conventions including by acting with due diligence to prevent conceivable abuses by other states. High Contracting Parties to the Geneva Conventions are under an obligation to investigate and prosecute individuals responsible for the commission of grave breaches,454 and those who are party to the Rome Statute are obliged further to cooperate with the ICC in this regard.455 Given the long-standing prohibition of the war crime of pillage under customary international law, and in light of the recognition of pillage as a serious crime in the statutes of numerous international tribunals, as well as in the domestic criminal law of most countries,456 States must investigate pillage allegedly committed by their nationals and prosecute those responsible. They must also investigate other war crimes over which they have jurisdiction, particularly to ensure that these serious crimes do not go unpunished.457 Although these obligations are potentially limited to the nationality of the perpetrator of the crime and the territorial jurisdiction of the State, it seems important to note that States have the right to vest universal jurisdiction in their national courts over war crimes, i.e. to prosecute regardless of where the crime was committed or of the nationality of the alleged perpetrator.458

454 Article 146, Fourth Geneva Convention.
455 Article 86, Rome Statute.
456 For more information about the codifications of the crime of pillage see CI, Rule 52.
457 In customary international humanitarian law, “States have the right to vest universal jurisdiction in their national courts over war crimes.” This right is supported by treaty law and national legislation. Although the ICC Statute does not oblige States to establish universal jurisdiction over the war crimes listed therein, several States have incorporated the list of war crimes contained in the Statute in their national legislation and vested jurisdiction in their courts to prosecute persons suspected of having committed such war crimes on the basis of the universal jurisdiction principle. International Committee of the Red Cross (ICRC), Customary International Humanitarian Law, 2005, Volume I: Rules, Rules 157, 158, and 161.
458 “[A]lthough pillage is not technically a grave breach of the Geneva Conventions, there is significant evidence that customary international law now extends the same duty to all war crimes.” Stewart (n. 409) at 91.
Please reword as “In the context of serious breaches of jus cogens, practices of annexation, and war crimes, such as the war crime of pillage, require States, whether or not they are individually affected by the serious breach, to cooperate to bring such breach to an end through lawful means, and to not recognize as lawful a situation created by this breach, nor render aid or assistance in maintaining that situation.” Such cooperation calls for a joint and coordinated effort by all States to counteract the effects of these breaches and could be organised in the framework of a competent international organization. Hence, Israel’s violation of peremptory norms of international law, namely the denial of the Palestinian right to self-determination, including permanent sovereignty over Palestinian natural resources, entails the responsibility of Third-Party States to refrain from rendering any support to Israel’s illegal practices, policies and measures in the OPT, including that of its illegal settlement enterprise. Possible measures to be taken by Third-Party States consist in lawful counter-measures, sanctions, or efforts to convince corporate actors from refraining to invest or operate in occupied territories.

Furthermore, an extraterritorial scope of the duty to protect under IHRL applies to “home” States. Crucially, the UNGPs highlight the importance of States being aware of and responding to “evolving circumstances.” Those obligations also apply extraterritorially where business enterprises are involved in cross border economic activities. Home States should “set out clearly the expectation that all business enterprises domiciled in their territory and/or jurisdiction respect human rights throughout their operations.” Home States should especially ensure that business enterprises operating in those contexts of conflict or occupation are not involved with human rights violations. Moreover, home States of transnational business enterprises are also encouraged to support businesses in their responsibility to respect human rights through implementing domestic measures, such as legislation, as well as by cooperating in multilateral initiatives. Along these lines, principles 2 and 7 of the UNGPs require home States to take “enhanced and context-specific” steps in order to engage with businesses that risk contributing to human rights abuses.

Regarding human rights violations caused by environmental damage by third actors operating in a third country, home states have been said to hold the duty to take appropriate legislative or

459 Such as those defined by Article 147 of the Fourth Geneva Convention, including extensive destruction or appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.
461 Ibid.
462 See Hirsi Jamaa v Italy (European Court of Human Rights, Application No 27765, 23 February 2012); Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion (ICJ, July 9, 2004), 43 ILM 1009(2004) paras. 134,137; Lopez Communication No. 52/1979, UN Doc. CCPR/C/13/D/52/1979.
463 UN Guiding Principles, Guiding Principle 2.
464 UN Guiding Principles, Guiding Principle 7, Commentary.
administrative measures to prevent acts of transnational corporations registered in a State which negatively impact the human rights of individuals outside its territory.\footnote{IACHR AO Environment para 151; UN Doc. E/C.12/2000/4, August 11, 2000, para. 39; CERD/C/USA/CO/6, (8 May 2008) para. 30.} In the Case of the Kaliña and Lokono Peoples, the Court indicated that the obligation to protect the territories of indigenous communities entailed a duty of monitoring and oversight.\footnote{Case of the Kaliña and Lokono Peoples v. Suriname, supra, paras. 221 and 222.} Accordingly, home States must develop and implement adequate independent monitoring and accountability mechanisms.\footnote{UN Doc. A/HRC/17/31, March 21, 2011, Principle 5.} In the specific case of activities, projects or incidents that could cause significant transboundary environmental harm, the potentially affected State or States require the cooperation of the State of origin and vice versa in order to take the measures of prevention and mitigation needed to ensure the human rights of the persons subject to their jurisdiction.\footnote{Para 182 AO environmental damage.}

