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Executive Summary

The Millennium Round of the World Trade Organization will be critical in continuing the process of market expansion begun in the Uruguay Round of the GATT. Greater access to international markets is important to the continued growth and prosperity of U.S. agriculture. Trade growth is considered by some analysts to be crucial as U.S. farm programs change and producers become more dependent on commercial markets to maintain the size and scale of their farm and ranch operations.

Some of the most likely areas to be considered for negotiation are:

1. Market Access - TRQ administration, transparency, and guaranteed minimum access will be major issues. Dirty tariffication, methods of tariff reduction, and specific request tariff reductions also will be key issues for market access negotiations. Minimum domestic purchase requirements used by some Latin American countries for grains may emerge as significant impediments to U.S. market access. Beef, pork, poultry, dairy products, grains, fruits and vegetables, oilseeds, sugar, and cotton may be most affected.

2. Export Subsidies - Export subsidy issues will relate to the need to develop a broader and clearer definition of subsidies, the possible inclusion of export credit as an export subsidy, and EU reform of the CAP and its impact on subsidy use. Beef and poultry, dairy products, wheat, rice, fruits and vegetables, wines, and sugar will be most affected by subsidy issues.

3. Domestic Support - Domestic support issues will focus on the amount of cushion available to each country under the AMS cap, the increased use of Green Box policies and possible calls for reductions in their use, and methods for further reducing trade distortions, with one possible alternative being to concentrate efforts on border measure reductions.

4. Sanitary and Phytosanitary Regulations - Negotiations will focus on whether to reopen the URA on SPS, how to handle GMO issues, EU labeling requirements for GMOs, and the need for international standards for GMOs. Most agricultural and food products could be affected if the negotiations are reopened.

5. Technical Barriers to Trade - Technical trade barrier negotiations may focus on transparency of regulations, possible inclusion of GMOs, and the need for harmonization among international institutions. Fruits, vegetables, meats, and grains should be the most affected.

6. State Trading Enterprises - Lack of pricing and operational transparency and the extent to which STEs violate the non-tariff trade barrier principle of WTO will be key issues. This round of multilateral trade negotiations will be the first attempt to discipline STEs under multilateral trade rules. STEs are most prominent in dairy products, grains, cotton, and vegetable oils.
7. WTO Dispute Settlement - Modification of dispute resolution procedures may include the calculation of damages due to improper trade restrictions, product seasonality and perishability issues for agriculture, enforcement, and compliance with WTO rulings.

Other possible areas for negotiation could include:

8. Genetically Modified Organisms - Trade rules regarding genetically modified organisms will focus on whether to include GMOs in the current SPS agreement or TBT agreement, or whether to create a separate GMO agreement, labeling and segregation requirements for GMOs, and the need for international standards for GMOs. Corn, soybeans, beef, pork, poultry, fruits and vegetables are commodities most affected by this issue.

9. Multifunctionality - Multifunctionality, or the use of market intervention and trade distorting policies to abate non-trade concerns, has become increasingly important. EU concerns about food safety and food security, the environment, and rural development are being used to justify calls for the increased use of trade distorting policies. Political stability and food security, fostering the economic well-being of rural peasantry, reducing population pressures in cities, the conservation of foreign exchange, and the importance of stimulating agricultural growth are arguments posed by some Asian countries.

10. Export Sanctions - Though the imposition of sanctions is a domestic policy decision, some issues in the upcoming round of WTO negotiations could affect the future use of sanctions. Given the progress on market opening that was accomplished in the Uruguay Round Agreements, some countries have expressed concern about the impact of further liberalization on food security, possible retaliation by trading partners, and the inequitable distribution of sanction impacts. U.S. rice exports have been impacted the most by export sanctions in recent years.

11. WTO Accession - If China is admitted with equal market access to other countries, U.S. cotton, wheat, corn, tobacco, and textiles may face more competition in foreign markets. U.S. market access will increase, however, partially offsetting the competitive effects. New WTO members will be under rules and disciplines to which they were not previously subjected.

12. Trade and the Environment - Trade and environmental issues will most likely focus on the impacts of increased regulation on competition, methods to ensure that environmental proliferation is not allowed to unduly restrict trade, and the potential for the harmonization or the development of more consistent environmental regulations across countries.

13. Antidumping and Countervailing Regulations - Antidumping and countervailing issues will likely include methodological questions related to consistency of laws regarding the use of positive determinations to establish material injury, the need to establish causality between imports and material injury, and at what point foreign raw materials and foreign processed goods become a domestic product. Cattle, hogs, tomatoes, beef and pork have all been affected by these issues.

