

Nicelma King Director, North Central Region

Public literacy about agriculture: What is it? What is it for?

At one time, most of the U.S. population were either farmers or indirectly involved in agriculture. Today's farm population comprises just 2% of the U.S. population. In 1860, the American farmer produced, on average, enough food and fiber for himself and four other people; by 1900, the ratio was 1 to 7; by 1940, 1 to 11; by 1960, 1 to 25. By 1985, each farmer produced enough food and fiber to support 80 people, 25 of them living in other countries.

Public policy in this country has generally supported this increase in productivity. However, there is an increasing concern in agriculture that the diminishing number of Americans in farming will mean reduced support for these policies. Indeed, since so few Americans are directly involved in the production of food or fiber, the general population is under-informed about both agriculture and the contribution it makes to our prosperity and standard of living. For example, school children from urban areas may think of food as coming from a supermarket rather than from a farm.

While it is true that an uninformed electorate may undermine agriculture's immediate interests (for instance, by failing to support public policies viewed as "good" for agriculture), there are also societal issues at stake. Professionals in agriculture have a role to play, not only in helping to assure our own survival, but also in building a scientific and agricultural literacy among today's young people. This effort at increasing agricultural literacy will have many benefits including:

- A citizenry that is better-informed about the public policy choices they must make affecting agricultural production, land-use, food safety and the environment;
- A large body of young adults who are familiar with basic science concepts, aware of their practical application, and excited about selecting careers in science; and
- The next generation of scientists devoted to solving the problems faced by agriculture, food science and technology, nutritional science, natural resources and environmental sciences. The potential benefits include research gains leading to improved products of all kinds, and the increased economic competitiveness of our country.

Californians have undertaken a number of activities that support these goals. Some are taking place in local school districts, either alone or with the assistance of UC Cooperative Extension staff.

One of the programs is "Ag In the Classroom", a national network of educators committed to strengthening agricultural literacy. In California, "Ag in the Classroom" is sponsored by the California Foundation for Ag in the Classroom, created by the California Farm Bureau. Local programs are jointly conducted by local school districts, UC

Cooperative Extension, and county Farm Bureaus. Schools may either participate in ongoing curricular activities or opt for short-term activities, such as "Farm Day", designed to introduce agriculture to elementary school students. In addition, teacher-trainees at 33 California colleges and universities (which graduate the majority of the state's teachers), will receive an overview of agriculture in the elementary curriculum.

On a smaller scale, "Agademics" is a program developed by Cooperative Extension 4-H Youth Development Advisors. "Agademics" attempts to reinforce basic math and science skills with elementary-age youth by using applied projects related to agriculture. Currently the program operates in a few Northern California schools. A recent example of the interest in increasing agricultural literacy is Marin County Cooperative Extension's receipt of a grant from the Marin Community Foundation to develop an agricultural literacy packet in English and Spanish, and to conduct teacher workshops for Marin County schools. These efforts are both small in scale, but lend themselves well to replication in other areas.

Finally, Cooperative Extension is involved in public policy education. This effort began in the form of issue discussions concerning public policies critical to agriculture, such as water quantity and quality, and land use. In recent years, however, the effort has broadened to encompass education about the public's decision-making role in urban growth and development, nuisance abatement, food safety and environmental impacts. This program does not simply provide the agricultural interests' point of view, but sets up a framework in which participants can hear a variety of viewpoints on a given subject, and evaluate potential consequences of alternative decisions. Perhaps most promising of all our efforts in this area is that our advisors with public policy skills are now able to work with groups with diametrically opposed views. Programs of this sort are in their infancy in Cooperative Extension, but our staff are committed to them as an avenue for improving public education and awareness.

This description of programs illustrates the commitment of the academic staff of the Division of Agriculture and Natural Resources to meet the needs of the public for education in agriculture. These activities are an important beginning in our effort to use agricultural issues to improve public understanding of science and technology. Such awareness will not only provide us with the next generation of applied and basic scientists to work on the agricultural problems of the 21st century, but will provide the nation with a more effective workforce, better prepared for careers in an ever-more sophisticated technological environment.