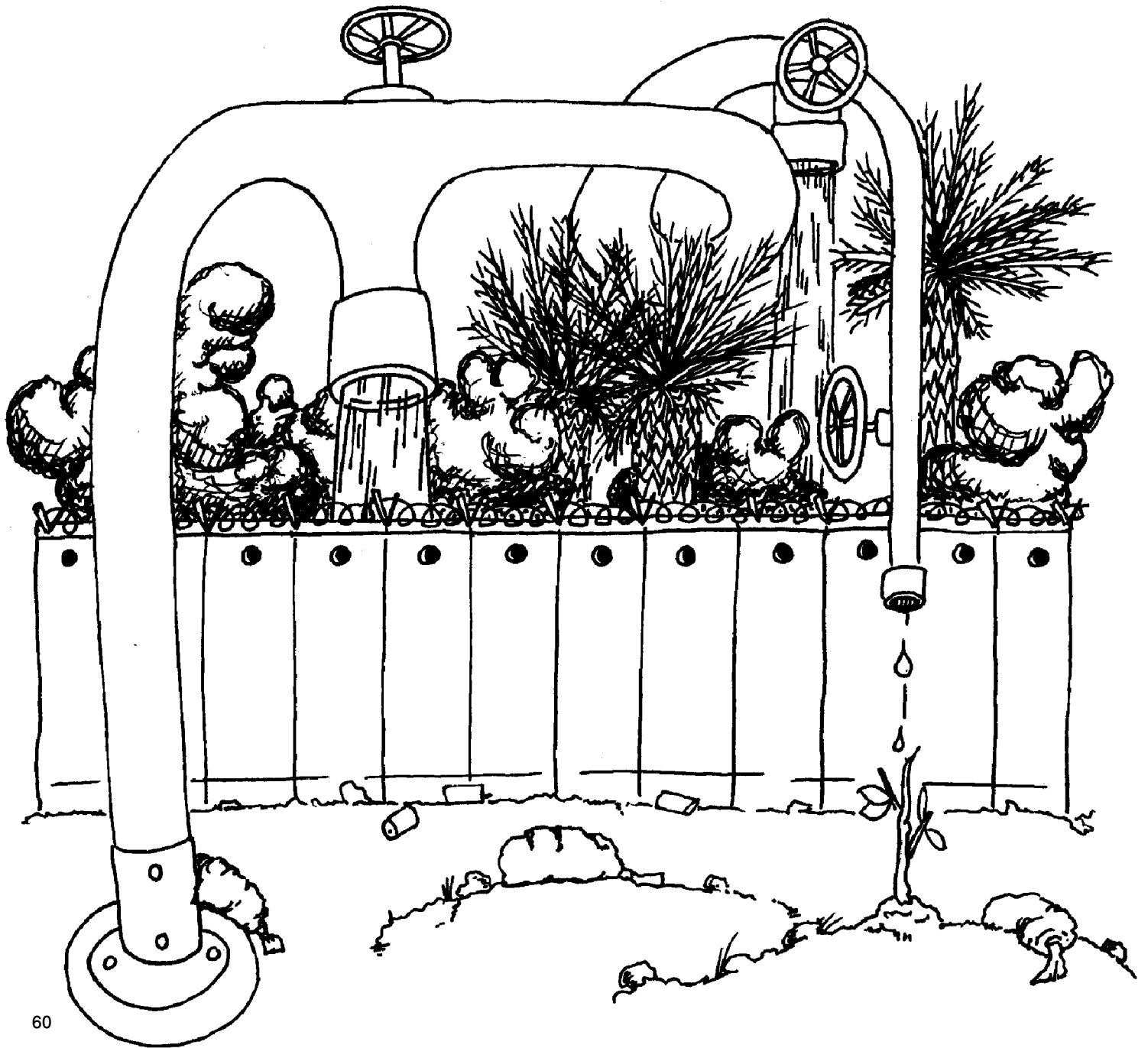


Water



'All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence'

