**Introduction**

The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) concluded in 1994 with an agreement that fundamentally changed the treatment of national agricultural policies under the multilateral rules of global trade. In the Uruguay Round Agreement on Agriculture (URAA, or the Agreement), members determined that trade-distorting policies are to be disciplined, or constrained, so that agricultural markets can be increasingly directed by market forces rather than government intervention. Members set the implementation period for these reform commitments at 1995-2000 for developed countries, and through 2004 for developing countries (table 1).

The URAA marked a first step in the process of global policy reform. The Agreement provided the starting point for further reform by including a provision that member countries resume negotiations on agriculture by December 31, 1999, one year before the end of the implementation period for developed countries. Although efforts at the WTO’s November 1999 Seattle conference failed to initiate a full round of negotiations, agricultural negotiations ultimately began in March 2000. They are being conducted as special sessions of the WTO Committee on Agriculture in Geneva, Switzerland (table 2).

The new negotiations present an opportunity to further reduce policy distortions in global agriculture. Agricultural trade barriers and producer subsidies inflict real costs, both on the countries that use these policies and on their trade partners. Trade barriers help keep inefficient domestic producers in operation, result in forgone opportunities for a more efficient allocation of national resources, and lower demand for trade partners’ products. Domestic subsidies may induce an oversupply of agricultural products and help to retain resources in agriculture that can be used more profitably in other sectors. The oversupply of agricultural commodities leads to lower prices and increased competition for producers in other countries and can create the need for export subsidies to dispose of excess domestic production. Consumers are harmed not just by trade barriers, which directly raise the cost of imports, but also by the effects of tariffs and subsidies, which lead to inefficiencies in their economy. When their country produces less than its potential, consumers’ incomes and welfare are reduced.

The first objective of this report is to analyze and quantify the global costs of current trade and domestic policy distortions and the potential benefits from their full elimination. While the URAA mandate is to continue a process of reform, this report’s hypothetical analysis of the full elimination of agricultural policy distortions helps us to understand what is at stake in global agricultural negotiations. We decompose the global costs and benefits of a full reform by country, commodity, and type of policy. We take into account both the direct effects of tariffs and subsidies in distorting production and consumption decisions, and the long-term effects of these policies on savings and investment decisions, and in slowing development and productivity growth, particularly in developing countries. We base our analysis on current levels of agricultural tariffs, tariff rate quotas (TRQ), domestic support, and export subsidies. In particular, the analysis takes into account that many countries have recently adopted less distorting forms of farm support, and that differences exist in the effects of coupled and decoupled farm subsidies on production and trade.

As mandated in the URAA, the goal of further negotiations will be to continue the process of agricultural policy reform begun in the Uruguay Round. Defining a path toward partial reform can be more complicated than considering the full elimination of tariffs and subsidies. Partial reform requires making an informed choice among potential targets or strategies, and the alternatives are likely to imply different distributions...
of costs and benefits. Also, some domestic farm subsidies are operationally linked with trade policies, and reforms of one policy can affect the costs and benefits of remaining policies. For example, market price support programs that attempt to support a domestic price level for commodities at above the world price can only be effective if there are insulating trade policies in place. Imports must be prevented from entering the high-priced market and export subsidies may be needed to help dispose of high-cost domestic production on world markets. Otherwise, the country will likely need to embark on costly stock holding programs to support prices. Reforming trade policies alone removes an important instrument of domestic support and implies that some domestic programs are likely to be effectively restrained by trade policy reforms. Understanding and quantifying these interrelationships whenever possible can help to clarify the choices to be made among options for policy reform.

The second objective of this report is to analyze alternative policy reform options that are defined as broad or generic, rather than specific options as proposed by WTO member countries. Our analysis of options for policy reform is organized to address these questions:

- What are the potential effects on U.S. and world agriculture of alternative approaches to improving market access, including options for making tariffs lower and more uniform, and for liberalizing tariff rate quotas?
- What are the potential effects on U.S. and world agriculture of alternative approaches to reducing distorting farm support, including options for making domestic support lower and more uniform, and for reducing domestic support through changes in border measures?
- What are the potential effects on U.S. and world agriculture of eliminating or reducing export subsidies?
What are the potential effects of further agricultural policy reforms on less developed countries, particularly the least developed?

Provisions of the Uruguay Round Agreement on Agriculture: First Steps in the Reform Process

The URAA provided for disciplines, or global trade rules, governing three areas of national agricultural policies. These areas, sometimes called the three pillars of the Agreement, are market access (tariffs, quotas, and other trade barriers), domestic support, and export subsidies.

The URAA objectives in market access reform sought to reduce barriers to agricultural trade and to make them more transparent. Members committed themselves to convert most nontariff barriers, such as import quotas, to simple tariffs or to a two-stage tariff system called tariff rate quotas. TRQ’s allow imports at a relatively low tariff within a level, or quota, that was to be expanded over the implementation period. Over-quota tariffs and simple agricultural tariffs are to be reduced over the Agreement’s implementation period of 1995-2000 for developed countries and 1995-2004 for developing countries.

