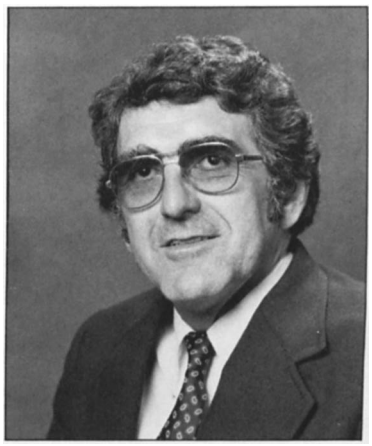
L. N. LEWIS

Assistant Vice President–
Agriculture and University Services



Setting research priorities

Despite an undisputed record of success in providing the technology to produce abundant food and fiber for the American people, and at a lower real price than in any other nation, agricultural research programs are confronted by tighter and tighter budgets. Funds to carry out essential research programs are being cut to the bone and further eroded by a devastating inflation rate that robs us of even the resources to replace outdated research facilities. Federal support for agricultural research has fallen from 40 percent of the national research and development budget in 1940 to less than 2 percent in 1981.

Maybe we have done our job too well.

It is evident that our entire agricultural system, from research through production, is being taken for granted; it is assumed that the American consumer will always have enough to eat, and at the same bargain prices that now prevail.

Events such as the invasion of California by the Mediterranean fruit fly, the drastically increased cost and uncertain availability of energy and water, and the loss of important production tools, such as the nematicide DBCP, are all reminders of the fragility of our agricultural system. If we attempt to stand still, to rely on past research accomplishments and technology, we will surely fall behind. Farmers may be the first to suffer, but ultimately it will be the consumer — the major beneficiary of greater agricultural productivity — who will be faced with higher prices, diminished quality and shorter supplies of food and fiber.

Across the nation we're losing 3 million acres of farmland to nonagricultural uses each year. Wind and water erosion takes 9 tons of soil per acre. Nonagricultural demands for water are projected to increase 50 percent by the year 2000. The unrestricted use of cheap energy to increase agricultural productivity is no longer an option available to us.

In the face of these continuing pressures and shrinking budgets, it is vital that agriculture coordinate its efforts to bring the maximum possible resources to bear on the most urgent problems confronting us. I am convinced that the best way to accomplish this is to involve producers and industry groups more directly in the process of identifying problems and setting research priorities to resolve them.

Too often, scientists and research administrators identify research projects by gaps in the scientific literature rather than by actual problems related to production of food and fiber. While it is absolutely essential that we make every effort to fill these scientific gaps and to provide a strong basic research program to solve present and future problems, this approach alone has not provided persuasive arguments for fiscal support. The people who control the purse strings have not been convinced. Legislative, executive, and lobbyist groups at the national and state level constantly remind those of us in agricultural administration that, if we expect to get needed support, we've got to do a better job of identifying our problems and then come up with specific research proposals to solve those problems.

Such a process is not as simple as it may sound. Often the agricultural industry itself identifies research projects rather than problems. In our first attempts to work with representatives of commodity groups, we frequently found them listing broad research areas, such as genetic engineering or breeding of new varieties, rather than specific problems that they wanted solved.

Some agricultural specialists feel insulted by a "brainstorming" approach to agricultural research needs. They tell us they know very well the problems agriculture faces, and it isn't necessary to go through this elaborate process. Others are afraid that we will consider only the needs of production agriculture and not the needs of the consumers, labor groups, and those concerned with environmental quality.

These are valid concerns, but when we consider the realities of budget trends and the food and fiber needs of our nation and the world, it seems to me that we must move forward in the most efficient manner possible to meet the difficult years that lie ahead for agricultural research programs. Only through the constant development of new information and its extension to the agricultural community can we hope to maintain, let alone increase, productivity.