Preparing Students for Careers

In Food Distribution and Marketing:

An Opportunity for Colleges of Agriculture*

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Colleges of agriculture at land grant universities are in trouble. Most suffered serious declines in their undergraduate enrollments in the 1980s. At the University of Minnesota, undergraduate enrollment fell from about 1600 students in 1980 to between 700-800 by the late 1980s. This enrollment decline was largely a reflection of the economic crisis in farming, which created the perception that agriculture offered little promise for successful careers. Enrollments at most schools have now stabilized, and have increased somewhat in recent years at many schools. However, many colleges of agriculture are being retrenched, largely due to their low undergraduate enrollments.

Most colleges of agriculture have prepared students for careers in, or related to, production agriculture. Figure 1 provides a visual overview of the entire food system. Although most graduates of colleges of agriculture do not go directly into farming, most have traditionally gone into fields that either supply farm inputs or that buy and handle agricultural commodities, at least at the University of Minnesota. Typical starting jobs have been in seed or agricultural chemical sales or as an agricultural loan officer at a rural bank.

Colleges of agriculture have an opportunity to train students for careers throughout the entire food system, shown in Figure 1. In particular, there is an opportunity to prepare many more

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Figure 1. The Food System

Agricultural Inputs
chemicals, machinery, labor, etc.

Technology
research, extension

Farming

Food Processing:
Primary
Secondary

Non-agricultural
inputs

Food Distribution
Wholesaling,
Transportation, etc.

Food Retailing

Food Stores
groceries,
convenience stores

Food Service
restaurants,
institutions, schools,
hospitals, etc

Consumers

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students for jobs in food processing, distribution, and marketing. Figure 2 shows that the sectors of the food system that are experiencing the most growth are "Transportation, trade, and retailing," and "All others," which is a rather broad catch-all category. Figure 2 gives the value added to the domestic economy in 1975 and 1988 in billions of dollars. Value added is determined by subtracting the value of the inputs from the value of the output of the sector. It should be noted that the value added by "Farming" changed the least.

Figure 3 shows that the only two sectors that experienced a significant growth in jobs between 1975 and 1988 are "transportation, trade, and retailing" and "eating establishments." Employment in "all others" category grew by only 100,000. However, the numbers of jobs in "other manufacturing, food processing, and farming" actually declined. The number of people employed in "farming" fell by 1.2 million.

**Food Marketing Programs**

Two land grant universities that are well known for their programs that prepare students for careers in food distribution and marketing are Cornell and Michigan State Universities. Based on the 1989-90 catalog, Cornell’s Department of Agricultural Economics offers a major in Applied Economics and Business Management. One of the six specializations offered in this major is food industry management. The objective of this specialization is to prepare people for "management or sales positions with the processing, manufacturing, or distribution segments of the food industry." Four of the specific courses offered for this specialization are:

- Ag Ec 240 Marketing
- Ag Ec 342 Marketing Management
- Ag Ec 443 Food Industry Management
- Ag Ec 448 Food Merchandising

Three key faculty members at Cornell in this area are Professors Christy, German, and McLaughlin.

Based on the 1989-91 catalog, Michigan State’s Department of Agricultural Economics offers a major in Food System Economics and Management. A student in this major can empha-
Figure 2.

Value Added to the Domestic Economy
By the Food & Fiber System
USA, 1975 and 1988

Transportation, trade and retailing
All others*
Eating establishments
Other manufacturing
Food processing
Farming

*Includes other services, mining and forestry

Figure 3.

Employment in the Food and Fiber System
USA, 1975 and 1988

Transportation, trade and retailing

All others*

Eating establishments

Other manufacturing

Food processing

Farming

*Includes other services, mining and forestry

clearly and objectively? More and more food and agricultural businesses are global and hence require an international perspective. And finally, there is a heightened awareness of the importance of ethical issues.

The College of Agriculture now has ten majors:

1. Agricultural Business Management
2. Agricultural Education
3. Agricultural Industries and Marketing
4. Animal and Plant Systems
5. Applied Economics
6. Food Science
7. Natural Resources & Environmental Studies
8. Nutrition
9. Science in Agriculture
10. Scientific & Technical Communication

Three of these majors, Agricultural Business Management, Agricultural Industries and Marketing, and Applied Economics, would allow students to develop a possible emphasis in food marketing.

