U.S. Agricultural Trade in the 1970s: Progress and Problems

By Richard K Abrams and C. Edward Harshbarger

One of the most significant economic developments in agriculture during the 1970s has been the sharp expansion in international trade. U.S. agricultural exports have shown remarkable growth in recent years, as the American farmer has been transformed into an international producer of food and fiber. At the same time, U.S. consumers have continued to demand the agricultural products of foreign countries and, as a result, agricultural imports have also grown rapidly.

While agricultural trade has expanded very sharply during the past decade, it still remains below levels that would have existed in the absence of trade restrictions. Actions taken by governments to protect domestic industries and to provide for national security by supporting an inefficient agricultural sector reduce trade levels and distort international trade patterns. Obviously, the economic goal of free trade is not universally accepted, even in the United States. Nevertheless, the events of the past decade have demonstrated that U.S. agriculture has become inextricably involved with the international market, and that this involvement will likely increase in the future.

This article reviews recent developments in agricultural trade. Special attention is given to some of the methods that are used to distort trade patterns. In addition, the agreements in the recent round of Multilateral Trade Negotiations (MTN) are discussed in terms of the implications for future trade expansion.

U.S. AGRICULTURAL TRADE DEVELOPMENTS

In the last decade, U.S. agricultural exports have more than quadrupled, rising from $6.7 billion in fiscal 1970 to $27.3 billion in fiscal 1978 (Table 1). Since 1970, exports have increased more rapidly than production so that the proportion of total U.S. farm: marketings that has been sold abroad has risen from 14 per cent to more than 25 per cent. Foreign markets now absorb the production from nearly one out of every three harvested acres. Moreover, the U.S. share of world agricultural trade has increased from 13.5 per cent in 1970 to around 17 per cent in 1978.

The commodities largely responsible for the sharp gain in the value of agricultural exports in this decade are grains and soybeans. Wheat and feed grains have each accounted for about

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Table 1
U.S. AGRICULTURAL TRADE EXPORTS, IMPORTS, AND NET SURPLUS
(Billion Dollars)

Fiscal Year	Exports	Imports	Surplus
1970	6.72	5.59	1.13
1971	7.76	5.83	1.93
1972	8.05	6.05	2.00
1973	12.90	7.32	5.58
1974	21.32	9.55	11.77
1975	21.58	9.58	12.00
1976	22.76	10.11	12.65
1977	24.00	13.38	10.62
1978	27.30	13.89	13.41

SOURCE: U.S. Department of Agriculture.

25 per cent of the increase and soybeans for another 15 per cent of the total gain. Over the last 25 years, the U.S. portion of world grain exports has risen from about one-third of the total to approximately one-half.[1] In addition, roughly 80 per cent of the soybeans that enter world trade each year originate on U.S. farms. In fact, the United States accounted for more than 80 per cent of the total worldwide increase in grain exports during the 1970s.

During the past decade, the major markets for U.S. farm products have not changed appreciably in relative importance (Chart 1). The largest market is the European Economic Community (EEC), which absorbs slightly more than one-fourth of all U.S. agricultural exports. On the other hand, Japan is the leading single country for U.S. farm products, purchasing about $4 billion in fiscal 1978, or 15 per cent of total sales abroad. The most significant trade development in the 1970s has been the growth in sales to the centrally planned economies—Russia and China in particular. Starting from a negligible level, exports to these economies now constitute about 10 per cent of total U.S. farm sales in foreign markets.

