

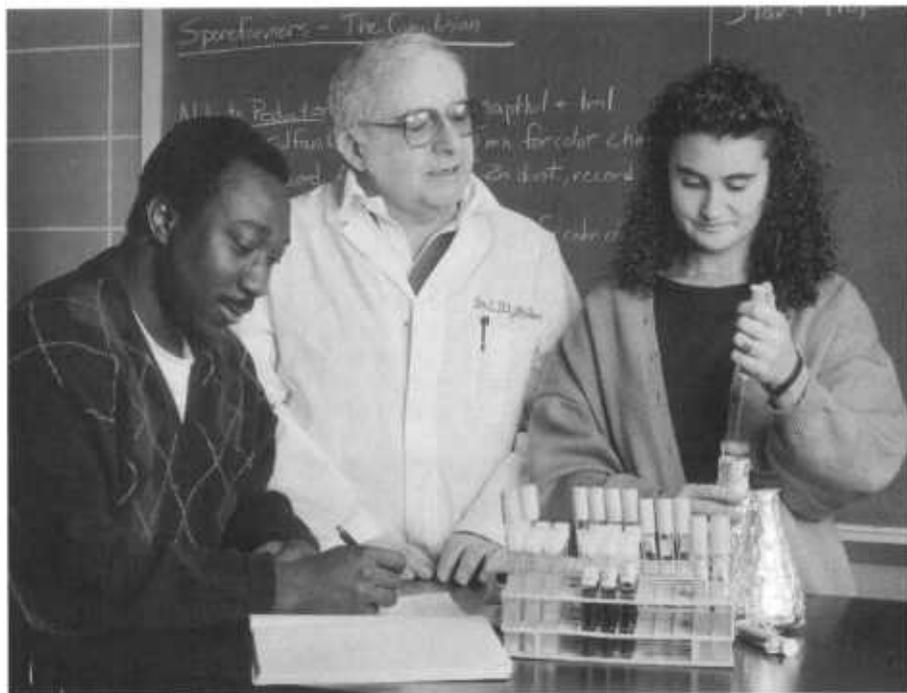
Plan Your Education for a Career in Agriculture

There may have been a time when it was fairly easy to prepare for a career in agriculture in the United States. "Agriculture" meant farming, and farming was more an art than a science. Sons and daughters shared the chores on the farm and learned from their parents and neighbors; then they either took over their families' farms or moved on to a new territory to start afresh.

Times have changed, and the farmer as artist has merged with the farmer as scientist and businessperson to pursue the complex, varied, and dynamic endeavor that is modern American agriculture. Sons and daughters still learn many things from their parents, and productive farmers remain the base on which all agriculture is built, but a substantial amount of formal education is required to be successful and to cope with the rapid changes taking place.

Today's and tomorrow's agricultural professionals are not only farmers but also scientists, engineers, educators, managers, market and sales representatives, communicators, and diversified production specialists. Each of these careers requires a liberal education in mathematics, science, and communication skills in addition to a foundation in the technical area of choice. And as U.S. agriculture continues its partnership in the world agricultural network, it is also necessary to know foreign languages and to understand other cultures, customs, and peoples.

by Keith Wharton, Acting Dean, and Jean M. Underwood, Coordinator of Career Services, College of Agriculture, University of Minnesota, St. Paul, MN



Ed Zottala, Department of Food Science and Nutrition, University of Minnesota, discusses research techniques with students.

Bright Opportunities in Agriculture

One dramatic change in agriculture has been the decline in the number of people needed to produce crops and livestock. However, while demand for people in this area has decreased, opportunities have increased in the businesses that support the production and processing of food and fiber. Biotechnology and the changing international marketplace are two powerful forces that have changed employment opportunities in agriculture.

Opportunities for people prepared in agriculture will increase in coming years. A July 1986 USDA report, "Employment Opportunities for College

Graduates in the Food and Agricultural Sciences," predicted a 10-percent shortage, annually through 1990, of graduates with food and agricultural expertise. The most significant shortages were projected for the scientific and business specialties associated with agriculture.

These predictions were correct: During the past 2-3 years, agricultural employers have found fewer graduates to fill available positions. Placement offices in colleges of agriculture report an increase in the number of opportunities for internships and full-time

positions, but fewer available students. For example, recruiting activity for full-time positions has increased 44 percent since 1985 at the University of Minnesota, and recruiting for internships has increased 90 percent. By all indications, this highly favorable job market for college of agriculture graduates should continue.

