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## To the Detriment of None

In Paris in mid-May, delegates from 33 nations (including the Soviet Union and the United States; Israel and the United Arab Republic) brought to conclusion a harmonious and highly successful meeting. Although there were minor differences, there was general agreement about the major problems to be attacked and about the importance of continued international cooperation. The meeting was held at UNESCO House, not at the Palais de Chaillot; the delegates were scientists, not heads of states; and the subject was the application of science to human welfare, not international politics.

Since 1951 UNESCO has been concerned with the problems of arid lands, which, if semi-arid regions are included, comprise about one-third of the land area of the world. In 1956 UNESCO organized a six-year attack on these problems, concentrating on the deserts of North Africa, the Middle East, and Southeast Asia. The Paris meeting was designed to appraise the progress so far, to facilitate exchange of information, and to decide whether to continue along the same lines beyond 1962.

Reports from the conference show steady advance in research results, point up some difficulties, and suggest some new undertakings. Although progress has been made in desalting water for irrigation, the best methods are still some ten times too costly. A cheap source of power is still to be developed; improved methods for converting the energy of sun and wind into usable power have been devised, but none is yet economically practical.

The difficulties in reclaiming deserts are formidable. Artificial induction of rain is still in the experimental stage. Irrigation brings in its wake salt and silt and, as B. P. Uvarov of the United Kingdom pointed out, creates an environment that favors catastrophic increase of desert insects, especially locusts.

Luna B. Leopold of the U.S. Geological Survey warned that the semi-arid southwestern region of the United States is, thanks to rapid agricultural and industrial expansion, depleting its underground reservoirs as it draws water from them at much more than replacement rate.

A sharp change in the direction of thinking about desert reclamation was voiced by Gilbert F. White of the University of Chicago. A decade ago trees were planted to anchor shifting sands and to provide favorable agricultural environments, but some trees, the tamarisk for example, use more water than do crops and they should be planted sparingly.

White also pointed out that technology itself will not be enough. Social attitudes toward the use and misuse of water must be modified: "The human problems are more difficult than the technical."

Among the proposals put forward for new projects were the following: a cooperative international pilot project in a particular desert area to determine what is possible, to "recreate the Garden of Eden"; a survey of underground water resources in North Africa; the creation of an international laboratory (or phytotron) for studying plants in a controlled environment; and extension of arid zone research to South America.

The course of future arid zone research under UNESCO's auspices cannot be forecast, but from the tone of the conference there can be no doubt that cooperation among scientists of many disciplines and many countries will continue, to the detriment of none and to the ultimate gain of all.—G.DuS.