The protection by Home/Third States against the abuse of human rights and IHL by third actors is crucial. Indeed states “breach their international human rights obligations where such abuse can be attributed to them, or where they fail to take appropriate steps to prevent, investigate, punish and redress private actors’ abuse”.\footnote{UN Guiding Principles, Guiding Principle 1, Commentary.} Hence, breaches of international humanitarian law, such as pillage, committed by private actors and its employees could be attributed directly to the State in which the concerned company is incorporated or registered provided the State exercises effective direction, for instance by giving instructions, or control over it.\footnote{Para 182 AO environmental damage.} This attribution, as illustrated above, could result from the failure to comply with the home States' enhanced due diligence obligations, binding states to take preventive measures at the source, namely at home, where the state in question (still) has the power to influence (its own) decision-making processes. Similar to host States, the home State responsible for the internationally wrongful act is under an obligation: (a) to cease that act, if it is continuing; (b) to offer appropriate assurances and guarantees of non-repetition, if circumstances so require and to make full reparation for the injury caused by the internationally wrongful act, which can take the form of restitution, compensation and satisfaction.\footnote{ILC Articles on State Responsibility, Article 8.}

### 3.7. Corporate Accountability and Liability for Corporations

Companies are liable on the basis that they assisted or facilitated in violations of international law in some material way. Companies have previously been implicated in gross human rights abuses carried out by State organs or authorities (such as the police or military). Such implications have occurred when a company allegedly requested or benefited from certain action or assistance, provided financial or logistical support, or supplied goods, services, technology or resources that then contributed to human rights violations. In short, a company that benefits from the opportunities or environment created by human rights violations, even if it does not positively assist or cause the perpetrator to commit the violations, may be found complicit in those violations.

\footnote{ILC Articles on State Responsibility, Articles 29-39.}
3.8. Evaluation of Liability

The evaluation of the liability of corporate actors is typically based on three things: knowledge (i.e., what the corporation “knew” at the relevant time), intent (i.e., what the corporation intended to happen) and causation (whether the actions of the corporation caused the abuses that then took place).

Under ICL, the relevant standard of liability in aiding and abetting is whether a business “knowingly provid[ed] practical assistance or encouragement that [had] a substantial effect on the commission of a crime”. Practical assistance, for example, in the commission of a crime could be providing weapons or an omission from acting where legally obliged to intervene, such as the failure to comply with applicable due diligence obligations.

Article 25(3)(c) of the Statute of the ICC considers a person liable for the crime in question if the person “[f]or the purpose of facilitating the commission of such a crime, aids, abets or otherwise assists in its commission or its attempted commission, including providing the means for its commission”. A causal link, between the committed crime and its assistance, encouragement, or support is required to identify a business’ substantial effect on the perpetration of a crime.

Essentially, the actors in question have to have knowledge that the crime will be committed and that aiding and abetting through their conduct assists the commission of the crime. Thus, a CEO of a company can incur criminal responsibility for pillage if they directly perpetrated the crime, control various forms of a company that has committed a crime, or for failing to comply with their due diligence obligations.

3.9. Access to Effective Remedy

Any violation of an obligation under international law, gives rise to an obligation to make reparation. The State duty to protect against business-related human rights abuses involves ensuring access to effective remedy for those affected within its territory and/or jurisdiction, whether through judicial or non-judicial means. Therefore, companies hold the duty to participate in grievance mechanisms that offer Palestinian communities, adversely impacted by the violations of the right to water, access to an effective remedy.

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472 UN Guiding Principles, Guiding Principle 17, Commentary.
473 The establishment of direct link between aid provided by accused and relevant crimes committed by principals is required. However, in the Taylor case, AC is not satisfied that special direction is part of CIL and concludes that actus reus is determined by essential effect on the commission of the crime. Prosecutor v. Dusko Tadic (Appeal Judgement), IT-94-1-A, International Criminal Tribunal for the former Yugoslavia (ICTY), 15 July 1999.
474 See Rome Statute, Article 25(3)(c) ICC Statute.
475 Rome Statute, Article 25(2).
476 Rome Statute, Article 28.
477 Permanent Court of International Justice, Factory at Chorzow (Claim for Indemnity) case, (Germany v. Poland), (Merits), PCIJ (ser. A) No. 17, 1928, p. 29. ILC Articles on State Responsibility, Article 1
478 UN Guiding Principles, Principle 25.
479 UN Guiding Principles, Principle 22, 29 and 31.
Under Article 3 of the 1907 Hague Convention (IV) respecting the Laws and Customs of War on Land, and Article 91 of Additional Protocol I to the Geneva Conventions (1977), all rules of IHL give rise to an obligation to make a reparation for breaches of IHL, not only violations of the grave breaches provisions. The obligation to make reparations arises automatically as a consequence of the unlawful act, without the need for the obligation to be spelled out in conventions. Entitled to those reparations are states and, through an increasing acceptance and enshrined in human rights law and international criminal law, individuals.