-1966 International Covenants on Human Rights, common article 1

The average water supply to the Palestinian communities of the Occupied Territories is about 63 liters per capita per day (lc/day) in the West Bank and 140 lc/day in the Gaza Strip. However, water supply significantly varies throughout the Territories. In 7 percent of the Palestinian communities (43 out of 708), per capita supply is less than or equal to 30 liters per day; in 36 percent of them (225 communities) it is between 30 and 50 liters per day; in 41 percent of them (264 communities) it is between 50 and 100 liters per day; and finally, only in 16 percent (100) of these communities does the per capita supply exceed 100 liters per day, which is the minimum amount recommended by the World Health Organization (1).

Such surveys relate exclusively to that limited 69 percent of the Palestinian communities that are connected to water networks. The other communities are not reached by pipelines at all. Communities without linkages water must rely upon rainfall, springs, wells, and water purchased by private suppliers (2).

The quality issue is the second dimension of the water crisis. Quality is a primary concern, especially in the Gaza Strip, where over-extraction (the extraction of water in quantities outrunning the recharging capacity of the aquifers) leads to the seepage of

saltwater from the Mediterranean Sea into the underground aquifer and to the increase of brackish water from the deeper layers.

However, the situation is also difficult in the West Bank as all of the Palestinian Territories are characterized by an extensive and inappropriate use of pesticides and fertilizers in the agricultural sector and by the absence and inadequacy of the sewage infrastructure.

Today only 7 percent of water in the Gaza Strip meets the World Health Organization's standards. Diseases registered in the hospitals include cholera, dysentery, hepatitis, and yellow fever (3).

In Israel domestic per capita consumption of water is over three times higher. Two thirds of the water come from sources 'shared' by the Palestinians, to be mainly assigned (about 64 percent) to agriculture, even though typically Mediterranean agriculture is not traditionally water-intensive.



The Facts:

**The average water supply to the Palestinian communities in the oPT is about 63 liters per capita per day in the West Bank versus 140/day in Gaza (1).

**In 7% of the Palestinian communities (43 out of 708), per capita supply is less than or equal to 30 liters per day; in 36% (225 communities) it is between 30 and 50 liters per day; in 41% (264 communities) it is between 50 and 100 liters per day; and finally, only in 16% (100) of these communities does the per capita supply exceed 100 liters per day, which is the minimum amount recommended by the WHO (1).

**Only 69% of Palestinian communities that are connected to water networks (2).

**Only 7% of the available water in the Gaza Strip meets WHO standards (3).

**Israel, primarily the settlements, utilize 37% of the water from the Eastern Aquifer which is entirely located in the West Bank (4).

**the price of water supplied by private tankers has increased in 290 communities in Palestine, with 205 of them experiencing an increase of up to 150% and the remaining 85 of them up to 200% (7).

Access & Distribution

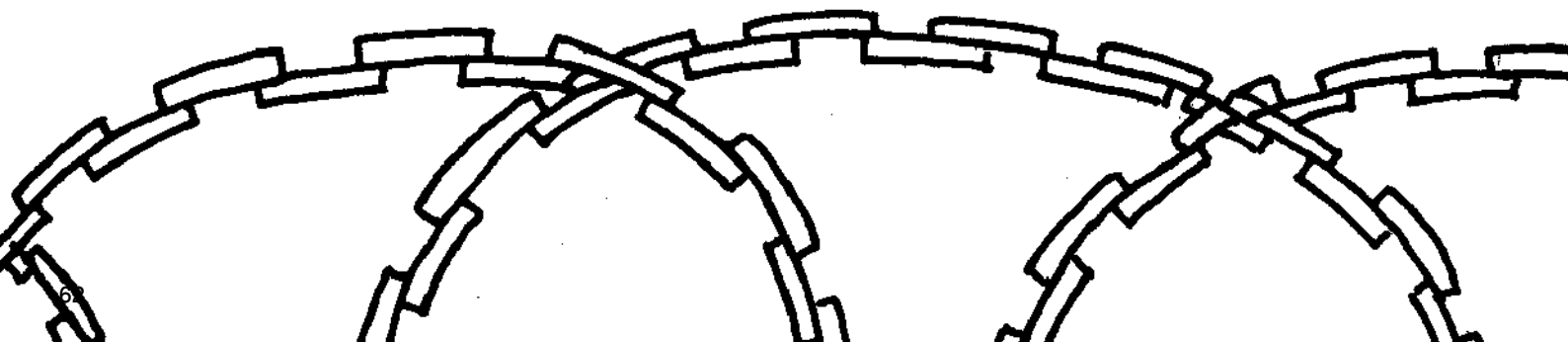
The Israelis and the Palestinians share two interrelated water systems:

