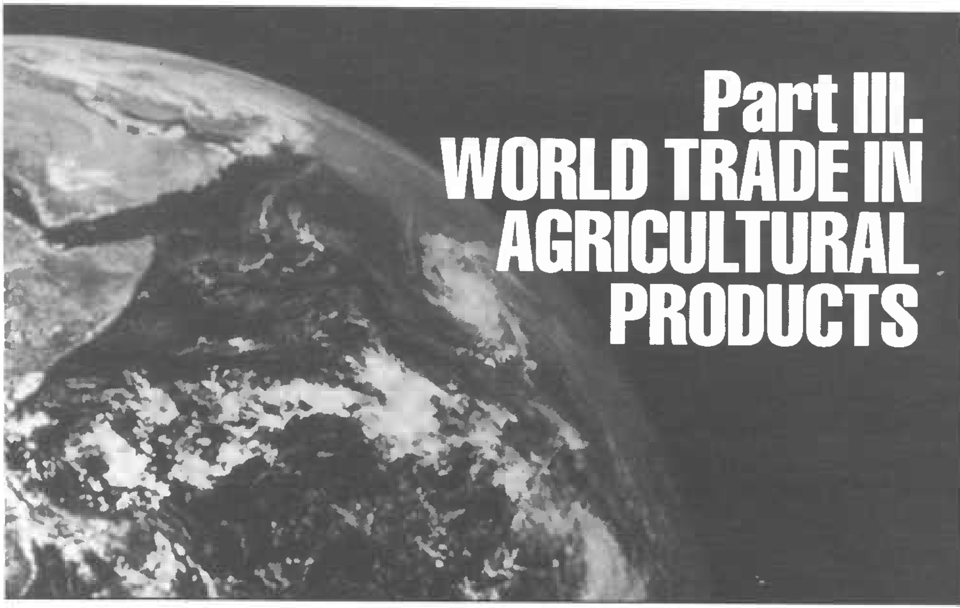
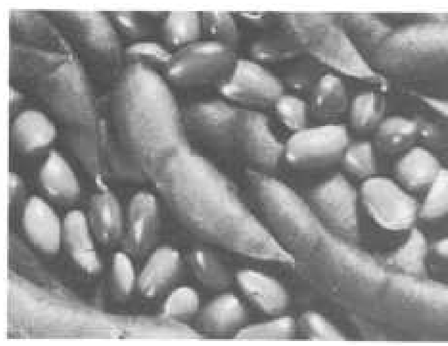
Part III. WORLD TRADE IN AGRICULTURAL PRODUCTS





The Importers and the Exporters

By Eileen Marsar Manfredi, *grains analyst, World Agricultural Outlook Board*

Global trade in agricultural products was $228 billion in 1983. Virtually all countries participated in the international exchange of grains, feedstuffs, meats, fruits, vegetables, beverages, sugar, spices and nonfood items like fiber, tobacco and rubber. World trade in food has grown in the past decade even with a steady increase in total food production. From 1975 to 1984, the rate of growth in world food production was 2.1 percent. This rate of increase in output exceeded population growth so that world food production per person also has grown. The distribution of output, however, has not been even across countries and that, plus a desire for different types of food, has spurred rapid gains in world food trade.

World Food Trade

World trade in food products expanded about 60 percent between the mid-1970's and 1983. Trade accelerated during the 1970's as a combination of income growth, policy changes encouraging consumption, and weather-related harvest declines stimulated imports in a number of countries and regions. Since 1980 the growth of world trade has slumped, and the volume of trade in some foods has actually declined.

Grains, primarily wheat, rice and corn, are a major component of food trade, accounting for roughly one-fifth of the value of total world food imports in recent years. Total grain trade rose from 110 million tons in 1970/71 to 216 million in 1980/81. Trade accounted for over one-third of the increase in global grain consumption in that period. The share of total grain consumption traded rose from 10 to 15 percent during that decade. Thus, 1 out of every 7 tons of grain used by people or animals originated in a different country from where it was consumed.

Many of the food commodities being traded are interrelated. For instance, many grains like corn, barley, sorghum, and oats are imported by countries as animal feeds. Some of the resulting meat products, beef, veal, pork, poultry, butter, cheese and milk, are then often exported to other countries. For some commodities, trade is a major share of total world production as output is concentrated in only a few countries. In contrast, for basic foods like rice and meats, trade represents a small share of global consumption. Less than 5 percent of the world's annual rice crop leaves the country where it was grown.