The growth of U.S. agricultural exports over the past decade has occurred against a background of major changes in global trade patterns. One change is that the developed countries have been increasing their relative share of agricultural trade. Also, the less developed countries and the centrally planned economies have become more dependent on the developed countries for food and grain imports, and intraregional trade among the centrally planned economies has been decreasing in relative importance.[2]

A number of factors have contributed to the growth in U.S. agricultural exports during the 1970s. These factors include occasional world production shortfalls, decisions by foreign policymakers to upgrade dietary standards by importing more food, and the implementation of programs designed to encourage economic development in less developed countries. Also, special credit programs have been authorized by Congress to assist foreign customers in the financing of agricultural imports. Although some observers believe that the two devaluations of the dollar, along with the institution of floating exchange rates, have stimulated foreign sales in recent years, the short-run impact of these factors probably has been small.[3] Trade barriers and other restrictions have tended to negate the positive effects of changes in currency exchange rates. Thus,

1 S.C. Schmidt, H.D. Guither, and A.B. Mackie, "Quantitative Dimensions of Agricultural Trade," *Speaking of Trade: Its Effect on Agriculture.* Agricultural Extension Service, University of Minnesota, Special Report No. 72, November 1978, pp. 78-9.

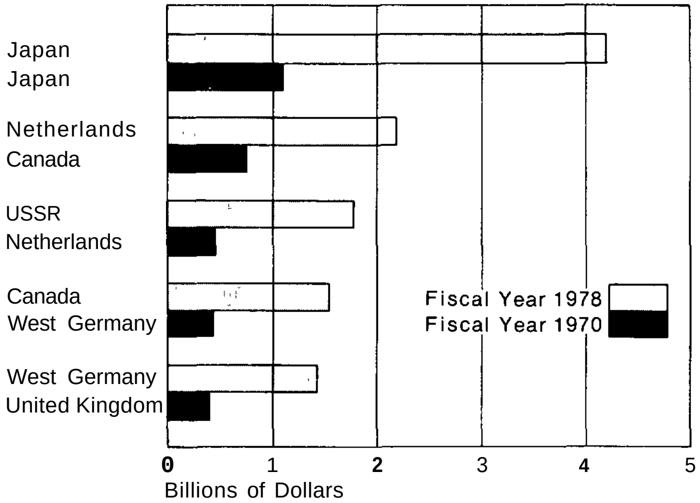
2 *Ibid,* p. 76.

3 William E. Kost, "Effects of an Exchange Rate Change on Agricultural Trade," *Agricultural Economics Research,* U.S. Department of Agriculture, Vol. 28, No. 3, July 1976, p. 99.

Chart 1

LEADING PURCHASERS OF U.S. AGRICULTURAL PRODUCTS

Fiscal Years 1970 and 1978



SOURCE: U.S. Department of Agriculture.

foreign demand for agricultural products has not been very sensitive to price changes because of trade impediments.

The growth of agricultural exports during the 1970s has been accompanied by large increases in agricultural imports. U.S. imports have more than doubled, going from $5.6 billion in fiscal 1970 to almost $14 billion in fiscal 1978. A large share of this increase is due to the rapid growth in complementary imports, i.e., products that are not produced in the United States. For example, coffee imports amounted to nearly $4 billion in fiscal 1977, or almost 30 per cent of total agricultural imports.[4] Significant quantities of crude rubber, cocoa beans, and spices are also purchased from foreign sellers each year. Although the relative share of complementary imports to total agricultural imports has trended down over time, the experience in recent years has been quite the opposite. Since 1975, when this proportion fell to 29 per cent, complementary imports have expanded very rapidly, pushing the ratio up to 47 per cent in fiscal 1978.

As the growth of agricultural exports has exceeded the growth in imports, the surplus from agricultural trade has grown sharply. In the past decade, the surplus has advanced from just over $1 billion to almost $13.5 billion in fiscal 1978. The large surplus in agricultural trade has helped alleviate the serious balance of payments problem faced by the United States in recent years.

OBSTACLES TO ACHIEVING TRADE POTENTIAL

The growth in agricultural trade during the 1970s has produced many benefits. Not only

[4] *Agricultural Statistics.* U.S. Department of Agriculture, 1978, p. 573.

has the economic welfare of U.S. farmers been enhanced by this development, but the world has been brought much closer together, both economically and politically. Living standards have been substantially increased in the developed world as a result of trade, and conditions in the developing world are also beginning to show some improvement. However, there is room for a further expansion in agricultural trade, particularly if various trade barriers can be relaxed.

