DEVELOPING COUNTRIES AND THE URUGUAY ROUND NEGOTIATIONS ON AGRICULTURE

Maurice R. Landes
Economic Research Service, USDA

Agricultural trade has been framed by many as primarily a developed country issue in the Uruguay Round. The most serious agricultural trade disputes over subsidies and protectionism have occurred among developed countries, placing agriculture high on their negotiating agendas. Developing countries, on the other hand, have historically been afforded special and differential treatment in the General Agreement on Tariffs and Trade (GATT) that has provided them a waiver from compliance with GATT provisions. This heritage, reaffirmed in the Ministerial Declaration opening the Uruguay Round, tends to minimize consideration of developing country issues and concerns in the negotiations.

Although agriculture may remain primarily a developed country issue during the current round, several factors suggest an increasing role for developing countries. First, many feel that the success of the more radical liberalization proposals could be affected by the degree of support by developing countries, leading to more concerted efforts to draw them into the negotiation. For instance, the U.S. proposal for complete liberalization may be more acceptable to the European Community (EC) if key developing countries also agree to its subsidy and market access provisions.

Second, many feel, supported by a growing body of research, that trade responses by developing countries will significantly affect the global impacts of liberalization, reinforcing the importance of developing country participation. Third, some developing country exporters (Argentina, Brazil, Chile, Columbia, Fiji, Indonesia, Malaysia, the Philippines, Thailand and Uruguay) realize that they have something to gain or lose and are already participating in the negotiations as members of the Cairns Group. Other developing countries, particularly food importers, may join the negotiation to protect their interests.

Farm Policy Interventions in Developing Countries

Developing countries tend to intervene in their farm sectors in dif-

ferent ways and to achieve different goals than developed countries, and this leads many of them to take different positions toward proposals for policy reform sponsored by developed countries. Developing countries also tend to face different factor endowments, resource constraints and income distribution patterns than developed countries, and may perceive more serious internal adjustment problems from trade liberalization.

Some of these differences have been identified by the Economic Research Service (ERS) in case studies of policy interventions in developing countries, and in quantitative estimates of these interventions using producer and consumer subsidy equivalents (PSEs and CSEs). Use of a comprehensive, aggregate measure of policy impacts on producers, such as the PSE and CSE, has been suggested in some GATT proposals. They provide a convenient means of summarizing policy interventions.

A summary of PSE and CSE estimates (Table 1) suggests some of the more obvious differences. While several Newly Industrialized Countries (NICs) also provide relatively high levels of support, developed counties tend to provide more support to their producers than developing countries. In fact, two of the developing countries and one of the NICs tax their producers, and the estimates for two of the other developing countries (Indonesia and Thailand) are based

Table 1. Estimated Producer and Consumer Subsidy Equivalents (1982–86 Averages)

	Producer Subsidy Equivalents	Consumer Subsidy Equivalents
	% of Producer Value	% of Consumer Value
Developed Countries		
Australia (9)	11	—
Canada (13,11)	31	−12
European Community (13,14)	35	−15
Japan (12,10)	72	−39
New Zealand (5)	25	—
United States (12,9)	25	−12
Newly Industrialized Countries		
Argentina (4)	−45	35
Brazil (6)	9	—
Mexico (7)	32	—
South Korea (10,10)	60	−58
Taiwan (11,9)	19	−26
Developing Countries		
India (7,10)	−18	−7
Indonesia (1,1)	14	−22
Nigeria (6,5)	5	−7
Pakistan (4,4)	−23	17
Thailand (1,1)	1	21

Notes: 1) Numbers in parentheses indicate number of commodities covered in estimates of PSEs and CSEs, respectively.
2) Estimates do not include exchange rate distortions shown in Tables 3 and 5.
3) — = Not available.

SOURCE: ERS estimates

on only one crop (rice) and likely do not reflect actual aggregate support. A second key difference shown in Table 1 is that, while more developed countries tend to tax food consumers to help pay their producer subsidies, developing countries subsidize consumers with the proceeds of their producer taxes.

