Aid, Food-Policy Reform, and U.S. Agricultural Interests in the Third-World

by

Walter P. Falcon*

1987

International agricultural cooperation

Low commodity prices in the 1980's have drastically affected farm incomes and land values within the United States. Interestingly enough, these low prices seem also to have affected U.S. farm views of the global food economy. One component of this new agricultural nationalism is a growing disenchantment with American aid to agriculture in the Third World. The New York Times (June 4, 1987), for example, recently featured the story, "World Bank Loans Stir Ire of U.S. Farm Groups," in which a half-dozen leading agricultural organizations argued against aid and "stimulating competition against American farmers..."[1]

This paper assesses the aid-to-agriculture question from a food-policy perspective. It seeks to answer two broad questions: Is food-policy reform and agricultural growth in the third World in the interest of U.S. agriculture? And if so, is aid (and the

---

* Walter P. Falcon is the Helen C. Farnsworth Professor of International Agricultural Policy and Director of the Food Research Institute at Stanford University.

The author is grateful for the helpful comments of Carl Gotsch, Scott Pearson, Anne Peck and C. Peter Timmer, but absolves them from any responsibility for his views.

[1] The American Soybean Association has been particularly outspoken against aid to support the development of oil palm production. They have also sought legislation that would require products containing palm oil to be accompanied by labels indicating "a saturated fat."

conditions attached to it) an effective means for achieving this reform? These are immense topics and the rather bold series of propositions presented here provide only partial answers.

Four clarifying comments seem necessary before proceeding with the analysis. First, the focus of this paper is on food policy and its reform. Such a concept is not necessarily synonymous with simply increasing agricultural output, although reform typically leads to additional production. Food policy is instead a broader view that embraces consumption, marketing and trade, as well as production (Timmer et al.). Some types of policy reform might significantly improve consumption, but leave agricultural production unaffected, or even lowered. For example, many developing countries now have domestic prices <u>higher</u> than those in comparable world markets. <u>If</u> "reform" means using world or border prices as the pricing norm, an imposition of that norm would increase consumption, but negatively affect farmer incentives and hence reduce the production of certain commodities.

Second, the paper is primarily concerned with aid, not A.I.D. (the Agency for International Development). The United States is a major contributor to several multilateral aid institutions, such as the World Bank. Given the overwhelming importance of the Bank in agricultural lending, it seemed important to use the broader definition of U.S. assistance.

Third, much of farmers' concern in the United States has focused on U.S. technical assistance to the Third World, specifically on the transfer of new biological technologies. Both A.I.D. and the World Bank have played key roles in the generation and dissemination of these technologies through the support of the international agricultural research centers (the CGIAR system). The significance of the centers' contributions to Third-World agriculture is beyond question; however, support for new agricultural technologies is only a small part of U.S. assistance, and more importantly, it is the major focus of the companion paper by Brady. Hence, it is purposely excluded from this essay.

Finally, U.S. agricultural interests are not necessarily identical with U.S. national interests. In this paper, however, a narrower viewpoint is usually maintained, since it is the agricultural concern that prompts this session.

Third-World Reform and U.S. Agricultural Interests

Policy reforms in the Third World that provide farmers with remunerative prices, new technology and improved infrastructure, and that permit increased access of poor people to both resources and food are surely in the interests of the countries themselves. (Why this self-interest has not always been translated into reform measures is an important, but separate, issue.) Such reforms may also be complementary to the interests of U.S. agriculture, even if they lead to increased production abroad. This is an empirical issue, however, and one that cannot be resolved by arguments based on first-principles or ideology. This point deserves special emphasis because agricultural organizations have typically seen the problem as a zero-sum game of constant size, i.e., "them vs. us" producing for a fixed market. Conversely, many aid proponents have been equally "theological" in their failure to acknowledge that U.S. - Third-World tradeoffs can exist, especially with respect to particular commodities.