Food is exchanged among most countries of the world, even by those for whom self-sufficiency is an important policy goal. Most trade in food products is carried on by the developed countries. Other groupings have emerged, however, as food imports by centrally planned economies and by the middle income developing countries have grown rapidly, especially in the last 10 years.

Food Trade Growth

International trade is the exchange of one type of good or service for another, generally through the use of currencies as payment. Trade benefits all parties by allowing each participant to specialize in producing those items for which it has a comparative advantage in exchange for other commodities that cannot be produced as efficiently domestically. Some foods cannot be grown in some countries because of soil and climate. In many countries, food is imported whenever there is an imbalance between domestic production and the level of domestic consumer demand. This imbalance may be a constant level, a growing level, or an erratic level from year to year. Weather-related fluctuations in crop production can turn an exporter into an importer, as was the case with the Republic of South Africa for corn in recent years.

Even in areas where food output is expanding, food imports may also increase for a variety of reasons, such as rapid population growth, low levels of food consumption, income growth, and a desire to vary diets. Looking at these factors a little more closely will yield some insight into changes in world trade in foods over the last decade.

Rapid Population Growth. For the poorest countries, population growth rate may be the major factor determining food imports. If domestic production fails to grow at or above the population growth rate, proportionate food imports will be needed, even if scarce foreign exchange earnings must be diverted from other planned uses. Food production in developing African countries as a group grew by an average of 1.9 percent per year in the last decade. Population growth however, averaged 3 percent annually. Without growing food imports, consumption per person would fall. Because of the low income levels of developing African countries, food imports tend to be concentrated into basic foods, especially grains. Over the past decade, wheat and rice imports by these countries have more than doubled.

Low Food Consumption Levels. Continuing high growth rates in food trade in developing countries is accounted for by the generally low levels of food intake per person. For instance, to increase consumption Egypt has become a major importer of foods and is currently the third major wheat importing country in the world. Two-thirds of all daily caloric intake comes from basic grains there. Egyptian grain consumption on average now exceeds the minimum daily caloric intake recommended by the United Nation's Food and Agricultural Organization (FAO). In many countries average consumption levels fall below FAO minimums. If financing permits or international food aid is available, these countries rely on increasing food imports to raise food consumption. Tremendous pressure exists on governments in poor countries to ensure politi-

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cal stability and to further social equity by increasing food imports.

Income Growth. As incomes grow in lower income countries, spending on food rises. Thus, a strong, positive relationship exists between income growth and food consumption in countries where food consumption is low. Global income growth rates, adjusted for inflation, grew by 3.5 percent a year in the 1960's and accelerated to an average annual rate of 3.7 percent in the 1970's. In the early 1980's the economic growth rate slowed. In keeping with the income growth, the value of food products traded rose sharply from 1970 to 1980.

The major areas where income growth was highest were neither the developed countries nor the poorest developing countries, but a group of middle-income newly industrializing countries. In countries such as South Korea, Taiwan, Mexico, and Brazil, growing incomes for an expanding middle class are translated directly into higher consumption levels and higher imports. Consumers in less developed countries generally tend to spend a larger share of their income on food than consumers in developed countries. As incomes rise, spending on food in middle income countries also rises, although the types of foods consumed will likely expand and the relative shares of various foods in total intake will change.

Varied Diets. A direct result of higher incomes is the ability of consumers to vary their diet and improve the range of foods consumed. The variety can include different cereals, such as wheat-based noodles in a predominantly rice-eating area, and processed products like confectionaries and preserved fruits. As policies in many countries over the past few decades have stressed industrialization and production for export, urbanization has grown. Many Third World cities have grown sharply with several such as Cairo and Mexico City becoming huge metropolitan areas. This change and higher incomes for many residents go hand in hand with dietary changes. While meat consumption per person has barely changed in the United States over the last 10 years, it has tripled in Saudi Arabia, doubled in South Korea, and risen by 50 percent in Egypt. And there is room for further growth since people in all of these countries are currently consuming less than two-fifths as much meat as the average American.

