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Economic Growth, Agricultural Trade, and Development Assistance

Gary Vocke

Developing countries are the most likely growth markets for U.S. agricultural exports. The best U.S. strategy for increasing the potential of agricultural exports to developing countries is to encourage economic growth in these markets, which will lead to higher incomes and increased food demand. Developing countries will then import more U.S. farm products to meet part of their increased demand.

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When developing countries' incomes increased rapidly in the 1970's, so did their agricultural imports. Developing countries, especially those with higher incomes, increased their agricultural imports faster than they did their agricultural exports (fig. 1).

AGRICULTURAL GROWTH RAISES INCOMES AND U.S. EXPORTS

Most developing countries are primarily agricultural. Thus, the best way to raise incomes is to help improve agricultural productivity. If agriculture, as the largest employer, is not more productive, incomes are not likely to increase rapidly. Rising incomes transform a latent demand for better diets into real purchasing power: The effective demand for food generally outruns domestic production because few developing countries have sufficient resources to expand output fast enough to keep up with a rapidly growing economy. Are there sometimes exceptions or tradeoffs for specific export commodities in specific markets? Yes; India furnishes an example.

India is often viewed as a lost market to U.S. wheat farmers because of new technology (called the green revolution) in its wheat production. The green revolution started in the 1960's and refers to dramatic gains in crop productivity resulting from replacing traditional wheat varieties with semidwarf varieties; increasing the use of fertilizers, irrigation, and other agricultural technology; and improving management practices.

The green revolution is a key factor in reducing India's wheat imports. However, most of the country's wheat imports replaced by the green revolution were subsidized by U.S. taxpayers through such programs as Public Law 480. In addition, India's seeming self-sufficiency in wheat production is due more to a lack of effective demand because of low incomes and an unequal distribution of income and wealth than to new technology. The country still has millions of undernourished and poor people. So, without strong economic growth, U.S. export markets can be reduced by improved agricultural productivity. However, despite the success of its green revolution, India is not expected to become a major U.S. competitor in international wheat markets.

Brazil is another example of a developing country in which increased agricultural production is thought to have hurt U.S. agricultural exports. From 1970 to 1981, Brazil's agricultural production grew almost 70 percent, or 5 percent a year, a rapid rate by international standards. Although Brazil emerged as a strong competitor in export markets for some U.S. commodities, especially soybean meal and oil, its imports of U.S. farm products substantially increased. U.S. agricultural exports to Brazil increased 15 percent a year in quantity and 25 percent a year in value.

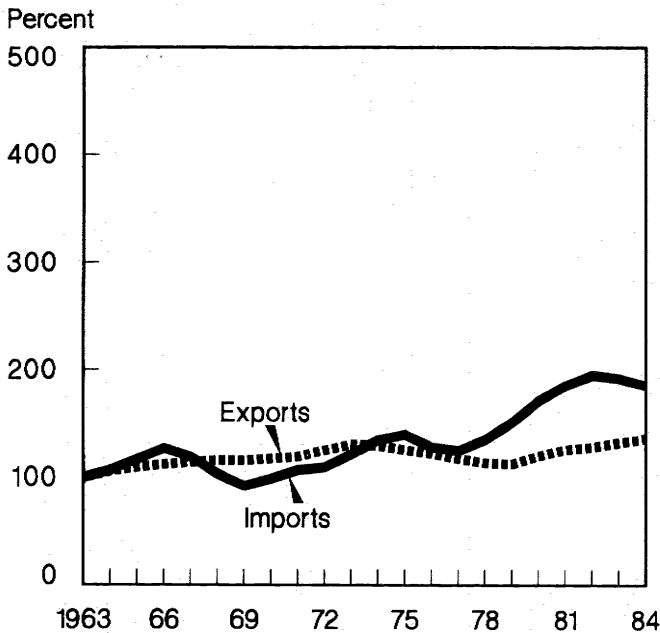
Brazil's improved agricultural production contributed to development in its nonagricultural sector. Growth of the agricultural and nonagricultural sectors dramatically increased availability of foreign exchange. Brazil's imports of U.S. farm products became almost 100 percent commercial (that is, private cash purchases) during the 1970-81 period compared with earlier imports, 64 percent of which were subsidized by U.S. taxpayers through food aid.

