

International Trade and Agricultural Education

Lawrence Witt

Abstract

Despite agriculture's large stake in export markets, many farm people do not recognize that farm price policies often conflict with this interest. The U.S. concern with world food problems emphasizes food exports, without adequate recognition that U.S. imports can help those enmeshed in poverty gain access to improved diets.

Such issues draw on the analytical tools of economics, as other problems draw on other sciences. In addition, they require discussion in terms of options and goals. Because goals vary among individuals, no single "right answer" can be identified. Understanding the consequences of alternative choices, however, encourages more rational public decisions.

Through most of its history, the United States has been a competent, reliable, and competitive exporter. Agricultural policies have been aggressive in supporting exports but, since the 1930s, often have been highly inconsistent, in two respects. Internal commodity price policies frequently have priced some U.S. products above world levels thus leading to export subsidies or a lower level of exports. Also, the use of import restrictions fails to recognize adequately that imports, in the long run, pay for exports. Either policy leads to less efficient production and limits on trade. In a world that is increasingly interrelated, it is necessary to understand the interactions of national and international policy if we are to deal with world food problems rationally.

Some Basic Principles of Trade

Creating this better understanding poses major challenges to agricultural and economic education. The large stake of U.S. agriculture in export markets matches the contribution it can make to improved world food consumption. But this contribution is not infinite; we need to know what trade can and cannot do, we need to recognize the limits on the U.S. ability to help.

Why Exports Are Favored

Food producers, rural people, and many urban consumers easily accept the idea that food exports should be increased generally, and they support export programs that send more food to malnourished people. It is less easy to accept the idea that larger imports by the United States and other developed nations also contribute to this goal.

Large exports imply full production at home, which brings purchasing power to domestic farmers and food handlers and foreign exchange earnings to the nation.

Lawrence Witt is with the United States Department of State as a foreign policy analyst. The views expressed are those of the author, and do not necessarily represent those of his department.

Humanitarian values and economic interests coincide. In fact, this coincidence sometimes leads to over-commitment of exports for immediate improvement relative to other alternatives, such as imports of aid for development.

Role of National Development

Economic development that increases the productivity and purchasing power of those enmeshed in poverty can lead to better diets. This occurs as local food production increases, as ability to buy food is advanced, and as the developing nation has more to sell in world markets, thereby increasing its purchasing power.

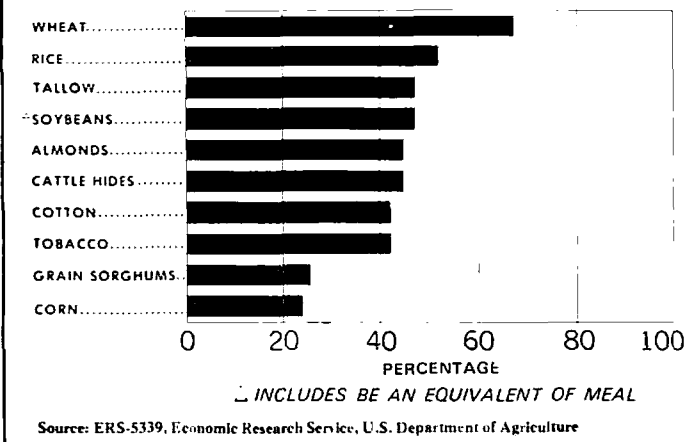
Many social and economic tools can assist in the development process. Some require and are mainly the function of an effective local or national government. The competencies of many governments to use such tools are increasing, albeit slowly, as they improve and expand agricultural education programs. Other development tools require support and assistance from abroad, such as foreign training, and the exchange of technology, of genetic materials, and skilled scientists to develop a local supply of improved agricultural practices. Still other tools — offering a continuing major challenge to U.S. agricultural education — require internal and trade policies in the developed countries to provide secure and profitable market opportunities for products exported by the less developed countries.

Imports Can Assist Development

International trade basically "exchanges stuff for stuff." Whereas loans or special terms can postpone the exchange, no nation is likely to donate its products, or sell them cheaply, for an extended period of time. It may do so temporarily for humanitarian reasons, or for political advantage. But psychology tells us that this path breeds resentment and negative reactions on the part of both the receiver and the donor — the receiver increasingly resents his dependency role and seeks to express himself in ways that may "bite the hand that feeds him," and the donor comes to expect certain "cooperative" attitudes and policies that are not always forthcoming. Thus, trade represents viable long-term economic relations among countries, leading to interests in common and long-term interdependency.