The major which explicitly offers a food marketing emphasis is Agricultural Business Management, which is offered jointly by the College and the Carlson School of Management. Food Marketing is one of five possible areas to emphasize in this major. In the food marketing emphasis, students are required to take two specific courses:

Mktg 3020  Marketing
AgEc 5550/ FScN 5474  Food Marketing Economics

They must also take two additional courses from the following list:

AgEc 5480  Futures Markets and Prices
AgEc 5580  Human Capital and Household Economics
AgEc 5750  Agricultural Trade and Commercial Policies
FScN 3400  Food Communication Techniques
FScN 3472  Food Selection Principles
FScN 5390  Introduction to Food Law
Mktg 3010  Buyer Behavior and Market Analysis
Mktg 3030  Sales and Distribution Management

The Food Marketing Economics course is taught by myself and Elaine Asp, who is in the Food Science and Nutrition Department. We have taught the course together now for about ten years. The course focuses on the economics of food marketing in the United States. It covers food consumption trends, consumer food behavior, food expenditure and consumption data, consumer survey methodology, the food distribution and retailing system, and food policy issues related to food marketing.

About five or six years ago we undertook a major revision of the course. We introduced active learning techniques and centered the course around several major student projects. There are currently four major student projects. Each is written as if the students were working for a specific division in a diversified food company called Minnesota Foods. The students are requested by a memo to carry out a particular assignment and write a report in reply. Minnesota Foods may be thought of as a food company like General Mills.

The first assignment focuses on food trends and asks students to discuss major demographic trends and/or lifestyle factors in the United States and their implications for food consumption patterns. They then suggest a new food product for Minnesota Foods to introduce which would respond to the demographic and food trends they have discussed. One student several years ago suggested cleaned, cut-up fresh vegetables as a response to the desire of women in the labor force for convenience. This product is now available in supermarkets!

The second assignment focuses on income elasticities. Minnesota Foods wants to know for which food products the demand will increase the most as income increases. The students are provided consumption and income data for a range of food categories from USDA's Nationwide Food Consumption Survey. The data have been averaged into twelve income categories in the USDA
publication. Each student picks a food category, graphs the data, draws the Engel curve for consumption and income, estimates the income elasticity, and interprets the results for the company.

In the third assignment, each student picks a food product or issue for which it would be useful for Minnesota Foods to have more information on consumer behavior and/or consumer preferences. They then design a short questionnaire, develop a survey method, and collect data from a small sample of their designated survey population. The final step is to tabulate, analyze, and interpret the survey results and prepare a report. As far as active learning techniques, the students present an overview of their reports to the class for discussion for the first two assignments. For the third assignment, they give a formal talk to the class on their project.

The fourth assignment is presented in the context of Minnesota Foods holding a company retreat at which food policy issues important to the company are debated. The class collectively develops a list of food policy topics and votes on the three or four to be discussed. Examples from last year are food irradiation and BST. Since these are controversial topics, the discussion is structured as a formal debate. The students are divided into approximately three-person teams and assigned to either the pro or con side of the debate topics. They work as groups to develop their presentations.

This course is taught from 4:30 - 6:00 p.m. two days a week and listed as an evening extension class, as well as regular day school offering. It attracts a very diverse and interesting mix of students. In a typical year we normally have several students in the course who are employed by food companies. We have had students from General Mills, Pillsbury, and Malt o Meal. The course is taken by both undergraduates and Masters students, with an occasional Ph.D. student. In addition to students from the College of Agriculture, there have been students from other colleges or schools such as Public Health and the Business School.

One of the most unique students who ever took the course was a man in his 50s who had just been laid off from the Minnesota Department of Agriculture. He was looking for a new direction for his career. He just recently completed a cookbook for single men, which was the idea he presented for the first assignment when he took the Food Marketing course in 1990.

Conclusions

Although students can certainly receive a good undergraduate education in the College of Agriculture at the University of Minnesota, our programs may still be too heavily oriented toward production agriculture. The food marketing emphasis could be greatly strengthened with the addition of one or two faculty members in that area. Minnesota currently does not have any faculty with a primary responsibility in food marketing. It is not the primary area of responsibility for either Elaine Asp or myself. Elaine Asp is a food scientist and I am a consumption economist.

If faculty were added in food marketing, one of the new people should have a marketing management orientation and would desirably have business experience in the food industry. Such a person could take a lead in developing contacts with firms in the industry, which would help open up employment opportunities in food distribution and marketing for our graduates. One advantage of the University of Minnesota in this area is the very high concentration of food companies which have their headquarters in the Twin Cities. Members of the Food Distribution Research Society could play an important role in persuading the colleges of agriculture at our land grant universities to start preparing their graduates for jobs throughout the entire food system. This society is in an excellent position to push for the introduction or strengthening of undergraduate programs in food distribution and marketing. A glance at the membership list shows that a significant portion of the members have academic positions in land grant colleges of agriculture. The industry members could play a pivotal role in helping to develop programs in food distribution and marketing. The ideas of well-placed business people may frequently get more attention from university administrators than suggestions from their own faculty.