Although the potential benefits from international trade are well documented, most countries are unwilling to open their borders to free trade flows. This reluctance is especially acute for agricultural products. Because of this anti-trade bias, many countries end up producing goods that can be produced more efficiently elsewhere.[5] As a result, total world output is kept below its maximum potential.

Although inefficient industries are protected for many reasons, four arguments are frequently used to justify barriers in agricultural trade. First, it is often claimed that domestic. supplies of agricultural products are vital to national security and therefore the domestic agricultural sector must be protected, independent of its relative inefficiency. The second argument states that domestic agricultural production must be protected because foreign suppliers are unreliable. The U.S. embargo on soybean exports in 1973 lends some credence to this claim. Third, some countries maintain that protection is necessary to insure farmers a fair standard of living. Thus, prices are supported at high levels and foreign competition is controlled by imposing trade restrictions. Finally, some countries believe that protection of their agricultural sector is an inexpensive way of avoiding unemployment. This belief is based on the presumption that freer agricultural trade would release more workers from the agricultural sector than could be absorbed by the other sectors of the economy. Whatever the reasons, many countries want to be self sufficient in the production of food, and so long as this goal exists, trade barriers will be difficult to eliminate.

Numerous methods are used to protect domestic agricultural sectors and to distort agricultural trade patterns. In some cases, trade is restricted by raising the price of imports directly by imposing tariffs or variable levies. In others, the supply of foreign products is limited directly with quotas, or indirectly with other nontariff barriers.

Tariffs

Many countries protect domestic producers by taxing imports. One form of tax is the tariff, which charges importers for each unit of a commodity imported into the country. Because of the tariff, the product will only be imported when the domestic price is greater than the world price plus the tariff. Although tariffs have historically been a most important impediment to agricultural trade, their relative importance has declined in recent years. More recently, variable levies, quotas, and other nontariff barriers have become the most common methods of restricting

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[5] **Nations trade for the same reasons that regions or people do—to gain from the benefits of specialization. These benefits can arise in two ways. First, two identical countries can profit by arbitrarily specializing in different goods in order to exploit economies of scale. Second, and more important, potential benefits from trade exist because countries, like people, are not equally endowed in all ways. Some countries are densely populated, others have fertile land or extensive water resources, while others have vast quantities of capital or a skilled work force. In fact, any difference can make a country *relatively* better at producing some set of goods, and this *comparative advantage* is the basis for international trade. For a more complete description of comparative advantage and the potential benefits of trade, see C.P. Kindleberger and P.H. Lindert, *International Economics* (Homewood, Ill.: Richard D. Irwin, Inc., 1978), pp. 15-35, 489-95.**

agricultural exports. Nevertheless, virtually every country continues to use tariffs to restrict agricultural imports.

Two types of tariffs are commonly used—the specific and the ad valorem. The specific tariff places a fixed charge per unit imported, independent of its price. Therefore, if the world price rises relative to the domestic price, the degree of protection afforded by the tariff declines.[6] The ad valorem tariff, on the other hand, taxes the imported good by a fixed percentage of its price. Thus, if import prices rise, the degree of protection is unchanged, but the tax per unit increases. Historically, specific tariffs have been common, but in recent years, probably as a result of inflation, ad valorem tariffs have been favored.[7]

An example of a tariff on agricultural imports by the United States is the 20 per cent ad valorem tariff on hard Italian-type cheeses.[8] Because of this tariff, these cheeses cannot be profitably imported into the United States if the domestic price is less than 20 per cent above the world price. In the event American producers can satisfy domestic demand below this price, the tariff will be prohibitive and these cheeses will not be imported, except those which the public may regard as specialty products. However, since U.S. producers, even with tariff protection, are not competitive with Argentina, the primary exporter of these cheeses, hard Italian-type cheeses are normally sold in the United States at 20 per cent above the world price.

