

**ISRAEL'S POLICY
ON THE WEST BANK
WATER RESOURCES**



UNITED NATIONS

**ISRAEL'S POLICY
ON THE WEST BANK
WATER RESOURCES**

*Prepared for, and under the guidance of,
the Committee on the Exercise of
the Inalienable Rights of the Palestinian People*



UNITED NATIONS
New York, 1980

TABLE OF CONTENTS

Foreword i

Quantities of Water 1

Israel's Policy on
the West Bank Waters:
Utilization and Settlement 3

Israel's Policy on
the West Bank Waters:
Restrictions and Effects
on the West Bank Economy 10

Table - Water Supply in
the West Bank 17

References and Notes 18

FOREWORD

The human and material resources of the Palestinian territories of the West Bank and the Gaza Strip occupied by Israel in June 1967 and their economic importance for it are a subject that deserves close examination.

One of these resources is water. Israel's water policy has important implications for the West Bank, the Gaza Strip and their Palestinian inhabitants.

QUANTITIES OF WATER

The renewable or fresh water in Israel before the June 1967 War, after the development of all water resources, according to Yakobowitz and Prushansky, was estimated at 1,610 to 1,650 million cubic metres yearly.

This amount may be broken down as follows:

	<u>million cubic metres</u>
Ground water	950
Jordan River and Sea of Galilee	600
Floodwater run-offs	60 to 100
Total	<u>1,610 to 1,650</u> ^{1/}

Water in arid areas such as the West Bank is a commodity of strategic value and without adequate water resources there can be no viable economic activity. The West Bank is dependent upon rainfall for its annual water supply. In normal circumstances, the water retained in underground aquifers is estimated at 600 million cubic metres, in addition to 250 million cubic metres of surface run-off and the waters of the River Jordan. Of this total, only 620 million cubic metres is easily usable.

Because of an increase in domestic consumption as a result of Jewish

immigration and natural increase and of settlement policy, Israel has been facing a fast-accelerating crisis in water economy. In Israel before the June 1967 War there were no unexploited water resources. As Arnon Magen said, "there was just no place left in pre-June Israel to drill new wells."2/

Israel's consumption of its renewable water resources increased from 17 per cent in 1948 to 95 per cent in 1978.3/ The increase of Israeli consumption of waters amounts to 15-20 million cubic metres yearly. This increase is nearly equivalent to one per cent of Israeli total proven renewable water reserves.4/

ISRAEL'S POLICY ON
THE WEST BANK WATERS:
UTILIZATION AND SETTLEMENT

Israel attaches great importance to water resources in the West Bank. According to some sources, it has given priority to its needs at the expense of the inherent rights of the Palestinian people to its waters.5/ This is because of two factors:

- (i) A considerable and increasing percentage of the water consumed by Israel before and after June 1967 is originating in the West Bank;
- (ii) Israel's pursuit of a very intensive Jewish settlement policy in the West Bank and the Gaza Strip.

To control water resources in these two areas, these resources have, since June 1967, been placed under the responsibility of the Department for Water Allocation and Certification of Israeli Water Commission.6/

By drilling artesian wells within the pre-June 1967 borders, Israel has been pumping and siphoning off underground waters of the West Bank. Before 1967, Israel had been pumping away of the West Bank's total water supply some 500 million cubic metres annually by means of artesian wells drilled in Israel. This constituted approximately one-third of Israel's annual water consumption before 1967 and it constituted five-sixths of the West Bank waters.7/ This explains the considerable

importance the Israeli Government attaches to control of the aquifer along the western slopes of the West Bank.^{8/}

Any faster pumping would lower the water table below sea level, making the water highly saline and unsuitable for human use.

Since June 1967, Israel has pursued an intensive settlement policy in the West Bank and the Gaza Strip; within this policy many Jewish settlements, mainly agricultural, have been established.

Israel's political attitude towards the political future of the West Bank and the Gaza Strip, its rejection of the establishment of a Palestinian state on them and its insistence on retaining them appear to be partially attributable to the water factor in these Palestinian territories. Water resources in the West Bank and the Gaza Strip play an important role in shaping Israel's conception of the autonomy for these territories. It would seem to be difficult for Israel to accept a political settlement in the West Bank and the Gaza Strip that would result in its relinquishing of its control over water resources in these territories.

