AGRICULTURAL DEVELOPMENT AND THE THIRD WORLD MARKET FOR U.S. FARM EXPORTS

Robert L. Paarlberg
Wellesley College and Harvard University

Only a decade ago U.S. agricultural producers and traders were being told—by everyone from the Club of Rome to their own Department of Agriculture—that the Third World was falling behind in its agricultural production and was going to be in need of ever larger food imports in the years ahead. The response of U.S. farmers was to borrow heavily to buy land and machinery to be ready to service this anticipated Third World demand. U.S. farm indebtedness increased by 60 percent during the 1970s.

No sooner had these debts been incurred than the demand for U.S. farm products by Third World countries appeared to dry up. Between 1981 and 1985 U.S. agricultural sales to the Third World not only stopped growing; they actually shrunk by 30 percent.

In their struggle to comprehend what was happening, U.S. farmers noted that some of their former Third World customers—countries such as China, India and even Saudi Arabia—were boosting their own agricultural production and transforming themselves in the process from net importers into net exporters of some kinds of food staples. They also noticed that a part of the export business still being done in the Third World was now being lost, not only to traditional export competitors in the developed world—such as Canada, Australia and the European Community (EC)—but also to some Third World competitors such as Argentina, Malaysia, Thailand and Brazil.

Many U.S. producers concluded from these developments that their trading future must indeed be bleak. They had been counting heavily on the developing countries to provide them with a long term future of steady export market growth. The developed countries—in which population growth rates are slow, diets are already rich and agricultural protection often stands in the path of trade—could no longer be trusted to perform this role. So if developing country markets were now also evaporating, either because of indigenous production breakthroughs or perhaps because of a more general "loss of competitive-

ness" on the part of U.S. agriculture, then the trade game must finally be up. The U.S. agricultural trade balance would have to continue sagging and the trade dependent U.S. farm sector would have to continue the painful process of downsizing itself.

This sort of pessimism about U.S. trade prospects in the developing world is familiar, but badly misplaced. U.S. agricultural producers and traders have some good reasons to be pessimistic about the future of their trading relations with the Third World, as we shall see, but "indigenous Third World production breakthroughs" and a "loss of U.S. farm trade competitiveness" should not be considered the most important of these reasons.

The best data we have show that (outside of China) there has *not*, in fact, been any recent surge in developing world agricultural production. The growth of developing world agricultural production so far in the 1980s is on roughly the same trend line that it had been on during the decade of the 1970s. Between 1980 and 1985, according to data gathered by the United Nations Food and Agriculture Organization, the volume index of agricultural production for all the developing market economies (excluding China) increased at an average annual rate of just 2.76 percent.

This represents no significant change from the 2.74 percent annual rate that was being noted for these same countries during the previous decade of 1970–80, the so-called "food crisis" decade (United Nations 1980, p. 78; 1985, p. 80). This remains, sadly, an inadequate absolute growth rate given the still rapid growth of Third World populations. In per capita terms, Third World agricultural production has scarcely increased at all over the last decade. Per capita production is only about 3 percent higher today than it was a decade ago when it was still fashionable to worry about lagging farm production in poor countries.

If a few more developing countries lately have been approaching agricultural "self-sufficiency" in their trade, it is not so often because of a sudden production-side success. It has more often been because of a consumption-side austerity brought on in the 1980s by suddenly changed macroeconomic conditions, including slower domestic income growth rates in the Third World, lower foreign exchange earnings and much larger debt service burdens, all of which have tended to restrict imports.

Average production performances, of course, are deceiving. Looking within the developing world, some countries and some regions have done much better with their agriculture than others. Between 1975 and 1985, per capita agricultural production increased by a strong 21.2 percent in Asia, but only by 6.9 percent in South America. Per capita production actually *declined* in Africa by a painful 12.2 percent and declines were registered in Central America as well.

But this only leads to a second observation. In those regions of the developing world in which indigenous agriculture has been doing best—especially in East Asia—demand for food imports has also, paradoxically, been growing most rapidly. In the agricultural "basket case" regions of Central America and Sub-Saharan Africa, commercial food import demand has been growing most slowly.

One conclusion we can draw is that a broad surge in Third World agricultural production, if it ever were to occur, might not be all bad for U.S. farm trade. This is because agricultural success in poor countries can add to the local demand for food as well as to the local supply. It does so by stimulating broadly based income growth among the poor citizens of the Third World, who will typically spend 50 to 70 percent of any additional income to improve their diets. Some of the added food demands that will result (especially for animal feedstuffs) will tend to be satisfied through larger agricultural imports. This will tend to benefit U.S. farmers who are the world's largest and most efficient producers and exporters of animal feedstuffs.

This paradoxical tendency for agricultural success in poor countries to lead to larger rather than smaller agricultural imports, because of income-driven, demand-side dietary improvements, is not just a "hypothetical" tendency. A half dozen cross-national production and trade studies, done over the past several years by agricultural economists of varying persuasions, have confirmed its existence (Lee and Shane; Kellogg; Kodl; Houck; Anderson; Voke).

