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Nuclear Desalination and Gaza Politics — Title 94

A giant nuclear desalination plant, producing 4.5 million cubic meter a day of fresh water from the sea and 2 Megawatt of electricity, this was the ultimate aim of the US Atomic Energy Authority, as reported at the Geneva Conference by James Ramey, one of its Commissioners. Already in 1964, the year of the Conference, the need for additional fresh water in many parts of the Earth had become an urgent necessity, and this need has in the following decades become ever more imperative.

An ample supply of fresh water is the critical factor for an ever increasing human population, for irrigation and for greater industrialisation in many underdeveloped countries, as well as in certain areas of the developed world. For example Southern California, Australia, Israel, Tunisia, Spain and Greece and even Essex County in Britain, would all welcome more fresh water. One day perhaps will Politicians, yielding to population pressure, override environmentalists' opposition, and learn the Scientific Temper?

Where energy is cheap, as in the oil-rich States of the Persian Gulf, desalination is a cheap routine operation by simple distillation in vacuum using the flash process. Nuclear desalination would be more expensive, it was admitted by the speakers at the special session devoted to this subject in Geneva, but no figures were given, as many variables enter into the cost calculations.

So for example Dr F.S. Aschner of Israel's Institute of Technology in Haifa, stated that their large Transac Computer had been used for cost and efficiency calculations. He informed the Session that in June 1964 American experts had visited Israel to study the technical and economic aspects of nuclear desalination. In July 1964, a Russian team of experts visited Washington at the invitation of President Johnson for discussions on this subject, as apparently the USSR was the only country which had built a nuclear desalination and electric power station.

There was no public mention of the political consequences of a nuclear desalination station in Israel or its occupied territories. After several visits to Israel by myself in the following years, it struck me that if such a station, with American aid, safety knowledge and know-how, could be built in the Gaza Strip, it could also provide a political solution to the Israel-Palestinian conflict. If ample fresh water were available in Gaza, at present a desert-like area, a rich fertile land could be created, and, with Israeli experience of desert reclamation, the irrigated areas would become a highly desirable home for the then widely scattered Palestinian refugees.

Such a political conflict might well be settled by modern high technology. I discussed my idea with both Israeli and Egyptian scientists and urged them to approach their politicians to start at least discussions on this subject. But it remained just one more dream.

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To... Routine Science and Deserts Worldwide - Routine Science in Fleet Street. Title 95.