Of relevance here is an article written by Michael Gerti and entitled "Water Salinity and the Green Line,"

"The political question, which will have to be dealt with both in the government and in the autonomy negotiations, is: how will Israeli control on the drilling be maintained? And will an agreement on the subject be reached with the autonomy administration, or will Israel have to

"keep physical control over the water resources in its hand, which also require a special military apparatus."^{9/}

Amir Shapira's article in Al Hamishmar shows the connexion between Israel's intentions concerning West Bank waters and its political stand on the West Bank,

"Israeli water experts have recently briefed senior political circles on the question of the possibility that in the framework of the administrative autonomy in the West Bank /proposed in the Camp David Accords/ Israel would lose control over essential water resources and /the experts/ warned against a double bind. In the view of these circles it is inconceivable that Israel will not include in its autonomy plan articles that will prevent the development of a situation in which Israel loses the ability to secure itself against the possibility that local elements assisted by foreign finance pump water through deep drilling from the underground aquifer in West Samaria which supplies approximately one-third of Israel's water consumption, and which is fed by water that originates in the watershed of the Samaria mountains,"^{10/}

Shapira further notes:

"The assessment of the elements with whom I have talked is that it is not difficult to carry out a pattern of deep drilling along ... the western slopes of the mountains of Samaria which could seriously disrupt the Israeli pumping system, which is fed by the same aquifer... The fact that it will not be difficult for the

autonomy administration to raise funds for this project, and the possibility that such a wide-scale pumping project would be presented as a humanitarian development project aiming to transport water eastwards in order to implement a massive programme of refugee rehabilitation (a programme which could receive international sympathy) must - in their opinion - concern the leaders at the helm of the state, and entail Israeli preparations and the introduction of changes in the autonomy plan which will alter the Israeli status quo in the field. In their opinion, such a pattern of drilling along the western slopes of the mountains of Samaria could - if implemented - constitute a casus belli for Israel, because, in contrast to the situation elsewhere, no substitutes can be offered to Israel in this matter. "11/

Under the title "One Source of Water to the Sharon and the Shomron" Amon Magen noted that,

"Water as a source of conflict among neighbours is not a rare phenomenon in history, either in our region or in the wider world. The Middle East, whose waters are in short supply and whose climate is relatively hot, has known, and still knows numerous such conflicts... The State of Israel has also managed in its short life to engage in confrontation with two of its neighbours, Syria and Jordan, and even mobilize aircraft and raiding forces against them on the question of the exploitation of the water of the Jordan and the Yarmuk Rivers. Meanwhile there is developing, imperceptibly as yet, another conflict

between Israel and the Arabs living along (or, some would say, inside) its borders. Coincidentally, all three conflicts centre on more or less the same quantity of water: 500 million cubic metres annually. Such is approximately the flow of the Jordan River (though, in all truth, it must be said that the Syrians threaten to divert only a portion of this quantity); such is approximately the flow of the Yarmuk River; and such is whose origin is the rainfall over the slopes of Judea and Samaria... This 500 million cubic metres which the State of Israel is pumping from springs and wells... all critically depend on the quantities of water that are pumped or otherwise in the mountains of Judea and Samaria...

"Our good luck is that the agriculture in the West Bank is not developed. Until 1967 it was mainly dry agriculture whose water came exclusively by rainfall: 800 mm. per annum in the neighbourhood of Nablus and Ramallah to 500 mm. per annum in Hebron... Irrigated agriculture was limited and fed on spring water. Only a few wells were sunk, partly because it was necessary to drill to depths of hundreds of metres in order to get to the ground water level (compared with 300 metres at the most in Israel). The wells were mainly utilized for domestic consumption, which was limited: some 40 cubic metres per person per annum, as compared with the 100 cubic metres per person per annum in the Israeli settlements in the Jerusalem corridor... Forty cubic metres per person per annum multiplied by 700,000 residents comes to approximately 30 million cubic metres per annum - really not a very big quantity. After the Six Day War ... the military administration

took care to apply on the West Bank the laws regulating water drilling that are in force in Israel. Permits to sink wells were given on very rare occasions, and effectively only to provide for supplies of drinking water for domestic use. This is done in order not to affect the pumping in Israel."12/

Likewise, Yehuda Litani, Haaretz correspondent reported as follows:

"On the subject of the water resources /in the West Bank/, the members of the Committee /appointed to determine Israel's position on the subject of autonomy/ concluded ... that the State of Israel must continue to control the water resources in the territories, both because of the danger to water reserves inside the Green Line and because it will be impossible to establish new Israeli settlements in these territories without control and supervision of the water resources. The Water Commission submitted a Memorandum to the Committee which said that the water resources of the State of Israel inside the Green Line originate in the West Bank and that incorrect application of drilling in the West Bank could salinize the water reservoirs of the State of Israel..."

