

Better Med than Dead

Vera Rich reports on Israel's plan to save the Dead Sea from drying up by building a canal linking it to the Mediterranean

ENVIRONMENTAL protection is normally one of the first victims of a war economy. It would be tempting, therefore, to interpret the Knesset motion tabled last month by former Foreign Minister Yigal Allon, to avert ecological disaster by constructing a canal linking the Mediterranean and the Dead Sea, as a sign of approaching political normalisation. Ironically, this is by no means the case; indeed, according to some Israeli sources, the signing of a peace treaty with Egypt would effectively block any such plans.

The idea of such a canal is not new. It was first proposed at the end of the last century by Theodore Herzl, the Zionist leader who first envisaged a future Jewish state. Since then, a number of plans have been proposed, including a grandiose scheme for a ship-canal down from Haifa, via the Sea of Galilee, lower Jordan and the Dead Sea, down to the gulf of Aqaba. Present plans, however, and there are five under consideration by the Israeli government, with three possible routes, concentrate rather on the possibility of using such a canal as a source of hydro-electric power which could produce up to 10% of Israel's present generating capacity.

The Dead Sea lies some 400m below the level of the Mediterranean. Theoretically, therefore, such a canal could descend via a number of hydro-electric cascades. Such a project is highly favoured by Israel's anti-pollution lobby, notably by Dr Anthony Pirano of the Techion, who has worked out his own "integrated" scheme, with desalination of the water at the inlet end, and use of the proposed storage reservoir at Arad as a winter spa. Other proposals are somewhat less elaborate, but all would admit that the construction of such a canal would not be at present justifiable economically, on the basis of the energy produced alone.

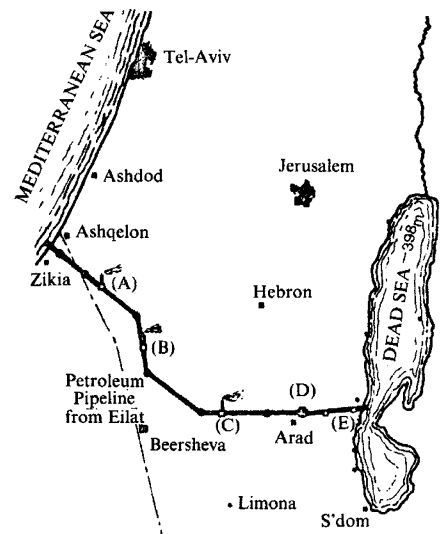
Replying in the Knesset to Mr Allon's motion, the Energy Minister, Yitzak Moda'i, stressed this point. Electricity, he said, can still be generated more cheaply by conventional power-stations using fossil fuels. The main purpose of the canal would not, however, be the hydroelectric scheme, although, as Mr Joseph Vardi, official spokesman for Israeli Ministry of Energy and Infrastructure told *Nature*, power production would be a spin-off which would make the canal economically feasible. Its prime purpose would be to recharge the Dead Sea.

Of recent years, Israel's use of the Sea of Galilee as the water source of the whole country has led to a significant drop in the level of the lower Jordan and a consequent fall in the level of the Dead Sea. The arid climate of the Dead Sea region causes a high evaporation rate—a fact utilised by the Dead Sea potash plant at S'dom, which is based on the natural evaporation of brine from shallow pans. Already the receding shore-line has left the S'dom works some distance "inland," and it has been necessary to construct a new pumping station and canal to bring the brine to the evaporation pans.

Although the Dead Sea Works has thus solved their own immediate problem, this is no remedy for the ecological changes produced by the recession of the Sea. According to Mr Allon, the situation is becoming "urgent" due to continuing progress by the Jordanians in their own water projects. The diversion of the Yarmuk river (a tributary of the lower Jordan) via the East Ghor canal for irrigation purposes is almost complete. Half the streams flowing into the Jordan from the east have already been dammed, and the damming of the remainder is proceeding at full speed. Once these Jordanian schemes are complete, said Mr Allon, the lower Jordan will disappear completely, save as a drainage channel, the level of the Dead Sea will fall completely and the southern part of the present area of the Sea would become a salt desert. This, as Mr Moda'i admitted in his reply, could cause "tremendous" ecological damage, which could not be easily repaired.

Use of the Jordan water by Israel's eastern neighbours has always been a sensitive issue. The "war over the waters" between Israel and Syria, was one of the prime causes of tension which led ultimately, to the Arab-Israeli conflict of 1956. Since it is not the loss of the lower Jordan itself, but the drying up of the Dead Sea that is seen as the ecological hazard, the construction of the proposed canal would clearly remove at least one potential cause of future conflict between Israel and Jordan.

A speedy separate peace with Egypt, however, would almost certainly force any such construction project to be deferred. Not for any political reason, but simply because Israel's resources, both human and financial are limited, indeed, over-extended. Military withdrawal from the Sinai would entail the construction of



Dr Pirano's proposed canal route

new defence installations in the Negev.

Furthermore, troops stationed in the Sinai have left their families at home, generally in the populous areas in the north. If transferred to the Negev, however, they would probably bring their families south, with consequent development of such towns as Be'er Sheva and Dimona, as well as less fortunate settlements such as Yeruham which have never really become fully viable. Under such circumstances, Ben Gurion's vision of the Negev as the heartland of Israel's prosperity could well come true—but at the cost of resources which could be otherwise used for the proposed canal.

According to some Israeli sources, there is considerable pressure "from outside" for a post-treaty Israel to develop a joint nuclear power capability with Egypt, the stations being situated in the Sinai, as a further incentive to peace. Such a project running into "billions of dollars" would be of considerable interest to foreign investors. Israeli attitudes to nuclear power are generally cautious—particularly since the proposed coastal site for one nuclear station between Ashqelon and Ashdod (see map) was found to be earthquake-prone. Until now, however, costs have been too high for Israel to consider any major nuclear power programme.

Should the proposed joint Israel-Egypt Sinai scheme become a reality, the proposed canal would be less important from the energy point of view, and with still more of Israel's construction workforce committed to the Sinai power-stations, its early construction would seem most unlikely.

The ecological threat to the Dead Sea would remain. It would be ironical if the peace-makers who urge Israeli-Egyptian nuclear cooperation should prove later to have laid the foundations for a second "war of the waters". □