## THEY ALSO TOOK THE WATER

Dr. Hisham Awartani

Water is a strategic resource in the Middle East, perhaps more so than oil. For the Palestinians under Israeli occupation in particular, the significance of water transcends purely economic consideration. Control over their own water resources constitutes a crucial link in their struggle to remain on the land, as they face Israel's systematic onslaught to deprive them of the wherewithal of survival.

Agriculture is central to the West Bank economy. It generates about 30% of the Gross Domestic Product and absorbs a similar percentage of the labor force. Of the total area of 5.57 million dumums (1 dumum = 1 1 acre), 2.1 million dumums or 28.1% are cultivated. Ninety-six percent of the cultivated area is rainfed, and irrigated agriculture makes up only 4% of the cultivated land. Yet, its contribution vastly exceeds this miniscule ratio; one-third of agricultural income is estimated to come from irrigated fields. Moreover, irrigated agriculture responds more rapidly to modern techniques, and its production is steadier since it is not at the mercy of erratic fluctuations in rainfall.

Artesian wells are the main source of irrigation water on the West Bank; there are no lakes or rivers. The 300 or so springs discharge sman quantities of water, are subject to seasonal fluctuations, and suffer from neglect. In addition, collection wells, which number 5,000 to 10,000, and which played an important role in the social and economic history of Palestine, have declined in importance, in part due to the accelerating construction of pipe networks. On the eve of Israel's occupation, the West Bank had 314 artesian wells under operation, mainly in the Plains region of the North, and in the Jordan Valley. The capacity of all wells was estimated at 35 million cubic meters year. Israel's campaign to control water in the West Bank has targeted these wells.

During the last 30 years, Israel has basically utilized all water resources available to it, most of which flow initially from outside the 1948 borders in Syria. Lebanon, Jordan, and the West Bank. As a result of the intensification of settlements inside and outside the 1948 boundaries, coupled with general economic growth, Israel faces a potential water shortage. Most recent Israeli estimates put the deficit at 450 million cubic meters year by the mid-1980's. It should be borne in mind, however, that "shortage" is a relative term: the average per capita consumption of water in all sectors in Israel is 3.5 to 4 times higher than on the West Bank; the ratio increases to 6 to 7 times for domestic water.

In theory, Israel can choose among several alternatives to overcome this potential shortage. Most of them—desalination using nuclear power, treatment of sewerage water, replacing sprinklers with the more efficient drip irrigation—will not be feasible for various political, economic and technological reasons before the end of the century. The remaining options are either to draw water from the Litani River in Lebanon and the Yarmouk River in Syria, or to exploit West Bank water. Thus far Israel has opted for the latter.

At the moment, Israel gets one-third to one-half of its

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water from the West Bank by channeling both surface and ground water to the aquifers in the plain of the Western slopes. This may mean that Israel would not countenance a political solution on the West Bank which might jeopardize this water source. On the West Bank itself, Israeli authorities started to drill water wells in the early days of the occupation, especially along the Jordan River in line with what was then called the Allon Plan, Now, Israeli-dug wells are found all over the West Bank. Although official reports put the number of such wells at 17. Palestinian sources estimate them at 27. In any case, the volume of water pumped from them amounts to 40-50% of that derived from all the 314 Palestinian wells. In addition, some settlements and military bases obtain relatively large quantities of water from Palestinian springs and wells, either via pipe networks or tank trucks.

This is but one side of a double edged policy. For while Israel allows itself generous use of Arab water, it imposes manifold restrictions on the Palestinians. Examples abound. The military government has set a ceiling of 35 million cubic meters year on water pumped from Arab wells, claiming that the restriction is necessary to avoid water salination. If we compare the discharge of Arab wells, 37 million cubic meters year, with that of Israel's (1150 million cubic meters), however, we cannot take these claims seriously. Another type of restriction Israel imposes is the prohibition on the drilling of new wells, except for the village of al-Ouja (see below). Even drinking water has come under severe control. Only 7 drinking water wells have been drilled since 1967 in spite of the growth in demand for water from an increasing population and urbanization. The Ramallah municipality was denied a permit to dig a new well, and was obliged to accept water from Makorot, the Israeli water company, thus becoming ever more vulnerable to Israeli political control. So far. other towns have resisted taking such a course.

Using the grounds of "national security," the occupation authorities continually harass the farmers, if not prevent them from farming altogether, especially in the irrigated regions. In the early days of the occupation, the Israeli army demolished 140 water pumps in the Ghor Valley along the Jordan River, and closed large tracts of land (30,000 dunums) in the same area to farming. In 1979, it buildozed the irrigation canal in Jiflek in the Jordan Valley, Recently, American Near East Refugee Aid (ANERA) offered to replace dirt canals in these areas with pipes, but was not permitted to do so despite the fact that both American and Palestinian experts thought the project would double the efficiency of water use.