We can get an intuitive sense for what these studies show simply by asking ourselves, "Which are the developing countries that import the largest volume of agricultural products?" They are not the agriculturally unsuccessful countries of Sub-Saharan Africa. These countries are "hungry" all right, but in their poverty they make poor commercial customers for U.S. farm products. It is the rapidly developing and agriculturally successful East Asian countries—such as South Korea and Taiwan—that are the Third World's most voracious agricultural importers. South Korea and Taiwan, despite their small population size and their agricultural success, import more wheat and coarse grain every year than all of the poor and agriculturally unsuccessful nations of Sub-Saharan Africa combined.

At this point a third observation must also be made. The aggregate level of Third World import demand is not all that determines the final volume of U.S. farm sales. During the early part of the 1980s, while U.S. sales to the developing world were falling so sharply, the sales of some U.S. competitors actually managed to increase. In fact, Third World imports were still going up overall. Between 1980 and 1985, despite macroeconomic difficulties, the volume of Less Developed Country (LDC) food imports continued to increase at a respectable annual rate of about 3 percent. Outside of Latin America (where foreign debt burdens were heaviest) the rate of increase was actually

a strong 5 percent a year (Sanderson, p. 6). The United States was not capturing its accustomed share of this business because it had momentarily allowed its export prices to become noncompetitive.

This failure has now been largely corrected and U.S. agricultural exporters are now—once again—well positioned to capture a significant share of any new business that might develop in the developing world.

Most of the loss of competitiveness suffered by U.S. agricultural traders during the first half of the 1980s was a result of temporarily high dollar exchange rates plus high domestic price support programs. Both of these impediments have now been substantially removed. Since 1985 the dollar has fallen by more than 40 percent against the European Currency Unit (ECU) and by even more against the Japanese yen. It has not yet fallen as much against the "pegged" currencies of some important agricultural trade customers and competitors—including Canada, Australia, South Korea and Taiwan—but even here the most extreme exchange rate disadvantages of the 1981–85 period have to some extent been corrected.

No less important, the high domestic price supports of the early 1980s also now have been eliminated under the sweeping provisions of the 1985 Food Security Act. These provisions include, of course, not only a multibillion dollar direct export subsidy program (the Export Enhancement Program), but also a sharp lowering of commodity loan rates, plus a variety of supplementary options such as "marketing loans" (for cotton and rice) and the use of "generic certificates" (especially for corn), all of which permit farmers to retain their own personal income guarantees while selling their crops into the market at prices even below the loan rate.

Can U.S. agricultural producers survive while competing at these lower price levels? Current farm legislation insures that they will in the short run since it generously subsidizes farm income with direct cash "deficiency payments" that are calculated against a high price standard (the "target price") that was *not* sharply reduced by Congress in 1985. Evidence suggests, however, that the more efficient U.S. farm exporters will not need such costly cash subsidies from the taxpayer to survive in the long run. This is because production and export costs in the U.S. agricultural sector remain highly competitive.

A recent Department of Agriculture comparison of variable costs of production shows U.S. wheat, corn and soybean farmers in a strong competitive position even against some of the world's lowest-cost foreign competitors in Australia, Canada and the developing world. Average variable costs per bushel for U.S. wheat on the Northern Plains were almost identical to Canadian costs in Saskatchewan, and U.S. national average costs were below Australian national average costs. Average U.S. variable costs for soybeans in the cornbelt were

well below variable costs in both Argentina and Brazil (U.S. Department of Agriculture). More important, downstream from this low-cost U.S. farm production system is the world's largest, most flexible and most efficient agricultural handling and marketing system. While competing exporters are currently working their installed export handling infrastructure nearly to capacity, the United States would have no trouble doubling its current export volume with the handling capacity that it already has in place (Johnson).

What is the danger that these important U.S. agricultural trading advantages will be lost sometime in the future due to the accelerating world-wide spread of new agricultural production technologies? The fact is, it is precisely the United States that has the world's most impressive record for moving new farm technologies quickly from the laboratory to the field. Between 1970 and 1982, the average productivity of U.S. farmland increased by 39 percent compared to just 27 percent in the rest of the world. The average productivity of U.S. agricultural labor rose by 97 percent compared to a 22 percent increase in other countries and compared to a sluggish 15 percent increase in the productivity of the nonagricultural U.S. labor force.

Outside agriculture the United States does have a competitiveness problem due to slow productivity growth. Inside agriculture it does not. Even the average product per unit of farm machinery increased in the United States between 1970 and 1982, while it was actually falling in the rest of the world (U.S. Department of Agriculture). There is no end in sight to this implied capacity for U.S. farmers to stay one step ahead of their competition. Productivity growth in the U.S. farm sector has recently been forecast to increase at an accelerated annual rate of 2.4 percent, which is significantly above rates of growth experienced in the sector overall since 1950 (Council of Economic Advisers, p. 162).

