

Agriculture in a World Economy

Leaflet No. 1

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Agriculture in the United States is becoming increasingly trade oriented and trade sensitive. Agricultural trade issues are seen to be much more complex now compared to earlier days. Since the mid-1980s, the value of the dollar has been falling on world currency exchanges and few people (including economists) agree on whether this is good, bad, or no big deal. People are asking questions about the relationships between world trade and the environment. Congress recently ratified two important trade agreements, the North American Free Trade Agreement (NAFTA) and the Uruguay Round agreement negotiated under the auspices of the General Agreement on Tariffs and Trade (GATT). However, arguments continue over who will win and who will lose under these new trading rules. Even as the impacts of these treaties begin to emerge, discussions are beginning on a new round of trade negotiations under GATT and on broadening NAFTA by including other countries.

Understanding the economics of trade issues is, in itself, a very difficult task. In addition, a host of other concerns--national security, social justice, humanitarian interests, democratic ideals, etc.--sometimes limit the importance of economic realities. However, the underlying economics are important and must be considered, even though the economic evidence and understanding is sometimes unclear or incomplete. The economists involved in developing this set of leaflets, and the two sets that preceded this one, have often engaged in heated discussions about the various issues. Despite the complexity of the issues, it is important

that farmers, citizens and political leaders concern themselves with trade issues and the economic impact of alternative policy choices.

The purpose of this series of leaflets is to enable farmers, agribusiness, agricultural leaders and policy makers gain a clearer understanding of the important agricultural and trade policy issues that are much in the news. Because the development of this leaflet series is a project of a Task Force representing Extension Economists at 13 southern Land Grant Universities, there is a regional slant to some of the material in some of the leaflets. However, the intent is to provide information useful to everyone with an interest in agricultural trade policy issues.

The authors do not advocate any particular policy or set of policies. Rather, they hope to provide the reader with a knowledge base from which policy alternatives can be evaluated and acted upon. Because this series is written by economists, the focus is on economic issues and economic policies. However, the authors recognize that, in many instances, other concerns are also important or even paramount.

Our Shrinking World

Many readers doubtless will be familiar with the rollercoaster of U.S. agricultural export activity in recent years. As a percentage of farm marketings, U.S. farm exports doubled during the 1970s and reached a high of 30 percent of farm sales in 1981 before tumbling to about 20 percent by 1987. The decline in exports during the first part of the 1980s took a serious toll on farm incomes and farm asset values. U.S. exports have rebounded since the low point in 1987 but, when measured in real (inflation adjusted terms), they have not regained all of the lost ground compared to the export peak of the early 1980s. These events only scratch the surface, however, and do not adequately explain just how tightly the U.S. agricultural economy is interwoven with the economy of almost every country in the world.

U.S. exports account for a large share of world trade in many agricultural commodities. In the mid-1990s, about one fifth of world wheat production moved into world trade but exports absorbed about half the U.S. crop. About 12 percent of world coarse grain production, about 17 percent of world oilseeds, and over one-third of high protein meals and edible oils find their way into world markets. Exports absorb about 20 percent of U.S. coarse grain production, 25-30 percent of oilseed production and 20-25 percent of high protein meals. About one-third of world cotton production moves into world trade compared to 40-45 percent of the U.S. crop. Meats are not generally thought of as export commodities, but about 12 percent of U.S. poultry production and about 6 percent of U.S. beef move into export markets. Meat exports have been growing and in 1995 beef exports

exceeded beef imports for the first time since World War II. The growth in meat exports is expected to continue with the implementation of the provisions of the new GATT agreement.

World trade absorbs an increasing share of global production but perhaps more significant than the effect of the international flow of agricultural commodities and other goods has been the change in world financial markets. International investors can transfer billions of dollars from one country to another instantly with the touch of a computer keyboard or by FAX. In 1993, financial flows into and out of the U.S. were estimated at \$16 trillion-- dwarfing the \$1.4 trillion value of goods and services moving into and out of the country. International financial flows, not trade in goods and services, have become the major driving force determining currency values and exchange rates. Exchange rate fluctuations affect the prices of goods traded in the international market place and, therefore, affect the competitiveness of U.S. and southern farm products.

Agriculture and World Trade

Changes in exports have a major effect on the health of agriculture in the United States. Export volumes and prices affect farm incomes directly and indirectly affect the businesses that supply farm inputs and process and distribute farm products. It has been estimated that a one dollar increase in exports generates a second dollar's worth of related economic activity and that one new job is created for each additional \$50,000 of exports. The value of U.S. agricultural exports consistently exceeds the cost of imports. In 1994, the U.S. exported \$46 billion of agricultural products compared to \$27 billion of imports, generating a \$19 billion trade surplus (Table 1). Crops and crop products accounted for most of the exports-- about \$37 billion--with livestock products accounting for the remaining \$9 billion. Most of the imports were classified as competitive, i.e., they competed with similar products produced in the U.S. Only \$7 billion of imports were products not produced in the U.S., such as coffee, bananas, cocoa, and spices.