The adverse impact of these policies on Palestinian agriculture cannot be overestimated. Overall, agricultural production has seriously declined. It is estimated that grain output has been reduced by 28%, vegetables 18%, and mel-

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ons 89% in the six years following the Israeli occupation. The only rise in production has been registered in the case of fruits, and by a meager seven percentage points at that. Add to this the blocking of the planned expansion of irrigated land by 10% in the Jordan Valley, for which water was to be provided by the East Ghor Canal. Agriculture in the Western Plains region suffered as well, both by the prohibition of drilling new wells and constraints imposed on those still in operation. Agronomists postulate that additional 200,000 dunums could be brought under intensive cultivation were it possible to start new wells.

The decline of agricultural production has had a profound impact on the social and economic structures of the West Bank. Agriculture, once the main source of income for the majority of the population and employer of the labor force, has been relegated to a secondary status. A large number of Palestinian farmers and farm laborers have been turned into wage workers in Israeli farms and factories. Their earnings now constitute the backbone of the West Bank's economy, enabling Israel further to tighten its grip on the occupied territories. The story of the village of al-Ouja is a case in point.

Al-Ouja is located in the Jordan Valley, ten kilometers north of Jericho. Out of 8,000 inhabitants before June 1967, only 2,000 remained in the village in the aftermath of the war. Before 1967, al-Ouja was one of the most important production centers of bananas, citrus, and vegetables in the West Bank. In 1978-79, the cultivated land was estimated at 9,700 dunums.

Farmers obtained their water from the al-Ouja spring and artesian wells. The spring was one of the largest in the West Bank, with an annual discharge of 5.7 million cubic meters. Al-Ouja's troubles began when Israeli authorities dug three wells in the vicinity of the village's spring in order to supply water for the newly-established Jewish settlements of Yitav and Gilgal. There followed a sharp decline in the discharge of the spring; with low rainfall in the following years, the spring completely dried up in early 1970. The consequences were catastrophic: 1.300 dunums of bananas and 150 dunums of citrus, worth \$2.7 million, were lost. Vegetable growing was reduced by 2,000 dunums; most of this has been under drip irrigation, so capital losses in pumps, pipes and irrigation pools was considerable. As a result. 1.500 villagers migrated and the majority of the 500 who stayed became wage laborers in nearby Israeli settlements. While Palestinians in al-Ouja lacked even drinking water. Jewish settlers in Gilgal, a few miles to the north, splashed around in swimming pools.

Thanks to local protest and a campaign in the international press, the military government agreed to supply the village with drinking water from an "Israeli" well. After more pressure from the international media. Israel finally licensed the drilling of two wells in al-Ouja, so that the remnants of that community can at least survive.

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## HAVE GUNS, WILL TRAVEL

## ISRAEL: CENTRAL AMERICA'S MERCHANT OF DEATH

by Frank Shaffer-Corona

Since the end of World War II the world has been subjected to an on-going series of armed conflicts which appear to be totally senseless if viewed without benefit of a common threat. One clarifying lens which brings close to forty years of military madness into focus is the realization that the First World (the West) has been engaged in mortal combat with the Second World (the East) over the nebulous goal of world supremacy. Further sharpness is added to the picture when one connects the filter of awareness that, during the same period of time, the First World has been steadily and intensely making war on the Third World as well. It is even clearer that Israel has enthusiastically chosen for itself a prominent role on the second front of this global conflict—having become in one short decade a leading arms merchant throughout the Third World.

Historians generally agree that World War II can trace its roots directly to the economic origins of fascism as much as to the dependence of fascism for its existence upon conquest through war. The economic struggle for the markets and the resources of the world left unsettled by World War I was also not determined with finality by the Second World War. The Third World is actually the prize at stake in the unending string of conflicts which have scarred the face of the twentieth century since 1946. The First World has been the only one of the major players with sufficient resources to wage the kind of two-front war necessary to simultaneously compete with the rival and debilitate the potential subject. One of the most valuable resources in the West's arsenal has been the burgeoning military capability of its Middle Eastern outpost, the State of Israel. It is a weapon which has been used most effectively in the efforts of the United States to quell the aspirations for freedom of the people of Central America.

In a few short years Israel has become the chief arms supplier to Central America. In that same period of time Israel has become, according to Central Intelligence Agency estimates, the fifth largest producer and exporter of arms in the world. The Reagan Administration, which has made a great deal of noise about cutting off the arms flow to Central America, has not only remained silent, but has also been supportive of Israel's role in the region. In the U.S. Congress even the strongest foes of the Administration's Central American policies prefer to ignore the phenomenon of massive Israeli involvement in the conflicts there.

Prior to 1967, Israel's participation in arms manufacture had been limited to small arms and ammunition primarily for use by its own forces. It is estimated that exports were limited to some \$10 million per year. When France cut off arms supplies to Israel as a result of its seizure of the occupied territories in 1967. Israel became dependent on the U.S. as its only supplier of weapons. The 1973 War confirmed to Tel Aviv's military planners that this was too short a leash. After 1967 Israel began to take steps to reduce the constraints of that dependence. Huge investments were made in the development of an independent armaments