The experience of South Korea is a striking example of the economic relationship between general economic development and the emergence of markets for U.S. farm products. In 1981 alone, South Korea bought \$2.1 billion in U.S. farm products, exceeding the total value of U.S. food aid to Korea between 1955 and 1979.

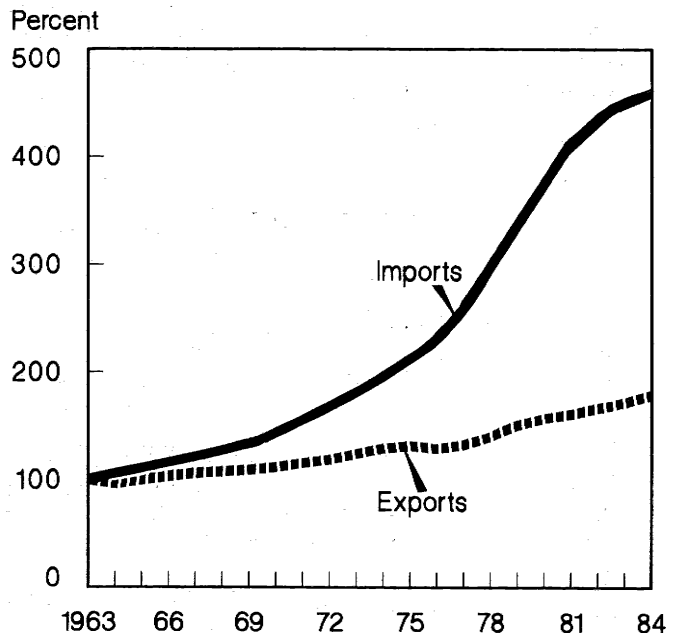
In the early 1950's, Taiwan exported more grain than it imported. Although Taiwan has increased food production very rapidly over the past 30 years, it now imports 60 percent of all its cereals. Virtually all of these cereals are feed grains because of greater demand for fed livestock products.

Figure 1
Agricultural Trade in Higher and Lower Income Developing Countries¹

Lower income²



Higher income³



1/ Percentage of 1961-63 average using deflated 3-year averages.
 2/ Includes 59 countries, such as India, Malawi, Burma, Morocco, and Colombia.
 3/ Includes 23 countries, such as Taiwan, Mexico, Brazil, South Korea, and Argentina.

Countries with more rapid economic growth generally increase their agricultural imports at a faster pace than countries with slower economic growth. Higher incomes in developing countries resulting from rising agricultural productivity foster increased agricultural imports. Rising productivity increases incomes of farmers and rural laborers. Employment and income in rural and urban areas then rise as farmers spend their higher incomes on goods and services produced off the farm. By increasing the productivity of the land, new agricultural technology can initiate broad-based economic development leading to industrialization and rising per capita incomes. These rising incomes create food demand that eventually outpaces growth in agricultural production, which is partly why developing countries relied more on imports of food grains and coarse grains during the 1970's. The increase in trade reliance was not due to declining production; rather, it was due to rising consumption based increasingly on imports supported by rising per capita incomes.

Upper income developing countries have been the driving force behind converting the developing world from a net exporter to a net importer (it imports more than it exports) of coarse grains since the 1970's. A key factor is that as poor people's incomes improve, so do the quantity and quality of their diets. Consumers in these countries eat more meat and poultry products and food grains and less other grains, roots, and tubers because of higher incomes, urbanization, and changing lifestyles. Expansion of the poultry and, in some cases, swine industries underlies this switch to meat consumption in developing countries.