As a result of tariffs on agricultural products, a country's government and its farmers benefit at the expense of consumers. The farmers benefit because the tariff allows them to sell their products above world prices. Thus, producers who would be inefficient in the world market may be able to make profits with the tariff, while domestic producers who are internationally competitive make inflated profits from domestic sales as a result of the tariff protection. The government also gains because it receives a tax on the imported goods. The loser from the tariff is the consumer. Since the tariff raises the price of agricultural products, less is consumed at a higher price. Still, the country as a whole loses because benefits to government from the tariff revenue and to the producers from higher sales at higher prices are inadequate to compensate the consumers for value they would have realized by consuming more agricultural products at the world price.[9]

Variable Levies

Another technique used to restrict agricultural trade is the variable levy. This technique, used exclusively by the EEC, prevents agricultural imports from under-pricing domestic suppliers.[10] To keep foreign imports noncompetitive, the EEC has set minimum import prices on two-thirds of its agricultural products, including grains, rice, dairy products, beef, pork, poultry, eggs, olive

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6 The degree of protection, or the tariff rate, is the percentage increase in the price of the imported good as a result of the tariff. It measures the amount of protection domestic producers receive as a per cent of the cost of the good.

7 To see how effective inflation is at reducing the degree of protection provided by a specific tariff, one need only note that the protection provided by the U.S. Smoot-Hawley Tariff of 1930 declined from 47 per cent in 1934 to 24.4 per cent in 1945 as a result of inflation.

8 The U.S. also has a quota on these cheeses which is generally binding. As part of the MTN's, the United States reduced the tariff 5 per cent.

9 See H. Robert Heller, *International* Trade: Theory and Empirical Evidence (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1973), pp. 164-7.

10 For a further discussion of the EEC variable levy, see R.B. Schroeter and Omero Sabatini, "The EC's CAP: How It Works," Foreign Agriculture. January 9, 1978, pp. 2-5.

oil, fruits, vegetables, and tomato concentrates. The minimum import price is the EEC's desired wholesale price in the Community's highest priced market for the given product, less transport costs. Variable levies are set daily at a level which will ensure that the price of the imported products when delivered to the highest priced market area in the EEC is not below the threshold price, which is the EEC's desired wholesale price in that market.

For example, on December 12, 1978, the EEC's minimum import price for No. 2 hard winter wheat was $282 per metric ton (mt), delivered in Rotterdam. At that price, the EEC was assured that imported grain, when delivered in Duisburg, Germany—the EEC's highest priced grain market—would not be below the Duisburg threshold price. Since the wheat was selling for $122 that day, the variable levy was set as $160 per mt. Because this type of levy guarantees that Community producers cannot be undersold, foreign producers are forced to become residual suppliers who are only able to supply quantities and qualities that cannot be produced domestically.

When EEC grain prices fall to the intervention price, which is a little below the threshold price less transport costs to Duisburg, the EEC will prohibit imports and buy the excess domestic grain off the market. To avoid this problem, the EEC often uses the proceeds from the variable levies to subsidize agricultural exports. This allows exporters to sell the EEC's excess supplies at competitive world prices in non-EEC markets.

Quotas

Instead of taxing imports, many countries choose to limit import volume directly. Quantitative restrictions are called quotas. A quota reduces imports and raises domestic prices if domestic supplies plus the quota do not satisfy domestic demand at the world price.

In recent years, quotas have become a very common method of restricting agricultural trade. The United States, Japan, and the EEC all presently are using quotas. A striking example is the Japanese quota on "hotel," or high quality beef, which limited the importation of such beef into Japan to 16,800 tons in 1978. Since Japanese beef production is not competitive at world prices and the quota was binding, the price of hotel quality beef was bid up to clear the market. As a result, in January, comparable cuts of beef were 6½ times more expensive in Tokyo than in Washington ($18.69 per lb. versus $2.89).[11]

When a quota is binding, permission to import a unit of the protected item is valued by the importer at the difference between the domestic and the world price. As a result, governments often collect tariff-like revenues by auctioning import licenses to the highest bidder. If exchange rates or world prices fluctuate, the value of an import license fluctuates in a way opposite from an ad valorem tariff. If the world price rises relative to the domestic price, the value of a license declines relative to the price of the good, and the degree of protection declines.