Rapid productivity growth in the U.S. farm sector is sometimes viewed as a dubious commercial advantage because of the socially and politically difficult resource adjustments that usually follow—such as the movement of human labor out of farming. But in a competitive world environment would we really prefer low productivity growth? What productivity growth gives to U.S. agriculture is actually a way of *easing* the adjustment burden. What productivity growth makes possible is the successful use of price competition by U.S. agriculture to expand markets and market shares. The U.S. farm sector cashes in on its productivity growth when it uses price reductions to squeeze out its less productive foreign competitors. When, on the other hand, high dollar exchange rates or high domestic price support levels prevent such price reductions from taking place, foreign competitors only get a free ride, and the U.S. farm sector is forced to make its difficult resource adjustments alone in an impossible environment of stagnant market growth. U.S. agriculture damaged itself severely by allowing this to happen during the first

half of the 1980s. There is reason to hope, from the developments we have seen since 1985, that some of the appropriate lessons have been learned.

We have seen here that the reasons most often given to worry about the future of U.S. farm sales to the developing world are largely insubstantial. There has *not* been any dramatic upsurge in Third World farm production in the 1980s. Even if there were to be such an upsurge, it would *not* necessarily displace imports in the long run since it would stimulate demand along with supply. And if rapid market growth is stimulated in the developing world, U.S. agriculture—because of its recently restored competitiveness—will be well enough positioned to capture an adequate share of the benefits. This is the good news.

The bad news is that there are several less visible factors, less often cited by agricultural trade pessimists, that nonetheless justify a certain amount of gloom about the future of U.S. agricultural trade with the developing world. These include, most of all, the continuing Third World debt crisis, sluggish rates of economic growth worldwide and the increasing closure of rich country markets—both agricultural and industrial—to Third World exports.

These less often cited reasons for pessimism also include the inadequate and uneven progress toward agricultural and trade-oriented development being made among the poor countries themselves and the recent faltering of U.S. and rich country assistance to promote such development. None of these is a narrow agricultural policy concern and so the narrowly-focused agricultural policy community is not as well organized as it might be or as it should be to influence U.S. policy on these issues.

With the proper policies in place, agriculturalists at both ends of the U.S.-Third World farm trade relationship can prosper. The first step toward putting those policies in place is to distinguish, as we have tried to do here, between those problems that are real and those that are not.

REFERENCES

Anderson, Kym. *Does Agricultural Growth in Poor Countries Harm Agricultural-Exporting Rich Countries?* Dept. of Econ. Bull., University of Adelaide, Australia, May 1987.

Council of Economic Advisers. *Economic Report of the President.* Washington DC: U.S. Government Printing Office, Jan. 1987.

Houck, James P. "A Note on the Link Between Agricultural Development and Agricultural Imports." Dept. of Agr. and Appl. Econ. Staff Paper 86-26, University of Minnesota, July 1986.

Johnson, Robbin S. "Implications for U.S. Agribusiness Strategies." Paper presented at the 63rd Agricultural Outlook Conference, U.S. Department of Agriculture, Washington DC, Dec. 1986.

Kellogg, Earl. "University Involvement in International Agricultural Development Activities: Important Issues for Public Education." Speech delivered at the annual meeting of the Assn. of U.S. Univ. Dir. of Internat'l. Agr. Prog., Athens, Ga., 31 May 1985.

Kodl, Richard. "An Analysis of Agricultural Growth in Developing Countries and U.S. Agricultural Exports." Master's thesis, Dept. of Agr. Econ., University of Illinois, 1985.

Lee, John E., Jr., and Mathew Shane. *United States Agricultural Interests and Growth in Developing Economies: The Critical Linkage.* Paper presented at the National Planning Association Food and Agricultural Committee meeting, Denver CO, 19-20 April 1985.

Sanderson, Fred H. "Agriculture in the Uruguay Round." Unpublished paper presented at a Conference on Issues in the Uruguay Round, sponsored by the National Bureau of Economic Research, Cambridge, Mass., 14 Aug. 1987

United Nations. *FAO Production Yearbook 1980*, Vol. 34, Table 5, p. 78. New York: Food and Agriculture Organization, 1980.

_____ *FAO Production Yearbook 1985*, Vol. 39, Table 5, p. 80. New York: Food and Agriculture Organization, 1985.

U.S. Department of Agriculture. "U.S. Agriculture Still Has the Edge." *Farmline*, pp. 8–9. Washington DC, Nov. 1985.

Voke, Gary. *Economic Growth, Agricultural Trade, and Development Assistance.* Washington DC: USDA ERS AIBN 509, March 1987.

ROLE OF VALUES, BELIEFS AND MYTHS IN ESTABLISHING POLICY