

Dried Up

Mekorot's Involvement in the Israeli Occupation

WHO RESEARCH PROFITS CENTER

Dried Up:

Mekorot's Involvement in the Israeli Occupation

June 2023

Introduction	1
Israeli Control Over Water Resources	2
Jordan River and Mountain Aquifer Coastal Aquifer and Mount Hermon Aquifer Mediterranean - Water Desalination	3
Water in the West Bank	5
De-development and Captivity of the Palestinian Water Sector Discrimination in Water Prices Asymmetrical Allocation of Water Water Scarcity in the West Bank – Displacement Through Lack of Water Supply Destruction and Confiscation of Water Infrastructure and Equipment Masafer Yatta	
Mekorot in Service of Settlements	13
Settlement Agriculture in the Jordan Valley Israel's Water Master Plan – Connecting West Bank settlements to the Israeli National Wate Settlement Outposts The Fifth Water System to Jerusalem	r System14 15
Water in East Jerusalem	17
Gaza Mekorot – A Prime Beneficiary The Mediterranean – A Source of Livelihood	
The Syrian Golan	_
Settlement Production	
Water Inside the Green Line	22
Water in the Naqab Agriculture Health and Education	23
Mekorot in the World	24
An Overview of Mekorot's Global Activities	24

INTRODUCTION

Water is a fundamental element of human life.

"Mní wičhóni" or "Water is life", declares the Lakota phrase, central to the indigenous protest movement at Standing Rock, USA. Concurrently, control over water translates into political and economic power. This is especially so in the global context where water scarcity is a real concern.

Positioning itself as a global leader in the development of innovative technological solutions to global issues including homeland security, agriculture and technology, Israel has long been using water technology to whitewash its settler-colonial project.

According to the Israel Export Institute, Israel exports around US\$ 2 billion in water technologies annually.¹ As previous research by Who Profits and others have documented, these technological developments are predicated on and are enabled by the unhinged structural exploitation and dispossession of occupied Palestinian and Syrian people and their natural resources. Mekorot, Israel's National Water Company plays a critical role in advancing this agenda in the water sector.

Mekorot has an almost complete monopoly over water extraction and the supply of over 1.5 billion cubic meters of water to Israeli households and industry on both sides of the Green Line, in service of an Israeli water sector that is contingent on the exploitation of occupied natural resources, and the violation of Palestinian and Syrian communities' rights.

This report opens with a review of Israeli control over water resources across historic Palestine, examining Mekorot's role in facilitating Israel's regime of water apartheid, and the use of water policies to promote Israel's colonial settlement expansion and the displacement of Palestinian communities. Mekorot is a central facilitator of this embedded dispossession systematically denying adequate Palestinian access to water, leading to structured dependency and the captivity of the Palestinian water sector.

We then detail the implications of the de-development and captivity of the Palestinian water sector – a dependency Mekorot has a vested financial interest in maintaining.

Finally, we list the deals struck between Mekorot and governments around the world in recent years, used by Israel to advance its diplomatic efforts on a global scale - in the MENA region in particular - following the signing of the Abraham Accords.

MENA region in particular - following the signing of the Abraham Accords.

This publication will also highlight the role of Mekorot in implementing the Israeli Government's 2020 <u>Water Master Plan</u> to expand water facilities and double the water supply to settlements in the occupied West Bank.²

This report is a follow-up to the Who Profit's previous Flash Report - <u>Mekorot's Involvement in the</u> <u>Israeli Occupation</u>.

¹ Berkovich, Aviv. (n.d.). In a world thirsty for advanced water solutions - Israel can play a central role (Hebrew). Israel Export Institute.

² The Knesset. (2016, August 8). Foreign Affairs and Security Committee News (Hebrew).

ISRAELI CONTROL OVER WATER RESOURCES

Gaining control of and securing the exploitation of Palestinian and Syrian water resources is imperative to Israel's ongoing settler-colonial project. Control of this key resource directly fuels Israel's economic growth - the agricultural sector in particular - and has been used to systematically deny adequate Palestinian access to water, crippling both human and economic development. The takeover of water resources is integral to the settlement enterprise, land grabs and population displacement, and is a main pillar in the dispossession of Palestinians to this day.

Mekorot is a central facilitator of this embedded dispossession. Founded in 1937, Mekorot played a central role in the Zionist colonial project before the establishment of the Israeli state in 1948 by providing water and infrastructure for new settlement households and agriculture. The company took part in planning the Israeli future state's water plants and formulating the first national water plan as early as 1944.³ In the 1940s, Mekorot established its first water plant in the Naqab which was vital for the subsequent establishment of 11 Jewish settlements.⁴

Today, Israel holds exclusive control over all water resources between the Jordan River and the Mediterranean Sea (except for a short section of the Coastal Aquifer that runs under Gaza), including the Sea of Galilee and all water resources in the occupied Syrian Golan.⁵ The main source of benign natural water in historic Palestine is groundwater, originating from two main groundwater aquifers - the Mountain Aquifer and the Coastal Aquifer.

Jordan River and Mountain Aquifer

The Mountain Aquifer is the main and highest-quality groundwater basin in the region.⁶ It is located west of the Jordan River, covering a central area of the West Bank and extending across both sides of the Green Line. The natural outlets for the subterranean waters are springs located along the western foothills and the Jordan Valley area in the West Bank.⁷

Since Israel's occupation of the West Bank in 1967, Israeli authorities have denied Palestinians access to water from the Jordan River (the only above-ground water basin in the West Bank) making the Mountain Aquifer the only water resource available to Palestinians in the West Bank. In 1967, Israel also imposed strict policies controlling the use of the Mountain Aquifer and has since extended its control over the aquifer, plundering its resources for Israelis on both sides of the Green Line.

Groundwater and surface water are the central resources of the Israeli water sector⁸ - the Mountain Aquifer is the main groundwater reservoir used by the Israeli water system, with 87% of its water used by Israelis and only 13% by Palestinians as of 2021.⁹

³ The Central Zionist Archives. From the drawing table to the ceremony stage (Hebrew).

⁴ Mekorot. Our History (Hebrew).

⁵ B'Tselem. (2017, November 11). <u>Water Crisis</u>. Updated 2021, June 3

⁶ Tzafrir, Rinat. (2002, October 6). The Western Mountain Aquifer is at risk of rapid salinization (Hebrew). Haaretz.

⁷ Harpaz, Y., Haddad, M., & Arlosoroff, S. (2001). Overview of the Mountain Aquifer A Shared Israeli-Palestinian Resource. <u>Management of Shared Groundwater</u> <u>Resources: The Israeli-Palestinian Case with an International Perspective</u>, 43–56.

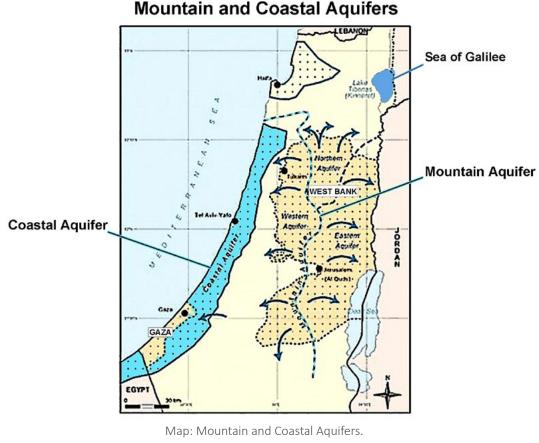
⁸ Varon, Guy. (2020, December 15). 1,500 meters underground: the water drilling that will save agriculture in the Golan (Hebrew). N12

⁹ Palestinian access to water & attacks on WASH structures in Area C- occupied Palestinian territory. (2021, May 3). ReliefWeb.

Coastal Aquifer and Mount Hermon Aquifer

The Coastal Aquifer basin stretches along the eastern Mediterranean coast from the northern Sinai Peninsula in Egypt, via Gaza to Mount Carmel in the north.¹⁰

The Mount Hermon Aquifer in the occupied Syrian Golan is the main source of water for the Jordan River.



Source: European Parliamentary Research Service (EPRS)

Of the 2 billion cubic meters of natural and desalinated water consumed by Israel annually, about 50% originates from pumping groundwater produced from drilling in aquifers.

Mekorot pumps about two-thirds of all drilling water.¹¹ As of 2023, Mekorot has 45¹² drillings in the occupied West Bank.¹³

^{10 &}lt;u>Coastal Aquifer Basin</u> | Inventory of Shared Water Resources in Western Asia. (2013). Waterinventory.org.

¹¹ Mekorot. (2020, March 3). *Photos* [Facebook page]. Facebook. Retrieved February 19, 2023, from <u>https://www.facebook.com/mekorot.il/photos</u> /a.112888366868307/142663340557476/?type=3

¹² Webpage inactive as of January 2023

¹³ The Government Water and Sewage Authority. (2018, November 27). Water Authority drilling (Hebrew) [Data set]. Last updated 1 January 2023

Mediterranean - Water Desalination

In 2000, the Israeli government introduced a long-term, large-scale seawater desalination plan aimed to increase Israel's water reserves.¹⁴

In 2018, the Israeli government passed Resolution No.3866, Strategic plan for dealing with periods of drought in the water sector in the years 2018–2030.¹⁵ According to the plan, the government will act to increase the supply of desalinated water to 1.1 billion cubic meters by 2030. Between 2020 and 2021, 533 million cubic meters (hereafter: MCM) of Israeli water consumption was comprised of desalinated seawater,¹⁶ and as of today, some 75% of the water Israel consumes comes directly from the Mediterranean.