4. Accountability for Corporate Complicity

4.1 Mekorot: Prima Facie Case for the Corporate War Crime of Pillage

Mekorot’s activities constitute a blatant violation of its legal obligations under IHL and IHRL and may be characterised as the war crime of pillage, given that the company cooperates directly with the Occupying Power in appropriating water from Palestinian communities.

Direct appropriation of movable and immovable water from the Mountain Aquifer and the Jordan River occurs through Mekorot’s water extractions. Export and sale of that water to Israel for use that exceeds military necessity under articles 52 and 53 of the Hague Regulations, and the usufruct rule under article 55 of the Hague Regulations. Commercial activities do not qualify as “military needs” within the meaning of Article 53 and therefore violates IHL. Mekorot appropriates more from the Mountain Aquifer than it was allotted under the Oslo II Accords, withdrawing more than the aquifer’s sustainable yield by over 50 percent. Water overextraction operated by Mekorot contributes to the depletion of existing water resources in the OPT, which, considering the increasing costs for water for Palestinian communities due to the need to buy expensive water tanks, shows that the exploitation cannot be considered to be carried out for the benefit of the local population. Moreover, Mekorot ignores the Green Line by providing illegal Israeli settlements and outposts with water while, simultaneously, restricting water supply for Palestinian communities in
the same region. This sustains the transfer in of foreign colonial settlers to the occupied territory, violating Article 49 of the Fourth Geneva Convention. The profit of increased sales of water quantities to Palestinians goes directly to Mekorot’s managing elites as well as to the Israeli government, which is understood as private use within the scope of Article 8(2)(b)(xvi) of the Rome Statute.

4.2. Rightful Ownership

Despite the existing discriminatory legal architecture of military orders, the Palestinian population is considered to be the rightful owner of natural resources, including water, through their right to permanent sovereignty over natural resources, enjoying an unrealized right to self-determination. The right over natural resources covers the total environment of the occupied territory that Palestinians traditionally occupy and use, following the evaluation of indigenous rights as illustrated above. Therefore, Palestinians are not required to hold formal registered land titles to be entitled to their natural resources, as their ownership rights flow from indigenous custom and tradition. In N.V De Bataafsche Petroleum Maatschappli v. The War Damage Commission, it was established that “effective physical control” by a private party over property before the occupation of territory is enough to indicate title, in the absence of legal documents.

The reclassification and rezoning of Palestinian immovable property as ‘Israeli state land’, common in order to demolish or confiscate water structures or to appropriate water located in the OPT, is unlawful. Hence, the displaced sovereign retains ownership over public immovable property based on its continued sovereignty under Article 55 of the Hague Regulations (1907). Similarly, changing the legal tie between absentees and their properties by the Occupying Power is unlawful under Articles 43 and 46 of the Hague Regulations, regardless of the constitutional provisions providing for assimilation of absentee properties into the public portfolio of State-owned property.

Any decree or agreement issued by the Occupying Power, such as the various military orders or the Oslo Accords, cannot justify the high appropriation of water. The Oslo Accords are temporary and did not terminate the occupation.

484 United Nations General Assembly (UNGA) Permanent sovereignty of the Palestinian people in the Occupied Palestinian Territory, including East Jerusalem, and of the Arab population in the occupied Syrian Golan over their natural resources (17 December 2021) UN Doc A/RES/76/225.
485 “N.V De Bataafsche Petroleum Maatschappli and Others v. The War Damage Commission” 802, 806. Here the issue revolved over whether the concession amounted to a lease agreement or a profit a prendre. 806 Ibid, 802, 805. The Court considered the level of effective control that an oil company had prior to the occupation of the territory by Japanese forces, taking into consideration the extraction of oil and drilled wells prior to occupation as evidence of the companies effective control.
486 In Armed Activities on the Democratic Republic of Congo, State ownership was evident from a number of concession agreements. The ICJ referred to the Porter Commission Report and United Nations Panel reports to substantiate the Democratic Republic of Congo (DRC) allegations of natural resource exploitation. The DRC had concluded a number of concession agreements with international companies for the development of mineral and diamond resources. In making a finding of State responsibility, the ICJ concluded that Uganda had failed to implement measures as Occupying Power to prevent the pillage and exploitation of natural resources in occupied territory. Case Concerning Armed Activities, para.237, 248; S/2002/1146, Letter Dated 15 October 2002 from the Secretary-General addressed to the President of the Security Council. (16 October 2002), para 168.
Pursuant to Article 47 of the Fourth Geneva Convention, which protects persons under occupation against the deprivation of their rights by the Occupying Power, the Oslo Accords cannot deprive the population of any right its members may have under the law of occupation and must not be interpreted in that way.

4.3. Absence of Consent

The appropriation of water by Mekorot in the OPT was executed without consent by the Palestinian population. In 2011, the Palestinian Ministry of Economy indicated the absence of consent for activities of exploiting natural resources. Several documents in relation to the JWC negotiations of drilling wells by Mekorot for the benefit of illegal settlements have been said to be de facto coerced. Several scholars and international organizations have also noted the coercion through the ICA-JWC permit system. The PLO did not agree to the transfer of property ownership under the Oslo Accords, nor did it explicitly consent to the exploitation of natural resources. It is contended that the transfer of power and responsibilities through the Oslo Accords cannot be considered as legitimate consent, especially given that this practice has continued since the occupation began in 1967.