Some aspects of the empirical record for the 1970's and early 1980's now seem reasonably clear. The work of Anderson, Houck, Kellogg et al., Paarlberg, Timmer and Vocke shows broadly consistent results on two key points. Most important, the growth in markets for U.S. agricultural exports has been heavily concentrated in developing countries, especially the middle-income group. (See Figure 1.) Between 1976 and 1981, for example, coarse-grain imports by developing countries roughly tripled, and these countries now constitute about 40 percent of total corn trade of which the United States supplies 50-60 percent. Moreover, the decline in coarse grain imports between 1981 and 1986 came as a consequence of events in the developed not the developing countries. Aggregate data for total grains show a similar pattern.

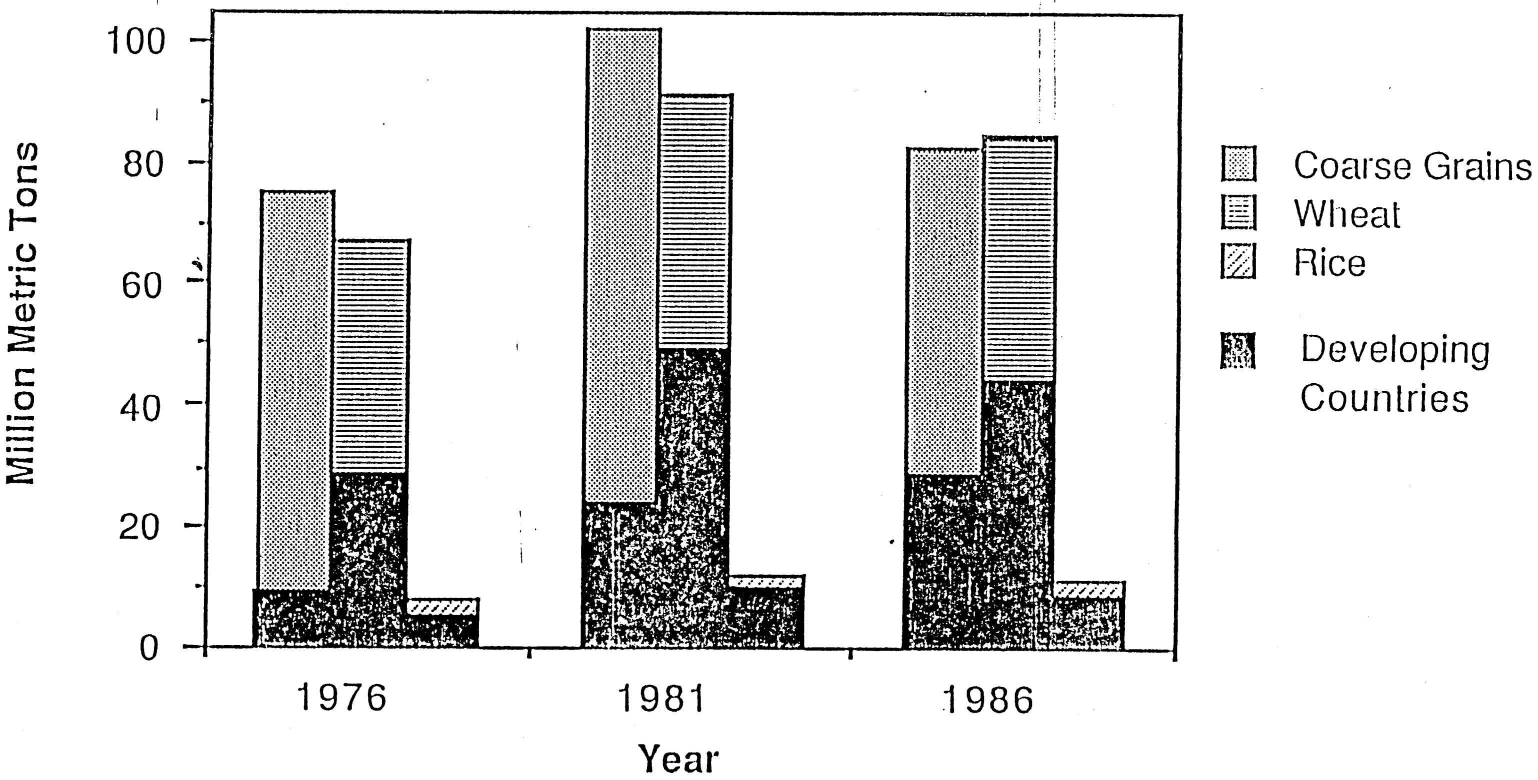

Figure 1. Imports of Grain by Developing and Developed Countries, 1976-1986

Source: United Nations, Food and Agriculture Organization
Food Outlook, Statistical Supplement. Rome, 1986.

Second, those developing countries whose agricultures grew fastest in the 1970's tended to import more food generally, and to import more agricultural products from the United States specifically. The Kellogg et al. analysis shows that developing countries with rapidly growing agricultures tended to import about twice as much corn and four times as many soybeans per capita than countries with slow growth.

A fuller explanation of these results seems important, since they seem to be counter-intuitive -- especially to U.S. commodity groups. A fundamental feature of agriculture in the Third World involves the close interaction between the growth of supply and demand. As the World Bank (1982, 1985 and 1986) and the International Food Policy Research Institute have argued in several of their reports, the countries that have grown most have emphasized small-holder agriculture and an export orientation. A dynamic countryside helps to spur employment on the farm and in the rural-non-farm sector, and the consequent growth of incomes and employment results in substantially greater consumption. The narrow supply-side orientation of many farm groups has caused them to underestimate greatly the importance of growth in demand and its link to the growth of domestic agricultural output. In short, consumption has been out-distancing the growth of domestic supplies in rapidly growing countries, leading to a growth of food imports from the U.S.

