

The loss of top soil and runoff water through erosion is a grave national hazard which is particularly serious for a country like the West Bank which already suffers a substantial and continuous drain in its land water resources as a result of occupation policies. Undue loss of such resources through natural phenomena is thus all the more regrettable.

Water reserves

The West Bank lies in the path of the rainy winds blowing from the east shores of the Mediterranean. As such it receives a fairly large amount of rainfall averaging at about 700 millimeters on the western foot hills and interior mountains and dropping down to less than 300 millimetres on the eastern slopes (see map 4 on page 48).

Although seasonal variation in the level of rainfall makes it difficult to project a representative volume of precipitation, a British hydrological team projected an estimate based on a two-year average (1964-1965). According to their study,¹ the West Bank received on the average around 2800 million cubic meters (mcm). But two thirds of the falling water is lost later through evaporation and transpiration. The usable reserve is estimated at about 850 mcm.

Springs

There are about 300 known springs in the West Bank, but most of them are of ephemeral and small flow, and only a few of them are of value for farming purposes. Springs are generally poorly managed and also suffer deliberate official negligence. In the experience

1. West Bank Hydrology, (London: Rife and Rafferty Consulting Engineers, 1965), p 15.

of the researcher, many of them have been severely damaged and depleted due to the powerful discharging capacity of deep-bore wells drilled by neighbouring settlements. Table (II-4) shows the number of major springs and their annual discharge during 1976-77.

Table (II - 4)

Number of springs and their annual discharge capacity

	<u>No of springs</u>	<u>Annual discharge</u> (000m ³)	<u>% of total</u>
Eastern slopes	24	49754	93
Western slopes	32	3572	7
	<u>56</u>	<u>53325</u>	<u>100</u>

Source: Hydrological Yearbook of Israel 1976-77, (Jerusalem: Israel's Water Commission, 1978), compiled from scattered pages.

Artesian wells

The West Bank has got at the present two groups of artesian wells, one owned by Arabs and the other by Israeli settlements. There are 314 Arab wells under actual operation, concentrated mostly in the coastal areas and the Jordan Valley (see Table II-5). Wells in the upper hills are few. This is one reason why these areas have been forced into almost total dependence on rainfall in their agriculture.

Table (II - 5)

Number of artesian wells and quantities of water discharged (1977-78)

<u>Region</u>	<u>No of wells</u>	<u>Quantity discharged</u> (,000 cubic meters)	<u>% of total</u>
Jordan Rift Valley	96	9932.7	26.2
Wadi Fara'a	23	2767.3	7.3
Western slopes	185	20204.8	53.2
Southern hills	10	5033.6	13.3
Total Arab wells	314	37938.4	100.0
Israeli wells (only those in the Valley)	17	14,144.8	

Source: Annual Report on the Monthly Discharge of wells 1977-78, (Beit Eil: Water Department in the Military Headquarters, 1979).