Under the law of State responsibility, a State may consent to an otherwise internationally wrongful act, if the waiver of such claims is “clear and unequivocal”. However, no valid waiver of a violation of a peremptory norm of international law—including the permanent sovereignty over natural resources and right of self-determination—can be issued, even by the “consent or acquiescence of the injured State”. As shown in relation to the consent requirement of pillage, the Oslo Accords are not considered as a form of implied or ex post facto consent by representatives of the Palestinian people to the appropriation of property and exploitation of natural resources in the OPT. Companies, such as Mekorot, drawing on the distribution of existing water quantities as enshrined in Oslo, which entitles Palestinians only to a minimal 13 percent of their groundwater resources of the Mountain Aquifer and no quantity at all from the Jordan River, pillage those quantities.

488 Internal document by former JWC employee on file with Al-Haq.
490 Internal Expert Opinion at 16.
491 See Commentary to Article 20, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries (2001), p. 73, para 4: “Consent to the commission of otherwise wrongful conduct may be given by a State in advance or even at the time it is occurring. By contrast, cases of consent given after the conduct has occurred are a form of waiver or acquiescence, leading to loss of the right to invoke responsibility.”
494 Ex post facto or after the fact consent. See Internal Expert Opinion at 16.
4.4. Mekorot and the Occupation

Mekorot’s operations are “closely related” to and in actual furtherance of policies associated with the Occupying Power. Mekorot’s activities are shaped by the ongoing occupation of Palestinian territory that allows for the exploitation of the West Bank’s rich groundwater resources through Israeli-controlled wells. The conflict, therefore, plays a substantial part in the ability of Mekorot and its subsidiaries to purchase water in order to transport it to illegal Israeli settlements, to sell it in the Palestinian captive market, or, in case of the Jordan River, to unilaterally exploit it violating the usufruct rule. Mekorot has actively taken part in the pillaging of water by failing to prevent the high extraction of water from the OPT and, in contrast, continued to sell the water back to Palestinians at ever-increasing prices for water supply. Additionally, permission for Palestinians to increase their water extraction is severely limited, whereas Mekorot provides Israelis and Israeli settlers with as much water as needed. If Palestinians get the permission for additional water quantities, they have to purchase it at full price. Furthermore, Mekorot facilitates the construction of internal water infrastructures, including pipelines, within illegal settlements.

Mekorot has been aware that the rule of usufruct is not satisfied through the extensive reporting of non-governmental, international organizations, and newspapers. That Israel’s actions go beyond the usufruct rule, which guarantees the occupied populations basic needs, has been demonstrated by the extensive drilling of Israeli wells in the EAB and the reduction of Palestinian wells in the region through both demolitions and non-renewal of permits for water infrastructure leading to Palestinian domestic water consumption far under the recommended water quantities by the WHO. By destroying the Palestinian agricultural sector through the lack of water supply for agricultural use, Mekorot denies the occupied Palestinian population once more their basic needs considering that the latter constitutes food supply. In summary, the applicable rules of IHL have been clearly breached by Mekorot’s operations and a strong prima facie case has been made that the elements for the war crime of pillage under the Rome Statute have been satisfied.

4.2 Corporate Complicity in Water Appropriation

Companies such as the Middle East Tubes Company through B Gaon Holdings (Israel), Mehadrin, Minrav Projects, David Ackerstein Ltd., and Einav Ahets have provided Mekorot with services, equipment, and logistical and technological support to assist in the commission of pillage. For decades, these companies, knowing the situation of occupation within which they have aided in the illegal exploitation of water resources for illegal Israeli settlements, have willingly contributed to the commission of pillage. This awareness, combined with a failure to assess the negative human rights impact of their activities and determine the extent to which they contribute to violations of IHL, likely makes them complicit in the commission of war crimes by Israel, as well as in the highly unequal water consumption level between Israeli settlers and Palestinian communities, which may amount to an inhumane act of apartheid.

The drilling of illegal wells that serve illegal Israeli settlements by Mekorot and the provision of water to those settlements by Mekorot and Gihon, clearly violates IHRL and the right to self-determination under IHRL.\textsuperscript{496} Due to the over-exploitation of other wells, such as the wells in Wadi al-Far’a, in the central Jordan Valley, and al-A’uja, a village north of Jericho, the available water quantities were decreased and then disappeared due to Mekorot’s nearby drillings, which directly affected water quantity and quality available for Palestinians. The construction and demolition of wells and cisterns subject comparatively poor Palestinian communities to the risk of displacement, especially in area C where communities depend on cisterns for their livestock and agriculture. By increasing the rates charged for use of water supply systems by users in these contexts of specific vulnerability, Mekorot and Gihon violate their due diligence obligations requiring the prevention of any negative impacts on the affordability, accessibility and availability of water resources to the occupied population. Furthermore, both companies arbitrarily reduce water quantities for Palestinians in periods of heat.\textsuperscript{497} By illegally appropriating water from Palestinian communities, corporate actors also blatantly violate Palestinians’ right to self-determination, as a core principle of international law and reflective of international customary law.\textsuperscript{498} Those practices also violate Article 1(2) of the ICCPR and ICESCR containing the prohibition on depriving individuals of “[t]heir own means of subsistence.” To date, no remediation processes for the caused adverse human rights impacts have been initiated.