The underground system - the Mountain Aquifer - traverses the border between the West Bank and Israel, while the surface system - the Jordan Basin - also belongs to Jordan, Syria and Lebanon.

The Mountain Aquifer extends for over 130 km, from Mount Carmel in the north to the Negev in the south, and is 35 km wide, from the Jordan Valley in the east to the Mediterranean Sea in the west.

It is typically divided into three sub-aquifers. The primary one, due to the high quality of its water, is the Western Aquifer. Most of its recharge area lies in the West Bank, while the entire storage area lies in Israel. 95% of its water is used by Israel.

The second one, the Northern Aquifer, has both its recharge and storage areas essentially located within the West Bank. However, Israel extracts about 70% of the water. Finally, the Eastern Aquifer, which is entirely within the West Bank, has 37% of its water consumed by Israel - mostly by settlers.



The Jordan Basin stretches over 330 km from the Upper Galilee in the north to the Dead Sea in the south, with an average width of 30 m. The whole ecosystem is now endangered by the diversion of over 90 percent of the water, with dams and pumping stations installed all along its route and the discharge of sewage and agricultural waste.

The Palestinians have no access at all to this aquifer's water. By contrast, Israel enjoys a share of 31 percent of the water produced (4).

Israel prevents the Palestinians from accessing water resources legally, technically and physically. Legally, the main consequence of the classification of water as (Israeli) public property requires a permit in order to drill new wells or fix existing ones. Permits go through eighteen stages of approval in various administrative departments. Furthermore, quotas limit the drawing of water from each well. In many cases, Palestinians are deprived of access to water resources by being deprived of access to their land in general. De facto expropriations are frequently carried out by the establishment of military areas on natural reserves, especially in the Jordan Valley (5).

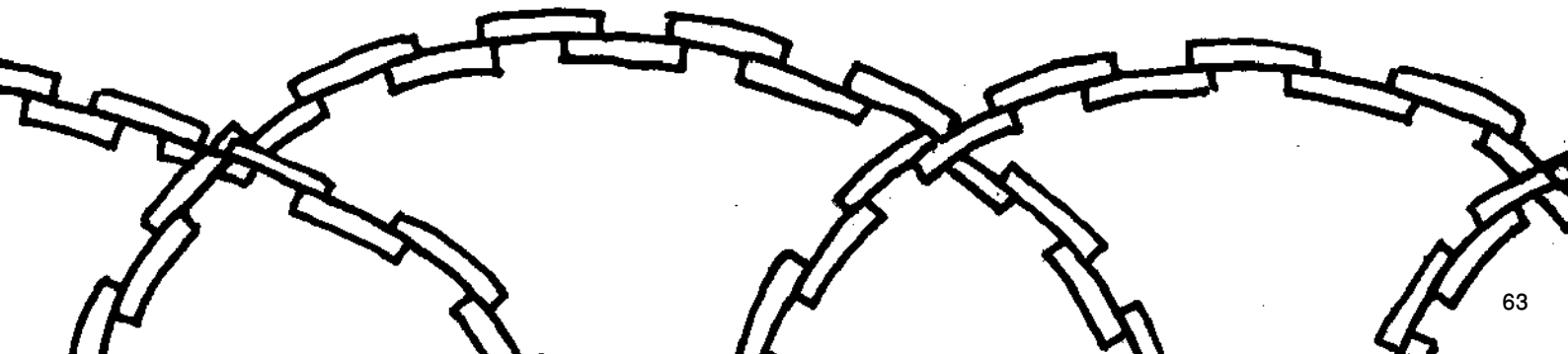
Technically, Israel makes no effort to maintain the water system, nor do the Palestinian municipalities - which depend on allocations set by Israel - have