Israel's enormous desalination capacity has allowed it to integrate this into its export diplomacy, as part of measures designed to enhance and normalize its political power in the region. In November 2021, Israel and Jordan signed an agreement, through which Israel will supply up to 200 MCM of desalinated water to Jordan in exchange for 600 megawatts of solar electricity provided by Jordan.¹⁷ In March 2021, Mekorot signed an agreement to develop and upgrade the water economy of the Kingdom of Bahrain, the first of its kind for an Israeli-government company, which leveraged the Abraham Accords signed that year. Under the agreement, signed with the Bahrain Electricity and Water Authority, Mekorot will provide consulting, planning, and support services in several fields, including seawater and brackish water desalination.¹⁸

While Israel utilizes its access to the Mediterranean for its own economic and geopolitical interests, Palestinians in the West Bank have no access to the Mediterranean at all, while Gaza's access to the sea is extremely limited - when permitted. Gaza's besieged residents have access only to its coastline and a one-nautical mile strip of the sea at each end of it and have varying restrictions on sea access that range from three to nine nautical miles off the coast.¹⁹

Israel arbitrarily restricts access to Gaza's territorial waters - sometimes amounting to a full maritime closure - as a means of punishment and exerting pressure on the population.²⁰ These restrictions are enforced by the Israeli Navy patrolling the sea offshore Gaza's coast, using live fire against vessels and fishermen.²¹

¹⁴ Tal, Dalia. (2020, December 3). <u>A plan for the desalination of 117 million cubic meters of brackish water in six facilities</u>. (Hebrew). *Globes*.

¹⁵ Prime Minister's Office. (2018, June 10). A strategic plan to deal with periods of drought in the water sector in the years 2018 – 2030 (Hebrew).

¹⁶ Central Bureau of Statistics. (2022). Israel in numbers, selected data from the Statistical Yearbook for Israel 2022 (Hebrew).

¹⁷ Fischer, Israel. (2021, November 22). Israel and Jordan signed an electricity for water agreement, now the questions arise (Hebrew). The Marker.

¹⁸ Mekorot. International Operations.

¹⁹ Gisha. (2021, September 1). Gaza Up Close.

²⁰ Ibid.

²¹ Adalah. (2021, April 29). Human rights organizations demanded to cancel the closure of the fishing area of the Gaza Strip (Hebrew).

WATER IN THE WEST BANK

Not long after the Israeli occupation of the West Bank, including East Jerusalem and Gaza in June 1967, the Israeli military authorities consolidated total control over all water resources and water-related infrastructure in the occupied Palestinian territory (hereafter: oPt).

On August 15, 1967, the Israeli military General of Central Command and commander of the Israeli military forces in the West Bank area issued Military Order No.92: Concerning Powers Regarding Water Laws (West Bank area), 1967.²² The order transferred authority over all water laws and regulations in the area starting from June 7, 1967, to the Israeli military commander. In November 1967, the Israeli military authorities issued Military Order No.158, compelling Palestinians to obtain a permit from the military commander to operate any water facility or to build a new facility.²³ According to this order, the operation of any facility or structure intended for the extraction of water, including drilling or the diversion of water from any water source, requires a license from the Israeli military. Already existing facilities also required a license to continue their activities.²⁴ The military commander of any facility providing a reason and may revoke the license, change it, or change any of its conditions at any given time. Violation of the order conditions is punishable by six months in prison, or a fine.

Following the establishment of the Israeli Civil Administration (hereafter: ICA) in 1981 through the authority of the military commander²⁵ a water officer acting on its behalf was appointed to implement the water laws, including enforcement matters.²⁶

In 1982, West Bank water infrastructure, then controlled by the Israeli military, was handed over to Mekorot through a military order.²⁷ Today, Mekorot's operations in the West Bank are under the supervision of the ICA. The company carries out maintenance, operation, and development of the water system in Area C,²⁸ primarily for Israeli settlements in the area. Mekorot also takes part in ICA and military activities monitoring and limiting Palestinian use of water in the occupied West Bank²⁹ by operating special measures used to detect alleged 'water theft' by Palestinian communities thirsty for water.³⁰

Such means include active participation in disconnecting Palestinian water connections in cooperation with the Israeli Police and military,³¹ as well as the development and use of security-based technologies in the occupied West Bank³² targeting those trying to obtain water to survive.

In October 2020, the Israeli Ministry of Water Resources approved Mekorot's plan to thread a smart

²² Legal advisor for the Judea and Samaria region. (1967, August 15). Order No. 92: Decree regarding powers in the matter of water laws (Hebrew).

²³ Amnesty International. (2017, November 29). The Occupation of Water.

²⁴ IDF. (1969, December 29). Proclamations, orders and appointments of the headquarters of the IDF forces in the West Bank region (Arabic and Hebrew).

²⁵ Government of Israel. (1981). Decree concerning the establishment of a Civil Administration (Judea and Samaria) (No. 947) (Hebrew).

²⁶ Shomron Regional Council. (2015, June 11). <u>Issues regarding the powers, duties and rights of the localities of the Shomron Regional Council- cooperative societies and local committees as "water suppliers"</u> (Hebrew).

²⁷ Who Profits. (2013, December). Mekorot's Involvement in the Israeli Occupation.

²⁸ The Ministry of Defense. (n.d.) The Civil Administration in the West Bank. Water (Hebrew).

²⁹ The Ministry of Defense. (2021, February 22). The Civil Administration cut off pirate water connections in the Alon axis (Hebrew).

³⁰ Bartov, Aviad. (2019, July 15). 32 suspects arrested on suspicion of water theft in the Hebron area. tcity. (Hebrew).

³¹ Granz, Nati. (2010, August 29). Water war: The Ministry of Infrastructure has declared an all-out war on water theft in Judea and Samaria. Tashtiot Industry and energy infrastructure portal (Hebrew).

³² Bareket, Amiram (2020, October 7). Mekorot will invest NIS 30 million in switching to the use of an optical fiber network (Hebrew). Globes.

fiber optics system in its pipeline infrastructure³³ spread over an estimated 12,000 km,³⁴ including Area C in the occupied West Bank.³⁵ The project was estimated to reach a total cost of approximately 100 million Israeli Shekel (hereafter: NIS) over five years.³⁶

The system is used to monitor Mekorot's pipelines and alert attempts at unauthorized use.³⁷ The optical fiber cables are laid in the ground next to the water line every few kilometers and can detect changes in water pressure sensors up to five meters from it. The system is connected to Mekorot command and control systems that can cross-reference data and send a team to the area.³⁸ According to Mekorot, the technology is based on an Israeli military technology used in Lebanon.³⁹

Before the approval of the plan, Mekorot tested the use of optical fibers in the occupied West Bank.⁴⁰ In January 2021, Mekorot deployed the optical fiber system along the route of a new 27km water line connecting the Barkan, Elkana, and Ariel settlements to the Tapuach, Shilo and Elon Moreh settlements.⁴¹ The system was also deployed in the Jordan Valley.⁴²

In addition to monitoring water piping, the fibers will be used to expand the provision of telecommunication infrastructure to settlements in the West Bank. In December 2022, the Minister of Communications approved Mekorot's leasing of its fiber infrastructure to telecommunication companies.⁴³ This will allow communication companies access to Mekorot's infrastructure in remote areas in the occupied West Bank without the need for approval from the ICA to establish new infrastructure, allowing them to provide their services to the settlements at a much lower cost.⁴⁴ According to estimates, this infrastructure has the potential to generate revenue for Mekorot of around NIS 70 million from each lessee company.⁴⁵

De-development and Captivity of the Palestinian Water Sector

The Paris Protocols cemented Israel's domination over the region's water resources through the terms of Article 40 of the Oslo II Accord of 1995, by codifying Israeli restrictions on Palestinian movement and access to infrastructure equipment, and mandating Israeli-issued permits for all water structures in Area C.⁴⁶ Area C, which is under full Israeli military control, constitutes over 60% of the West Bank and contains the majority of agricultural land, water sources and underground reservoirs of the oPt.⁴⁷

³³ Ibid.

³⁴ Abou, Avior. (2021, April 11). Mekorot will compete with Bezeq: will lease fiber infrastructure (Hebrew). Calcalist.

³⁵ Bergman, Roi. (2021, September 9). Mekorot will deploy optical fiber to Eilat through the water pipeline (Hebrew). Calcalist.

³⁶ Abou, Avior. (2021, April 11). Mekorot will compete with Bezeq: will lease fiber infrastructure (Hebrew). Calcalist.

³⁷ Bergman, Roi. (2021, September 9). Mekorot will deploy optical fiber to Eilat through the water pipeline (Hebrew). Calcalist.

³⁸ Raviv, Erez. (2020, October 7). Possibility of fast communication in the periphery: Mekorot plans to deploy optical fibers in the water pipelines to prevent leaks (Hebrew). Davar.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Peretz, Gad. (2022, January 27). Sources are in talks towards obtaining a communication license (Hebrew). Globes.