Corporate actors are complicit with Israel’s “extensive destruction and appropriation of property” of water through the destruction of water infrastructure beyond military necessity, the damaging of water infrastructure in seasons of heat, negligence of good administration, and severe restrictions of water permits, which under Article 147 of the Fourth Geneva Convention constitute a grave breach. Gihon and Tahal International, for example, can be considered liable on the basis that they facilitated (over)extraction and the sale of illegally acquired water quantities in a material way. Natural resources, such as water are considered to be indirectly appropriated through purchasing illicit resources from an intermediary. While Gihon does not directly use the water resources of the Mountain Aquifer, the water that flows through its water supply system stems from Mekorot. By enforcing the zoning and permit-policy by the systemic denial of permits for well development and rehabilitation, Tahal International can also be considered complicit in the

\textsuperscript{496} It constitutes a violation of Article 49 of the Fourth Geneva Convention as well as a violation of Palestinians sovereignty over their natural resources. Furthermore, it contradicts requirements of distinction as a core principle of IHL.
\textsuperscript{497} UN Guiding Principles, Principle 11.
appropriation of large quantities of water and the furtherance of policies that deny Palestinian communities their reasonable and equitable share of transboundary watercourses and aquifers.

Tahal International may be deemed to have breached its due diligence obligations as it was responsible for the overall planning and design of Israeli water development projects extending to the OPT. While it contributed to estimates of water quantities that would overly limit water quantities to Palestinians, the company facilitated not only the (over)extraction of the Mountain Aquifer by Israel but also limited the availability and accessibility of water for Palestinian communities. Other companies such as Volvo, Caterpillar Inc, Daio, JCB, LiuGong, Hyundai, and Hidromek have contributed to the destruction and confiscation of water structures. These companies have operated for decades in an environment reportedly prone to war crimes through the illegal expropriation of natural resources.

Machinery used for water infrastructure demolitions documented by Al-Haq field workers between January 2017-August 2021.

<table>
<thead>
<tr>
<th>Company name</th>
<th>Amount of documented demolitions of water infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyundai</td>
<td>24</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>7</td>
</tr>
<tr>
<td>JCB</td>
<td>16</td>
</tr>
<tr>
<td>Volvo</td>
<td>13</td>
</tr>
</tbody>
</table>

In another example, the joint venture to carry out the “Fifth Water System to Jerusalem,” spear-headed by Züblin-Jäger, along with Mekorot’s subsidiary EMS Mekorot Project Ltd., contributes to human rights impacts and violates international humanitarian law. As water carried through this enterprise will directly supply illegal Israeli settlements, which breaches Article 49 of the Fourth Geneva Convention, this long-term project exceeds temporary conservationist principles of Article 43 Hague Regulations. Moreover, such mega projects produce long term and permanent effects in the occupied territories, which violates the principle of territorial integrity, the right of self-determination and permanent sovereignty of the occupied population over natural resources.

Assessing risks by identifying the factual circumstances of its activities and relationships and evaluating those facts against relevant standards provided under national and international law, as required under corporate responsibility and enhanced due diligence standards, other corporate actors should have been aware of their specific IHL and IHRL obligations emerging from a context of occupation in which the violation of the right to water as well as of applicable international environmental and water law have been widely reported.\textsuperscript{499}

Considering enhanced due diligence in the context of occupation, companies need to be aware that any extractions of natural resources should only be operated for the benefit of the occupied population, not for the increased profit of the Occupying Power who can only be considered a usufruct according to applicable IHL provisions.

\textsuperscript{499} Koek (n. 13).
IHL imposes obligations on managers and employees and foresees criminal and civil liability in cases of breaches to said obligations. Thus, the managers of the aforementioned companies run the risk of criminal responsibility based on their enterprise’s complicity in the form of aiding and abetting, enabling, exacerbating, or facilitating the war crime of pillage and related IHL violations. Due to these companies’ failure to conduct genuine and enhanced human rights due diligence, they should immediately offer remediation in the form of grievance mechanisms and should engage in cooperation with judicial mechanisms where criminal responsibility is concerned.

The home states of these companies must also ensure respect for IHL obligations by acting with due diligence to prevent conceivable abuses by other states or corporate actors. For example, the Netherlands, where Kardan Group (which owns Tahal Group International) is located, has an obligation to investigate the actions of Tahal. Thus, the Netherlands have to conduct criminal investigations into said companies’ complicity of pillage, through cooperation with the ICC. In relation to the infringement on the right to self-determination and the permanent sovereignty over natural resources, the Netherlands, as well as other states that are not directly affected by the violations, have to cooperate to bring to an end to the violation of the right to self-determination, refrain from recognizing as lawful a situation created by this breach, nor render aid or assistance in maintaining that situation. Accordingly, states must cease any business or economic activity with companies that support the expansion of water infrastructure to illegal Israeli settlements and serve the demolition and confiscation of Palestinian water structures. Furthermore, the Netherlands have to introduce mechanisms of monitoring and oversight for better vigilance regarding the actions of enterprises registered in their jurisdiction.