Importance of Agricultural Taxation

PSE estimates by crop (Table 2) and by broad policy category (Table 3) provide more detail on the extent of agricultural taxation in developing countries. While only one of five NICs has a negative aggregate PSE, three of five tax at least one commodity. For the developing countries studied, at least two of five have negative aggregate PSEs and all but one had some policies that taxed producers.

Taxation of traditional sectors, particularly agriculture, is fundamental in most models of economic development. As new technology and infrastructure boost farm productivity, labor and capital are drawn out of agriculture to fuel development of infrastructure and industry. To some extent, the taxes may be recapturing public outlays that contribute to agricultural development, including such items as roads, irrigation works or fertilizer subsidies. Taxes may be direct and transparent, such as an export tax, or they may be indirect, taking the form of border or price policies that keep internal farm prices relatively low. And, while certain subsistence or export crops may be taxed, others may be subsidized in order to stimulate technology adoption or import substitution.

In many cases, particularly those in which agriculture is the largest economic sector, taxation of agriculture may be one of the few practical means of mobilizing resources. Ports, borders and markets are convenient means of implementing revenue measures, while more broadly-based income tax measures are frequently infeasible. As we shall see below, policy measures that tax producers may also be the same measures that meet another key objective of developing country food policy—affordable and stable food prices.

To be sure, agricultural taxation is not always a perfect policy, since it can bias the terms of trade against agriculture, leading to reduced economic efficiency and growth. There can be a tendency for producer taxes to become excessive, particularly when governments are under the pressure of domestic and foreign debt or high inflation, and taxes are a convenient short-term measure. In fact, reduced agricultural taxation is a key condition of much bilateral and multilateral structural adjustment lending.

The treatment of agricultural taxation in developing countries presents problems for proponents of agricultural trade liberalization, and for the use of an aggregate measure of support (AMS) like the PSE in implementing policy reform. None of the major liberalization proposals before the GATT, including the U.S. or Cairns Group

Table 2. Producer Subsidy Equivalents for Developing Countries (1982–86 Averages)

	Newly Industrialized Countries					Developing Countries				
	Argentina	Brazil	Mexico	S. Korea	Taiwan	India	Indonesia	Nigeria	Pakistan	Thailand
Commodities Covered:	4	6	7	10	11	7	1	6	4	1
					Percent of Producer Value					
Aggregate PSE	−45	9	32	60	19	−18	14	5	−23	1
Commodity PSEs										
Rice	—	53	—	72	28	−17	14	12	10	1
Rice (basmati)	—	—	—	—	—	—	—	—	−75	—
Wheat	−31	67	9	60	65	−35	—	65	−20	—
Corn	−42	3	46	59	70	—	—	3	—	—
Sorghum	−88	—	41	—	74	—	—	—	—	—
Barley	—	—	—	66	—	—	—	—	—	—
Dry beans	—	—	9	—	—	—	—	—	—	—
Peanuts	—	—	—	—	—	17	—	—	—	—
Rapeseed	—	—	—	—	—	3	—	—	—	—
Soybeans	−53	−2	34	75	57	−11	—	—	—	—
Sesameseed	—	—	4	—	—	—	—	—	—	—
Cotton (ms)	—	—	−38	—	—	−14	—	40	−23	—
Cotton (ls)	—	—	—	—	—	−24	—	—	—	—
Beef	—	−32	—	66	18	—	—	—	—	—
Pork	—	—	—	−1	2	—	—	—	—	—
Poultry	—	7	—	42	23	—	—	—	—	—
Eggs	—	—	—	12	—	—	—	—	—	—
Milk	—	—	—	46	43	—	—	—	—	—
Sugar	—	—	—	—	29	—	—	25	—	—
Cocoa	—	—	—	—	—	—	—	−21	—	—
Tobacco	—	—	—	—	43	—	—	—	—	—

Notes: 1) Estimates do not include exchange rate distortions shown in Tables 3 and 5.
2) — = Not available.

