Revitalizing U.S. agricultural and food research

Our agricultural research system, grounded in an historical partnership between the U.S. Department of Agriculture and the state Land-Grant institutions, is the object of widespread concern and the focus of numerous studies designed to improve its efficiency and effectiveness. Changes over the past 30 years, both in agriculture and in the public institutions that support it, have blurred the once distinct roles of federal, state, and privately sponsored agricultural research. This has led to charges of wasteful duplication of effort and of inappropriate research being undertaken by some elements in the system. Concern is also expressed that our storehouse of basic knowledge is running short of what is needed to maintain our agricultural output.

There is general agreement that we need to keep our agricultural and food research programs strong because of their substantial contributions to our productive capacity and our national economy as well as to the amelioration of hunger throughout the world. Views begin to diverge, however, when we attempt to define the specific roles of federal, state, and private agencies in actual research efforts.

Without getting into this complex issue of definition of roles, and in the spirit of supporting the “common good” for U.S. agriculture and the research that undergirds it, I would like to suggest a plan to revitalize our agricultural research system and at the same time strengthen the partnership between federal and state educational institutions.

The core of this plan would be a USDA-developed National Research Institute for Agriculture and Food Sciences. Founded with the very best of facilities and scientific expertise, the Institute should be established with a goal of making it the world’s foremost center for basic research in agriculture and food science. It should provide support and stimulation that no other organization or agency could duplicate. It should have the capacity to attract the most competent scientists and specialists, not only for permanent affiliation, but also for short-term projects. As an integral and indispensable part of this plan, the Institute should establish a number of prestigious resident professional fellowships in the agricultural and food sciences, to be offered annually on a competitive basis to the scientific community at large.

Pursuing a program of this nature would, in my judgment, restore a national focus on the fundamental research needs of one of the most important ingredients for the well-being of our country. Agriculture, no less than human health and national defense, justifies this kind of national commitment to excellence.

As important as such an Institute would be to our future basic research needs, it should not be expected to satisfy the total requirements for a comprehensive research program. The diversity in both commodities and geography that characterizes U.S. agriculture makes the problem too complex for a single-program approach. Regional USDA programs and state agricultural research, teaching, and extension activities must also be maintained and strengthened if we are to move from theory to practice without undue delay.

The products of science and education are not confined by state boundaries. They contribute in the aggregate to a vital national resource. Federal support of teaching, research, and extension programs at state institutions is not only warranted, it is essential if we are to meet the needs of the future. None of the rearrangements of federal, state, and privately supported research programs in the agricultural and food sciences should be allowed to destroy the cooperative relationship of each to the other. Adoption of this plan, however, would require a careful review of existing programs to determine their appropriateness in relation to the scope and location of their sponsoring agencies.

A concerted national effort to emphasize and focus upon very basic research in science is important to the well-being of our food and agricultural industries and could, if developed with adequate support, revitalize the entire research program and enhance the cooperative relationships that were so instrumental in bringing U.S. agriculture to its prominence in the world today.

I visualize a national research center equipped in a manner far better than would be possible for a single state to undertake. Likewise, it should strive to develop a staff of such outstanding research scientists that their colleagues in state universities would seek opportunities to spend sabbatical leaves at the Institute and to work collaboratively with resident scientists.

This core of excellence, like the hub of the spokes in a wheel, could radiate its influence and stimulation throughout the system. Basic agricultural research would receive the attention it merits, and the entire system of food and agricultural research would almost certainly be revitalized.