5. Conclusions

This report examined corporate actors’ responsibilities with respect to the treatment of water as one of the occupied territory’s major natural resources and Palestinian communities’ intrinsic entitlement as part of their permanent sovereignty over natural resources. From the outset, corporate actors such as Tahal International have played a major role in reducing the water quantities allotted to Palestinian communities in the OPT while enabling the illegal overexploitation of water resources by complicit corporate actors such as Mekorot and Gihon until this day. Therefore, the corporate involvement in producing and maintaining Palestinians’ water dependency cannot be underestimated. With the discriminatory legal architecture cemented by the Occupying Power in place, as well as the practices of curtailment, policing and resale in relation to the access to water, it has been shown that corporate actors play an enabling role in the maintenance and furthering of an environment conducive to gross violations of IHL (amounting to war crimes and crimes against humanity such as apartheid), IHRL and other applicable legal frameworks.

500 Common Article 1 Geneva Conventions.
While the context of occupation, the heightened vulnerability of Palestinian communities as the protected population and the widely reported entrenched patterns of discrimination should have pointed private actors to the exercise of enhanced vigilance in order not to breach relevant obligations under IHRL and IHL, these actors, instead, continued their operations. Therefore, they are liable in the deepening and prolongation of illegal practices of appropriation of water as a major natural resource of the OPT and have acted in furtherance of practices of annexation.

Particularly, the major corporate actor in the water sector in the OPT, Mekorot, is likely to have committed the war crime of pillage within the scope of Article 8(2)(b)(xvi) of the Rome Statute by illegally appropriating large water quantities from their rightful owners, Palestinian communities in the OPT, without consent for private use, namely use that exceeds military necessity. In this regard, it has been shown that the Oslo Accords do not lawfully contain any clear or unequivocal consent to the appropriation of property from its lawful owners. As per an applicable legal framework pertaining to indigenous rights to ownership, all land and water that Palestinians traditionally use and occupy belongs to them. Since the unlimited water supply to Israeli settlements contributes to their expansion (and prolonged occupation), corporate actors, such as Mekorot, Gihon and Tahal Group International, Middle East Tubes Company (B Gaon Holdings), Mehadrin, Minrav Projects, David Ackerstein Ltd., Einav Ahets are complicit in the transfer of Israel’s civilian population into the OPT and East Jerusalem thus acting in blatant violation of Article 43 and 49 of the Fourth Geneva Convention. Corporate actors, such as Mekorot, Volvo, Caterpillar Inc, Daio, JCB, LiuGong, Hundai, and Hidromek evidently assisted by providing services or equipment, technical and logistical support in demolitions and confiscations of Palestinian water structures, exceeding military needs and usufruct, and amounting to “extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly” a war crime and part of the grave breaches regime of the Geneva Conventions. By illegally appropriating water from Palestinian communities, corporate actors also blatantly violate Palestinians’ right to self-determination, as a core principle of international law and reflective of international customary law.

In addition, the aforementioned corporate actors have breached their enhanced due diligence obligations in situations of widely reported and foreseeable adverse human rights impacts that would contravene the right to water, as well as interrelated rights to health and life. By drastically limiting the availability, lowering the quality and severing the affordability of water in situations in which water scarcity caused by Israel’s practices have been reported by international bodies for decades, these corporate actors are liable for not preventing nor assessing or mitigating their adverse human rights impacts. The situation produced through their actions have increasingly come to bear on vulnerable Palestinian communities during the COVID 19 pandemic, in which the quality and availability of water played a central role to prevent deadly infections with the virus.

502 Internal Expert Opinion at 9.
503 Article 147 of the Fourth Geneva Conventions; Article 8(2)(a)(iv) of the 1998 ICC Statute.
As illustrated, corporate actors also violated principles enshrined in context-specific applicable legal frameworks, such as the principle of prevention of environmental damage in the context of significant risk, including access to and the safeguarding of an adequate quality of water and the principle of optimal, reasonable and equitable utilisation of the watercourse and transboundary aquifers. As a consequence, staff, managers, and directors of Mekorot, Gihon and Tahal International that committed or were complicit in the commission of the war crime of pillage must engage his/her criminal responsibility. These companies have the duty to cooperate with judicial mechanisms, including the International Criminal Court. They also hold the duty to participate in grievance mechanisms that offer Palestinian communities, adversely impacted by the violations of the right to water, access to an effective remedy.

The primary responsibility to ensure respect of IHL rests with states, meaning that states have to take all reasonable measures to prevent violations of IHL, e.g., by establishing mechanisms of control in this respect. Furthermore, States’ IHRL obligations require that they respect, protect and fulfil the human rights without discrimination of individuals within their territory, by preventing any adverse interference with these rights by private actors. Israel, as both host State and Occupying Power, violates its human rights obligations by failing to cease business operations that increase water costs making it impossible for Palestinians to access sufficient, accessible and affordable water. Israel also breaches its obligation to exercise due diligence to prevent, investigate, prosecute, punish and remedy any harm sustained by Palestinians, whether it is caused by officials or private persons. Hence, Israel has failed to protect against violations of the right to water by third actors, including the denial of Palestinians access to the Jordan River and limiting access to their rich groundwater resources, in addition to environmental damage caused by corporations over-pumping from the WAB and the NEAB, diminishing the water level of the WAB and depleting the Jordan River.