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Introduction

The World Trade Organization (WTO) was created by the Uruguay Round Agreements of the General Agreement on Tariffs and Trade (URA), which were an important initial effort to reform agricultural trade. The Millennium, or Seattle, Round of the World Trade Organization (MR-WTO) will be critical in continuing the process of market expansion. Key areas for negotiation will likely include attempts to further discipline export subsidies, examine the role of state-trading enterprises, refine the dispute settlement process, resolve issues related to Genetically Modified Organisms (GMOs), and address a wide range of other issues.

It is important to note, however, that issues unrelated to agriculture often overshadow agriculture and many of the considerations most critical to U.S. producers. Foreign policy, food security, the interests of developing nations, and other strategic issues will likely be more important than agriculture in the Millennium Round. Though these issues may never surface explicitly in the trade policy debate, they are none the less implicitly, and often subtly, considered in many of the policy choices made by the United States and the other industrialized countries. While this may be a frustrating, and an often confusing outcome, it is one of the stark realities of multilateral trade negotiations.

Many U.S. producers are uncertain about the benefits of freer trade and its potential impacts on the U.S. agricultural economy. Some in fact, are calling for only limited U.S. participation in the multilateral trade negotiation (MTN) process. In order to achieve an effective negotiating stance, therefore, U.S. agriculture must examine the key aspects of the existing URA and identify areas for improvement, along with the policy alternatives for achieving these improvements and the potential consequences of these alternatives. This report is designed to assist the farm and agricultural community to identify trade issues that are most likely to result in significant economic gains or losses for U.S. producers.

Greater access to international markets is considered by many to be essential to the continued growth and prosperity of U.S. agriculture. Trade growth is especially important as U.S. farm programs change and producers become more dependent on commercial markets to maintain the size and scale of their farm and ranch operations. U.S. agriculture has undergone dramatic change in the 1990s. New trade policies under the North American Free Trade Agreement (NAFTA) and the URA opened markets previously closed to some U.S. producers, but created additional import competition for others. The 1996 farm bill removed part of the government safety net for some crops, leading to more dependence on markets and greater exposure to additional downside price risk. Economic and political turmoil occurred in the former Soviet Union and other regions of Central and Eastern Europe, and while China emerged as

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a major force in world trade, other Asian economic powerhouses faltered. These changes have had major impacts on U.S. producers, while presenting new opportunities for some and new challenges for others.

Many sectors of U.S. agriculture stand to gain from expanded trade, but the complexity of trade issues, along with rising protectionism in the United States, has slowed efforts to pursue new trade arrangements with other countries. Trade is also a key source of instability affecting U.S. agriculture, most recently manifested by declining farm exports to Asia and increased foreign competition spurred by a stronger U.S. dollar. Market opening trade agreements could stimulate increases in U.S. farm incomes. Many major farm group and commodity association leaders are still supportive of trade expansion, understanding that the United States must keep its market open to trading partners if U.S. exports are to be increased, but insist that any negotiated agreement must provide genuine improvements in market access for U.S. exports.

Trade policy changes, differing rates of economic growth between countries, exchange rate fluctuations, and the emergence of new competition all influence trade to make the international market more risky for U.S. producers. In today’s international market, macroeconomic policies, political instability, and weather may have a larger impact on agricultural trade than trade agreements or the WTO. These agreements, however, often stimulate rapid and more complete economic recovery from adverse events or forces. Mexico’s rebound from the 1994/95 peso crisis occurred more rapidly than from previous crises due partly to NAFTA and increased access to the U.S. market, while at the same time allowing U.S. products to continue to enter the Mexican market at preferential duty rates.

Large shares of important U.S. crops and livestock products are exported each year. In 1998 for example, about 40 percent of U.S. wheat output was exported. U.S. cotton exports accounted for 30 percent of production, while soybean exports represented 37 percent, and corn exports 19 percent. Peanut exports account for about 16 percent of production, while rice exports represent 45 percent. New crops, such as canola and canola meal have export shares of 35 and five percent, respectively. Even though U.S. beef exports account for only 8.3 percent of production, this share has more than doubled since 1988 and is increasing steadily each year. Consequently, agriculture in the United States is becoming increasingly trade dependent and more sensitive to international forces.

U.S. agricultural imports are also growing in importance. While agricultural imports represented only 4.5 percent of total U.S. food consumption in 1998, this share has increased by 50 percent since 1990, reflecting greater dependence on foreign food supplies and more intense competition for some U.S. producers. Imports of coffee, tea, cocoa, bananas, and tropical cooking oils account for virtually all of U.S. consumption of these products. Fresh fruit imports account for 37 percent of consumption, while fresh vegetables represent about 10 percent. Nearly 80 percent of broccoli for processing is imported, compared to 60 percent of all fresh fish, and 40 percent of fresh grape consumption. Because these data represent total annual consumption, import shares for fruits and vegetables vary widely throughout the year. Beef imports account for 10 percent of consumption, while lamb and mutton imports represent 31 percent. Sugar imports represent 22 percent of U.S. consumption.
Economic Impacts of International Trade

In 1998, U.S. agricultural exports were valued at $53.6 billion, 10 percent below the record set in 1996, but more than double the levels of the mid-1980s. U.S. agricultural imports reached $37.1 billion, continuing the growth trend of the 1990s and resulting in a trade surplus of $16.5 billion.