Over the years, farm people and agricultural pressure groups have given limited consideration to import policies that support this interdependency, particularly when interests conflict. Farm people are not alone in reacting in this way; in fact they may be more far-sighted than other groups. But alas, it is far easier to become alarmed that imports of beef, wool, cheese, butter, or

Figure 1 Ten Leading U.S. Agricultural Exports, as Percentage of Farm Production, Year Ending June 30, 1974.



sugar will bring economic adversity to sectors of U.S. agriculture than it is to explore whether some adjustment to such imports could expand U.S. exports of other products, possibly providing desirable alternatives to donations and subsidized sales. Similarly, it is easier to protect the U.S. industry that processes imported raw materials than it is to allow competition to determine whether the processing is done in the United States or in the low-income countries—their logical form of industrialization.

Volumes Are Large

Trade is important to U.S. agriculture, with over \$20 billion of exports in 1974. Most major farm products move overseas in large volume, including wheat, feed grains, rice, cotton, soybeans, vegetable oils, animal fats, tobacco, and selected fruits and vegetables (Figure 1).

Imports have lagged behind exports in recent years. Of the total \$10.7 billion expected in 1975, a third consists of noncompetitive products such as bananas, coffee, cocoa, tea, natural rubber, spices, and carpet wool. Of the competitive imports, sugar and cow meat are the major items.

Without export markets, major readjustment of the U.S. agricultural economy would be necessary. The search for better agricultural and national policies to support the long-time interests of farm people and of the United States as a whole requires better understanding of the economics of trade and the impact of available policy options. Through such policies the United States also can contribute to the welfare of millions in less prosperous regions around the globe.

Future Food and Population Ratios

Though there are rapid increases in agricultural production (Figure 2), high rates of population growth threaten to overtake them in developing nations and to require increasing food assistance from developed countries. Projections of future relationships vary widely,

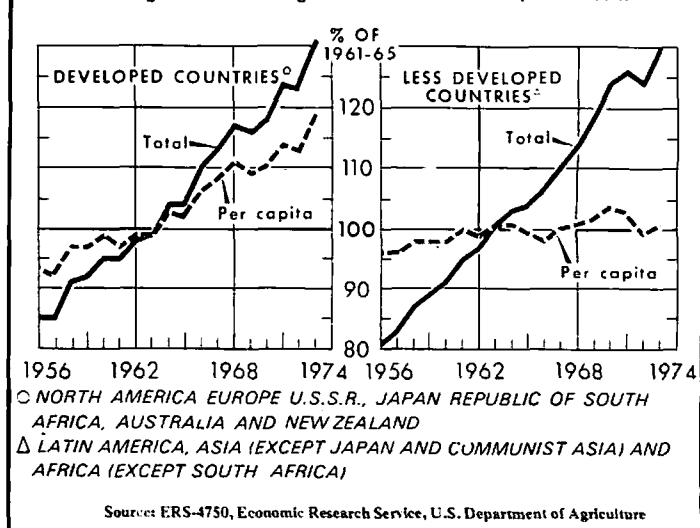
ranging from optimism to pessimism as fractional differences in assumed future population growth rates accumulate.

Until recently, many developing nations in most years enjoyed some improvements in diet and were able to divert food for special distribution to low-income groups, usually in urban centers. There have been fewer such local surpluses since 1970. While developed countries have had more food per capita, the amount allotted to special sales or donation abroad has decreased as commercial exports and prices have increased. Three of the many problems implicit in this possible approach to a more Malthusian relationship and efforts to avoid it have particular interest for agricultural education and to the graduates of the various agricultural specializations.

Accelerated efforts to increase the productivity of food producers, wherever they may be, call for an expanding research, training, and adult education base. For economic and logistical reasons, much of the improvement must occur near the locations where the food will be consumed. Some high rates of population expansion are in countries where food supplies already are limited. Thus, the package of technical information on food production in Asia, Africa, and Latin America must be vastly expanded for each important ecological zone within these regions. An increasing share of this responsibility will fall on local institutions and local scientists, but the challenges to the competencies of the outside component of this effort will increase.