In turn, this dietary shift increases the requirements for livestock feed much faster than it can be grown domestically and creates strong, growing import markets for coarse grains. One kilogram of livestock production requires 2-6 kilograms of coarse grains and other feeds. Figures 2 and 3 show that per capita feed use of coarse grains in the upper income developing countries has grown rapidly, whereas feed use in low- and middle-income developing countries has remained flat.

Developing countries became net importers of food grains after World War II, and their dependence on imports has increased steadily since the 1950's. The developing world's reliance on imports of food grains and coarse grains will continue if these countries' economies continue to grow.

U.S. DEVELOPMENT ASSISTANCE TO AGRICULTURE: A PARTIAL ANSWER

The United States has helped low-income countries develop for nearly four decades. This fundamental foreign policy is founded on the belief that the United States will benefit from a world of politically and economically viable nations.

The Agency for International Development (AID) administers direct (bilateral) U.S. economic assistance to more than 80 countries. The United States is the world's largest development assistance donor, but its share is shrinking in terms of gross national product. Foreign aid programs, including military assistance, receive about 1 percent of the Federal budget. Development assistance represents 25 percent of that amount. But, this assistance is not just a giveaway because much of it is used directly by the countries to buy U.S. goods and services. In 1985, \$8.6 billion in bilateral U.S. economic assistance to developing countries directly generated about \$6 billion in U.S. exports of goods and services.

If economic and market development are to occur, the United States, other aid donors, and the developing countries themselves must give strong, long-term support to agricultural development. While not always successful, the combination of policy reform and investment in agricultural research and infrastructure has produced sustained agricultural development in a number of Asian and Latin American countries. Such development has moved them from low-income status to middle and upper income levels to become significant net importers of agricultural commodities.