Operating far beyond the remit of its role as an administrator and usufructuary of the occupied territory’s public property, Israel’s practices in the West Bank and East Jerusalem area constitute blatant violations of its obligations as an Occupying Power. Israeli authorities continue to allocate part of its public budget to the expansion of settlements, thus encouraging, assisting and facilitating the exploitation of the OPT by private actors. Israel has breached Article 43 Hague Regulations and Article 64 of the Fourth Geneva Convention requiring the Occupying Power to respect domestic laws in force in occupied territory, by issuing military orders to facilitate the extension of Israel’s internal water legal regime to the OPT, in some instances radically altering this regime.

504 See UN Guiding Principles, 23(a), which can be interpreted as implying international environmental law and international water law.
505 UN Guiding Principles, Principle 22, 29 and 31.
507 Article 43, 52, 53, 55, Hague Regulations (1907); Article 49, 55 of the Geneva Conventions (1949); Articles 35(3) and 55 AP I; CIL Rule 43 and Rule 45.
after the occupation. By virtue of the temporary nature of occupation, Israel, as Occupying Power, must be regarded only as the administrator of the natural resources belonging to the OPT and is obliged to administer them in accordance with the rule of usufruct. Israel is prohibited from exploiting water resources in a way that undermines their capital and results in economic benefits for Israeli citizens, including settlers, or for its national economy. Israel is further obliged to prevent corporate actors from breaching applicable IHL provisions. Ultimately, Israel has not only not prevented private actors from committing the war crimes of extensive destruction of water infrastructure, leading to forcible transfer of communities, and the war crime of pillage, but through its close ties between the mentioned corporate actors, Mekorot, Gihon and Talal International, the operations can be attributed to Israel. The latter incurs responsibility for the committed acts and has the duty to offer appropriate assurances and guarantees of non-repetition to the Palestinian population and to make full reparation for the injury caused.

Under the obligation to ensure respect of IHL as per Common Article 1 Geneva Conventions, Third and Home States hold the duty to prevent any actions by corporate actors that violate IHL rules and to ensure the latter’s respect. As a result, they have to conduct criminal investigations into the crimes committed, including through the cooperation with the ICC. As Home States, they hold the duty to exercise adequate oversight over business operations registered in their jurisdiction and prevent adverse human rights impacts potentially caused by these operations abroad. They should also mitigate already caused infringements on human rights, such as the right to water, and cease those business operations when mitigation is not possible. By not seizing the continuation of their involvement in those operations the Netherlands and Israel violate their obligations under the Geneva Conventions and under the UN Guiding Principles. They also have to offer appropriate assurances and guarantees of non-repetition to the Palestinian population and to make full reparation for the injury caused. All States that are High Contracting Parties to the Geneva Conventions, whether they are directly affected by the violations or not, have to cooperate to bring to an end through lawful means the violation of the right to self-determination as a jus cogens norm, and refrain from recognizing as lawful a situation created by this breach, nor render aid or assistance in maintaining that situation. Accordingly, States must immediately cease any business or economic activity with companies that support the overexploitation of water resources in the OPT, illegally appropriate these resources to the detriment of Palestinian communities, drive the expansion of water infrastructure to illegal Israeli settlements and serve the demolition and confiscation of Palestinian water structures. Ultimately, all states also have the right to vest universal jurisdiction in their national courts over war crimes, i.e. to prosecute regardless of where the crime was committed or of the nationality of the alleged perpetrator.

508 See UN Economic and Social Council (n. 382), para 17 (“the extension of such legislation to the occupied territories also has brought an appreciable change in the legal character and economic and social value of land ownership.”)
511 Article 8(2)(b)(xvi) Rome Statute.
512 Article 46, 53, 55 and 56 Hague Regulations and Article 53 of the Fourth Geneva Conventions and ICRC Rule 51.
In conclusion, there is a direct link between the violation of the rights of the Palestinian population under occupation and the interest in creating permanent relations of dependency and economic domination. While the financial and economic gains from the illegal appropriation of water in the OPT certainly contributes to the expansion of water-related business activities in the OPT, the use of discriminatory business tactics in the situation of prolonged occupation primarily underpins and exacerbates the water dependency of Palestinians prompted by Israeli practices of domination. For example, while the need for drinking water is often prioritized, the increasing scarcity of water for agricultural use is disastrous, as this is essential for the economic development and activities of the Palestinian population. In the Palestinian context, therefore, the appropriation of resources is not only lucrative for companies, but also operates as part of intentional racial policing, discrimination and creeping annexation that denies the occupied population its right to self-determination. Corporate actors operating in the OPT should bear in mind that compliance with IHL principles is essential in their operations, because IHL, in turn, affords protection to companies. Violating IHL and IHRL is not just a matter of breaching legal compliance, which can result in individual criminal liability- it also ultimately weakens the protection of companies themselves in the face of conflict and during occupation.

