Letters

On-the-Job Training Offer Rebuffed

A year ago, 1250 scientists, who were concerned with the inability of disadvantaged persons to improve their condition, offered to accept one unskilled, untrained person in their laboratories for up to 2 years of personal, on-the-job training. The offer included a promise to help the trainee find permanent employment. The scientists requested the federal government to provide trainee wages of up to $5000 per year. From the sample size, we estimate that there may be as many as 25,000 scientists who would be willing to participate in the program.

Details were discussed with members of Congress, some of whom then helped us to review the offer with members of of the White House staff and the Department of Labor. It developed that an administrative mechanism to accept the offer was lacking and, therefore, we wrote directly to the President and to members of the Cabinet for aid in authorizing acceptance. Several (Spiro Agnew, Robert Finch, David Kennedy, Daniel P. Moynihan) wrote letters of approval. However, a final reply has just been received by the undersigned from Chester E. Finn, Jr., staff assistant to the President:

> . . . In the end, much as it is to be regretted, I must tell you that present budgetary constraints are such that I doubt the feasibility of federal support of this program at this time. I don't mean to discourage you from bringing it up again in another year, or to deny our very real enthusiasm for the ideas you suggest, but only to try to be realistic . . . I would hope that you would report to them (your colleagues) that, while we do indeed accept your offer to volunteer time and service, the federal budget cannot at this time make the resources available that would seem necessary to carry out your program.

We conclude that there is little hope that positive action will be taken on this generous offer of personal services by so many scientists. However, we have summarized our experiences for the benefit of others who may feel that opportunities for persuasion still exist.

HERBERT MELTZER
GERALD COHEN
New York State Psychiatric Institute, 722 West 168 Street, New York 10032

Fresh Water for Agriculture

Clawson *et al.* ("Desalted seawater for agriculture: Is it economic?," 6 June, p. 1141) apparently have fallen into the same pitfall of which they accuse the Kaiser and Oak Ridge studies concerning seawater desalting in the Middle East. That is, their a priori point of view has biased their approach to the question. By analogy, their point seems to be that lack of need in some areas (the "overdeveloped" countries) combined with the local lack of technological capability in other areas ("undeveloped" countries) disproves the economic feasibility of large-scale desalinization in an area that has both the need and the technology. In their rather extensive review of potential costs and frequently neglected problems in this technology, they have failed to note that the Israelis are among the most advanced in the world in their approach to water resources management and desalinization technology. This is the reason that all plans for Middle East freshwater development include a major role for Israel.

A more serious error, however, is the application of American and Egyptian experience to placing a dollar value on water to Israel. The answer to if "not economical in Southern California . . . then where is large-scale desalting of seawater economic?" is simply anywhere where no alternative source is available as it is to Southern California. The economy of California is certainly not yet limited in fresh water, and, if it were, agricultural products could easily be imported should it become necessary. The Egyptian tomato fiasco is even less relevant to the determination of the value of water to mechanized, efficient agriculture.

In the nontechnical area of discussion, deprecation of plans "to develop . . . a wholly new order of magnitude in farm efficiency" on social and economic grounds is valid when applied to some areas of the world, but probably not to Israel or whatever fraction of the Middle East to which the Israeli example may eventually extend. Israel has evolved the social and administrative structure appropriate to "agro-industrial complexes" in the Kibbutz and Moshav organizations, and has done it at least partly with foreign capital without becoming colonized.

Problems certainly exist, and research should continue, but the potential advantages of large-scale desalting to the Middle East appear to warrant the active engineering development that only occurs when the end result is an operational prototype; scale, cost, and risk require participation by major powers.

D. A. KORENSTEIN
325 Danell Road, Radnor, Pennsylvania 19087

Your readers must be puzzled by the vigorous attack of Clawson, Landsberg, and Alexander on nuclear desalting schemes that have never been discussed in the pages of *Science*. A paper is therefore being prepared for *Science* which describes the Oak Ridge work. I hope readers will withhold their judgment as to the feasibility of using desalted water for agriculture until after this article is published.

ALVIN M. WEINBERG
Oak Ridge National Laboratory, Oak Ridge, Tennessee 37830

The article by Clawson, Landsberg, and Alexander is among the very few I have seen that gives adequate attention to the ability of agriculture to pay for water, and the technological competence necessary for efficient use. Calculations for various segments of agriculture show that gross return per acre should exceed $1000 before it becomes possible to compete with domestic users for water. Some economists believe that field irrigation in eastern Colorado would cease when the cost of water at the farmer's head gate exceeds $6 per acre-foot. The only segment of agriculture that could possibly afford