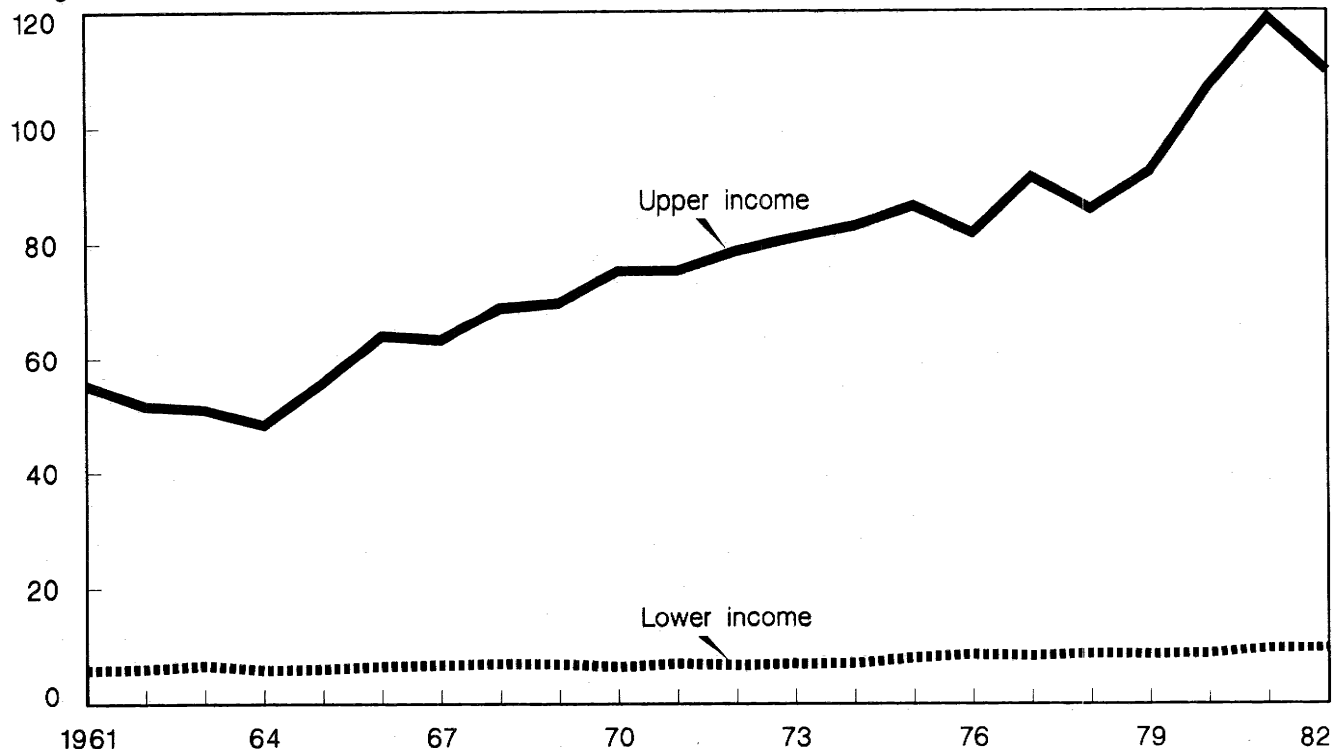
IMPORTS LEVEL OFF IN EARLY 1980's

Agricultural imports by developing countries have slowed in the last several years because of factors outside the influence of the U.S. development assistance programs. Foreign debt (money owed to other countries) in developing countries increased rapidly, starting in 1973-74 as higher oil prices sharply increased trade deficits (imports exceeded exports) in oil-importing developing countries. These deficits were financed through bank loans. In addition, banks offered low interest rates during this period to recycle petrodollars (a unit of hard currency held by oil-exporting countries as a result of the sharp increases in oil prices) of the Organization of Petroleum Exporting Countries. As a result, many developing countries, including some oil exporters (such as Mexico and Venezuela),

Figure 2

Per Capita Feed Use of Coarse Grains in Upper and Lower Income Developing Countries

Kilograms



Source: FAO.

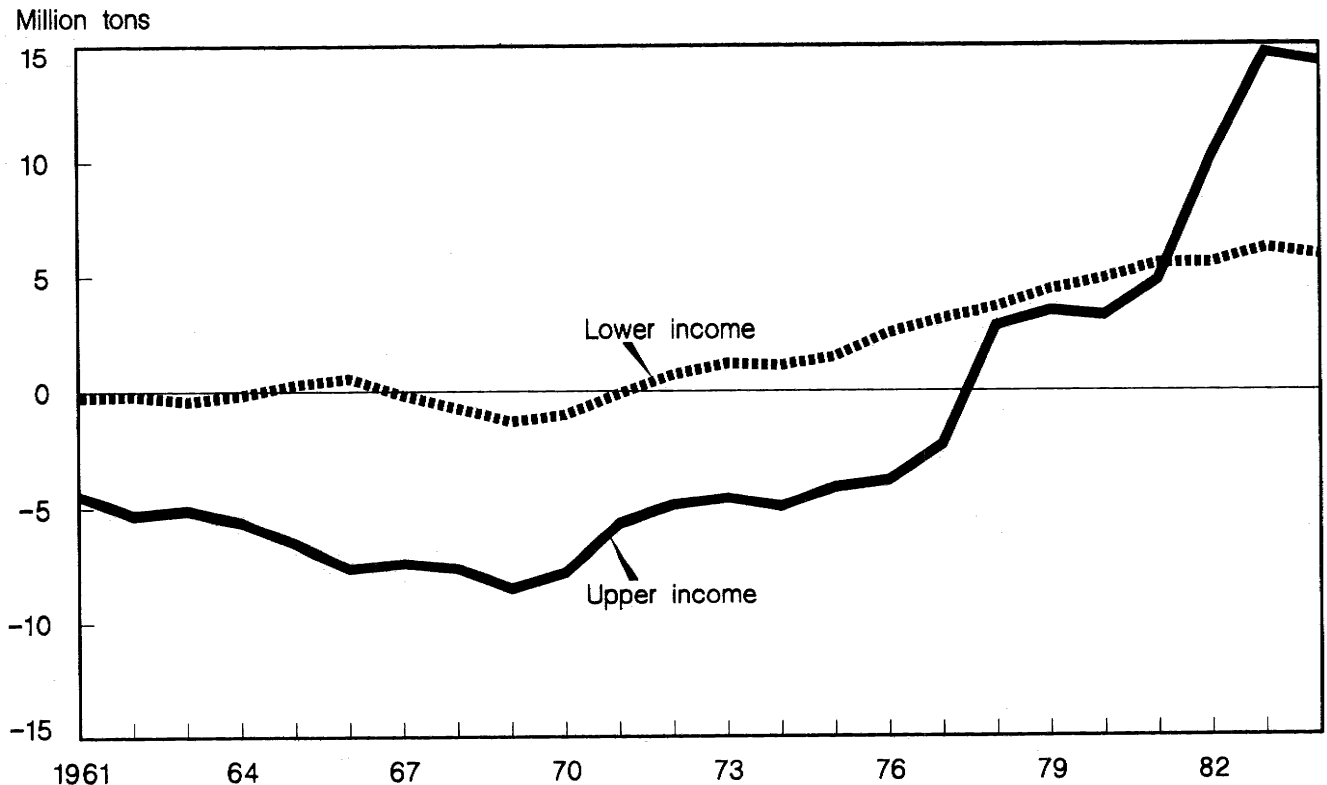
borrowed heavily to finance investments to accelerate their economic growth. Between 1974 and 1979, the economic growth rate of developing countries was double that of industrial countries.