⁴² Fischer, Israel. (2021, April 11). Instead of Bezeq's canals: Partner and Cellcom are in talks with sources about the retirement of optical fibers (Hebrew). The Marker.

⁴³ Mosteki, Adiel Eitan. (2022, December 26). Not only water and road: Mekorot and Ayalon Highways will be able to provide fiber infrastructure (Hebrew). Calcalist.

⁴⁴ Fischer, Israel. (2021, April 11). Instead of Bezeq's canals: Partner and Cellcom are in talks with sources about the retirement of optical fibers (Hebrew). The Marker.

⁴⁵ Abou, Avior. (2021, April 11). Mekorot will compete with Bezeq: will lease fiber infrastructure (Hebrew). Calcalist.

⁴⁶ Aviram, Ram; Hindi, Ahmad & Abu Hammour, Saad. (2020, December 14) Coping with Water Scarcity in the Jordan River Basin. The Century Foundation.

⁴⁷ Nations, Human Rights Council. (2021, September 23). The allocation of water resources in the Occupied Palestinian Territory, including East Jerusalem: Report of the United Nations High Commissioner for Human Rights.

The Oslo Accords stipulate that 80% of the water pumped from the Mountain Aquifer in the West Bank will be allocated for Israeli use, with the remaining 20% for Palestinian use. Under the agreement, Israelis enjoy an unlimited water supply while Palestinian supply is restricted to a predetermined amount.⁴⁸

Through constraints on the Joint Water Committee (hereafter: JWC), created through the Oslo Accords, Israel has systematically blocked Palestinian water development and maintenance projects, including the extraction of groundwater without Israeli approval - thus in practice, Palestinians extract even less water than that specified in the agreement.⁴⁹ This is done through the restriction of Palestinian access to large parts of the West Bank by settlements, apartheid roads, settlement infrastructure, and closed military zones, and restrictions on the import of equipment needed for drilling and pumping water, which require approval by Israeli military authorities.⁵⁰ This equipment includes drills for water wells, deep pumps, and steel pipes for drilling casing, among other things.⁵¹

Two decades after the interim agreement period ended, it continues to govern the Palestinian water sector today, now completely dependent on Israel for water connection infrastructure to Palestinian villages and towns, in a system facilitated by Mekorot.

Prevented from maintaining independent infrastructure and denied sufficient water supply, the Palestinian Water Authority (PWA) is forced to purchase its water from Mekorot,⁵² acting as a mere middleman and "money collector" for the company.

Israel's control over Area C enables the plunder of its natural resources, for the use of Israelis on both sides of the Green Line, facilitated by Mekorot which enjoys almost unlimited access to water resources in the West Bank. In 2021, more than 80% of the annual water supply of the West Bank, 91 MCM, was purchased from Mekorot,⁵³ much of which has been extracted from the Mountain Aquifer within the West Bank. In 2021, water sales to the Palestinian Authority (and Jordan) increased by 31% compared to 2020.⁵⁴

As the largest water supplier in the oPt, Mekorot collects huge sums of money from the sale of defined quantities of water to the Palestinian Authority (hereafter: PA) according to the rate determined in the Water Agreement Price Protocol.⁵⁵ In 2020 and 2021, Mekorot's annual revenue under the agreement for water supply in the oPt was around NIS 268 million and about NIS 287 million, respectively.⁵⁶ This does not include additional payment for any quantity beyond the 46,169 MCM defined in the water agreement, charged according to a marginal rate of NIS 3.607 per cubic meter.⁵⁷

The amount charged to the Palestinian Authority for water consumption is deducted every month by the Israel Tax Authority⁵⁸ from the Palestinian tax revenues Israel collects on its behalf and holds

⁴⁸ B'Tselem. (2017, November 11). <u>Water Crisis</u>. Updated 2021, June 3

⁴⁹ Ibid.

⁵⁰ The Ministry of Defense. (2020, August 31). The Civil Administration in the West Bank. Online forms for Judea and Samaria (Hebrew).

⁵¹ Chamber of Commerce; Peres Center for Peace and Innovation; Norwegian Embassy. (2015). Israelis and Palestinians do business (Hebrew).

⁵² State of Palestine Water Authority. (2022, March 22). The Palestinian Water Authority (PWA) and the Palestinian Central Bureau of Statistics (PCBS) Issue a joint Press Release on the Occasion of the World Water Day.

⁵³ United Nations, Human Rights Council. (2021, September 23). The allocation of water resources in the Occupied Palestinian Territory, including East Jerusalem: Report of the United Nations High Commissioner for Human Rights.

⁵⁴ Liberman, Guy. (2021, November 23). Mekorot: 10% of the water supply in 2021 was provided to Jordan and the Palestinian Authority (Hebrew). Globes.

⁵⁵ State of Israel Water Authority. (2009, March). <u>The Issue of Water between Israel and the Palestinians</u>.

⁵⁶ Mekorot. 2021 <u>Annual Report</u>.

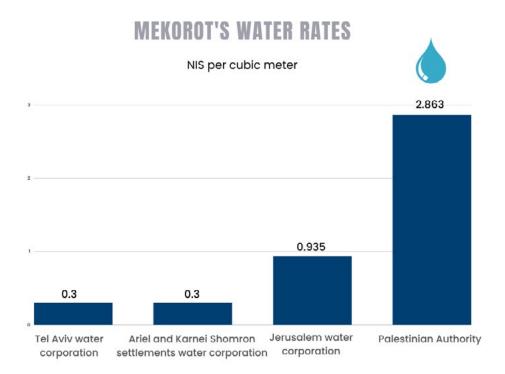
⁵⁷ State Comptroller. (2020). Reports on the audit in local government 2020: Selected issues in the water sector in the Shomron.

⁵⁸ Ibid.

hostage. Israel's withholding of Palestinian clearance revenues is repeatedly weaponized and used as a punitive measure against the Palestinian Authority to exert political pressure. In this way, the Palestinian water sector's constant debt serves Israel's colonial domination while generating profits for Israeli corporations and draining the Palestinian budget.

Discrimination in Water Prices

Not only are Palestinians forced to purchase water originating on their land from Mekorot, but the company also charges them higher rates than Israelis. Mekorot sells water to the PA at NIS 2.863 per cubic meter,⁵⁹ while Israeli water corporations providing water to Israelis on both sides of the Green Line enjoy significantly lower rates.⁶⁰ In comparison, Yuvalim BaShomron, the water corporation owned by the Ariel settlement municipality, and the Karnei Shomron settlement local council, pay Mekorot NIS 0.3⁶¹ per cubic meter.⁶² Mei Avivim, the water corporation owned by the Tel-Aviv-Jaffa municipality, pays the same amount. Hagihon Company, which provides water to the Jerusalem area, including Israeli settlements and settlement neighborhoods in occupied East Jerusalem and several settlements in the West Bank, pays NIS 0.935 per cubic meter.⁶³ The company also sells the water it purchases from Mekorot to the PA and the Ramallah water factory.⁶⁴



⁵⁹ NIS 2.8 per cubic meter up to the permitted amount (46,169 million cubic meters) and NIS 3.607 beyond the permitted amount.

63 Ibid.

⁶⁰ State Comptroller. (2020). <u>Reports on the audit in local government 2020: Selected issues in the water sector in the Shomron</u>.

⁶¹ No VAT

⁶² The Government Authority for Water and Sewerage. (2023, January). The Water and Sewerage Tariff Book Tariffs for water and sewerage consumers (Mekorot, local suppliers and corporations).

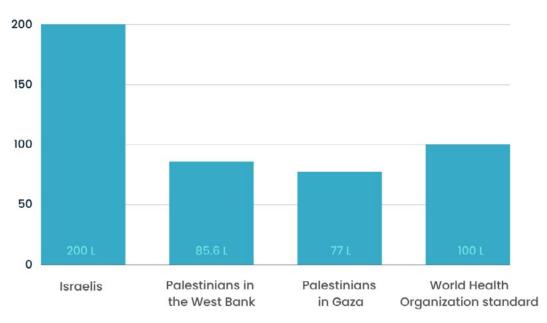
⁶⁴ Hagihon Company. (2018). Annual Report.

Asymmetrical Allocation of Water

Water dependency and the captivity of the Palestinian water sector enable Israel to systematically deny Palestinians access to adequate water.

While the average Israeli water consumption per person is about 200 liters of water per day,⁶⁵ the daily allocation per person is only 85.6 liters in the West Bank and 77 liters of water per day in Gaza. Thus, the average Palestinian water consumption per capita is less than the minimum recommended level globally, according to the 100 liters per day standard of the World Health Organization.⁶⁶

Despite paying higher rates, Mekorot prioritizes Israeli settlements over the Palestinian communities dependent on the company's network. Palestinian communities in the West Bank frequently suffer from a restricted water supply, reduced flow and pressure, and lengthy water outages, while neighboring Israeli settlements enjoy an unrestricted water supply. For example, Israeli settlers in the settlement of Ma'ale Adumim have access to a water supply roughly four times greater than that of Palestinians in East Jerusalem.⁶⁷



DAILY WATER CONSUMPTION

Liters of water per person

⁶⁵ Mei Avivim. (n.d.) <u>Water consumption and rates: Excessive water consumption</u> (Hebrew).