the financial means to intervene. Neglect of infrastructure is a deliberate Israeli policy well beyond the water sector. The amount of public expenditure in the Territories in all fields is less than the fiscal revenues that Israel collects from the Palestinian population (6).

Due to the physical barriers and restrictions described throughout the book, the price of water supplied by private tankers has increased in 290 communities, with 205 of them experiencing an increase of up to 150 percent and the remaining 85 of them up to 200 percent (7).

Barriers and curfews are routinely accompanied by the targeting of Palestinian infrastructure and property, not only during military incursions but also by hand of settlers rather than soldiers.

When the Wall is completed the Western Aquifer will lie mostly under Israeli control. Whatever its purposes might be, the Wall has already meant the uprooting of tens of thousands of trees and the isolating of hundreds of dunums of lands, with many farmers forced to abandon their property to become low-wage workers in nearby settlements. It has also deeply affected the hydrology of the watersheds, representing a barrier to the storm water which flows to the west that causes serious flooding in adjacent villages (8).



Water in Negotiations

The water sector in Palestine faces a multitude of problems and challenges in improving the effective use and management of their limited water resources. Many of these issues are a result of the stringent Israeli Military Orders which were put in place back in 1967. Consequently, this restricted access has led to the current state of underdevelopment in the water sector and the inequitable allocation of the transboundary water resources between Israel and Palestine. In 1995, as a result of the signing of the OSLO Interim Agreement between the Palestinian Liberation Organization (PLO) and the state of Israel, the Palestinian Water Authority (PWA) was established to develop the water sector in Palestine.

In the post-Oslo era, the additional water that was to be made available in the form of self-production as per the OSLO II Interim Agreement (9) has not been fully realized. At the time of the agreement Palestinians only utilized 17% of the mountain aquifers estimated safe yield. Over twelve years on, the Palestinian share of the mountain aquifer has dwindled, despite the fact that the population has increased by approximately 150% in this same period.

In Gaza, the situation is even worse, since the only access to water is limited to the coastal aquifer, which today remains in imminent danger of collapse. Essentially none of the available water from the coastal aquifer currently meets the widely accepted World Health Organization water quality standards for potable water. The only additional source of water which is available to the Palestinian Authority comes from the purchase of water from the Israeli Water Company Mekorot. In 2006, the total quantity of water purchased was limited to 50.3 mcm, which makes up for 15% of the total accessible quantity of 333.3 mcm for use by all sectors (domestic, industrial, and agriculture).

Since the OSLO II Interim Agreement took effect, the PWA has been faced with the bureaucratic nature of the Joint Water Committee (JWC) and the Israeli Civil Administration for the approval of both water supply and wastewater related projects in the West Bank. To date, over 140 projects remain pending in either the JWC or Israeli Civil Administration. Of these, a majority of the highest priority water supply and wastewater projects, in regards to strategic and master planning, continue to be held up by the Israelis and have therefore not been implemented, in some cases for over twelve years.

Despite the lack of attention water receives relative to the other core issues, finding a just resolution is as important to arriving at a lasting peace and a viable Palestinian state as is the removal of settlements or checkpoints. The difficulties surrounding this issue though could be unique from the others in that water usage, conservation and production provide Israel and Palestine the opportunity to work together to face a mutual problem in a scientific, rather than politicized atmosphere. This opportunity however, has yet to be taken advantage of (10).

Endnotes

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