Importing Countries

Poorest Countries. While the needs of the poorest countries are large relative to available supplies, these countries as a group are not the major food importers. Large populations and large-scale malnutrition may motivate a country to increase food imports, but ability to pay is a determining factor governing the level of such imports. Hunger is related to food aid shipments, but commercial imports are constrained in the poorest countries by financial problems.

Food aid shipments in 1984/85 are estimated at 11.7 million tons or about 20 percent of total food imports in low-income, food-deficit countries. Some 69 developing countries fall into the category of countries needing food aid. If all people in these countries were eating at minimal nutritional standards this year, an additional 8 million tons would be needed as imports over and above expected food aid shipments and likely commercial imports. Most of the countries in direst need are in sub-Saharan Africa and South Asia.

Newly Industrialized Countries. In contrast to the poorest countries, the newly industrializing countries are major food import markets. A combination of factors—such as trade orientation, access to foreign exchange resources, middle income levels, and increased urbanization—have expanded imports of basic foods, feeds for the domestic livestock economies, and processed products. For example, a handful of these dynamic economies account for over 25 percent of world trade in feed grains. The demand for greater consumption of meats in middle income countries spurs increased levels of imported feeds, both grains and oilmeals, to fuel their expanding livestock numbers. As many of these countries move from backyard hog and chicken operations to commercialized feeding industries, their need for high-quality feeds increases.

In addition to expanding their output of meat domestically, many middle income countries have become important importers of meat and other processed and semiprocessed products. As internal demand, backed by economic growth, expands, imports are needed because domestic capacity is inadequate or unavailable. Saudi Arabia, for instance, is now a leading poultry importer and several other oil exporting countries are major markets for milk, butter, cheese, and fruits.

Centrally Planned Economies. Perhaps the most important markets in the last decade and a half have been the centrally planned economies—U.S.S.R., Eastern Europe, and China. These countries have become key players in food trade because of the large volume and annual volatility of their purchases of grains, meals, meat, and dairy products. Various factors determine import levels, and conditions have differed substantially among these countries which, nevertheless, share an approach to trade based on centralized control and decision-making in contrast to more market-oriented economies. Weather, domestic production and trade policies, and income and credit problems have affected their food imports.

The **U.S.S.R.** became a major world grain buyer in the early 1970's when poor production and a policy decision to attempt to maintain domestic meat consumption with imported feeds led to large grain imports. Annual levels of imports since then have varied widely with weather. The U.S.S.R. is an important buyer accounting for about one-quarter of world grain trade in 1984/85. The Soviets have long-term grain agreements with a number of exporting countries in which they pledge to buy a minimum volume of grain each year at prevailing market prices. The U.S.S.R. is also a leading import market for butter and beef and could become a significant user of soybean meal if animal rations were to become more efficient.

Eastern European Countries as a group are important importers of food products, especially feeds. Meat consumption per person in these countries is quite high—about 70 percent of that of Americans. Both meat consumption and feed imports for their livestock however, have dropped in recent years because of financial constraints. Some East European countries, especially Poland, had to cut imports when access to borrowing and trade credits was curtailed. Debt levels are quite high, with some countries having had to attempt to reschedule debts with their creditors and set up a new time table of payments. Debt repayment is directly linked to food import levels because it reduces the hard currencies these countries have left to pay for imports after meeting some of their debt obligations. In addition, official trade credits, which some exporting countries offer to promote sales, have been suspended. This removes the easy credit which aided rapid import growth by East European countries in the late 1970's.

China is an example of rapid change in domestic production and trade because of domestic policy changes. Favorable weather and movement towards more market-oriented agriculture have sharply raised their food and agricultural production during the 1980's. This occurred along with a few years of large food imports as official policies allowed domestic consumption of wheat and meat to surge. China is the world's largest pork producer. Yet with the world's largest population, their total meat consumption per capita is quite small. Rising income levels for peasants and urban workers alike are translated into a desire for more and different foods. Imports were needed to supplement domestic output of wheat, and in the future as meat consumption grows, the need for imported feeds is likely to rise. The immediate hurdle to be faced by a large, developing country like China is to improve internal transportation and to build more facili-

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The centrally planned economies of the U.S.S.R., Eastern Europe, and China have been some of the most important import markets in the last decade and a half because of their volume of purchases. (Czechoslovakia, feeding breeder cattle.)

ties to provide concentrated animal feeds and efficient feeding operations to meet the latent food demand.