⁶⁶ The Palestinian Central Bureau of Statistics. (2021, March 22). <u>The Palestinian Central Bureau of Statistics (PCBS), and the Palestinian Water Authority (PWA)</u> <u>Issue a joint Press Release on the Occasion of World Water Day</u>.

⁶⁷ Amnesty International. (2017, November 29). The Occupation of Water.

Denial of Palestinian access to water impacts Palestinian industries and productive sectors, leading to further dependence on, and the captivity of the overall Palestinian economy in Israel. The effects are particularly visible in the agricultural sector which is largely dependent on water for irrigation. Palestinian use of water for agriculture is estimated to be about a tenth of Israel's use.⁶⁸ This has had a devastating impact on the sector's production and profitability. Lack of water ultimately leads to economic collapse from unemployment and food insecurity, which affect social aspects and have severe environmental and public health consequences. This, in turn, results in inadequate access to services, establishing structural impediments to economic and social development. Israel thus utilizes its control over resources, including water, to advance its geopolitical agenda of control and economic development.

Water Scarcity in the West Bank – Displacement Through Lack of Water Supply

Roughly 14,000 Palestinians living in approximately 180 communities in Area C have no connection to a water network and are without water infrastructure,⁶⁹ a practice mobilized as part of a multitude of mechanisms to drive Palestinians off their land.

As a result of the extensive extraction from the Mountain Aquifer by Mekorot, water resources in the West Bank are drying out, resulting in reduced water quantity in springs and wells,⁷⁰ which are the main water resource for rural communities not connected to a water network or those that are poorly supplied. Many Palestinian communities not connected to the water grid have no choice but to purchase water tanks at much higher prices - reaching up to US\$ 100 for a water tank,⁷¹ which many can't afford.

Destruction and Confiscation of Water Infrastructure and Equipment

Israeli authorities regularly confiscate and destroy Palestinian water infrastructure - water pipelines, and water tanks, including property provided as humanitarian aid.⁷² In the first six weeks of 2023 alone, the Israeli military demolished dozens of water tanks and confiscated water equipment in at least six Palestinian villages in the occupied West Bank.⁷³ These measures form just one mechanism of forced displacement.

In January 2023, the Israeli military demolished a swimming pool and damaged 13 water tanks in the village of 'Ein a-Duyuk a-Tahta, west of Jericho, confiscated a digger used to clean a water reservoir in the village of Furush Beit Dajan in the central Jordan Valley, demolished the homes of two families, and destroyed their water tanks and a power grid belonging to them in the village of al-Jiftlik in

⁶⁸ United Nations Conference on Trade and Development. (2015). The Besieged Palestinian Agricultural Sector.

⁶⁹ Ibid.

⁷⁰ Amnesty International. (2017, November 29). The Occupation of Water.

⁷¹ Najib, Mohammed. (2018, July 2022). Palestinian residents in West Bank facing severe water crisis. Arab News.

⁷² United Nations Office for the Coordination of Humanitarian Affairs. Demolitions in West Bank undermine access to water. (2019, April 15). <u>Rate increases in first</u> <u>quarter of 2019</u>.

⁷³ Btselem. (2023, February 14). Facing Expulsion.

the central Jordan Valley, and sealed a well in the town of al-Mughayyer, northeast of Ramallah.⁷⁴ In the first half of February 2023, the Israeli military destroyed two water tanks in the village of Fasayil al-Wasta in the Jordan Valley and demolished a rainwater cistern used for irrigation in the village of al-Buweib in the South Hebron Hills.⁷⁵



Demolition of a rainwater cistern in al-Buweib in the South Hebron Hills. Photo by Nasser Nawaj'ah, B'Tselem, 12 February 2023.

Masafer Yatta

Many of the communities in the West Bank enduring these policies and restrictions are communities facing imminent expulsion by Israeli authorities. In the Masafer Yatta area in the South Hebron Hills, more than 1,000 of the area's residents are facing forcible expulsion, approved by Israel's High Court, following the designation of their land to be used by the Israeli military as a firing zone. Israel prohibited these communities from connecting to power and water grids⁷⁶ and has repeatedly demolished homes,⁷⁷ classrooms,⁷⁸ and agricultural structures⁷⁹ belonging to the area's residents, including water wells and equipment. In January 2023, Israeli authorities gave notification of the intended demolition of three water wells belonging to a resident.⁸⁰ This adds to the military's razing of four water wells

- 78 Btselem. (2022, November 23). Israel demolishes school in Masafer Yatta as part of effort to drive Palestinians out of area.
- 79 POICA. (2021, December 2). The Occupation Demolished Residential and Agricultural Structures in Masafer Yatta / South Hebron.

⁷⁴ Wafa Palestine News Agency. (2023, January 4). Israeli forces demolish structure, seal water well and uproot olive saplings near Ramallah. Wafa.

⁷⁵ Btselem. (2023, May 10). Facing Expulsion.

⁷⁶ Btselem. (2023, January 2). Press Release: Fast-tracked war crime: Israel informs Palestinians from Masafer Yatta of imminent expulsion.

⁷⁷ United Nations Office for the Coordination of Humanitarian Affairs. (2022, July 6). Fact sheet: Masafer Yatta communities at risk of forcible transfer.

⁸⁰ The Palestinian Return Centre. (2023, January 8). Israel Orders Demolition of Five Palestinian Homes, 3 Water Wells in Masafer Yatta.

in the area,⁸¹ the destruction of a water pipe that served fifteen families,⁸² and the cutting of water supply lines.⁸³

Control over water resources has been an integral part of Israel's strategic decision-making on where to establish settlements and the expansion of its settlement enterprise. It is not by chance that the construction of settlement blocks took place in areas containing the majority of agricultural land, water sources, and underground reservoirs of the West Bank. Israeli settlements significantly impact Palestinian access to natural resources through land grabs, expropriation of Palestinian water springs and wells, and creation of a buffer that physically separates Palestinians from their water sources.⁸⁴

Israel's construction of the Apartheid Wall in the West Bank, which began in 2002, consolidated Israeli control over the water in the so-called Seam Zone area, further isolating Palestinian communities from their water sources, leaving over 150 wells and dozens of springs west of the wall.⁸⁵ The route of the Wall strategically leaves the majority of the Western Mountain Aquifer trapped between the Wall and the Green Line, giving Israel additional control over the basin and annexing the mass of the Western Aquifer.⁸⁶



Confiscation of water containers in al-Jawaya, southeast of the town of Yatta in the South Hebron Hills. B'Tselem, 19 July 2022.

⁸¹ Middle East Monitor. (2022, July 8). Israeli forces raze four water wells in Masafer Yatta, south of Hebron, in the southern West Bank. Middle East Monitor.

⁸² Btselem. (2021, June 16). Israeli military again destroys roads to Masafer Yatta communities and water pipe serving one.

⁸³ Btselem. (2020, October 29). Israel destroys water supply line in Masafer Yatta, South Hebron Hills.

⁸⁴ United Nations Office for the Coordination of Humanitarian Affairs. (2016, November 11). At risk of settler takeover – 'Ein Fera'a water spring in Hebron.

⁸⁵ Ibheis, Hasan & Ayad, Khaled. (2012). The Separation Wall: Israel's Complete Apartheid. Al-Zaytouna Centre for Studies and Consultations.

⁸⁶ Tramel, Salena. (2008, July 20). <u>West Bank wall elevates barrier to water access for Palestinians</u>. *Reliefweb*.

MEKOROT IN SERVICE OF SETTLEMENTS

Mekorot carries out enormous infrastructure projects in advance of Israeli plans to connect its settlements to the National Water System to ease water access for settlements in an attempt to apply de facto sovereignty in the West Bank.⁸⁷

Settlement Agriculture in the Jordan Valley

Water is essential for settlement production and agriculture, which constitute an important pillar for the profitable settlement-based Israeli export sector and the Israeli occupation economy itself.

Such is the case of the Jordan Valley and the northern part of the Dead Sea, where some of the most fertile areas in the West Bank are located and which is home to the Israeli date industry. Israel produces about 50,000 tons of dates⁸⁸ annually, the majority of which originate from plantations in the northern Dead Sea and the Jordan Valley in the West Bank. Israel exports about 28,000 tons of dates per year, about 50% of its total production. The majority of Medjool dates in Europe are imported from Israel.⁸⁹ Date palm trees require large amounts of water, about 1 cubic meter of water per day for at least two months.⁹⁰

In 2020, the Israeli Water Authority approved the connection of the Jordan Valley settlements to Mekorot's National Water System in addition to a project to transport water from the Sea of Galilee for the benefit of the agricultural associations operating in the Jordan Valley.⁹¹ In March 2021, Mekorot completed the nine-month construction of new water infrastructure stretching around 40 km connecting the northern Dead Sea in the Jordan Valley north to the National Water System at an estimated cost of NIS 50 million.⁹² This project is meant to increase the water supply to settlement agriculture by an additional 4 MCM of water per year in preparation for the irrigation season.⁹³

Water consumption rates in Israeli settlements focusing on agriculture reach 300-440 liters/per capita/per day, while water consumption for some Palestinian communities drops to less than 50 liters/ per capita/per day.⁹⁴ Israeli settlement agriculture enjoys unlimited access to affordable water, while nearby rural Palestinian communities are struggling for their lives, facing water scarcity due to access restrictions imposed by the Israeli authorities, poor infrastructure, and the threat of confiscation of existing infrastructure.