Population control activities no longer can be viewed as someone else's problem. While one may argue that food production can be expanded to meet the population that will be here in 1985 and 1990, or even that the food needs of the year 2000 are achievable despite a near doubling of the world population, all agree that population growth must be curtailed. Moreover, the process of curtailment requires imaginative effort over many years, including changes in social attitudes, if it is to be accomplished by human decision rather than by a sharp in-

Figure 2 World Agricultural Production, 1956-1974.



crease in malnutrition-related deaths. This challenge requires the active concern of all, not just a few specialists in population planning. For millions of people in the developing nations, there are no options in lifestyle; they spend 50, 60, and 70 percent of their income for a nutritionally deficient diet consisting mostly of carbohydrates, and they see little, if any, prospect for improved housing, literacy for their children, or a secure retirement.

Nutrition is another specific challenge. Scientists in biochemistry and nutrition have developed food additives that can improve, at low cost, the nutritional adequacy of various commercial products. While ways to increase their use have high potential for urban dwellers, they have little relevance for the subsistence farmer who consumes the produce from his small patch of land and lacks income to buy manufactured food. The nutritional adequacy of some carbohydrates is being improved by increasing the quality and quantity of proteins, as with high lysine corn. The challenge is made more acute by the need to incorporate these qualities while maintaining and increasing the yield per hectare.

Many other challenges vie for attention. Space permits only a brief statement and some questions to suggest how they relate to issues already discussed.

Multilateral trade negotiations, now under way in Geneva, seek to reduce tariffs and especially trade restrictions other than tariffs that limit trade. As farmers, young people, and others review and react to proposals made in the negotiations, what developments should be encouraged? If agricultural protectionism in European countries is decreased solely for the benefit of developing countries in Africa, Asia, and Latin America, how should the United States and Canada respond? How should a package of reduced U.S. trade restrictions for agricultural and industrial products be analyzed? How should a package of proposals that will increase imports of some commodities and expand exports of others be evaluated?

An embargo was applied to U.S. soybean exports in the summer of 1973. Although temporary, it led many nations to feel that their supply of foodstuffs is threatened. How does one evaluate the use of such trade controls to protect domestic livestock producers along with the interests of livestock producers in long-time customer countries and the long-term U.S. export interests? Does it make a difference if the product is used for human consumption, as soybeans are in Japan? What are the advantages and disadvantages of permitting price competition to allocate supplies among customers at home and abroad, and between developed and developing nations? Should producers and consumers take different attitudes?

At the World Food Conference in Rome in November 1974, contrary to other recent international conferences, little working time was spent in confrontation tactics. The need for food was too vital. Delegates in the various committees quickly went to work in formulating

conference activities. But little media attention has been given either to the activities or to those conference resolutions. Does this suggest a need for greater use of agricultural science reporters, or development of longer-run public concerns that would stimulate a change in media coverage? Agricultural education can contribute in either case.

The possible creation of a system of grain reserves is one follow-up topic of the conference, with several discussions already held. We know that world grain production varies from year to year because of the weather. How does the world meet this problem? In the use of cereals, for example, it is not easy to define our interests and responsibilities to people in other nations and to our own producers and consumers, both in years of large production and in years of small production. Many nations, including the United States, have been generous when production is high but less so in years of low production. Would grain reserves level out such aid? To what extent are grain reserves an alternative to adjustments in livestock production, and to what extent should both be practiced? What are the economic and social impacts of such alternatives upon the many economic groups affected, at home and abroad?

A shortage of foreign exchange is a continuous problem in many less developed countries and affects the lives of many millions of people. It is a difficult problem and likely to persist for decades. The world has dealt with this problem on a short-run basis, through loans that increase the developing nations' indebtedness to the rest of the world. What are possible long-run solutions and how can agricultural policies contribute to them? What is the role of increased imports by developed countries? Is the only solution, as some developing countries claim, a higher price for raw material exports? Because most developing countries have large rural populations, usually well above 50 percent, agricultural policies have a vital role to play.

Implications for Agricultural Education

Many of these issues can lead to controversy. Certainly some possible lines of action would be objected to by groups within our society. Some objections, for example to some forms of population control, would be based upon religious or ethical grounds or values. Other objections, for example to expanded imports from or increased financial assistance to poorer countries, might be based more on perceptions of economic self-interest. Among the challenges to agricultural education is improved ability of students (and teachers) to deal with these topics dispassionately. This requires that views held because of certain ethical values be separated from those held because of beliefs in how interests are affected. The former may change from time to time but cannot be challenged on analytical grounds. The latter can be changed or modified (compromised) on the basis of improved knowledge of how an economic system works, or of how another person's interest may be affected.