The small-holder, export orientation of the most successful countries of the Third World is also important vis-a-vis balance-of-payment and debt issues. A failure to obtain growth in agricultural output often results in a spiral of general stagnation and balance-of-payments crises. These crises, often exacerbated by over-valued exchange rates, cause further damage to the tradable component of the domestic agricultural sector. Similarly, balance-of-payments difficulties pose an enormous constraint on the commercial import of food products. The conclusion is again the same. A growing, outward-looking agricultural orientation within the Third World is likely to lead to more, not fewer, U.S. imports; stagnant agricultures lead to the reverse.

The argument thus far has stressed the complementarity between Third-World agricultural growth and U.S. agricultural interests. If complementarity were always present, there would be no problem; however, the real world is not always so kind to U.S. agriculture. Everyone can think of examples in which aid-assisted growth has caused the loss of specific markets. Rice in Indonesia is an excellent illustration of a sensible domestic (Indonesian) policy, substantial investment in agricultural infrastructure (especially irrigation) funded by the World Bank, and the use of new varieties adapted from the International Rice Research Institute. This success for Indonesia, moving it from the world's largest importer of rice in 1981/2 to a net exporter by 1985/6, came largely at the expense of U.S. (and Thai) rice exports. It was also a central reason for the large drop in international rice prices. A similar story could be told about the tripling of wheat production in India between 1965 and 1985, although the world price effects from this growth were less pronounced than in the rice example.

The commodity composition of trade is also likely to be affected differentially by rapid agricultural growth in the Third World. U.S. exports are likely to fare better if they are commodities whose costs of production are low relative to other countries, whose international markets are large, whose income elasticities are high, and whose end uses are varied. In other words, corn growers should feel more sanguine about rapid Third-World growth in agriculture than rice producers. Feed grains are efficiently produced in the United States, are an integral part of the process whereby middle-income countries switch from vegetable-based to animal-based proteins, and have multiple uses -- food, feed, fructose and oil. U.S. rice, by contrast, is high cost relative to Thailand, is traded on a very thin market, and has only one primary end use -- food. Although some reactions of commodity groups have been of the knee-jerk variety, there is indeed a legitimate concern about loss of some specific markets as a result of Third-World growth.