Table 1. U.S. Agricultural Exports and Imports, 1994

item	Value (\$ million)
Exports:	
Crop Products	36,555
Animal Products	9,149
Total Exports	45,704
Imports:	

Competitive Products	20,087
Noncompetitive Products	6,731
Total Imports	26,818
Agricultural Trade Balance	18,886

Source: USDA, Foreign Agricultural Trade of the U.S., Calendar Year 1994 Supplement; Economic Research Service, USDA, 1995.

The importance of the export trade for the South's major crops is shown in Table 2. A large acreage in the South is devoted to nationally important export crops--corn, soybeans, wheat and sorghum--and the competitiveness of U.S. exports in world markets affects all producers. Cotton, tobacco, citrus, rice and peanuts are regionally important crops that are affected by trade and international competition. Cotton must compete with imported textiles in the domestic market and with foreign producers for export markets. Tobacco is both exported and imported, and U.S. leaf must compete against lower priced leaf from foreign sources. Brazil is a major supplier of frozen orange juice concentrate, in direct competition with domestic producers. U.S. exports of poultry meat and pork are growing and these are regionally important livestock products.

The major customers for U.S. farm products are Japan, Canada and Mexico, which together accounted for \$19 billion of the \$46 billion export total for 1994 (Table 3). Taken together, the nations of the European Union are another important market, with exports of close to \$7 billion in 1994. However, this is a market that has been declining in importance as a result of EU agricultural and trade policies.

The developed or industrialized countries buy more than half of U.S. exports (Table 4). However, the less developed countries (LDCs) represent an important market and many people believe that this is where future export growth will occur. Paradoxically, for many LDCs increased farm productivity may be the key to higher incomes and the ability to buy more U.S. imports.

Table 2. Production and Exports, Selected Agricultural Commodities, U.S. and Southern Region, 1994

Commodity	United States Farm Value (\$ Mil.)	Southern Region Farm Value (\$ Mil.)	Southern Region % of U.S. Farm Value	Exports Value (a) (\$ Mil.)
Beef and Hides	36,445	11,306	31.0	3,827
Poultry & Eggs	18,443	12,309	66.7	1,880
Corn	15,031	1,596	10.6	3,936

Soybeans	13,404	2,203	16.4	4,330
Hogs and Pork	9,859	1,890	19.2	548
Wheat	7,794	1,211	15.5	4,266
Cotton	5,730	4,171	72.8	2,676
Tobacco	2,646	2,482	93.8	1,303
Rice	1,654	1,228	74.2	1,008
Oranges	1,580	1,137	72.0	654
Peanuts	1,231	1,213	98.5	181

(a) Animal items include meat and meat products but crop items do not include further processed or value added products.

Source: Data taken from "Ranking of States and Commodities by Cash Receipts, 1992", U.S. Department of Agriculture, Economic Research Service, Stat. Bull. 871, Dec. 1993 and "Foreign Agricultural trade of the United States: Calendar Year 1994 Supplement", USDA, ERS, June 1994.

Table 3. Top Four U.S. Export Markets, 1992

Country	U.S. Exports (\$ Mil.)	Top Three U.S. Agricultural Export Categories (a)
Japan	9,268	Meats, Feeds, Oilseeds
European Union (EC-12)	6,774	Oilseeds, Feeds, Fruit
Canada	5,504	Vegetables, Fruit, Meats
Mexico	4,513	Meats, Oilseeds, Feeds

(a) Includes some items that have been further processed and byproducts. Meats include poultry; Feeds include feed grains, products and fodders; Fruit includes juices and nuts.

Source: "Foreign Agricultural Trade of the United States: Calendar Year 1994 Supplement", Economic Research Service, U.S. Department of Agriculture, June 1994.

The LCDs also are major suppliers of U.S. imports, accounting for more than half of the total. Some of these imports are tropical products not produced in the U.S., but many are products that do compete directly with U.S. goods. However, trade is a two-way street and customers for U.S. exports must be able to earn U.S. dollars by selling their products--both agricultural and industrial--in world markets. Protectionist domestic policies that deny

access to U.S. markets may also deny foreign countries the opportunity to earn the foreign exchange necessary to buy U.S. products.

Table 4. U.S. Agricultural Trade with Developed and Developing Countries

Countries	Exports (\$ Bil.)	Imports (\$ Bil.)
Developed	23.2	12.9
Developing	20.4	13.4
Other	0.0	0.5

Source: "Foreign Agricultural Trade of the United States: Calendar Year 1994 Supplement", Economic Research Service, U.S. Department of Agriculture, June 1994.

The South's Stake in World Trade

United States' agriculture is becoming more trade oriented and more sensitive to trade issues. For southern agriculture this is nothing new; agriculture in the South has its roots in world trade. During colonial days, southern farmers and plantation owners, unlike their counterparts in the North, relied largely on agricultural export markets for their livelihood. Consequently, during the early days of the Republic, most southern political leaders advocated free trade. The North, more oriented toward manufacturing, pushed for protectionism to shield its industrial base from foreign competition.