Agriculture teachers with much experience in the physical and biological sciences tend to proceed in terms of right and wrong answers, whereas the topics discussed here usually need to be viewed in terms of options and choices. When a farmer asks about a spray to control some pest, he expects a specific answer. The goal is clear — control or eliminate the pest — and science states that a certain chemical will do so. In agricultural or trade policy, the answer frequently is, "It depends." This is not because the analysis is weak but because the goals are unclear. One choice may be consistent with the goal of the producer, another with the goal of the urban consumer, and a third to the importer in a far away land. Thus, for these topics, the teacher or extension specialist cannot prescribe, he can only present options and analyze the implications of alternative choices.

Analyses Needed

In social sciences, particularly economics, factual analyses can explain how a society functions and how trade and foreign exchange work, and they can indicate how various economic groups may be affected. Eventually, a judgment must be made as to whether it is desirable to impose or permit such impacts, a choice in which all can share; it does not emerge from the special expertise or role of the specialist. Usually a choice must be made between beneficial effects upon one group and negative effects upon another, although compromise may be used to mitigate both extremes. The skill and challenge to the analyst consists of developing an understanding of the process and its potential impact, to facilitate a rational choice among several social policies with reasonable assessment of probable consequences.

Workers in agricultural education, whether in schools or adult education programs, will find many stimulating challenges as they move from problem analysis, through statements of options, to the effects of relevant options upon various interest groups. Those more oriented to the plant and animal sciences may find stimulation in applying the process to technical problems, sometimes with surprising results. Ecological problems already demonstrate the need for similar approaches.

Need for Economic Skills

Many questions raised in this discussion will be analyzed more readily by using the tools and concepts of economics. The importance of these problems argues for a larger role for economics courses in training programs, and for teachers skilled in posing options and analyzing consequences.

In an interdependent world, with an expanding flow of products and exchange among peoples, decisions on economic and social policies have far-ranging effects. Intelligent decision making requires an understanding of how such decisions will affect others, beyond the community and the state and to the far corners of the world.

LETTERS TO THE EDITOR

Dr. Jack C. Everly, Editor
NACTA Journal
608 West Vermont
Urbana, IL 61801

The article by L. H. Newcomb in the March, 1975 issue of the NACTA Journal under the title "Grade Inflation!" is an *interesting* review of some ideas concerning grading. The underlying premise of this paper however, which is well expressed in the abstract, implies that we should be working towards the reduction of grade averages and should be returning to the "good old days". The "good old days" are those times when our dismissal rate was up around 16% and the grade average about 2.6 rather than the present situation where our dismissal rate is below 10% and the grade average is about 2.9.

Over the past twenty-five years, many discussions have been held by college professors with the central theme concerning grading systems and the necessity for grading courses in college. In spite of the concern that was being reflected by the numerous discussions, no changes of consequence seemed to take place until the idea of measurable behavioral objectives became widespread. Every college professor in charge of a course has certain goals or objectives in mind for that course. He may have these objectives only as a concept in his mind, he may have stated the objectives of the course clearly in his own notes, or he may have written them in "measurable behavioral" terms and distributed them to the members of his classes. It seems so logical that the students should be informed of the objectives of the instructor that it is difficult to see how any person can defend the concept of not sharing these objectives with his students. Having shared these objectives, the students know what is expected of them by the instructor. Having this knowledge, it seems only logical that the grades students receive on tests, which correspond with the stated objectives, should increase as compared with the grades being received by students who have never been apprised of the objectives of the course. The acceptance and use of measurable behavioral objectives may explain the general rise in grade averages. The fact that these are not being universally used may simply be an explanation of the fact that the grade averages have not risen even more.

With the adoption of the system of measurable behavioral objectives and the increasing success of students in meeting these objectives, it then becomes possible to evaluate the objectives themselves. If they truly represent the level and quantity of knowledge that is reasonable to expect within a defined course, then an instructor should be pleased if a sizeable number of his students make top grades in that course. If the objectives are inadequate and are too elementary, then there should be some modifications made, but these modifications should be made in the new set of objectives, but not with the specific goal of deflating the grade average.

I do not have an objective set of data, but this year I have a set of measurable behavioral objectives that were handed out to the students at the beginning of the semester, which was not done last year. The students in the beginning animal science course which I am teaching, approximately 100 students, are doing better grade-wise than the students did last year. I believe that the students know what is expected and because of this, they are more nearly meeting the objectives of the course. It is now time for me to reevaluate the objectives. I am not displeased with their better comprehension as indicated by the higher test scores this year.

Sincerely yours,



Franklin E. Eldridge
Professor
University of Nebraska—Lincoln