⁸⁷ Segal, Amit. (2020, June 16). For the first time: Mekorot company connects Judea and Samaria to the national water system (Hebrew). tcity.

⁸⁸ Swart, Clayton. (2022, August 12). Israel date season starts with Medjool production to return to normal. Fresh Plaza.

⁸⁹ Twig, Gal. (2021, December). Dates Marketing, Date Growers conference. The Plants Production and Marketing Board.

⁹⁰ Gabizon, Yoram. (2021, May 16). Arava farmers' gamble made them rich- but soon the dream could turn into a nightmare (Hebrew). The Marker.

⁹¹ Gutman, Lior. (2020, September 30). Water Authority Council: The Jordan Valley will be connected to the national system of sources (Hebrew). Calcalist.

⁹² Etinger, Amir. (2021, March 22). The Jordan Valley was connected to the national water system for the first time (Hebrew). Srugim.

⁹³ Maariv Online. (2021, March 22). Mekorot company connected the Jordan Valley to the National Water System for the first time (Hebrew). Maariv.

⁹⁴ United Nations Office for the Coordination of Humanitarian Affairs. (2021, June 22). Palestinians strive to access water in the Jordan Valley.

Israel's Water Master Plan – Connecting West Bank settlements to the Israeli National Water System

Access to cheap and plentiful water is integral to sustaining and expanding the settlement project, enabling viable industry and acting as an incentive for both people and businesses to populate settlements.

In 2012, the Planning Division of the Water Authority prepared a "Master Plan for Water and Sewerage for the Israeli Systems in the West Bank" to expand the scope of water supply to the settlements and settlement industry. The plan was designed to formulate solutions for the development of the water supply systems, sewage treatment facilities, and reclamation systems for Israeli settlements in the occupied West Bank in two phases, based on consumption forecasts for the years 2030 and 2050.

The preparation of the plan was accompanied by a steering team that included Mekorot company personnel and representatives from Israeli settlements and from the Israeli Civil Administration, which estimated the total investment in the first phase of the plan (until 2030) at approximately NIS 741 million. The main components of the plan include the expansion of water lines (costing about NIS 480 million), investments in water storage (costing about NIS 138 million), and investments in pumping stations (costing about NIS 122 million). The steering team predicted that by 2030, the population in the West Bank is expected to number approximately 3.32 million residents, 580,000 of them in Jewish settlements.

In June 2020, Mekorot inaugurated a new water line connecting the West Bank to the National Water System as part of the implementation of the Master Plan.⁹⁵ The new line stretches from the settlement of Alfei Menashe to the settlement of Elkana, adding a daily amount of around 6,000 MCM allocated from the National Water System to settlement localities for residential and agricultural use.⁹⁶ In addition, the company inaugurated a new pumping station in the Barkan settlement industrial zone, which will transfer water to settlements in the east of the West Bank.⁹⁷ The station is connected to the National Water Carrier from the town of Elishema in central Israel.⁹⁸

Within the framework of the plan, the Hotze Shomron facility, the main water facility in the central West Bank area will be upgraded to supply about 25.5 MCM of water per year and around 105.5 thousand cubic meters of water on a peak day. Its upgrade began in 2019 with the laying of the new Hotze Shomron (Cross West Bank) 30 km long water line connecting the National Water Carrier at a pumping station near the city of Kfar Saba, west of the Green Line, to a pumping station near the set-tlement of Kfar Tapuach in the center of the West Bank, located about 30 km east of the Green Line.⁹⁹

⁹⁵ Segal, Amit. (2020, June 16). For the first time: Mekorot company connects Judea and Samaria to the national water system (Hebrew). tcity.

⁹⁶ Ibid.

⁹⁷ Now14 Desk. (2020, June 6). <u>Applying Sovereignty in Practice: Judea and Samaria was connected to the national water system this morning</u> (Hebrew). *Now14 Desk*.

⁹⁸ Raviv, Erez. (2021, March 24). Mekorot accelerated its investments in the development of the water sector (Hebrew). Davar.

⁹⁹ Mekorot. (2019, January 24). MS Mekorot Projects Posts. [Facebook page]. Facebook. Retrieved February 19, 2023, from https://www.facebook.com/ems.mekorot/posts/2173956279334517/



Mekorot work site for a distribution line to the Karnei Shomron settlement near Highway 55 (Trans-Samaria Highway), West Bank. Photo by Who Profits, 29 November 2021.

The project also includes the upgrading and expansion of three water facilities in the West Bank providing water to settlements - the Nave water facility, supplying water to the settlement of Kdumim, the Northern Gav HaHar facility, supplying water produced from drilling in the settlements of Tapuach and Horon to the area's settlements, and the Southern Mountain facility supplying water to the settlements of Ali, Shiloh, Shvut Rahel, Migdalim and Ma'ale Levona.

Along with the advancement of the long-term master plan, Mekorot has increased the amount of water supplied for domestic and agricultural use in settlements in recent years through different infrastructure projects designed to fill the gaps between the demand for water and the existing supply in settlements. These included drilling new water wells near the settlements of Ariel and Kadumim; the operation of the Na'ale water station in the Mateh Binyamin settlement Regional Council, and the operation of the Shivtin 5 water station, which supplies water to the Hotze Shomron area.

Settlement Outposts

Mekorot also supplies water to "unauthorized" Israeli settlement outposts in the occupied West Bank,¹⁰⁰ some of which are built on privately owned Palestinian land. Such is the case of Ma'on Farm, and Avigayil and Mitzpe Ya'ir settlement outposts, all partially built on private Palestinian land¹⁰¹ and connected directly to Mekorot's water network.¹⁰² In Mitzpe Ya'ir, the outpost's main water line connecting to Mekorot infrastructure is laid on private Palestinian land.¹⁰³

- 100 Prime Minister's Office. (2005, March 10). Summary of the Opinion Concerning Unauthorized Outposts.
- 101 Peace Now. (2007). Breaking the Law.
- 102 Ziv, Oren & Younis, Rami. (2019, February 21). The army destroyed a water pipe to Palestinian villages to push them out (Hebrew). Local Call.
- 103 Breaking the Silence. <u>Testimonies. There is no such thing as an "illegal outpost"</u> (Hebrew). Retrieved March 2023

The Fifth Water System to Jerusalem

Water also makes its way west of the Green Line into the West Bank, supplying settlements and settlement production in service of Israel's settlement expansion agenda.

In October 2022, Mekorot completed six years of construction of a new water transmission system to Jerusalem, the Fifth Water System to Jerusalem, which will be the main water transmission infrastructure to the Jerusalem area and neighboring settlements and factories.¹⁰⁴

The water system was built at a total cost of NIS 2.5 billion¹⁰⁵ and is expected to meet the future water needs of Jerusalem and its surroundings until 2065 by transporting desalinated seawater from facilities in the Mediterranean coastline to Jerusalem and the surrounding settlements.¹⁰⁶ The new system will be able to transport around 450 MCM of water, a volume that can provide for 4 million people, and is equivalent to 75% of the total desalinated water currently supplied to Israeli households,¹⁰⁷ facilitating the expansion of settlements and infrastructure in the occupied West Bank and occupied East Jerusalem.

The project, carried out by Mekorot and its subsidiary, EMS Mekorot Projects, is one of the company's largest projects. The project was defined by the Israeli government as a national infrastructure project, and according to Mekorot, is a strategic project due to its importance for Jerusalem and its neighboring settlements, and for the selling of water to the PA under the Water Agreement.¹⁰⁸

¹⁰⁴ Mosteki, Adiel Eitan. (2022, October 4). Mekorot has completed construction of a new water transmission system for Jerusalem (Hebrew). Calcalist.

¹⁰⁵ MS Mekorot Projects. (n.d.). The Fifth Water System to Jerusalem.

¹⁰⁶ Mekorot. (n.d.).<u>The fifth system for Jerusalem</u> (Hebrew).

¹⁰⁷ Jerusalem Post Staff. (2022, October 4). Mekorot completes fifth water transmission system for Jerusalem. The Jerusalem Post.

¹⁰⁸ Miki Elisha, Mekorot Company. (n.d.).<u>The fifth system for Jerusalem, a national infrastructure project.</u> Water Engineering The Israeli Water magazine (Hebrew).

WATER IN EAST JERUSALEM

Palestinian residents of Jerusalem suffer from a lack of access to adequate water and sanitation infrastructure and services. They do not receive a regular supply of water in sufficient amounts, with the water supply lower than the minimum threshold set by the World Health Organization. Only around half of the Palestinian population in occupied East Jerusalem can legally connect to the Israel Water Authority's water grid.¹⁰⁹ This is due to Jerusalem Municipality's discriminatory planning policy, which promotes increasing Israeli settlements while reducing Palestinian presence in the city as it is impossible for Palestinians to obtain building permits and they are also not allowed to connect to the water network.¹¹⁰ Furthermore, intentional neglect of Palestinian residential areas has led to the dilapidation of water and sanitation infrastructure - over a third of Palestinian households are not connected to the sewage network.¹¹¹

Ras Khamis, Ras Shehadah, Dahiyat al-Salam, Kufr Aqab, and Shuafat refugee camp - occupied and later annexed by Israel - although under Jerusalem's jurisdiction, are disconnected from the city by the Israeli wall. Even though residents of these areas continue to pay municipal taxes, the water infrastructure in place is only sufficient for a fifth of the number of residents. The neighborhoods do not have a valid outline plan, so it is impossible to obtain building permits and connect to the water and sewer pipes in a regulated manner. Most of the residents are not connected to the water network and consume water through makeshift pipes, storage tanks, and water pumps, and the water flow is weak and frequently interrupted. Some are connected to water and sewerage with pirated connections.