The country pattern of trade poses a third concern, since it may be substantially different in the next 15 years than it was in the last 15. Much of the aggregate growth in agricultural trade in the 1970's and early 1980's can be traced to two groups. The first set of countries includes the Asian "Gang of Four" -- South Korea, Taiwan, Singapore, and Hong Kong -- which grew rapidly with an export orientation. These countries had poor land bases, and also had both pork and poultry as key items in their growing consumption bundle. Such countries are atypical as compared with many other developing societies, as were a second group, the oil exporting nations. Part of the surge in U.S. agricultural exports in the 1970's (and the decline in the early 1980's) was occasioned by countries such as Iran, Saudi Arabia, Kuwait, Mexico, Indonesia and Nigeria. Some of these countries also had poor land bases; in most of them, growth was not led by the agricultural sector, but rather by sudden increases in oil earnings that had immediate effects on their income growth, consumption and food imports.

There remain important empirical questions about the relationship between future agricultural growth in the Third World and U.S. farm exports. The agricultural development strategies and food import patterns of the key developing countries of the 1990's may be quite different from those in the earlier sets of countries.

Finally, it is important to distinguish specific concerns about technical assistance for a particular commodity and food-policy reforms. The former may change the private profitability of a given product, but a "real" reform may change the competitiveness or social profitability of an entire sector over the medium-run. Such reforms for agriculture could result in more U.S. agricultural exports, but they are far from assured. It is difficult to specify what constitutes sufficient conditions for a "thorough-going, Third-World food-policy reform," but if efforts over the last decade by India, China, and Indonesia qualify even partially for that label, the short-run results are sobering indeed for U.S. agricultural exports. Perhaps in the longer run, however, as these countries go through an animal agriculture revolution, their import patterns will more closely resemble those of Taiwan, South Korea, and other upper middle-income countries.

Even if future patterns of agricultural trade are different from the past, rapid growth in the Third World is likely to be good for the United States, if not always for U.S. farmers. This distinction is important, for it raises the issue of winners and losers, and the extent to which potential losers should be permitted to dictate policy on trade and aid. Dealing with this issue straightforwardly in domestic farm and social legislation seems far more important than trying to argue that rapid growth of Third-World agriculture will never (or always) hurt U.S.

agricultural interests, or that aid to Third-World agriculture should be curtailed.

The Use of Aid in Food-Policy Reform

The preceding section has examined some of the linkages among agricultural growth, economic growth, and increased agricultural imports from the United States. In the 1970's, the Third-World countries that grew fastest were not always led by agriculture (for example, the oil exporters) and not all U.S. export commodities fared equally well in the Third-World growth process. In spite of these important caveats, the reform of agriculture in the Third World is likely to be crucial to the long-run expansion of U.S. agricultural trade. If this proposition is correct, using aid funds to reform food and agricultural policies in the Third World would seem to be a highly desirable line of activity.

The fact remains, however, that neither A.I.D. nor the World Bank have been particularly successful in using aid to alter agricultural policies in the Third World. Understanding why this is true is important for aid efforts generally. It is also relevant to the argument that specific restrictions now being proposed by some U.S. commodity groups are likely to be ineffective, as well as wrong-headed.

Generalizations about aid to agriculture do not flow easily, and there are almost surely specific country exceptions to all of the arguments that follow. Yet it seems useful to supplement Ruttan's earlier review of assistance to agriculture with a listing of why aid and aid conditionality have not proven very successful with respect to the reform of Third-World agricultural policy.

To start with the positive, aid seems to have been most effective when recipient countries were engaging in sensible policies themselves with respect to incentives, infrastructure and institutions. In these situations there are also good examples of marginal changes in policies that were induced through the aid-giving process. Taiwan and S. Korea during the 1960's and 1970's are good illustrations; however, in many countries where there is broad agreement among economists that agricultural policy is in serious disarray, aid has had little impact. The inverse relationship between the need for reform and effectiveness of aid deserves far more attention than it has received to date.