SOURCE: ERS estimates

Table 3. Producer Subsidy Equivalents for Developing Countries by Broad Policy Category (1982–86 Averages)

	Newly Industrialized Countries					Developing Countries				
	Argentina	Brazil	Mexico	S. Korea	Taiwan	India	Indonesia	Nigeria	Pakistan	Thailand
	Percent of Producer Value									
Producer Subsidies	—	33	32	59	19	4	14	6	7	4
Import Duties	—	—	—	—	—	—	—	3	—	—
State Control of Trade	—	—	—	55	17	—	5	—	—	—
Price and Marketing Support	—	11	19	—	—	—	—	—	—	0
Inputs	—	22	13	4	2	4	9	3	7	3
Fertilizer	—	—	5	—	—	1	—	3	3	0
Credit	—	21	8	—	—	1	—	0	1	—
Other variable	—	1	—	0	—	2	—	0	3	3
Research and extension	—	0	—	—	0	—	—	—	—	—
Other fixed/l. term	—	—	—	4	2	—	—	—	—	—
Producer Taxes	−45	−24	—	—	—	−22	—	− 2	−29	−2
Export Taxes & Duties	−45	−19	—	—	—	0	—	—	—	−2
State Control of Trade	—	− 5	—	—	—	−22	—	—	−29	—
Output Price Controls	—	—	—	—	—	—	—	− 2	—	—
Memo Item:										
Exchange Rate Policy										
Undervaluation (subsidy)	40	0	13	—	—	—	—	—	N/A	N/A
Overvaluation (tax)	—	—	—	—	—	—	—	−45	N/A	N/A

Notes: 1) Some totals may not add because of rounding.
2) — = Not available or not applicable.

SOURCE: ERS estimates

proposals, is clear on whether they are concerned with eliminating "all trade distorting measures" or "all trade distorting subsidies." A focus on all trade distorting measures would target producer taxes important to developing countries. Proponents use the classical efficiency and growth arguments associated with free trade, and also frequently cite the problems created when taxes on raw materials impart implicit subsidies on processors and exporters of value-added products.

A focus only on trade distorting subsidies would leave producer taxes intact. Other than the development-related arguments mentioned above, proponents here argue that, while these measures distort free trade, they do so in a way that reduces exports and raises imports. These policies may not be efficient, but they may not be at issue in these negotiations.

In either of the above cases, the existence of taxing policies creates problems in the use of an AMS like the PSE to implement policy reform. The AMS approach is designed to provide policy makers maximum flexibility in targeting specific policy adjustments needed to reach an agreed upon reduction in aggregate support. The approach could work well in the developed country case where policy interventions are overwhelmingly positive, but what happens when there are significant taxing policies? Would it be acceptable for a country to reduce a positive crop PSE by raising taxes rather than reducing subsidies? Would it be acceptable if a country reduced its AMS by raising taxes on one crop while retaining or increasing subsidies to another? Whether negotiators target all trade distortions or only subsidies, the prevalence of taxing policies in developing countries will have to be dealt with if these countries are going to be drawn into the negotiation.

Emphasis on Consumer Price Stability

Consumer welfare issues are normally top priorities of food, agricultural and trade policy in developing countries. Low and stable prices for food staples are often a primary objective because large shares of the population live at or below the poverty line, food accounts for a large portion of consumer budgets and the growing urban populations can be politically volatile. Frequently, maintenance of low food prices is the means of implicitly transferring resources from agriculture to other sectors. Concern with maintaining adequate food supplies and stable prices is often an argument for state trading and other measures to insulate domestic and world prices and for import substitution to reduce dependence on world markets.

The CSE estimates (Tables 4 and 5) suggest the prevalence of economic subsidies for consumers. Two out of three NICs have positive CSEs for at least one commodity and one has a positive aggregate CSE. At least three out of five developing countries have a positive

Table 4. Consumer Subsidy Equivalents for Developing Countries (1982–86 Averages)