The 1979-80 increase in oil prices contributed to a severe worldwide recession. Industrial countries' demand for developing countries' products dropped, and commodity prices declined. Balance-of-payment positions in developing countries deteriorated, reducing their ability to pay their debts. Because many countries had short-term loans with variable interest rates, sharply rising interest rates during this period compounded their difficulties. The ability of developing countries to pay their debts deteriorated seriously between 1980 and 1982 and caused the debt crisis.

The debt crisis limited expansion of agricultural imports in developing countries because debt payments and commodity imports compete directly for available foreign earnings. Unless countries are able to increase their export earnings or obtain additional long-term loans, they must either default on their debts or reduce imports. Many countries have reduced their imports. In addition, developing countries that are restructuring their debts are subject to International Monetary Fund conditions that often include policy changes to reduce costly food subsidy programs and realign exchange rates. These policy changes reduce food imports in the near term; in the long term, they will help countries resume the steady economic growth that leads to increased food demand and imports. Economic growth remains the long-term solution to increasing trade, but the debt problems of developing countries will severely hurt trade in the short and medium term unless a way is found to make debt more manageable.

Figure 3

Net Coarse Grain Imports in Upper and Lower Income Developing Countries^{1,2}



1/ Three-year averages. 2/ Negative volumes represent net exports.

A wholesale reduction in trade barriers along with management of the debt crisis would enlarge trade with developing countries. Developing countries would be able to export more products to industrial countries and, in turn, buy more U.S. farm goods.

SUMMARY

Developing countries are potential growth markets for U.S. farm exports. To encourage this growth, food demand in the developing world must be increased by raising incomes and solving the debt crisis. Developing countries can be growth markets only to the extent that their own economies are growing.

FOR ADDITIONAL INFORMATION...

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Also see...

John W. Mellor, *The New Global Context for Agricultural Research*, Food Policy Statement, International Food Policy Research Institute, Washington, DC, 1986.

United States Agricultural Exports and Third World Development: The Critical Linkage, Curry Foundation, Washington, DC, 1986.

Current debate on farm policy is based on conflicting reactions to the 1985 Food Security Act. A decision made on behalf of one group may have unanticipated or adverse effects on others. This bulletin is one in a series published by USDA's Economic Research Service aimed at informing those debating farm policy about the highly interrelated nature of agricultural policymaking. Other available bulletins in the series are:

- o *Choices for Implementing the Conservation Reserve* (AIB-507)
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