"This/ Memorandum submitted by the Water Commission is interesting. Is it the case that in the period 1948 - 1967 there was incorrect application of drilling in the West Bank? What did the State of Israel do during these years in the face of this "incorrect application"? It is possible that this is the true

reason, so far unknown, for the eruption of the Six Day War."13/
Israeli policy on the West Bank waters is also revealed in an article by Abshalom Ginat entitled "And You Will Draw Water to Samaria,"

"When Moshe/ Dayan went to the US at one of the stages of the peace treaty negotiations he said at Lydda /airport/ that Israel will continue to control the water resources in Judea and Samaria, which constitute the main water resources for the coastal plain. 'The Arabs in Judea and Samaria will not get more water than they have today,' said Dayan, and following this policy, the /Israeli/ Water Commissioner was appointed to control the waters of the West Bank. And thus, it will be recalled, began the debate on the question: to whom or to what does the autonomy apply: people or territories? Those who originated the idea of autonomy being applied to people assume that the Israeli Water Commissioner will be able to oversee the exploitation of the West Bank waters and instruct the autonomous residents if, when and where to drill..."14/

ISRAEL'S POLICY ON
THE WEST BANK WATERS:
RESTRICTIONS AND EFFECTS ON
THE WEST BANK ECONOMY

According to a study prepared for, and under the guidance of, the United Nations Committee on the Exercise of the Inalienable Rights of the Palestinian People, Israel's use of West Bank waters is a clear and gross violation of the Fourth Geneva Convention of 1949.^{15/} The effects of Israel's settlement policy in the West Bank on this area's water resources and on its Arab economy have been very harmful.

Jewish settlements are quite obviously using the limited water resources of the West Bank at the expense of Arab farmers. There has been an expansion of the Israeli water control system, in order to serve the requirements of agricultural projects established by the Jewish settlements that were set up by force on West Bank land.

This system is embodied in various measures taken up by the Israeli authorities. Israel has restricted the water consumption of the Palestinians in the West Bank and the Gaza Strip in order to make a larger amount of water available for Israeli consumption. These restrictions have become a problem for citrus producers and vegetable farmers, whose crops are dependent on irrigation. As a result of these restrictions, irrigated Arab land has remained at about 8,100 hectares.^{16/}

Professor Hisham Awartani, Chairman of the Department of Economics at al-Najah National University in Nablus wrote an insightful study of Israel's water policies in the West Bank. Using a recent study which was published by the Water Department of the Military Government of the West Bank entitled Monthly Discharge of Underground Water in Yehudah and Shomron 1977-1978, Awartani notes that the total number of artesian wells in the West Bank is 331, of which 17 have been drilled by the Israel Water Company (Mekorot) in the Ghor (Jordan Valley) to serve Israeli settlements in that area.^{17/}

In his well-documented research, Dr. Paul Quiring notes with respect to water and water rights that since 1968, the number of wells drilled by the Israel Water Company (Mekorot) in the West Bank to meet the irrigation and domestic consumption of the Jewish settlements amounted to at least 17 besides Israeli using of four wells which existed before June 1967 and owned by "absentee" Palestinians.^{18/}

No well is sunk by a Palestinian in the West Bank without first obtaining a permit from the representatives of the Water Commissioner at the military government offices.

The Israeli authorities, on the other hand, have been completely prohibiting Palestinian farmers from drilling of any new wells for irrigation purposes since such drilling would be carried out in the area whose aquifer Israel is exploiting through the artesian wells in Israel.^{19/}

Dr. Quiring notes that since June 1967 only seven permits have been given to

drill wells to provide domestic water consumption.20/ These permits were given in cases where denying Palestinians of these permits would have resulted in seriously impairing water supplies for domestic consumption. No existing well has been allowed to increase its pumping capacity.