	Newly Industrialized Countries			Developing Countries				
	Argentina	S. Korea	Taiwan	India	Indonesia	Nigeria	Pakistan	Thailand
Commodities Covered:	4	10	9	10	1	5	4	1
				Percent of Consumer Value				
Aggregate CSE	35	−58	−26	4	−22	− 7	17	21
Commodity CSEs								
Rice	—	−70	−29	3	−22	− 4	−23	21
Rice (basmati)	—	—	—	—	—	—	44	—
Wheat	22	17	− 9	21	—	−11	14	—
Corn	28	—	−18	—	—	−10	—	—
Sorghum	47	—	−16	—	—	—	—	—
Barley	—	−71	—	—	—	—	—	—
Soy beans	45	−73	−20	—	—	—	—	—
Peanut meal	—	—	—	36	—	—	—	—
Rapemeal	—	—	—	47	—	—	—	—
Soymeal	—	—	—	34	—	—	—	—
Peanut oil	—	—	—	−39	—	—	—	—
Rapeoil	—	—	—	−49	—	—	—	—
Soyoil	—	—	—	−35	—	—	—	—
Cotton (ms)	—	—	—	26	—	−26	38	—
Cotton (ls)	—	—	—	23	—	—	—	—
Beef	—	−72	−11	—	—	—	—	—
Pork	—	− 9	—	—	—	—	—	—
Poultry	—	−40	−39	—	—	—	—	—
Eggs	—	−21	—	—	—	—	—	—
Milk	—	−68	−10	—	—	—	—	—
Sugar	—	−70	−65	—	—	−19	—	—

Notes: 1) Estimates do not include exchange rate distortions shown in Tables 3 and 5.
2) — = Not available.

SOURCE: ERS estimates

Table 5. Consumer Subsidy Equivalents for Developing Countries by Broad Policy Category (1982–86 Averages)

	Newly Industrialized Countries			Developing Countries				
	Argentina	S. Korea	Taiwan	India	Indonesia	Nigeria	Pakistan	Thailand
	Percent of Consumer Value							
Consumer Subsidies	35	—	0	4	—	—	16	21
Export Taxes	35	—	—	0	—	—	—	21
State Control of Trade	—	—	—	1	—	—	12	—
Price & Distribution Policies	—	—	0	3	—	—	4	—
Consumer Taxes	—	−58	−26	−1	−22	− 7	—	—
Import Duties	—	—	− 2	—	—	− 7	—	—
State Control of Trade	—	−58	−24	—	−22	—	—	—
Price & Distribution Policies	—	—	0	−1	—	—	—	—
Memo Item:								
Exchange Rate Policy								
Overvaluation (subsidy)	—	—	—	—	—	62	—	—
Undervaluation (tax)	−13	—	—	—	—	—	—	—

Notes: 1) Some totals may not add because of rounding.
2) — = Not available or not applicable.

SOURCE: ERS estimates

aggregate CSE and four out of five subsidize consumption of at least one crop. Cotton consumption is commonly subsidized, indicating support for manufacturers, users and/or exporters of textiles. Comparison of the PSEs and CSEs by policy category (Tables 3 and 5) indicates that producer taxes and consumer subsidies are often implemented with the same policy. Typically the policy is a border measure, meaning that there is no budgetary cost of the consumer subsidy.

Although consumer subsidies and the border measures that impose them are commonly viewed as economically inefficient by free trade advocates, such policies normally stem from equity concerns not necessarily addressed by competitive free trade. Some research on developing countries permits examination of the effects of alternative policy options on various income groups in developing countries (Quizon and Binswanger; Parikh et al.; de Janvry and Subbarao). This work suggests that adjustment to policies seeking to boost growth with higher producer and consumer prices can be quite costly for net buyers of food, including the urban and rural poor. It is not clear from this research if traditional agriculture has the capability to be sufficiently price-responsive for the income gains stimulated by higher prices to eventually offset the adverse effects of higher food prices.

Consumer impacts of policy reform are seldom discussed by developed countries, but are likely to be a key concern of many developing countries in the negotiations. They would be concerned about the adjustment of low-income consumers to higher and, possibly, less stable internal prices, and about having to replace subsidies imposed by border measures with costly budgetary subsidies. While most would agree that subsidies targeted at low income groups are more efficient, few developing countries have the means to effectively administer a targeted program. Many importing developing countries will also be concerned about the consumer impact of policy reform in developed countries on the level and stability of world food prices and the availability of food aid.

Differing Policy Instruments

Developing countries tend to use different types of policy mechanisms than developed countries, both because they have different goals, and because of the limitations of the available administrative apparatus. These differences will have to be accounted for in identifying feasible policy reforms for developing countries. In addition, if a PSE or some other AMS is to be used in the negotiations, some of these policy mechanisms create unique and difficult estimation problems.