These conflicts had an impact on US trade policies. During the last 200 years, depending on the prevailing political and economic environment, the United States has vacillated between protectionism and the pursuit of free and open world markets.

Such conflicts contributed to the Civil War and have persisted into the 20th century. In "RedHills and Cotton: An Upcountry Memory", Ben Robertson vividly depicts the impact of government action at the outset of the depression era on world markets and on southern farmers:

"In our valley our Uncle Tom made speeches about the Hawley-Smoot tariff--it would ruin us. All over the world, governments were retaliating against this tariff. Governments, at any cost, were attempting to free themselves of America and its system of tariffs. In India, in Turkestan, in the Egyptian Sudan, in the Kenya Colony, in Brazil, in Queensland, in Peru, farmers were growing more cotton and still more cotton. Whether we liked it or not, we could not depend solely on cotton much longer. We would have to diversify our agriculture to grow our own grain, raise our own hay, keep dairy cows."

The health of southern agriculture is heavily dependent on regional specialty crops; commodities the region has an innate advantage in producing because of climatic conditions. Among the most important of these crops are cotton, tobacco, rice, peanuts, citrus and other fruits, certain vegetables, and sugar cane. For virtually all of these commodities, major trade problems and issues have arisen. For some regional specialties new competitors have arisen, sometimes right on our doorstep in the Caribbean, Latin America and Canada. In some instances this competition has eroded export markets and in others there has been deep penetration in domestic markets.

For example, tobacco imports grew rapidly in the early 1980s because of high domestic support prices. History repeated itself in the early 1990s when imports surged again. Orange juice concentrates from Brazil displaced sales of Florida and Texas producers. More recently, Florida tomato producers have railed against cheaper imports from Mexico. U.S. sugar producers have been protected from foreign competition by import quotas. Cotton and rice exports fell sharply in the early 1980s, a situation that was reversed by the introduction of marketing loans as a new policy tool of the 1985 Farm Bill. The 1996 Farm Bill abandoned most income supports for program crops and this will allow market forces to set prices, including domestic and international supply and demand. Farmers' production decisions will be made in response to these market signals.

A second reason for the South's high stake in world agricultural trade is that the South is a marginal production area for most of the major nationally important farm commodities such as wheat, corn, soybeans. Production costs are generally higher in the South. Therefore, when prices for these commodities have been relatively high, the South has rapidly expanded acreage and production, as was the case for soybeans in the 1960s and wheat in the 1970s. But when prices are low and profit margins are squeezed, as has been the case in recent years, the biggest downward adjustments also occur in the South. For example, from 1982 to 1992 the U.S. soybean acreage declined about 9 million acres or 13 percent. Virtually all of this adjustment occurred in the South where the acreage declined by more than 50 percent.

Because of the South's unique position as a producer of regional specialty crops and a high-cost producer of most of the major, nationally grown commodities, southern agriculture is especially sensitive to the impact of world events. In the past, there have been painful adjustments by the producers of many crops. The South stands to benefit from the recent expansion in pork and poultry exports because of its national ranking in pork and poultry production.

Complex, Conflicting and Interwoven Issues

The leaflets that follow discuss some of the major trade issues and their impact on

agriculture. The intent is to provide the basis for a more informed discussion of policy choices. Each leaflet stands alone but the authors have attempted to weave the issues together into a total package. There are ten leaflets in the set and each of the other nine examines a different trade issue.

The second leaflet in the series provides an overview of the fundamental economics of trade, including job gains and losses and America's competitiveness. [Leaflet 3](#) discusses one of the newest and most controversial of the trade related issues--Trade and the Environment. Does free trade help or harm the environment more than protectionist policies? Trade also affects important consumer issues such as food safety and the cost and availability of foods. These issues are discussed in [Leaflet 4](#).

Domestic macroeconomic policies (fiscal policies, monetary policies) have multiple major impacts on the economy, on trade and on agriculture. [Leaflet 5](#) examines these impacts. Governments have deliberate policies that affect trade and these policies are examined in [Leaflet 6](#), Government Intervention Affecting Trade. Some specific examples of government trade policies are contained in [Leaflet 7](#), Understanding GATT; [Leaflet 8](#), Preferential Trading Arrangements; and [Leaflet 9](#), NAFTA: Prospects for U.S. Agriculture. The last leaflet in the series reviews important U.S. agricultural export markets and export trends.

The Challenge

The size and complexity of agricultural trade issues is unsettling. Many would like to return to the days of the 1950s and 1960s when the United States was less affected by world economic and political events. This just won't happen. The world will continue to shrink, interdependency among the peoples of the world will continue to grow. Major new trade agreements, NAFTA and GATT-UR, have been negotiated and are being implemented. New policies affecting the relationship of U.S. and southern agriculture will be developed in the future. There will be trade-offs, winners and losers, and painful adjustments for some. The challenge is for agricultural and governmental leaders to take positions supported by fact and sound logic rather than emotionalism. The authors of this set of leaflets hope their efforts will be a step in that direction.

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