6. Recommendations

Based on the findings of the report, we propose the following recommendations:

To Mekorot:

a. Immediately cease any activities that contribute to pillaging water from Palestinian communities in the OPT;
b. Immediately cease the provision of water to illegal Israeli settlements, the confiscation and demolition of Palestinian water structures, and the overexploitation of transboundary water resources within and beyond the Green Line which deplete water resources available for Palestinians and cause irreparable environmental damage;
c. Cease any other operation that violates applicable IHL rules as well as the right to water and as a consequence, disengage from business relationships when adverse human rights impacts cannot be mitigated;
d. Cooperate with judicial mechanisms to hold managers accountable for the pillaging of Palestinian water resources;
e. Any water illegally extracted from the OPT and running through Mekorot’s water pipelines has to be provided to Palestinian communities for their free, accessible use in sufficient quantities and constantly available, in order to comply with Palestinians’ right to water. Where Mekorot provides water tanks due the lack of water system integration, these water tanks should be provided for free;
f. Groundwater development must be handed over to Palestinians for their input and consent on water distribution and development according to applicable international law.
Hagihon Company, IDE Technologies, Hyundai, Caterpillar Inc., JC Bamford Excavators Ltd., Volvo Car Group, and other corporate Actors involved in pillage and other violations of International Law must:

a. Stop any violations of international law, particularly complicity in the pillaging of water;

b. Identify and assess any actual or potential adverse human rights impacts with which you may be involved as a result of your business relationships with Mekorot.513

c. Prevent and mitigate adverse impacts on human rights 514 and, if already committed, cease those and provide effective and prompt remedies for the damage caused.515 This includes remedies, not only for individuals, but for collective people as a whole;516

d. Engage with applicable grievance mechanisms to enable individuals affected by adverse human rights impacts to access effective remedies.

To Palestinian Authority:

a. Initiate an intensive groundwater development instead of increasing the purchase of additional quantities of water provided by state and corporate actors since the import of water is not sustainable for comparatively poor Palestinian communities and cisterns and rainwater harvesting facilities implemented mostly by international donors do not compensate for the access to Palestinian autochthone groundwater resources;

b. Facilitate equal distribution of the Mountain Aquifer’s groundwater resources and the Palestinian Water Authority’s sovereignty over control of well pumping and spring flow, drilling of new wells and their proper maintenance.

513 UN Guiding Principles on Business and Human Rights, Principle 18.
514 UN Guiding Principles on Business and Human Rights, Principle 11, 13 (b).
To the Government of Israel:

a. Immediately cease and actively prevent the war crime of pillage and any corporate operations complicit in it;

b. Provide measures of restitution and reparation to Palestinian landowners and Palestinian communities that comply with international law standards;

c. Immediately halt the price increase for water supply through Mekorot and Gihon to Palestinian communities that consume water under their basic needs and bring an end to any commercial means to deal with Palestinians inalienable water rights;

d. Immediately allow for Palestinians to drill their own wells without any restrictions other than imposed by applicable international legal frameworks, e.g., international environmental law;

e. Stop the implementation of harsh restrictions on Palestinian planning and movement as well as water quotas, since these practices harm the livelihoods of the occupied Palestinian population and severely infringe upon their rights, including their right to self-determination;

f. Immediately allow for Palestinians full access to the Jordan River as they are full riparians and therefore are entitled to hold full access to a reasonable and equitable allocation of transboundary water resources;

g. Immediately grant access to the Mediterranean Sea for fishing, port development, and shipping and to the Dead Sea to Palestinian communities;

h. Offer appropriate assurances and guarantees of non-repetition to the Palestinian population and to make full reparation for the injury caused;

i. End the belligerent occupation and dismantle the apartheid regime over the Palestinian people as a whole.
To the international community, including the High Contracting Parties to the Geneva Conventions, and home States:

a. Ensure that Israel’s violations of international law do not remain unpunished and recourse be made to the relevant mechanisms of international accountability, including UN mechanisms and criminal justice;

b. Take concrete measures, including lawful countermeasures, to pressure Israel to halt its violations of international humanitarian and human rights law and not provide any form of assistance to such violations, including by maintaining business relationships with economic actors allegedly involved in pillage in the OPT;

c. Cooperate to bring to an end through lawful means the violation of the right to self-determination as jus cogens norm, and refrain from recognizing as lawful a situation created by this breach, nor render aid or assistance in maintaining that situation;

d. Ensure that business enterprises operating in conflict affected areas or cooperating with businesses operating in those contexts, are not involved with such human rights abuses by exerting adequate oversight and if necessary denying them access to public support and services.\(^5\)

To the European Union:

a. Act in accordance with its own guidelines on promoting compliance with international humanitarian law, which foresee the European Union’s responsibility to ensure Israel’s compliance with international humanitarian law provisions and provide for the possibility of adopting sanctions in case of their violation;

b. Adopt restrictive measures on the import of Israeli products originating from the settlements in the OPT, where the illegal appropriation of water resources was used for their irrigation and production, because of the serious violations of peremptory norms of international law that settlements and their related infrastructure entail, such as the violation of Palestinian right to self-determination. By allowing the entering of such products into their internal market, the EU and its national authorities are in breach of their duty of non-recognition of Israel’s unlawful conduct in the OPT. By trading goods coming from Israeli settlements, EU member states are actively cooperating and supporting the maintenance of the illegal situation created by the Israeli authorities in the occupied territory, in clear violation of their legal obligations under international law.

\(^5\) UN Guiding Principles, Guiding Principle 7(c).