Water meters have been placed by the Israeli authorities on existing Arab wells to keep a daily check in order to maintain the limitation imposed on the amount of water from the Palestinian land which they are permitted to use.21/

In some cases, wells owned by Arab farmers who were obliged, for various reasons, to live outside the West Bank since 1967, have been taken over and exploited for Israeli consumption.

Arab municipalities, for example, Ramallah, have been refused permission to drill wells unless they would also supply nearby Jewish settlements or have been forced to link up their municipal systems to the Israeli network, which gets its water supply from the groundwater of the city of Ramallah itself.22/

Dr. Quiring noted that,

"This lack of water resource development, together with the confiscation of wells on 'absentee' property, means that there are fewer wells providing less water for Palestinian agriculture in the Jordan Valley today than were available on the eve of the 1967 War."23/

Israel's water policy in the West Bank has a devastating effect on neighbouring Arab springs and wells.

Israelis have been drilling wells in close proximity to springs and wells that existed before June 1967 and that the Palestinian towns and villages have relied on for crop irrigation and domestic consumption.

Dr. Quiring notes that,

"While it is theoretically possible for such wells and springs to operate side by side without affecting one another, hydrologists advise that the long-term effects of such a policy will be detrimental to the output of the pre-1967 Arab water sources - particularly in an area such as the Jordan Valley, where water is limited."24/

H. Awartani noted that,

"...The total volume of water discharged from 314 'Arab' wells amounted in 1967-1978 to 33.0 million cubic metres whereas the 17 'Israeli' wells in the Jordan Valley discharged 14.1 million cubic metres."25/

According to a confidential report drawn up recently by a major Western embassy in Israel, the Jewish settlements in the West Bank are consuming some 15 to 17 million cubic metres of water annually, and this figure will rise to an annual 52 million cubic metres when the settlements achieve their irrigation targets, which include the irrigation of tens of thousands of dunums of Palestinian lands.26/

As a result of Israeli drilling with powerful drilling equipment, 500 metres deep, and the use of powerful pumps, Palestinian wells and springs are being depleted and West Bank water is being drained off for the Israeli settlements

in that area and for Israel. H. Awartani noted that, twelve Arab wells have dried up following the 1967 occupation. Many others in the Jordan Valley, mostly in the northern part, are suffering a declining water level and increasing salinity.^{27/}

This has happened in many areas in the West Bank, particularly in the Jordan Valley area. The 2000 Palestinians living in the village of Awja, 12 kilometres north of Ariha in the arid part of the Jordan Valley, have protested to the Israeli authorities that their agricultural economy is being ruined because the Israeli wells and the water network supplying the nearby Jewish settlements have drastically depleted the village's water resources. The inhabitants of Awja say that they have not been able to get any water for irrigation and have therefore lost over 1,300 dunums of land planted with bananas and 150 dunums of land planted with citrus fruit.

The farmers living in the village complain that, because of the lack of water, they will not be able to plant cucumbers, beans and tomatoes as they used to do and will therefore have to wait for the rains.

Similar cases have occurred in other Arab villages, such as Bardala, Ain al-Baida and Kardala in the northern part of the Jordan Valley.

The Palestinians have little power to do anything but watch hundreds of their pre-1967 springs and wells gradually turn saline and then dry up while, in the

vicinity, employees of Israeli water authorities use highly sophisticated water pumping and transport systems to irrigate the Jewish settlements in the West Bank.

Thus, Israel's exploitation of some 500 million cubic metres of water for its own purposes leaves, out of a total of 620 million cubic metres, only some 120 million cubic metres to meet the needs of the West Bank. The consumption by Israeli settlements of some 16 million cubic metres annually means that 8,000 Jewish settlers in the West Bank, excluding the Jerusalem area, constitute one per cent of the total population of the area but consume some 15 per cent of the local water.^{28/}

Since the water shortage in Israel is increasing and Israel's settlement policy in the West Bank is continuing and expanding, the expropriation of West Bank water is also increasing proportionately.

Israel's exploitation of the West Bank waters at the expense of its Palestinian inhabitants has been generating conflict between them, on the one hand, and the Israeli authorities and Jewish settlers in the West Bank, on the other. This conflict is bound to heighten as the demand for water by the settlers increases.