In 2015, it was estimated that of around 80,000 residents, the sewage infrastructure was adapted to service only 15,000 residents, and only 300 houses were connected to water meters.¹¹² The Israeli Water Authority has since refused to lay additional infrastructure and connect the houses to water, claiming that most of the residents live in houses that were built without a permit, leaving no long-term solution to the water shortage in the neighborhoods in sight.¹¹³

¹⁰⁹ Btselem. (2017, November 11). East Jerusalem. Updated: 2019, January 27

¹¹⁰ Ir Amim Bimkom. (2017, February). Deliberately Planned: A Policy to Thwart Planning in the Palestinian Neighborhoods of Jerusalem.

¹¹¹ Emergency Water, Sanitation, and Hygiene group, EWASH. (2011). Water and sanitation in East Jerusalem.

¹¹² Bendet, Shabtay. (2015, July 12). <u>Residents of East Jerusalem will pay for water even though they are not connected to the infrastructure</u> (Hebrew). *Walla!* News.

¹¹³ The Association for Civil Rights in Israel (ACRI). (2022, March 16). Water supply in the East Jerusalem neighborhoods beyond the wall (Hebrew).

GAZA

Israel's colonization - including the 15 years of sea, sky, and land siege imposed on Gaza - has crippled its water sector and subjected Gaza to a perpetually acute water crisis, with only 10% of its population able to access safe and clean drinking water.¹¹⁴

As part of the strict restrictions on the movement of goods into Gaza, Israel prevents the entry of equipment urgently needed for the maintenance and improvement of Gaza's water and sewage systems.¹¹⁵ Deprivation of such equipment and the severe damage caused by Israel's repeated military onslaughts targeting civilian infrastructure has brought Gaza's water sector to collapse. The Gaza Water Services department is unable to repair faults in iron pipes which were damaged by Israeli bombings, and the outdated infrastructure of approximately 500 water and sewage facilities in Gaza suffer from a shortage of valves, filters, pumps, pipes, electro-mechanical equipment, electric cables, spare parts for service cars and items for computers and computer systems for supervision, control, data collection and operation.¹¹⁶ In the absence of these necessary parts and repeated malfunctions, drinking water is polluted and sewage was discharged into the sea.¹¹⁷

In addition to the destruction and crippling of water infrastructure, Israel exploits 75% of Gaza's only natural source of water - the Coastal Aquifer that runs under it.¹¹⁸ As a result, more than 97% of the water pumped from the Gaza Coastal Aquifer, comprising 23% of the Coastal Aquifer,¹¹⁹ does not meet the standards of the World Health Organization.¹²⁰

With most of the water being pumped by Israel, the Gaza Coastal Aquifer is severely threatened by excess pumping¹²¹ and pollution from untreated sewage and seawater intrusions.¹²² Thus, despite Gaza's urgent need for alternative drinking water sources to meet the increasing demand for water, it is systematically denied to do so by Israel.¹²³ Israel prevents Gaza from developing additional resources and bans drilling new wells in areas of the coastal aquifer that are not contaminated¹²⁴ and restricts access to the Mediterranean, leaving Gaza to dry.

Moreover, by denying Gaza access to adequate electricity, Israel prevents its capacity to utilize desalination technology to increase access to water. Seawater desalination is an energy-intensive process that requires electricity, a commodity also controlled by Israel in besieged Gaza, which suffers from an acute energy shortage, with electricity available only several hours each day.¹²⁵ This means that de-

117 Ibid.

121 Seyam, Mohammed, et al. (2020, August 6). Investigation of the Influence of Excess Pumping on Groundwater Salinity in the Gaza Coastal Aquifer (Palestine). Using Three Predicted Future Scenarios. MDPI.

¹¹⁴ UNICEF. WASH water, sanitation and hygiene. Providing clean water to children in the State of Palestine.

¹¹⁵ Gisha. (2016, March 13). The Water Authority provided information regarding the water that Israel sells to the Gaza Strip (Hebrew).

¹¹⁶ Hass, Amira. (2022, January 9). Israel is delaying equipment for water and sewage infrastructure in Gaza. The result: drinking water was damaged and sewage was discharged into the sea (Hebrew). Haaretz.

¹¹⁸ United Nations Special Rapporteur. (2021, February 8). Mandates of the Special Rapporteur on the human rights to safe drinking water and sanitation.

¹¹⁹ UN-ESCWA and BGR. (2013). Inventory of Shared Water Resources in Western Asia. Chapter 20: Coastal Aquifer Basin.

¹²⁰ Palestinian Central Bureau of Statistics. (2019, March 21). The Palestinian Central Bureau of Statistics (PCBS) and the Palestinian Water Authority (PWA) Issue a Press Release on the Occasion of World Water Day.

¹²² UN-ESCWA and BGR. (2013). Inventory of Shared Water Resources in Western Asia. Chapter 20: Coastal Aquifer Basin.

¹²³ Seyam, Mohammed, et al. (2020, August 6). Investigation of the Influence of Excess Pumping on Groundwater Salinity in the Gaza Coastal Aquifer (Palestine). Using Three Predicted Future Scenarios. MDPI.

¹²⁴ Sarsak, Reem; Almasri, Mohammad N. (2014, April 5). Health of Palestinians, water and coastal aquifer in Gaza – Authors' reply. The Lancet.

¹²⁵ UNICEF. (2020, January). Sea Water Desalination Plant For the Southern Governorates of the Gaza Strip.

salination facilities and water purification facilities often operate using emergency diesel generators in a very limited capacity. This is also the case for wastewater treatment which requires electricity to pump wastewater from homes, transport it to wastewater treatment plants and operate treatment facilities.¹²⁶

Mekorot – A Prime Beneficiary

Israel's plunder of Gaza's water resources, the prevention of access to equipment, and the active destruction of infrastructure, all lead to an acute water shortage and an underdeveloped industry under captivity, forced to depend on Mekorot.

Prevented from maintaining an independent water sector, Gaza must purchase additional water from Mekorot. As of 2022, around 15 MCM of water in Gaza is purchased from Mekorot annually,¹²⁷ almost double the amount purchased in 2005.¹²⁸ Mekorot transfers the water through three main water lines spread along the Israeli-built fences surrounding Gaza.¹²⁹ The payments are collected by the Israeli Water Authority every month at a rate of NIS 2.57 to NIS 3.54 per cubic meter of water.¹³⁰

The lack of water and sanitation infrastructure in Gaza has forced an estimated 97% of the population to rely on unregulated private water tankers and small informal desalination plants for its drinking water.¹³¹ As of 2020 over 20,000 families cannot afford to buy safe drinking water.¹³²

The Mediterranean – A Source of Livelihood

Until 2000, Gaza's fishing sector provided a significant source of employment for over 10,000 fishing families.¹³³ Under the blockade, Israel exclusively controls Gaza's territorial waters and restricts access to fishing areas in the sea. Along with import and export limitations and lack of access to outside markets imposed by Israel as part of the blockade, this has led to the near-collapse of the industry and thousands of families have lost their livelihoods.

The remaining fishermen are under constant threat of violence inflicted on them by the Israeli Navy. Between January and May 2022, 167 incidents of Israeli Navy shooting toward fishermen took place. 35 people, including seven children, were arrested, 11 people, including three children, were injured, and ten boats were confiscated.¹³⁴ In February 2023, it was reported that the Israeli Navy assaulted Palestinian fishermen with gunfire and tear gas while sailing off the northern shores of Gaza, forcing them to return to the shore.¹³⁵ Between 2006 and 2020, ten fishermen were killed by the Israeli military.¹³⁶

¹²⁶ Gisha. (2011, November). The measure of control-Israel's ongoing responsibility in the Gaza Strip (Hebrew).

¹²⁷ Gisha. (2022, March 22). Reports: Still Waters. March 22, 2022

¹²⁸ Hass, Amira. (2022, January 9). Israel is delaying equipment for water and sewage infrastructure in Gaza. The result: drinking water was damaged and sewage was discharged into the sea (Hebrew). Haaretz.

¹²⁹ Tzuri, Matan. (2019, June 17). Exposure: Israel is building a new water line to Gaza (Hebrew). YNET.

¹³⁰ Gisha. (2016, March 13). The Water Authority provided information regarding the water that Israel sells to the Gaza Strip (Hebrew).

¹³¹ World Bank. (2018). <u>Toward Water Security for Palestinians</u>.

¹³² United Nations Office for the Coordination of Humanitarian Affairs. <u>Humanitarian Needs Overview 2021</u>. p.38

¹³³ United Nations Office for the Coordination of Humanitarian Affairs. (2019, November 19). Gaza's fisheries: record expansion of fishing limit and relative increase in fish catch; shooting and detention incidents at sea continue.

¹³⁴ Gisha. (2022, July 7). Increase in Israeli navy attacks on Gaza fishermen, including children.