<u>Scale</u>

Part of the problem in effecting changes with aid involve matters of scale. In spite of the rapid growth in agricultural lending by the World Bank, rising from about $150 million annually in the early 1960's to about $4 billion annually in the early 1980's, there are not many countries where external assistance is critical to the strategy chosen for the agricultural sector.[a] Recent trends in the magnitude of U.S. assistance seem to suggest that this will be even more true in the future. Total U.S. foreign-aid authorizations have been stagnant since 1984 at about $15 billion annually, and roughly two-thirds of this sum has been in the form of security assistance (O.D.C.). Even the $4 billion economic component of security assistance is provided by the United States in support of political and security interests abroad (such as the Camp David accords). Security support, whatever the form, has been as much a part of the problem with respect to agricultural policy as its solution. Agricultural pricing in Egypt is the classic case, but not the only one.

Of the roughly $5 billion economic assistance given by the United States, about $1.2 billion is in the form of PL480 commodities, and a roughly similar sum is provided to the multilateral development banks. Only about $2 billion of "straight" economic assistance is offered through A.I.D., of which only about one-third is assistance to agriculture broadly defined. Even scientific support for agriculture has come under hard times recently (Walsh). Funds for sub-Saharan agriculture

---

[a] Aid is now a more important component of agricultural investment in Africa than it is in Asia or Latin America. There is little evidence, however, that the success rate of agricultural reform has been higher in Africa.

were cut more than 20 percent in 1986 and agricultural research suffered cuts of 30 percent over the past two years.

There is general agreement among economists that funds for agricultural research activities have among the highest returns in the entire A.I.D. portfolio, yet the Agency has backed away from its guaranteed funding of one-fourth of the total budget for the international agricultural research centers. These alterations in policy do not necessarily reflect unhappiness in A.I.D. with respect to agricultural aid, but rather the outcome of priorities established by Congress as a consequence of strong lobbying efforts. Whatever the reasons, a leadership role for the United States is difficult in Third-World agriculture when the magnitude of such aid is declining and when remaining sums are increasingly politicized. The situation is sufficiently serious that, for these and other reasons, long-term aid advocate John Sewell is now arguing that "The current U.S. foreign aid program has outlived its usefulness." (Sewell and Contee, p. 1015.)

Mode

If the scale of aid is a problem in assisting reform, an even more serious dilemma concerns the mode in which aid is offered. A high percentage of aid goes in the form of project assistance, and therein lie two fundamental problems.

Responsible governments in the Third World (which probably constitute a much higher percentage of all governments than is commonly assumed) are grappling simultaneously with four agricultural objectives: efficient growth, improved distribution of income (usually through greater employment), adequate food security, and improved nutritional status for their populations. Multiple objectives are almost always troublesome and they are particularly so in a Third-World agricultural context if macro-economic conditions are out of control. The following policy sequence is depressingly familiar: a pegged exchange rate, an ambitious development program, deficit financing to fund the program, significant inflation relative to the rest of the world, overvalued exchange rates, and balance-of-payments crises. Similarly, credit programs that are designed to help the farm sector with subsidized interest rates all too frequently lead to severe capital rationing for agriculture. Exchange rate, interest rate, and other macro policies have been, and continue to be, badly distorted in many Third-World nations, especially in Africa. In such situations, reform of the agricultural sector <u>per se</u> is almost impossible, and the Minister of Finance and the Governor of the Central Bank have far more impact on food policy than does the Minister of Agriculture.

If the macro economy is in severe disequilibrium, project aid has little impact on the overall structure of agriculture. A.I.D. is typically not a factor in macro reform, since it normally does not control enough resources to underwrite such reforms in a significant way. A.I.D. personnel policies, which have reduced the total number of A.I.D. employees and which have stressed middle-level managers rather than macro or agricultural specialists, have exacerbated the problem. The World Bank, in principle, is better able to effect reforms, especially as it moves away from projects and towards sectoral and structural adjustment loans. However, a recent review of the conditions (covenants) attached to more than 50 of the Bank's agricultural loans in the last 20 years shows almost no links to key macro variables. It also appears that few of the aid conditions, whatever their form, were actually implemented by the countries. Instead, macro reform and its support has been much more the purview of the International Monetary Fund. The Fund has had mixed success, but has been generally weak in linking macro and agricultural development strategies.