The URAA provided for a 20-percent reduction of countries’ aggregate levels of distorting domestic support during the implementation period. The Agreement defined an aggregate subsidy measure, the Aggregate Measurement of Support (AMS), as a means to quantify and compare countries’ annual levels of domestic support that are subject to URAA disciplines. Reduction commitments during the URAA implementation period were made from a base AMS, defined for each country as the average of its total support for all commodities from 1986 to 1988. The URAA also differentiated domestic support policies according to their effects on production and trade (table 3). “Amber box” policies that directly subsidize production and influence the decision to produce were included in the calculation of the AMS and made subject to reductions. “Green box” policies, or domestic farm programs that meet certain criteria for causing minimal trade distortions, were exempted from any expenditure limits. The URAA made an exception for “blue box” policies, or distorting farm subsidies that are linked with supply limitations. The Agreement allowed these subsidies because the supply limits partially offset the subsidies’ incentives to over-produce and disrupt global trade.

The URAA disciplined export subsidies by placing both the value and the volume of subsidized exports under limits that are scheduled to decline through the implementation period.

Other provisions of the URAA addressed the concerns of developing countries, and included “special and differential” treatment in addition to longer implementation periods. The URAA granted exemptions to their domestic support policies because of the subsidies’

Table 3—Treatment of domestic agricultural support in the Uruguay Round Agreement on Agriculture

<table>
<thead>
<tr>
<th>Category</th>
<th>General criteria</th>
<th>Examples of policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt support</td>
<td>Measures must be financed by the government rather than consumers and must not</td>
<td>Green box programs include direct payments to farmers that do not depend on current</td>
</tr>
<tr>
<td>(green box)</td>
<td>provide price support to producers</td>
<td>production decisions or prices, disaster assistance,and government programs on research, extension, and pest and disease control</td>
</tr>
<tr>
<td></td>
<td>Specific criteria are defined for general government services, public stockholding,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>domestic food aid, direct payments, and other programs</td>
<td></td>
</tr>
<tr>
<td>Exempt direct payments</td>
<td>Direct payments under production-limiting programs must be based on fixed area or</td>
<td>Blue box policies are direct payments to producers, linked to production of specific</td>
</tr>
<tr>
<td>(blue box)</td>
<td>yields, and cover 85 percent or less of the base level of production or head of</td>
<td>crops, but which impose offsetting limits on output</td>
</tr>
<tr>
<td></td>
<td>livestock</td>
<td></td>
</tr>
<tr>
<td>Nonexempt support</td>
<td>Market price support, nonexempt direct payments and any other subsidies not</td>
<td>Amber box policies include market price supports, and output and input subsidies</td>
</tr>
<tr>
<td>(amber box)</td>
<td>specifically exempted are subject to reduction commitments</td>
<td></td>
</tr>
</tbody>
</table>

Source: Annex 2, Uruguay Round Agreement on Agriculture, WTO.
roles in supporting agricultural and rural development. The least developed countries received exemptions from any reduction commitments.

The URAA set up a Committee on Agriculture to monitor implementation of the Agreement as well as the possible negative effects of the reform program on the least developed and food importing countries. The Committee is now conducting agricultural policy reform negotiations in special sessions under the URAA’s “built in” agenda. The negotiations take into account the experience during the URAA implementation period, the effects of the reduction commitments on world agriculture, nontrade concerns, special and differential treatment for developing countries, and the shared commitment to establish a fair and market-oriented agricultural trading system.

The URAA Reforms Prove Fragile

The experience to date from the URAA implementation period shows that agricultural policy reform is difficult to achieve:

• Trade barriers remain high. In the URAA, countries agreed to reduce their average agricultural tariffs, but the rates remain high. The global, unweighted average bound rate for agricultural commodities is 62 percent; the average bound rate of industrial countries is 45 percent. (The bound rate is the upper limit on tariffs allowed by the URAA). Also, tariffs among countries and across commodities exhibit substantial disparities. Disparities across commodities, for example, tariffs that escalate from bulk to processed agricultural products, can increase the distorting effects of tariffs. TRQ’s have replaced many nontrade barriers, but some TRQ’s have complicated import regimes, often with procedures that are not transparent, and many have very high over-quota tariffs.

• Domestic support recently increased. Although domestic support levels declined early in the implementation period, and some countries shifted part of their domestic support into less distorting programs that are exempt from global trade disciplines, domestic support has recently increased in some countries in response to low world prices since 1998. Even though the URAA placed limits on total, nonexempt domestic support expenditures, there continues to be a disparity in support levels among countries and across commodities.

• Unused export subsidy credits now brought forward. The URAA placed constraining limits on export subsidies for individual commodities, but allowed for some flexibility. Lower usage levels early in the URAA implementation period, when prices were high, enabled some members to bring forward unused levels and apply the subsidies when prices were low and ceilings had been reached.