Education: Preparation for a Dynamic and Changing Future

Colleges and schools of agriculture across the United States are responding vigorously to demands for a better education for agricultural professionals—at the undergraduate and graduate levels. Curricula have been revised during the 1980's. National, regional, and local curriculum projects have been assisted by grants from the USDA Higher Education Program and from numerous corporations and foundations. One national project emphasized an integrated systems approach to agriculture and issues of values and ethics; some regional projects looked at revitalizing the curriculum to meet the demands of the 21st century.

"The career opportunities in agriculture are skyrocketing," says Aaron Goy, a district manager for Ciba-Geigy Corporation. "But agriculture is a highly complex endeavor, involving issues and questions that are crucial to society. We recruit students who have a degree in agriculture because we know that they will have faced these issues in their

schooling and experiences and will be prepared to help us deal with them in a positive and responsible way."

Students considering and preparing for careers in agriculture must realize one important fact: Opportunities will come only to those who are adequately prepared in both coursework and experience for the jobs that are available. There is a bright outlook for career opportunities in agriculture, but competition will be keen and employers will be selective. There will be no place for the person who avoids rigorous coursework or who tries to just get by in the quality of work or experience.



Times have changed, and Rab King (left), management information systems instructor, knows that students need all the knowledge they can get in order to succeed in agricultural business and industry careers.

Says J. Scott Early, a regional sales manager for the Wayne Feeds Division of Continental Grain Company:

"We look for students who have a degree in agriculture because that demonstrates to us their commitment to and preparation for a career in agriculture. In addition, we look for graduates with good communication skills and the ability to project themselves in a manner that would make them successful in working with people. Also, we want graduates who understand that they have to continue to learn in order to keep ahead of the many changes that will occur in their lifetimes."

Adaptability, a commitment to lifelong learning, and effective communication skills will be three of the most important characteristics of the agricultural professional of the future. Situations and businesses will change rapidly, and the people who succeed will be those who can respond positively to the opportunities that these changes will bring. Those who wring their hands and long for the perceived stability of the good old days will be left behind.

Career Planning: Key to Educational Planning

One important way in which a student can prepare for a career in agriculture is to adopt a "portfolio" approach to education planning. Instead of thinking about preparing for a specific job, such as agronomist or animal scientist, the student should

think about himself or herself as a whole person, with the wide range of skills, interests, and abilities that every person has. The student should develop these abilities and experiences into a portfolio to offer to prospective employers. For example, a student might plan to be able to say at graduation something like this:

I have just graduated from college with a bachelor of science degree in agriculture. I have a good background in production agriculture courses, particularly in the plant sciences. I have a solid base of coursework in mathematics and science, as well as some courses in business, marketing, and economics. I completed internships with two agricultural companies—one large, the other small—during the summers while I was in college. I speak Spanish well, although not fluently yet, and I understand something of Hispanic culture through coursework and through the experiences I had on a 3-month study-travel project in Uruguay. I have good speaking, writing, and presentation skills, and I have participated actively in several student and community organizations, holding leadership positions in some of them. I know that I will have to continue learning in order to be successful, and I know how to do that.

This student will be employable. Confidence, self-knowledge, skills for life, and an attitude that embraces growth and development will serve this graduate throughout the coming years.

Where To Study

The choice of where to study agriculture is as broad as the field of agriculture itself. The colleges that have



Activities beyond the conventional classroom play an important part in the educational experience. Dale Dahl (standing) advises student chapter members of the National Agricultural Marketing Association.

agricultural curricula reflect the diversity that is found in today's agriculture. Colleges of agriculture are found in every State, in rural communities as well as major metropolitan areas. There are large, public institutions as well as small, private colleges.

Values play an important role in the choice of college. The student should consider taking risks, stretching, trying new environments. Sometimes what feels the most comfortable may not provide the best opportunities. The student must consider such variables as location, cost, majors offered, reputation

of the institution, placement record of graduates, study-travel options, and research specialties of the faculty.

For more information about colleges that offer an agricultural curriculum, you may contact—

Food and Agricultural Careers for Tomorrow (FACT)
127 Agricultural Administration Building
West Lafayette, IN 47907