More striking and surprising, agricultural project aid has not even been very successful as a means of reforming agricultural policy more narrowly defined. Recent reviews by the World Bank show the particular problems of area development projects in the Third World. (See, for example, Johnston et al.) Too often these projects were overly ambitious (comprehensive) and set up as semi-autonomous bodies that failed when aid was withdrawn. The general dilemma can be boldly stated: bad policy destroys good projects; the converse, unfortunately, does not appear to be true.

Dialogue

If aid and the conditions attached to it are to be helpful in policy reform, there must be an effective dialogue between donors and recipients, almost as a pre-condition. There is enormous variation among countries in the quantity and quality of these discussions, but often there appear to be serious problems. Indeed, this is an area where it is difficult to cite many success stories.

Within the Third World, there is a widespread lack of analytic capacity for dealing with the economics of agriculture. The situation is generally characterized by small numbers of poorly paid analysts who are not well enough placed in government to bridge the commodity, sectoral, and macro issues that arise in the formulation of domestic food policy and in aid negotiations. These gaps in human capital seem woefully apparent, yet investments to fill these gaps have not been pursued aggressively by either donors or the countries themselves.

The deficiencies in Third-World countries are further aggravated by procedures used by the donor community. If institutions, continuity of policy, and political economy are important, there are limits to what donors can accomplish with short-term consultants, a series of three-week country missions, and a set of traveling algorithms. The consequences of the foregoing approaches are a set of unrealistic expectations on agricultural reform and inappropriate conditions on aid. Worst of all, the lack of individuals with long-term country perspectives alters the nature of the discussions. Realistic conversations about political economy cannot take place, and they tend to be replaced by the prevailing development theology. Proposed conditions on the use of border prices (irrespective of potential adjustment costs), the elimination of subsidies (irrespective of their social productivity), reaching the poorest of the poor (irrespective of institutional capacity), and privatization (irrespective of food-policy objectives) are all familiar refrains among those in the Third World who are attempting to deal seriously with real-world problems that go to the heart of their political and economic systems.

The search for soft-options also needs to be stressed, for it too is part of the problem among both donors and recipients. In order to secure loans and grants, countries are often willing to agree to a series of short-run conditions, even though they do not think implementation is feasible. They may also choose the easier alternative if given a choice. The continued preference of Title I food-aid over Title III, for example, has part of its explanation in the dislike of recipient countries for real reform and the conditions and reporting responsibilities that accompany Title III.

Among donors, the ability to "move project money" has long been the key measure of agency effectiveness. The search for larger quantities of loans has often been at the expense of project quality. The pressure to lend money has also been a driving force in altering the form of assistance toward sectoral loans and structural adjustment lending. One worries that the future of these broader loan forms, now in vogue at the World Bank, will be similar to the fate of more traditionally defined agricultural projects. Those countries and sectors that already have decent policies will use the new types of aid effectively; those that do not will not be reformed by the loan covenants, nor will the loans be used particularly well.

Conclusions

This paper has attempted to answer two important questions about food-policy reform in the Third World: Is such reform in the U.S. interest? And, has U.S. aid been instrumental in helping to achieve it? The answers are "almost surely" and "not very", respectively, but the quantitative research that underpins these conclusion is not nearly so strong as it should be.