¹³⁵ WAFA. (2023, February 5). Israeli Navy attacks Palestinian fishermen off Gaza. WAFA News Agency.

¹³⁶ Middle East Monitor. (2022, April 30). Gaza's fishermen struggling for a catch to feed their families. Middle East Monitor.

THE SYRIAN GOLAN

Since Israel's occupation of the Syrian Golan in 1967, Israel's land grabs and natural resource exploitation in the Golan have included the appropriation of wind, oil, and water resources.

Before the Israeli occupation, the economy of the Golan was primarily based on agriculture.¹³⁷ In 1968, Israel enacted a series of laws that legislated its exclusive access to the water resources of the Golan,¹³⁸ including a law stating that ownership of land does not include ownership of the water on, or under it. This forbade Syrian farmers from accessing or utilizing the water on their land for agricultural purposes and has had a devastating impact on the primarily agricultural economy. Syrian residents in the occupied Golan have lost up to half of their agricultural land as a result of the Israeli occupation, as well as access to the water they source,¹³⁹ leaving them forced to purchase water from Israeli companies and dependent on Israeli and settlements' agricultural products.

Between 1968 and 2021, Israel established sixteen water complexes and reservoirs with a total capacity of 45 MCM in the occupied Golan,¹⁴⁰ providing around one-third of Israel's annual water consumption.¹⁴¹

Over the last decade, Israel has expanded the scope of its groundwater drilling activities in the Golan.¹⁴² In 2022, Mekorot executed its biggest drilling project so far, at a depth of 1,500 meters below the surface of the earth.¹⁴³

Settlement Production

The establishment of water infrastructure in the area has been crucial for the viability of Israeli settlements relying on irrigated agriculture as the main component of their economy. Israeli agriculture in the occupied Golan generates products worth around NIS 1.5 billion per year and provides a livelihood to most of the settlements in the area.¹⁴⁴

Water extracted from the Golan is also used by Israeli companies to produce mineral water, many Israeli wines, and a significant quantity of fruits and vegetables. For more on the Israeli exploitation of natural resources under occupation see Who Profits report: <u>Greenwashing the Golan: The Israeli</u> <u>Wind Energy Industry in the Occupied Syrian Golan</u>.

In December 2021, the Israeli government approved an investment of NIS 1 billion as part of a government plan to double the population of Israeli settlers in the Golan within five years. The plan includes the establishment of new settlements, the expansion of existing settlements, and the development

¹³⁷ Al-Marsad. (2009, December). From Settlement to Shelf: The Economic Occupation of the Syrian Golan- A Summary.

¹³⁸ Zena Agha. (2019, June 28). Israel's problematic role in perpetuating water insecurity for Palestine. MENASource.

¹³⁹ Al-Marsad. (2009, December). From Settlement to Shelf: The Economic Occupation of the Syrian Golan- A Summary.

¹⁴⁰ Al-Marsad. Natural resource exploitation. golan-marsad.org. <u>https://golan-marsad.org/natural-resource-exploitation/</u> Updated February 24, 2022

¹⁴¹ MEE and agencies. (2019, March 21). <u>The Golan Heights: Why it matters</u>. *Middle East Eye*.

¹⁴² Tzafrir, Rinat. (2017, June 8). Groundwater drilling in the Golan is expanding and may damage springs and streams (Hebrew). Haaretz.

¹⁴³ Varon, Guy. (2020, December 15). 1,500 meters underground: the water drilling that will save agriculture in the Golan (Hebrew). N12.

¹⁴⁴ Golan Regional Council website. https://www.golan.org.il/agri/

of infrastructure and energy projects,¹⁴⁵ entailing the destruction of open areas that will significantly harm the area's ecology.¹⁴⁶

In a similar pattern to the oPt, while Israeli settlers and businesses in the Syrian Golan enjoy access to plentiful plundered water, the occupied Syrian population has suffered systematic discrimination in allotment of far lower water quotas.¹⁴⁷ Israeli settlers enjoy unmeasured access to water, while the indigenous Syrian communities experience significant restrictions inhibiting their ability to sustain an agricultural economy.¹⁴⁸

In addition, the few local springs that Israel has allowed Syrian farmers access to, have been drying up as a result of the drilling activities and water extraction carried out by Mekorot and the Israeli authorities.¹⁴⁹

¹⁴⁵ Prime Minister's Office. (2021, December 26). Press Releases: Cabinet, at a Special Meeting, Approves a NIS 1 Billion Plan to Develop the Golan Heights.

¹⁴⁶ Nerdy, Guy. (2021, December 26). <u>A new government plan aims to double the population of the Golan Heights within 3 years</u> (Hebrew). *Globes*.

¹⁴⁷ Al-Marsad. (2009). From Settlement to Shelf: The Economic Occupation of the Syrian Golan- A Summary.

¹⁴⁸ Al Marsad. (n.d.). <u>Natural resource exploitation</u>. Updated February 24, 2022

¹⁴⁹ Ibid.

WATER INSIDE THE GREEN LINE

Palestinian local councils and municipalities inside the Green Line are discriminated against - in government budgets, urban planning, housing, infrastructure, and economic development - and constitute the poorest municipalities within Israel.¹⁵⁰

In 2021, only about 80% of Palestinian households in '48 (the Naqab area excluded) were connected to the national water and sewage infrastructure, compared to about 90% among the general population. This means about 60,000 Palestinian (holders of Israeli citizenship) households that are not connected to the national infrastructure.¹⁵¹

Water in the Naqab

In a similar pattern to Area C of the occupied West Bank, Israel's deliberate lack of water supply to facilitate forcible displacement is particularly acute in the Naqab region. Over 100,000 Palestinian Bedouins live in 35 villages that Israel refuses to recognize (referred to as the unrecognized villages). Of those villages, 31 pre-date the establishment of the Israeli state, whilst the remaining four were relocated there by Israeli military force during the 1948 Nakba.

All the unrecognized villages are slated for erasure and are systematically deprived of basic infrastructure and services to force residents to move to overcrowded and impoverished state-sanctioned Bedouin shanty towns and villages.¹⁵² The Israeli authorities are using a range of discriminatory policies to compel the Bedouin communities in the Naqab to move off their land, including violating their fundamental right to water.¹⁵³

The lack of organized infrastructure means that residents are not connected to a regulated water supplier and there is no water corporation regulating the treatment of wastewater.¹⁵⁴ The only way to get a supply of water is by privately connecting households to a central clock to which water is supplied through a private water supplier, or to connect directly to Mekorot company pipes at extremely high cost.¹⁵⁵ In these cases, the water comes from central connections that are sometimes kilometers away from homes which harms the quality of the water.¹⁵⁶ The piping is laid above the ground via improvised, plastic hose hook-ups or unhygienic metal containers, and is sometimes transported in plastic pipes for several kilometers¹⁵⁷ from a water point located on a main road quite far from homes. In most villages, there is only one water point.¹⁵⁸ The connection work is done and paid for by the residents themselves.¹⁵⁹

¹⁵⁰ The Association for Civil Rights in Israel (ACRI). (n.d.) <u>Arab Minority Rights</u>.

¹⁵¹ Zaken, Dani. (2021, October 7). NIS 1.45 billion will be allocated to connect 20% of Arab households to the water and sewage infrastructure (Hebrew). Globes.

¹⁵² Who Profits. (2021, November). Tools of Dispossession in the Naqab.

¹⁵³ Adalah. (2013, February 28). <u>Water in the Naqab (Negev): Source of Life, Tool of Expulsion</u>.

¹⁵⁴ State Comptroller. (2022). Annual report 72a- first part, 2021: Aspects of governance in the Negev (Hebrew). p.14

¹⁵⁵ Sikkuy-Aufoq. (2020, November). The whole truth about the unknown villages in the Negev- and their fight for equality (Hebrew).

¹⁵⁶ Ibid.

¹⁵⁷ Adalah. The Right to Water in the Unrecognized Villages in the Nagab.

¹⁵⁸ State Comptroller. (2022). Annual report 72a- first part, 2021: Aspects of governance in the Negey (Hebrew). p.98

¹⁵⁹ Adalah. (2013, February 28). Water in the Nagab (Negev): Source of Life, Tool of Expulsion.

Even in localities recognized by Israel, the prevailing experience is inadequate infrastructure and lack of access to water. According to a State Comptroller report from 2021, water infrastructure is absent in 91% of Palestinian localities in the Naqab. Other public infrastructures such as electricity, sewage, sewage treatment, roads, and communication, are absent in 81.8% - 100% of the localities.¹⁶⁰ As a result, residents suffer from difficulties in accessing water and pay a higher price than their neighboring Jewish towns and farms.¹⁶¹ This is characterized by a poor connection to water, low and discontinuous water pressure, and low water quality.¹⁶²

Agriculture

Water is crucial to the Bedouin community in the Naqab, not only for drinking but also for farming - in many cases the only source of livelihood for residents of the unrecognized villages. To encourage Jewish settlement in the Naqab, Jewish towns, and agricultural farms receive millions of dunams of land allocated to them by the Ministry of Agriculture. This land is also entitled to water allocation quotas at a reduced rate. The same does not apply to the Bedouin communities, which hold only several hundred acres of agricultural land and do not receive water quotas.¹⁶³

Health and Education

The absence of sufficient water services also affects adequate access to other services, such as health and education.

