University President David Saxon has frequently emphasized the importance of the agricultural sciences in the total services provided by the University to the state and its citizens. He recently restated his position on this subject in a speech before a group of agricultural leaders. Because I believe his comments are of interest to all in agriculture, I am pleased to devote my editorial column this month to presentation of excerpts of that talk.

J.B. Kendrick, Jr., Vice President, Agriculture and University Services.

Cooperative Extension and Agricultural Research in the University of California

David S. Saxon, President
University of California

I appreciate the opportunity to talk about agriculture and its importance in the University of California. I hope to assure you that the agricultural sciences are vitally important to the University in spite of the controversy which surrounds some aspects of our program just now.

But before I speak specifically about agriculture and its place in the University, I want to talk a little about the University's future.

The University of California can anticipate two major changes in the decade of the eighties. First, we can expect a decline in our student population. Demographic studies predict a 15 percent decrease in the age group from which we draw our undergraduate students. This is expected to begin affecting the University about the middle of the decade.

Not only will there be fewer students, but we expect a dramatic change in the ethnic mix of our student body and much greater representation from ethnic groups traditionally underrepresented in the University community. These students will bring different experiences and interests to our classrooms and laboratories. The University has initiated a revision of campus and long-range academic plans to provide flexibility to meet these changes.

Second, the University faces great uncertainty about what support the state is able or willing to provide. It is quite likely that our resources will be constrained, for several reasons:

1. Faculty positions are allocated by the state on the basis of student enrollment. Fewer students mean fewer faculty.

2. Efforts to balance the federal budget will restrict funds available for research contracts and grants and student loans. Reductions in the USDA budget, for example, would be felt in less University support from that department.

3. All of us in the public sector can expect tighter budgets, because taxpayers want to see tax bills cut somehow, somewhere. Tax reform is inevitable and, in my opinion, overdue.

So the University must anticipate the possibility of having fewer dollars to carry out its teaching, research, and public service missions. But that is not to say that what people expect of the University will be any less. We have a tradition of excellence which must be maintained. With shrinking resources, that is the biggest challenge we face.

How does agriculture fit into all of this?

Work in agricultural sciences and forestry now involves 680 full-time faculty, who devote two-thirds of their time to organized research, and 66 research specialists. There are 484 academic employees in Cooperative Extension. Last year, expenditures for these programs were $117 million, equivalent to one-half of one percent of the value of agricultural activity in California at the farm level.

So you can see that agricultural research and public service are major undertakings in the University today. And, I maintain, very important ones.

About 60 percent of the University's state funds budgeted for organized research is devoted to agriculture. The largest share of the University's budget for public service is devoted to Cooperative Extension. Agriculture remains the only discipline with its own vice president at the systemwide level—there is no vice president for health sciences or engineering, for example.

For a long while, the University's agricultural research focused on productivity and marketing. Now, other areas compete for resources—energy, water, pest management, nutrition. The University's responsibilities in these areas are no less important to society than producing better food and fiber. Consequently, we must be prepared to adapt our research programs to accommodate this broader spectrum of needs.

Partial solutions often create new problems. For example, increased fertilizer use may greatly increase land productivity but pollute groundwater or downstream supplies. An insecticide to prevent crop damage may cause imbalance in the insect ecology or induce protective mutation in the target insect that makes the insecticide self-defeating. Genetic engineering that greatly enhances productivity in a given plant species may make the improved variety more susceptible to disease. Water application methods devised to conserve supplies may require more energy.

Interactions needed to solve problems such as these are best addressed in the University's multi-disciplinary environment. They are supported by the partnership created among the campus, experiment station, and extension education program. They are reflected in the science-professional character of campus instruction and the laboratory-field orientation of much of the experiment station research. Applied research, often conducted in conjunction with the experiment station and in extension's education, demonstration, and advisory service, widens the spectrum. These academic interactions are refined by reactions from growers and others who adapt new varieties or technologies to their farms and ranches.

In a University known for its diverse academic and research programs, there must be room to accommodate the diversity of society's research needs. Most definitely, the University of California has a responsibility to address an issue such as large-scale food