Dr. Quiring notes that:

"It is logically impossible for the Israeli government to argue that such settlement will not displace or adversely affect the indigenous

Palestinian population. The land and resources needed to provide the Jewish settlement do not proceed from a vacuum. The West Bank is no more vacant of its citizens than was Mandatory Palestine prior to 1948. The policies motivating settlement in 1978 are not unique; they are essentially the same as those employed in the 1920s and the 1930s. Unfortunately, the effect is also the same: the claim of one people to return to a homeland is being exercised at the expense of another people's right to live in theirs."29/

TABLE
WATER SUPPLY IN THE WEST BANK

Area	Number of Wells	Quantity (TCM)	Percent
Ariha (Jericho)	40	3,464.5	7.3
Aujah	11	1,077.8	2.3
Jafetlak	29	2,656.1	5.6
Marjna'ja	8	879.5	1.9
Bardalah	8	1,854.8	3.9
Wadi Far'ah	23	2,767.3	5.9
Jenin	56	3,277.8	6.9
Tulkarm	59	10,128.8	21.4
Qalqillyah	70	6,798.2	14.4
Ramallah	17	14,144.8	30.0
Ghor (Jordan Valley)	10	173.4	.4
Total	331	47,223.0	100.0

Source: Annual Report of the Department of West Bank Hydrology, 1978.

REFERENCES AND NOTES

- 1) Yakobowitz, M. and Prushansky, Y., eds. The Water in Israel (Jerusalem: Israel Information Centre, 1978), p. 21.
- 2) Davar, 26 November 1978.
- 3) Ibid.
- 4) Yakobowitz, M. and Prushansky, Y., eds. Op. cit., pp. 38-40.
- 5) Davis, Uri and others "Israel's Water Policies," Journal of Palestine Studies, Winter 1980, no. 34, pp. 18-20.
- 6) This Commission administers Israeli water resources. The Israeli Water Law (1959) governs the operations of the Israeli Water Commissioner who heads the Commission. Op. cit., p. 5.
- 7) Davis, Uri and others Al Hamishmar, 25 June 1978.
- 8) Haaretz, 30 November 1978.
- 9) "Water Specialists Warn that Autonomy in the West Bank Will Expose Israel to the Danger of Loss of Water Reserves," Al Hamishmar, 25 June 1978.
- 10) Shapira, A. Ibid.
- 11) Davar, 26 November 1978.
- 12)
- 13) Itani, Y. "Before the Auction," Haaretz, 27 November 1978.
- 14) Hotam, 20 April 1979.
- 15) United Nations Organization The Question of the Observance of the Fourth Geneva Convention of 1949 in Gaza and the West Bank Including Jerusalem Occupied by Israel in June 1967.
- 16) Permanent Mission of Jordan to the United Nations Prepared for, and under the guidance of, the Committee on the Exercise of the Inalienable Rights of the Palestinian People. New York: United Nations, 1979, pp. 15-17.
- 17) Awartani, H. Israel Drains West Bank Water Resources. Unofficial United Nations document no. S/AC.21/- used by Security Council Commission, Established Under Resolution 446 on 22 March 1979, p. 4.
- 18) Quiring, Paul West Bank Agriculture: "A New Outlook," Research Bulletin. No. 1, Al-Najah National University, Nablus, West Bank, November 1978. (See table on page 18).
- 19) "Israeli Settlements and Palestinian Rights, Middle East International (London), October 1978, no. 88, pp. 13-14.

- 19) Ibid., pp . 13-14.
- 20) Ibid., p. 14.
- 21) Israel Drains West Bank
Water Resources,
op. cit., p. 3.
- 22) Ibid., p. 3.
- 23) Quiring
op.cit., p. 14.
- 24) Ibid., p. 14.
- 25) Ibid., p. 14.
- 26) Israel Drains West Bank
Water Resources,
op. cit., p. 3.
- 27) Quiring
op. cit., p. 14.
- 28) Israel Drains West Bank
Water Resources,
op. cit., p. 3.
- 29) Quiring
op. cit., pp. 14-15.

Litho in United Nations, New York

16332—July 1980—6,000

41298—November 1982—1,000