

THE CHALLENGE OF WORLD FOOD NEEDS

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{The world food crisis is an eminent reality. It
{requires a revision of priorities in agricultural
{colleges. Professor Blackmore describes this priority
{ity as the Fourth Dimension. -Editor

A long and deepening shadow hangs over the future professional life of every student in the preparation for an agricultural career. This shadow is cast by the growing food crisis of our world. For the past six years, the Director General of FAO, in reporting annually on the state of food and agriculture, has had to report no measurable improvement in the world's per capita food supply. Recent estimates by the USDA are even more foreboding. In his recent address here, Nathan Koffsky had some grim statistics for our consideration.

He demonstrated that the U.S. capacity to provide food products for underdeveloped countries was now very great, considerably in excess of present needs. His trendlines of our capacity and their needs, however, eventually converge because of the rising tide of people to be fed. We have about twenty years before this will happen! Unless something is done, we will then be in the position of having to make a choice between feeding ourselves and feeding our friends.

The political consequences of this decision problem are such that no one would want to have to make it. The domestic consequences of restricting U. S. food consumption to feed others would be disagreeable, but the international political consequences of maintaining our own high level of food intake while others go hungry or starve - these are unthinkable.

If there is an alternative to this dilemma, it is in the hands of the students here tonight. It is during your future professional careers that something must be done.

It is possible to expand world food production to catch up with the growing human population and to maintain a reasonable food supply until population control can be made effective. However, making what is possible a reality is the great challenge to us, the students, and faculty in universities.

*Adapted from a talk given by Dr. John Blackmore, International Agricultural Programs, University of Minnesota, at Recognition Assembly, St. Paul Campus Student Center, May 10, 1966.

This is a challenge to students. This kind of agricultural development requires an enormous number of professionally trained persons. The underdeveloped world is straining itself to produce these technically trained persons, but for a decade or two, they simply cannot hope to meet their needs. There is one great potential source for them - the professional colleges of American state universities. This is the time for many to begin preparing themselves for professional careers relating to the food problems of the world.

The first requirement for such a career is intensive preparation in a specific professional field. An international career requires a first-class professional person in some specialized field. Second, it requires a broad perspective of the world in which we live and work. It is necessary to know something about its history, political systems, economic organization, and social problems.

Now is the time for a massive, imaginative assault by the U. S. colleges of agriculture on the world's food problems.

The really great needs are for research and technical training. We have been slow to learn the difficulties of exporting problem-solving research conducted in the U.S. We have built a highly productive agriculture in our country by effort on regional and local production problems. This same kind of effort must be performed at hundreds of locations abroad in developing countries if their agriculture is to be productive. New crop varieties must be developed and their fertility requirements must be determined. Tillage methods, harvesting techniques, and storage problems all need research. Animal productivity requires research on feed production, nutrition, diseases, and parasite control. Marketing research is needed everywhere, as is more research on human nutrition and food technology. Production research technologies need be fitted by research into management systems for farms not at all like our own.

The developing countries may someday have their own research facilities adequate to meet their needs, but not for many years. They cannot possibly overcome both the knowledge and the time gap. A few worldwide and regional facilities have been built by the great foundations, but many more are needed. If catastrophe is to be avoided twenty years from now, many of the American universities must soon make large-scale attacks on research problems relating directly to world food problems.

What is needed now is a plan and a program. The establishment of such a center requires thoughtful and imaginative planning. I do not suggest a center as a physical thing, separate and apart from the established units of a university. Quite the contrary. It should be built into the fabric of the university. Its staff should be in the appropriate departments. Its laboratories should be additions to present laboratory facilities. Its curricula should be built into departmental, college, and graduate school curricula. The center should exist as a set of policies and administrative arrangements. For example: 1) The research

Program should be aimed at a set of strategic bottleneck problems of an important part of the world; 2) The center itself should be designed to strengthen the campus departments and their instruction and research programs; 3) It should strengthen the program of experimental resources and the program of the graduate school; 4) It should provide a flow of trained people in many fields prepared to meet world needs; 5) It should provide a flow of new knowledge useful in breaking food supply bottlenecks.

The center, to be a reality, would need new professorships, new graduate assistantships, laboratories, and other research facilities on the campus and at field locations abroad. It would need a great new library, class and seminar rooms, and a great deal of money.

It would be no easy task to build this institution - this Fourth Dimension of American universities, but this is our challenge. The question is whether faculties can produce plans for workable programs and the essential administrative arrangements. If American universities opt for this course of action many students may someday make their marks on world history through such university training. Children now alive, but doomed by the looming food shortage, may yet live to make productive contributions to their national development and to world peace.

The challenge is before us. The world waits to see what we will do.

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