

a few kilometers long and several meters deep.

Preliminary investigation indicates that in all the fields the irrigation systems were so planned as to insure a complete control and distribution of the water by means of spillways, canals, drop structures, division boxes, and so forth. All these structures were built of stone. There was a depth of irrigation that would wet between 2 and 4 meters of soil. For loess, this irrigation is sufficient for the annual requirements of cultivated orchards or general field crops.

The pilot-plant farm is the culmination of years of Negev research by Evenari and his associates, South African-born Leslie Shennon, a water engineer; Naphtali Tadmor, an agriculturist; Y. Aharoni, an archeologist; and Tossi Feldman, an amateur archeologist from a nearby kibbutz, who reconstructed the farm. The research is supported by the Ford Foundation.

Evenari's preliminary findings will be reported to farmers, agriculturists, and scientists from every part of the world at the International Farmers Convention that will take place in Israel, 29 March to 12 April.

Geneva Test-Ban Negotiations

The executive committee of the Federation of American Scientists, a nationwide organization of more than 2200 scientists and engineers, has released a statement on the current nuclear test-ban negotiations at Geneva that includes the following comments.

"The present Geneva negotiations seem to be reaching a stalemate. . . . If the arms race continues, the certain spreading of nuclear weapons to more and more nations will almost surely lead to nuclear war of utter destruction.

"We should like to comment on several points of difficulty in the present negotiations.

"(1) We regret the impression given by news reports that data from the new underground explosions invalidates the inspection system worked out by the Geneva Conference of Experts last summer. Quoting from a U.S. State Department release of January 24: 'These data did not invalidate the system agreed upon at Geneva last summer.' Recently released testimony before the Senate Subcommittee on Disarmament makes it clear that the same detection capability envisioned by the Experts' Conference can be obtained with the original number of stations proposed, with some improvements in the techniques used.

"It is very unfortunate that the new seismic data were released, before thorough evaluation of the positive as well as negative aspects, in such a way as to

emphasize the negative aspects of the data. The manner and form of this release was such as to give rise to misleading reports which placed undue emphasis on the negative aspects of the new data. It is understandable that in these circumstances suspicion might well arise as to the motives behind such release.

"We wish to point out that the capability and reliability of the monitoring system can be significantly improved by making use of 'calibration' explosions, both chemical and nuclear. Consequently it would be desirable that there be provision for calibration explosions in the first agreement.

"(2) The Russian insistence on veto rights over the composition and operation of the inspection teams and the technical staff which will man the stations is a clear obstacle to success of the talks. To maintain this demand certainly means blocking any hope of agreement.

"Russian insistence that monitoring stations in each country be operated only by nationals of that country is also a fundamental block to success of the talks.

"If the Russian suspicion that the detection system would be used by the West as the basis for a widespread spying system is real, other means must be found of safeguarding against espionage; this problem must not be allowed to block a nuclear policing agreement altogether.

"(3) There is a stated American desire to exclude peaceful explosions from the ban. There is in fact an American program, called Project Plowshare, which is meant to develop peaceful applications of nuclear explosions. The carrying through of the peaceful tests program is certainly less important now than is the chance of agreement on a workable test ban and its policing. If exemption of peaceful explosions from the test ban threatens the success of an agreement, Plowshare should not be insisted on. It is really extraneous to the basic issue of arriving at a better chance of peace.

"In particular, the scheduled nuclear explosions this summer under Project Plowshare could very well lead to unrestricted resumption of Russian weapons tests. No gain from Plowshare would compensate for this unfortunate result."

Tropical Medicine Survey

The National Academy of Sciences-National Research Council has announced a major survey of needs in the field of tropical medicine. The work will be directed by Willard H. Wright, recently retired chief of the Laboratory of Tropical Diseases, National Institutes of Health. Wright, who holds doctorates in veterinary medicine and in medical parasitology, was a member

of the NIH staff for 22 years. He is a past president of the American Society of Parasitologists, president-elect of the American Society of Tropical Medicine and Hygiene, and has served in many capacities in the World Health Organization, for which he has just completed an assignment in the Middle East.

Advocated for several years by the American Society of Tropical Medicine and Hygiene, the survey was proposed by the Department of Defense on recommendation of the Armed Forces Epidemiological Board. Support has now been assured by the National Institutes of Health, the Department of the Army, and the Rockefeller Foundation.

As presently conceived, the investigation will cover infectious and parasitic diseases, veterinary medicine, and environmental hygiene. It will include surveys of disease problems in tropical and subtropical areas of significant importance to public health and to agricultural and industrial development; of funds expended for medical care and disease control; of financial support for research in medical and hygienic problems of the tropics; of fellowship opportunities, teaching programs, and training facilities; of career opportunities and incentives; of the impact of travel and migrations on tropical disease problems; of the importance of tropical medicine to the economy of the United States; and of projected manpower needs in terms of domestic and overseas requirements. The data assembled will be used to assess the need for domestic, foreign, and international measures to deal with the problems defined in the survey.

French Geological Information Service

The monthly publication of some 3000 to 5000 technical papers dealing with the earth sciences poses a problem of major magnitude in documentation and classification. The Service d'Information Géologique (S.I.G.) of the Bureau de Recherches Géologiques, Géophysiques et Minières (B.R.G.G.M.) is attempting to cope with this problem by means of a classified card index, duplicated for sale to interested persons or institutions. The index provides ready reference by means of letters and numbers, to 1200 subjects, the main headings being mineralogy, petrography, stratigraphy, tectonics, geophysics, general and dynamical geology, applied geology, history and activities of geology, regional geology, general paleontology, biology, botany, and zoology, prehistory and problematica.

Full information, descriptive data, and samples of work may be obtained from J. Roger, B.R.G.G.M., 74 Rue de la Fédération, Paris 15, France.