It would be a neater world -- at least analytically -- if aid led to food-policy reform in the Third World, if such reform enhanced Third-World economic growth, if this growth led to additional U.S. agricultural exports, and if U.S. agricultural interests were synonymous with U.S. national interests. Unfortunately, each of these links is subject to challenge theoretically, and empirical relationships are confounded by the enormous diversity among Third-World countries. Evidence from the 1972-82 period is reasonably clear on the positive relationship between Third-World agricultural growth and U.S. farm exports. There is no assurance, however, that this pattern will continue because the country composition of "rapid growers" is likely to change significantly. Policy making would be easier if the complementarity between the United States and the Third World were to continue, but a substantial number of underlying structural forces have changed since 1982. Clearly, however, the issue is empirical, and those who argue that U.S. -Third-World tradeoffs never (or always) exist are of little help to policy makers in either the United States or developing countries.

Much of the U.S. farm concern about aid has centered on technology transfer, such as new plant varieties. Little technology is directly transferable; moreover, it is unlikely that the curtailing of aid by the United States would make much difference to whether or not Third-World countries obtained the technology in question, since much of it is generally available from other sources. In any event, "real" reform is likely to involve infrastructure, incentives and institutions, and the more legitimate concerns with aid's effects on agriculture ought to be with this broader set of topics including macro policy.

Because Third-World agricultural reform is in the interest of the United States, there is much about the aid process that needs to be changed. The success in altering Third-World agriculture with aid has been limited to date because of the relatively small scale of U.S. assistance and its project orientation. Clearly, an improved policy dialogue on aid is required, which will in turn necessitate sustained efforts at the country level by good analysts from both the countries themselves and the aid-giving community.

References

Anderson, Kym. "Is Agricultural Growth in Developing Countries in Australia's Interest?" Adelaide: Typed Manuscript, May 1987.

Bachman, K.L. and Leonardo A. Paulino. "Rapid Food Production Growth in Selected Developing Countries: A Comparative Analysis of Underlying Trends." Washington, D.C.: International Food Policy Research Institute, October 1979.

Brady, Nyle C. "The Effect of U.S. Domestic Interests on Technology Transfer Policy." Amer. J. Agr. Econ. 69(1987): Forthcoming.

Houck, James. "Foreign Agricultural Assistance: It's Mostly A Good Thing for U.S. Farmers." Choices. Second Quarter 1987:19.

Johnston, Bruce F., Allen Hoben, Dick W. Dijkerman, and William K. Jaeger. An Assessment of A.I.D. Activities to Promote Agricultural and Rural Development in Sub-Saharan Africa. Washington, D.C.: M.A.D.I.A. Project, World Bank, 1987.

Kellogg, Earl, Richard Kall, and Philip Garcia. "The Effects of Agricultural Growth on Agricultural Imports in Developing Countries." Amer. J. Agr. Econ. 68(1986):1347-1352.

Overseas Development Council. "Foreign Aid: Annual Budget Battle Resumes." Washington, D.C.: Policy Focus Series, 1987.

Paarlberg, Robert L. "Farm Development in Poor Countries: The Disputed Consequences for U.S. Farm Trade." Amer. J. Agr. Econ. 68(1986):1353-1357.

Ruttan, Vernon W. "Assistance to Expand Agricultural Production." World Development. 14(1986):39-63.

Sewell, John W. and Christine E. Contee. "Foreign Aid and Gramm-Rudman." Foreign Affairs. 65:(1987):1015-1036.

Timmer, C. Peter. "Agricultural Development, Income Growth and Grain Imports: The Implications for American Agriculture." Washington, D.C.: American Enterprise Institute, Working Paper, Forthcoming.

Timmer, C. Peter, Walter P. Falcon, and Scott R. Pearson. Food Policy Analysis. Baltimore and London: The Johns Hopkins University Press, 1983.

United Nations, Food and Agriculture Organization. Food Outlook: Statistical Supplement. Rome: 1986.

Vocke, Gary. "Economic Growth, Agricultural Trade, and Development Assistance." Washington, D.C.: U.S. Department of Agriculture Information Bulletin Number 509, March 1987.

Walsh, John. "Science Gets Short End in Foreign Aid Funding." Science: 235(1987):742-743.

World Bank. World Development Report. New York City: Oxford University Press, Annual.