Developed Countries. Although developing countries will be the growth markets of the future for food imports, the major buyers today are developed countries. These countries have the income and trade infrastructure to handle a large volume of foods. In addition to their dominance in volume of food trade, developed countries import a wide variety of food products, including high-value products. Developed countries are major producers of several food products, but climatic constraints or cost efficiencies imply a large volume of imports of some commodities.

For instance, Japan imports a large volume of wheat, feed grains and soybeans for consumption by its people and livestock, but the country is more than self-sufficient in rice production. Although Western European countries are exporters of wheat and barley, they import large quantities of soybeans for crushing into meal for high-protein animal feed. With soybean production more limited geographically than production of grains, trade is extremely important. For developed countries, livestock products and meat consumption play a major role in the diet, and access to meat and animal feeds is vitally important. From 1970 to the early 1980's, the volume of soybeans crushed into meal doubled, but the volume of trade in soybeans and meal almost tripled.

In addition to significant imports of bulk food commodities like grains and meals, the developed countries are the major importers of expensive and exotic foods. Western European countries and the United States import over half of the value of all high-value products, even though these countries have only one-tenth of global population. Some of these commodities are tropical, and not produced in temperate zone developed countries, some are imported seasonally, and others are specialty products which differ from those produced locally, such as French cheeses and Italian wines imported by Americans.

A direct link exists between affluence, diversifying diets, and trade. Although high-income people do not necessarily increase their level of food consumption as incomes rise, they do shift to more expensive foods. The United States is a major food importer, annually spending over $18 billion for food product imports.

Exporting Countries

The major food exporting countries are basically a handful of developed countries, with the United States the leading exporter of a number of food categories. Developing countries like Argentina, Brazil, and Thailand are major exporters of commodities like grains, feeds, tropical products, and meat, and several developing countries are leading exporters of specific commodities like tea. Exports are strongly concentrated among a few countries: five countries account for over 90 percent of total wheat exports; seven for over 90 percent of feed grains; four over 95 percent of soybeans and products; six over 80 percent of beef; and only two regions account for over 85 percent of all pork exports.

The reasons for the large volume of food exports originating in several developed countries are a combination of factors—agronomic, economic, scientific, and political. The agronomic factors include large land bases, good soils, and climatic conditions. Added to that is the large-scale use of modern technology adapted to individual farm conditions. Yields tend to be high in developed

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countries because of intensive farming of the land with timely applications of fertilizers and herbicides, and controlled irrigation, as well as the use of specialized equipment for planting and harvesting. In addition, modern storage techniques and facilities minimize post-harvest losses and quality deterioration. Relative affluence among consumers in many developed countries stimulates demand for a variety of products and large trade flows of both food and nonfood items. The economic incentive to produce surpluses of food in developed countries for export to meet demand in other markets is enhanced by a relatively free trade environment in most major food exporting countries. Domestic agricultural policies to provide some income safeguards for farmers in many exporting countries and market stimulation lead to large-scale production. Trade is a vital link in the health of the farm sector in those countries which use their surpluses to meet global needs.

Major Importers of Basic Commodities Traded in the World

Wheat	Feed Grains	Soybeans & Products	Beef	Pork
U.S.S.R.	Japan	European Community	United States	United States
China	U.S.S.R.	Japan	U.S.S.R.	Japan
Japan	European Community	Spain	Japan	U.S.S.R.
Egypt	Mexico	Taiwan	European Community	European Community
Eastern Europe	Taiwan	Mexico	Egypt	Hong Kong
European Community	South Korea	Eastern Europe	Canada	
Brazil	Eastern Europe	U.S.S.R.	Saudi Arabia	
	Saudi Arabia	India		

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Wheat	Feed Grains	Soybeans & Products	Beef	Pork
United States	United States	United States	European Community	European Community
Canada	Argentina	Brazil	Australia	Eastern Europe
Australia	Canada	Argentina	Argentina	
France	South Africa	European Community	New Zealand	
Argentina	Thailand		Brazil	
	Australia		Canada	
	France			