In 2020, the Association for Civil Rights (ACRI) appealed to the District Court with a demand to compel the Ministry of Education to provide a regular water supply to an educational complex in the village of Tel Arad.¹⁶⁴ The complex, which was used as a kindergarten and grades 1 - 9, was cut off from water.

During the Covid-19 crisis, when people were instructed to stay in their homes and wash their hands more frequently and maintain hygiene, the water shortage deprived the residents of the necessary conditions to maintain their health.¹⁶⁵

In September 2022, sewage water flooding from the septic tanks near the village of Tel Sheva caused a sanitary and environmental hazard and harm to the quality of life of the residents. Although the water corporation and the local council are obligated to act to prevent such hazards by maintaining and upgrading the sewage infrastructure and septic tanks, pumping works were carried out only after a month following a request from ACRI.¹⁶⁶

¹⁶⁰ State Comptroller. (2022). <u>Annual report 72a- first part, 2021: Aspects of governance in the Negev</u> (Hebrew).

¹⁶¹ Tzafrir, Rinat. (2014, July 7). Report: 75 thousand Bedouins do not have access to water (Hebrew). Haaretz.

¹⁶² Sikkuy-Aufoq. (2020, April 7). Urgent appeal to the Budgets Department on the issue of the Bedouin villages in the Negev during the corona crisis (Hebrew).

¹⁶³ Arlozerov, Michal. (2022, November 11). <u>He should try to find out where they live first: why won't Ben Gabir succeed in exterminating crime in the Negev?</u> (Hebrew). *The Marker*.

¹⁶⁴ The Association for Civil Rights in Israel (ACRI). (2020, May 27). <u>Connecting an educational complex to the water</u> (Hebrew).

¹⁶⁵ Sikkuy-Aufoq. (2020, April 7). Urgent appeal to the Budgets Department on the issue of the Bedouin villages in the Negev during the corona crisis (Hebrew).

¹⁶⁶ The Association for Civil Rights Israel (ACRI). (2022, October 20). Following our request: Sewage overflow in Tel Sheva was repaired (Hebrew).

MEKOROT IN THE WORLD

The global water market generates about US\$ 700 billion every year and is in constant annual growth.¹⁶⁷ Given global climate challenges which have intensified in recent years and an increasing interest in the global market in smart water technologies for the benefit of efficient water management, Mekorot has positioned itself as one of the leading water companies in the world and has contributed to the establishment of Israel's emergence as a water power.

In 2022, Mekorot expanded its activities abroad by signing a series of agreements with various countries. According to Mekorot, the company engages in developing the provision of its consulting and planning services to various countries and acts to expand and promote additional activities.

Mekorot's operations in the global market include several countries in South America, Southeast Asia, Africa, the Mediterranean basin (Cyprus), and Europe.¹⁶⁸ The company works with governments and a variety of business entities promoting collaborations with regional and municipal water companies in those countries, offering its services in water storage, recycling, transportation, desalination, drilling, and cyber protection.¹⁶⁹

In addition, Mekorot owns several patents and applications for patent registration in several countries in the field of filtration technology, pumping, and water purification, and has registered trademarks in the USA and the European Union.¹⁷⁰

An Overview of Mekorot's Global Activities

Argentina

In February 2023, Mekorot signed five contracts in Argentina to consult on the planning of the water system in five districts in the country.¹⁷¹ Mekorot will help develop comprehensive master plans for Argentina's water sector. The contracts are estimated at NIS 11 million.

These agreements join two additional agreements signed in August 2022 for the planning of water management in the main wine production districts in Argentina, the provinces of Mendoza and San Juan in central Argentina, where 95% of the wine in Argentina is produced.¹⁷²

Morocco

In November 2022, Mekorot signed a Memorandum of Understanding with Morocco's National Office for Electricity and Drinking Water for the promotion of joint cooperation activities in the fields of seawater desalination, performance improvement, water sanitation, digital systems management, R&D, and innovation.¹⁷³ The agreement comes as part of a series of business collaborations resulting from the 2020 Abraham Accords.

¹⁶⁷ Berkovich, Aviv. (n.d.). In a world thirsty for advanced water solutions- Israel can play a central role (Hebrew). Israel Export Institute.

¹⁶⁸ Mekorot Development and Enterprise website (Hebrew). (n.d.). <u>https://mekorotdev.co.il/%d7%90%d7%95%d7%93%d7%95%d7%93%d7%95%d7%aa/</u>

¹⁶⁹ Videl, Elihay. (2022, March 23). Israel loses less than 3% of its water, it is fourth in the world (Hebrew). Calcalist. March 23, 2022

¹⁷⁰ Mekorot Annual Report 2021.

¹⁷¹ Binyamin, Idan. (2023, February 19). The Mekorot water company is expanding its operations in Argentina (Hebrew). The Marker.

¹⁷² Fischer, Israel. (2022, September 9). <u>A NIS 5 million agreement: Mekorot will plan the water management in the wine-producing districts in Argentina</u> (Hebrew). *The Marker*.

¹⁷³ Hennessey, Zachy. (2022, November 17). MOU between Israel, Morocco will enable collaboration in drinking water, liquid sanitation. The Jerusalem Post.

Azerbaijan

In March 2022, Mekorot signed a contract to develop a master plan for water management in Azerbaijan.¹⁷⁴ According to the agreement, Mekorot will create and design a master plan for the water sector for agriculture and will provide control and consulting services for several million NIS with the possibility of expanding the agreement in the future.¹⁷⁵

India

In July 2022, Mekorot signed a contract to provide consulting services in the field of water treatment in India.¹⁷⁶ Mekorot provides consulting services for the development of a master plan for the water economy in Maharashtra State,¹⁷⁷ and consulting services for the water economy in Punjab State.

Jordan

In November 2021, Israel and Jordan signed an electricity-for-water agreement through which Israel will supply up to 200 MCM of desalinated water in exchange for 600 megawatts of solar electricity provided by Jordan.¹⁷⁸

Bahrain

In March 2021, Mekorot signed an agreement with the authorities in Bahrain to consul in the field of water. According to the agreement, Mekorot will provide the Bahrain Water and Electricity Authority with consulting services for several projects in the fields of desalination facilities, automatic control systems for water stations, and technological upgrades.¹⁷⁹ Mekorot's income from the agreement is expected to reach around US\$ 3 million, with the option of extending the agreement to additional projects, totaling US\$ 11 million. This was the first government to sign an agreement as part of the Abraham Agreements.

Romania

2016 – Mekorot inaugurated a new wastewater treatment plant in Romania, through a project valued at around US\$ 10.5 million.¹⁸⁰

Mexico

In 2013, Mekorot signed a cooperation agreement with the Mexican national water commission (CONAGUA) for the development of strategies for the rehabilitation, management, and design of groundwater systems.¹⁸¹ The agreement's first stage's estimated cost is around US\$ 5.5 million.¹⁸²

¹⁷⁴ Fischer, Israel. (2022, September 9). <u>A NIS 5 million agreement: Mekorot will plan the water management in the wine-producing districts in Argentina</u> (Hebrew). *The Marker*.

¹⁷⁵ Jerusalem Post Staff. (2022, April 10). Israel's Mekorot to design Azerbaijan's water economy. The Jerusalem Post.

¹⁷⁶ Fischer, Israel. (2022, September 9). A NIS 5 million agreement: Mekorot will plan the water management in the wine-producing districts in Argentina (Hebrew). The Marker.

¹⁷⁷ Mekorot. (n.d.). <u>Mekorot International operations</u>.

¹⁷⁸ Fischer, Israel. (2021, November 22). Israel and Jordan signed an electricity for water agreement. Now the questions arise (Hebrew). The Marker.

¹⁷⁹ Fischer, Israel. (2021, March 29). Mekorot Company will advise Bahrain on how to use water (Hebrew). The Marker.

¹⁸⁰ Globes. (2016, July 20). <u>Mekorot inaugurates Romanian purification plant</u>. *Globes*.

¹⁸¹ Israel Agri. (n.d.). Water cooperation agreement signed between Israel and Mexico.

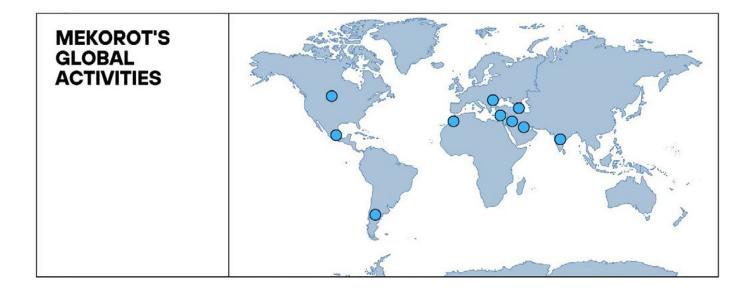
¹⁸² Mekorot. (n.d.). Mekorot International operations.

Cyprus

In 2009 and 2012, Mekorot won two tenders for the design, and construction of seawater desalination facilities and their operation for 25 years as published by the Cyprus government.¹⁸³

North and South America

A consulting collaboration with the Inter-American Development Bank (USA) in the mapping of investment channels in South America.¹⁸⁴



¹⁸³ Mekorot 2021 Annual Report.

¹⁸⁴ Mekorot. (n.d.). Mekorot International operations.