Other Nontariff Barriers

Tariffs, variable levies, and quotas are the most visible ways to discriminate against imports, but they are not the only ways. Virtually every country has laws, standards, and regulations which intentionally or unintentionally discriminate against foreign goods.[12]

11 "World Food Prices," *Foreign Agriculture*, February 5, 1979, pp. 6-7.

12 For a list of the types of nontariff bamers by country, see Jimmye S. Hillman, *Nontariff Agricultural Trade Barriers* (Lincoln, Neb.: University of Nebraska Press, 1978), pp. 57-60, 62-3.

Of the many nontariff barriers, those which probably have the greatest impact on agricultural trade are health regulations, bureaucratic rules, and labeling requirements.

Health regulations are normally created to assure that food is suitable for consumption; however, these regulations are sometimes used to restrict imports. One common practice is to forbid importation of a foreign product because of an isolated problem with a disease or a pest, even though the probability of domestic contagion is extremely small. In other cases, countries will not allow the importation of certain agricultural products because a certain insecticide or preservative is used, even though it has not been proven to be dangerous. The United States, Japan, and the EEC have all been suspected of manipulating apparently legitimate health regulations to form formidible barriers to trade in certain agricultural products. Health regulations have also been used selectively to restrict imports based on market conditions in the importing country.[13] This procedure involves loose enforcement of health regulations when domestic supplies are inadequate, and stringent enforcement when supplies are ample.

Two other methods of deterring foreign exporters are the use of extensive bureaucratic rules and labeling requirements. These rules and requirements vary between countries and act to increase the time, cost, and inconvenience involved in penetrating a country's markets. As a result, producers sometimes avoid exporting to a given country simply because the cost, in terms of inconvenience, is viewed as being too great.

[13] Jimmye S. Hillman, "Nontariff Barriers: Major Problem in Agricultural Trade," *American Journal of Agricultural Economics.* August 1978, p. 493, and Gerard and Victoria Curzon, *Hidden Barriers* to *International Trade,* Thames Essay No. 1, Trade Policy Research Center (London: Ditchling Press, 1970), pp. 26-33.

EXPANDING TRADE THROUGH MULTILATERAL NEGOTIATIONS

The development of trade between the United States and its trading partners has been a difficult task. While the benefits of free trade are widely recognized, many attacks have been launched against this ideal over the years. In fact, the United States has frequently utilized various trade restrictive practices in an effort to protect certain industries, overcome economic recessions, and retaliate against unfair trade practices of foreign countries.

The height of protectionism was attained in 1930 when Congress passed the Smoot-Hawley Tariff in an effort to counteract the economic downturn of the late 1920s. Unfortunately, this action caused many trading nations to increase their own levels of protection and, as a result, U.S. exports suffered catastrophic declines in the years that followed. Since then, the United States has devoted most of its efforts toward trade liberalization, but meaningful progress has been slow.

While some progress was made on a bilateral basis during the 1930s, the real thrust toward reducing tariffs and other trade impediments started when the General Agreement on Tariffs and Trade (GATT) was formed in 1947. Unlike earlier agreements and treaties, the results from the GATT negotiations were made multilateral in scope in that the agreed upon concessions were extended to all members under a "most-favored nation" clause—the cornerstone of GATT.

GATT is predicated on two basic principles.[14] One is that each nation shall grant nondiscriminatory treatment to the products of all other participating nations with regard to

[14] Robert L. Fontz, "Foreign Agricultural Trade Policy of the United States, 1776-1976," U.S. Department of Agriculture, ERS-662, January 1977, p.12.

duties, subsidies, and special rules. The second is that, as a general practice, quantitative restrictions (quotas) are not to be used as protective devices. Only customs duties can be used for this purpose. However, these guiding principles have occasionally posed some policy dilemmas for the United States. For example, the President has the authority to negotiate tariff reductions with other nations, but his powers have frequently been limited by Congress, particularly when there was concern about possible injury to domestic industries. Also, the farm legislation that was in effect during the early years of GATT offered strong inducements to foreign countries to ship agricultural products to the United States, where prices were artificially high because of the support mechanism. Thus, to protect the integrity of the domestic support programs, the United States resorted to the use of import quotas—a practice clearly inconsistent with the objectives of GATT. Because of this policy conflict, a GATT waiver on quotas was eventually granted for agricultural trade.