Public Investment in Agriculture. Developing countries typically have undercapitalized farm infrastructure relative to developed

countries and many invest heavily in such areas as roads, markets, irrigation works and research facilities. Such investments often have high rates of return and research has shown that they also tend to have positive distributional impacts. High public good components as well as shortages of private capital require public investment in these projects. Developing countries are obviously concerned that the legitimacy of such investments in public goods not be challenged, while reform advocates are concerned about where to draw the line between a producer subsidy and investment in a public good. Incorporation of long-term investments in PSE measures also presents a difficult methodology problem.

State Trading. Developing countries often rely on parastatals to handle all or part of domestic and foreign trade. These organizations play a central role in administering producer and consumer price policy, collecting revenue, storing and moving commodities, regulating foreign exchange expenditures and insulating domestic and foreign prices. There may or may not be a parallel private sector capability to assume these functions under liberalization. Many developing countries would face a formidable task if required to immediately dismantle parastatals and build viable private institutions. Developing countries with large debt or tight balance of payment positions may be reluctant to give up controls on trade, particularly when farm goods account for a large share of trade. Advocates of policy reform are concerned with achieving and maintaining strong price transmission and freer trade in the presence of parastatals.

Exchange Rate Policy. While developed countries tend to have freely traded currencies, many developing countries manage their exchange rates to maintain either overvaluation (a tax on domestic production and a subsidy on consumption) or undervaluation (a subsidy on production and a tax on consumption). Many consider exchange rate management an economy-wide policy not appropriate for the agriculture negotiation, but its impact on agriculture can be major. Also, because agriculture is generally a large sector in developing countries, exchange rate management could be viewed as agriculture-specific. Estimates of the impact of exchange rate policy on producers and consumers for a few countries (Tables 3 and 5) indicate its significance. Inclusion of exchange rate distortions would substantially change the size of Argentina's and Mexico's PSE and lead to a sharp change in the signs of Nigeria's PSE and CSE. In Brazil, exchange rate distortions fluctuated widely from undervalued to overvalued during 1982–86, but averaged zero for the period.

Exchange rate reform is very unlikely to become a part of the agriculture negotiations. At the same time, it will be difficult to accurately evaluate developing country policy intervention in agriculture unless exchange rate effects are incorporated. The PSE framework can readily accommodate estimates of exchange rate effects, al-

though the accurate measurement of exchange rate distortions presents another tough methodological problem.

Cross-Sectoral Issues

Developing countries are likely to be more concerned with linkages between agriculture and other sectors in the negotiations than are developed countries. Agriculture generally accounts for a much larger share of output and employment in developing countries and the size of employment and income effects to be absorbed by other smaller sectors may present more of a problem. Developing countries are likely to be very interested in increased access to markets for labor-intensive industries such as textiles and footwear, and possibly even labor-intensive services that are sensitive politically in developed countries.

Accommodation of cross-sector issues within the agriculture negotiations would add yet another dimension and complicate the negotiation considerably. The existence of a new Multi-Fiber Agreement (MFA) has been used by developed countries as an argument to defer discussion of textiles, although several developed countries favor discussion of textiles. No party has yet offered a framework or plan for accommodating swaps between the agriculture and the other sectoral negotiating groups operating during the Uruguay Round.

Accommodating Developing Country Issues

The sweeping agricultural policy reform advocated in some Uruguay Round proposals provides both opportunities and serious concerns for developing countries. The reform proposals were largely conceived to deal with the causes of developed country trade problems and may have to be modified in order to bring developing countries into the negotiation.

Meaningful developing country participation will require a new approach to the accommodation of their concerns that moves away from the blanket waiver provided under the current notion of special and differential treatment. Movement toward clearer identification of factors that provide a legitimate economic rationale for policy interventions in developing country agriculture would appear to be necessary to draw them into the process.

One simple framework has been discussed within the context of the U.S. and Cairns Group proposals (Mabbs-Zeno). In this framework, each participant would prepare, for approval by the entire group, a country plan for meeting the mutually agreed reduction in support. Developed country plans would have two policy "lists," together accounting for all current policy interventions. One list would be for "covered" policies subject to reduction in the country plan

and one would be for those policies agreed by the group to be trade neutral and subject only to monitoring.

