



Providing an International Dimension To Curricula of Agricultural Students

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Universities in the U.S. function in a central role to preserve and transmit cultural heritage, teach skills and disseminate new ideas, and generate new knowledge and technology. As faculty, with substantial control of these universities, society has given us major responsibilities to define and implement educational programs and curricula to achieve these objectives. Accomplishing this will require an understanding of what our students will need in the future to function effectively in a society that will be considerably different from the one we now experience. In no area of study is this a greater challenge than in agriculture. Fundamental technological changes are occurring along with an internationalization in agriculture that affects producers, agribusiness people, policy-makers, scientists, and teachers. I am concerned that our present agriculture faculty may not fully understand this internationalization process and the related changes we need to address in curricula and educational programs for agricultural students. While there are substantial difficulties in providing a quality international dimension to agricultural educational programs, we must offer the kind of educational experience for agricultural students which will prepare agricultural students for the 1990's and the 2000's. To neglect the international dimension in our universities' educational programs in agriculture would be a failure to responsibly fulfill our mandates as teachers of a new generation.

The organization of this paper is as follows. First, a definition of an international dimension is given to develop a common basis for the use of the concept in this paper. Secondly, a classification of agricultural students is suggested to sharpen our notion of rationale and appropriate actions. Thirdly, methods of providing an international dimension to agricultural students' educational programs are suggested. Lastly, constraints to making progress and suggestions for collective action to alleviate some of these constraints are given.

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Definition of an International Dimension

An international dimension to educational programs is used here to refer to teaching and research conducted within American universities relative to states, societies, and cultures other than those of the United States. In addition to the study of specific world areas, the definition encompasses all teaching and research on topics explicitly treated in a multi-national, comparative, or international manner such as international trade, international relations, development studies, and comparative studies involving at least one "foreign" area (McCaughy). Using this definition, most colleges of agriculture offer some international dimension to their course programs, e.g., courses in international trade, economics of agricultural development, crop production in the tropics, world animal agriculture, etc. An international dimension may also be given by including comparative foreign area content in agricultural core curricula courses, e.g., crop production, soils, basic agricultural economics, and animal science.

Classification of Agricultural Students and Rationale for Providing an International Dimension to Their Academic Programs

Part of the difficulty in making major progress in developing meaningful international dimensions for agricultural students is that we fail to differentiate among potential students and their needs. Most colleges of agriculture serve a diverse set of students. While each student has different interests, objectives and backgrounds, there are commonalities of interests and objectives which might serve useful in delineating appropriate options for providing international dimensions to their curricula. I shall propose four groups.

Undergraduates interested in domestic agriculture - Group 1

One important group is composed of agricultural undergraduates who plan to farm or work in an agribusiness firm and do not plan to attend graduate school. Numerically, this is the largest group in colleges of agriculture. A large proportion of this group will remain in the U.S. and work relatively near the

university. They will comprise a relatively large proportion of the active agriculture alumni of the university who serve on department and college advisory committees and provide leadership to agricultural and political institutions within the state. A relatively small number of these students will take first jobs directly related to international agricultural concerns.

Graduate students interested in domestic agriculture - Group 2

Another group is comprised of graduate students within colleges of agriculture whose initial primary career objectives relate to domestic agriculture. These individuals will enter a national and international job market, but relatively few will take first jobs directly related to international issues. However, many of these individuals will become directly involved in international agriculture concerns sometime during their careers.

Students interested in international agriculture — Group 3

This group consists of agricultural graduate and undergraduate students whose initial career objectives are to be employed with some international institution or in a foreign country.¹

Agriculturalists not enrolled in resident instruction programs - Group 4

This last group is composed of farmers, agribusiness persons, and leaders of agricultural institutions who are now faced with problems that have an international dimension. These individuals may work closely with various aspects of the college of agriculture but may not have much contact with the international dimensions of our colleges.

The rationale for providing an international dimension to the educational program is somewhat different for each group. However, there is, at least, one broad rationale which is relevant for all groups. Nations and people in all parts of the world are being affected in major ways by actions and occurrences in foreign countries and international institutions. The world is rapidly becoming one ecosphere and our future thinking and understanding must accommodate this singular fact of survival (Bonham). Today, far more than at any time in our history, what we do affects other nations and what others do affects us. To secure our interests we must bargain, persuade, cajole — in short, draw upon all of the international knowledge, skills and competence at our disposal (American Council on Education).

This is certainly true in agriculture. College of agriculture students who now sit in the classrooms will be providing leadership to U.S. and other countries' agricultural and political institutions in the 1990's and the first three decades in the 2000's. The internationalization of agriculture which has so rapidly

developed in the 1960's and 1970's will certainly continue during these decades.

The value of U.S. agricultural exports has increased about 800 percent since 1960. Not so well known is the fact that agricultural imports have increased over 400 percent since 1960 (see Table 1). While some of these imports are not competitive with U.S. agricultural products, about 66 percent of the total value of U.S. agricultural imports is commodities presently being produced in the U.S. It is good business to know not only your buyers but also your competition in your own home market.

Further evidence of the importance of international influences on U.S. agriculture is that exports have become increasingly large compared to the gross national product of the farm sector. In 1960, exports were about 22 percent of the total value of output of the farm sector. In 1983, exports were 49 percent of the farm sector gross national product (see Table 2). In terms of export value, American agriculture has rapidly internationalized in the past 10-20 years. Among individual commodities, the export share of total production varies substantially. Over 40 percent of our wheat, cotton, soybeans, and rice is exported. Substantial proportions of corn and soybean meal are also sold to other countries (see Table 3).

Our agricultural exports are increasingly being bought by less developed countries and nations with centrally planned economies as seen in Table 4. These countries buy about 46 percent of the total U.S. agricultural exports. Most of them have marketing systems, agricultural and trade policies, and consumer tastes not familiar to us. Fifty percent or more of exports of grains and feeds, wheat and products, rice, corn, soybean oil, and animal and animal products go to these types of countries.

In addition to international commodity trade, many other international influences are not affecting our nation's agriculture. Capital flows among nations much more freely than it did several years ago. The international debt problem affects many U.S. banks and financial institutions which also serve American agriculture. North-South dialogues and East-West negotiations involve agricultural issues. Other countries' agricultural and trade policies now affect us substantially. International institutions and agreements are becoming more important in agricultural trade. Non-tariff trade barriers are being increasingly utilized by many countries. To understand, accommodate, and negotiate these sometimes subtle barriers requires in-depth knowledge regarding these foreign countries and the pressures behind the enactment of various measures. Increased movement of commodities makes disease transfer more probable. In addition, agricultural research organizations in other countries are developing technology and answers which may be useful to U.S. agriculture.

¹ I have not chosen to classify students by country of origin. Foreign students fall into all groups. In some cases, foreign students are not interested in international issues in their studies.