Seven rounds of Multilateral Trade Negotiations have now been completed since the inception of GATT. As a result of these negotiations, tariffs have been reduced or eliminated on a number of products, and strong efforts have also been made to reduce the proliferation of nontariff barriers. Unfortunately, the agricultural sector of the economy has not been the recipient of many of these gains. Reducing trade barriers on agricultural products is much more difficult to achieve because most countries are unwilling to make significant concessions on a multilateral basis.

In the Tokyo Round of the MTN's, which began in 1973 and concluded in mid-April of this year, the United States insisted on treating agriculture as a part of the total negotiation package rather than as a separate issue. Consequently, the discussions focused much more sharply on agricultural trade restrictions than in any of the previous rounds. Several agreements have been reached. The new "codes," if approved, will impose stiffer restrictions on the use of export subsidies. Also, many of the nontariff barriers, including import quotas, favoritism toward some exporters at the expense of others, unfair use of sanitation rules, and a variety of other devices designed to stifle competition, will be reduced.[15]

As it now stands, trade barriers against U.S. farm exports will be reduced on about $3 billion of products. In return, the United States will grant concessions on about $700 million of imported farm products, mostly in the dairy industry. Japan appears to have offered the United States the largest package of trade concessions, involving larger quotas for oranges, hotel quality beef, and certain fruit concentrates. In addition, the EEC is granting important concessions on tobacco, rice, fruit, and beef. Concessions have also been received from other trading partners.

While positive progress has apparently been made in the Tokyo Round, negotiations on a new International Wheat Agreement have collapsed. This issue became deadlocked for several reasons. Several countries were interested in establishing an international grain reserve, but agreement could not be reached on the size of the reserve or the relative share that each country would hold. Also, the specific prices at which grain reserves would be accumulated or released could not be agreed upon, and an accord on the special provisions for developing countries proved to be another

15 Much attention has been paid to reducing barriers which result from restrictive procurement policies by governments and government agencies, as well as from nonstandard customs valuation methods. However, any liberalization in these areas should have little or no effect on agricultural trade.

stumbling block. The failure of these talks highlights the continuing frustrations experienced by any group trying to reduce trade barriers.

CONCLUDING COMMENTS

On the surface, the potential demand for U.S. agricultural products appears to be unlimited. Much of the world's population is malnourished and badly needs to upgrade dietary standards. Also, now that diplomatic relations have been established with the People's Republic of China, a potentially huge market comprising about one-fourth of the world's population, will be open to the U.S. farmer. However, translating potential demand for food into effective demand will remain a difficult task, either because incomes are so low in many countries or because the barriers to agricultural trade are so high.

Still, the United States should continue to encourage a worldwide policy of agricultural trade expansion. The large trade surpluses which the United States has enjoyed in recent years would likely experience further growth under conditions of freer trade. This development would be highly beneficial to America. A positive agricultural trade balance would not only act to ease the burden of paying for petroleum imports at ever-rising price levels, it would also tend to strengthen the international buying power of the dollar. A smaller trade deficit with a stronger dollar would allow U.S. consumers to continue to import the foreign goods that are associated with a high standard of living.

Although the negotiated agreements provided by the MTN's have not been large, the discussions provide hope for an expansion of agricultural trade in the future. Certainly, a growing world population and rising incomes in the developing countries augur well for the U.S. farmer. But if the trends established in the 1970s are to continue, more progress must be made in the relaxation of trade barriers. Unfortunately, history shows that the efforts to further liberalize trade will probably proceed slowly, and then only with difficult negotiations.