For developing countries there would be a third list that would allow them to move policies off the "covered" list if they are aimed at a legitimate market failure. One key feature of this framework is that policies rather than countries would qualify for exclusion. This would eliminate the current blanket waiver and avoid the intractable problem of specifying appropriate definitions of developing countries and criteria for "graduation" to developed country status under the GATT. Another important feature of this framework is that, with the option of offering to move policies from the "market failure" list to the "covered" list, developing countries would have some bargaining chips. Countries arguing to keep all or most of their policies off the "covered" list, hence keeping their blanket waiver in effect, would have little bargaining power.

Drawing developing countries into an agreement on liberalization will probably also require some explicit recognition of the role of agricultural taxation. A resolution of this issue might take the form of an agreement on the "disciplines" that must be observed in phasing out policies in the country plans. For example, such disciplines have already been discussed as a means of preventing increased use of export subsidies while other policies are reduced. Developing countries might be permitted to allow their taxes to offset subsidies within commodity groups, but not allow taxes on one commodity to offset subsidies on others. However, rules of this sort probably must be kept simple and to a minimum in order to facilitate enforcement and avoid a lengthy commodity-by-commodity negotiation.

Systematic accommodation of swaps between agriculture and the other sectoral negotiating groups may be one of the more intractable challenges of the negotiation. While the more radical agricultural proposals seek to avoid the conventional request and offer framework in favor of an aggregate approach to agricultural policy reform, request and offer may be the only workable means of dealing with cross-sector issues. The multiple list system discussed above, by creating some bargaining chips for developing countries, may contribute to more effective bargaining for gains in other sectors, including textiles, after the current MFA expires.

REFERENCES

Brooks, Douglas H. "Bringing Agriculture into the GATT: Case Study of Thailand." Washington DC: USDA ERS unpublished manuscript, Aug. 1988.

de Janvry, Alain, and K. Subbarao. *Agricultural Price Policy and Income Distribution in India.* Delhi: Oxford University Press, 1986.

Ender, Gary P. "Bringing Agriculture into the GATT: Case Study of Pakistan." Washington DC: USDA ERS unpublished manuscript, Aug. 1988.

Gardner, George R. "Bringing Agriculture into the GATT: Case Study of Egypt." Washington DC: USDA ERS unpublished manuscript, Aug. 1988.

Mabbs-Zeno, Carl C. "Accommodating the Interests of LDCs at the GATT." Background paper for the International Agricultural Trade Research Consortium Symposium on Bringing Agriculture into the GATT, Annapolis MD, 19–20 Aug. 1988.

Mabbs-Zeno, Carl C., and Nicole Ballenger. "Developing Country Agriculture in the Uruguay Round: What the North Might Miss." Washington DC: USDA ERS unpublished manuscript, 1988.

Mielke, Myles J. "Bringing Agriculture into the GATT: Case Study of Mexico." Washington DC: USDA ERS unpublished manuscript. Aug. 1988.

Parikh, Kirit S., Gunther Fischer, Klaus Frohberg, and Odd Gulbransen. *Towards Free Trade in Agriculture.* Dordrecht (Netherlands): Martinus Nijhoff Publishers, 1988.

Peacock, David, and John Link. "Bringing Agriculture into the GATT: Case Study of Brazil." Washington DC: USDA ERS unpublished manuscript, Aug. 1988.

Quizon, Jaimie, and Hans P. Binswanger. "Modeling the Impact of Agricultural Growth and Government Policy on Income Distribution in India." *The World Bank Economic Review* 1 (1986): 103–148.

Quizon, Jaimie, Bruce Gardner, and Lois Quinn. *Consequences of Agricultural Trade Liberalization for Developing Countries Assisted by AID.* Bala Cynwyd PA: Wharton Econometrics, Feb. 1988.

U.S. Department of Agriculture. *Estimates of Producer and Consumer Subsidy Equivalents: Government Intervention in Agriculture, 1982–86.* Washington DC: ERS Staff Report AGES880127, Apr. 1988.