Increasing globalization has meant that U.S. agriculture has become three times more dependent on international trade than the overall U.S. economy. U.S. exports of food and agricultural products accounted for 27 percent of farm cash receipts in 1998. For the U.S. economy, merchandise exports accounted for 6.8 percent of gross domestic product (GDP). When the major categories of agricultural products are examined, however, the degree of trade dependence varies. For bulk commodities, such as wheat, rice, feed grains, oilseeds, cotton, and tobacco, about 10 percent of farm cash receipts were attributed to exports of these products in 1998. By comparison, only six percent of farm cash receipts were represented by intermediate product exports such as wheat flour, vegetable oils, and live animals. Consumer ready food exports such as meats, fruits and vegetables, and other highly processed products represented 10.3 percent of farm cash receipts.

Competitive imports compete directly with U.S. production and are represented by products such as beef, dairy products, sugar, cotton, peanuts, vegetables, fruits, and wines. Noncompetitive imports are primarily coffee, tea, cocoa, and tropical oils and spices. In 1998 competitive agricultural imports were valued at $28.2 billion, representing 76 percent of all U.S. agricultural imports. Noncompetitive agricultural imports were $9.1 billion.

Agricultural exports are important in generating business and economic activity throughout the U.S. economy (estimated from ERS, USDA data). For each dollar of U.S. agricultural exports in 1998, an additional $1.28 was created in additional business activity throughout the U.S. economy, for a total multiplier effect of 2.28. The total economic impact of U.S. agricultural exports was $122.2 billion in 1998, $53.6 billion in exports and another $68.6 billion in related business activity.

Net business surplus from U.S. agricultural trade in 1998 was calculated at $46.5 billion (estimated from ERS, USDA data). This resulted from total economic output of $112.2 billion attributed to agricultural exports minus total economic output $75.7 billion attributed to agricultural imports. While this represents a significant contribution to the U.S. economy, net business surplus from agricultural trade was down 19 percent from 1997. The decline was due to lower agricultural exports, off by 6.3 percent and higher competitive imports which rose by 4.1 percent.

A total of 814,700 jobs were required to support agricultural trade in 1998. One new job was created in the U.S. economy for every $65,800 in agricultural exports. U.S. agricultural trade was responsible for 300,300 farm jobs, 37 percent of the total, and generated $15.5 billion in farm related business activity.
Two-thirds of all jobs and 87 percent of the business activity necessary to support agricultural trade were required in the nonfarm sectors of the U.S. economy, however. Service sectors, such as finance, insurance, and real estate received the most benefit from agricultural trade in 1998, with 195,500 jobs and business activity of $22 billion. Wholesale and retail trade and transport services generated $10.2 billion in business activity and required 163,700 jobs. Food processing required 84,200 jobs and $5.8 billion in business activity to support agricultural trade, while other manufacturing sectors contributing to agricultural trade generated $15.1 in business activity and 71,100 jobs.

U.S. competitive imports of agricultural products had a total economic output multiplier of 2.37 (ERS, USDA). If competitive agricultural imports would have been produced domestically, these products would have required an additional $66.6 billion in supporting goods and services. About 22.5 percent of the economic activity attributed to agricultural imports was at the farm level, while 76.5 percent was attributed to nonfarm sectors such as food processing (8.2 percent) and wholesale and retail trade and transportation (14.8 percent).
Part One

Trade Negotiating Issues in the Millennium Round
Section I. Country Negotiating Positions

Individual country negotiating positions will shape the direction and the final outcome of the MR-WTO. Since each country is attempting to maximize its own benefits from the upcoming agreement, each will have its own negotiating stance which may conflict with the position of other countries. The following section discusses the negotiating positions of the major players in agricultural trade negotiations.

**Market Access** - the United States, the Cairns Group, and many Latin American countries have a goal to increase market access through lower tariffs and larger tariff-rate quotas (TRQ). The Cairns Group, which currently consists of 15 countries including major agricultural traders such as Argentina, Australia, Brazil, Canada, Chile, and New Zealand, would like to see large decreases in bound tariff rates, while Latin American countries would like to gain greater access for fruits and vegetables, sugar, meat, and dairy. However, some of these countries use TRQs to protect certain industries. For instance, the United States currently uses TRQs to protect the sugar, peanut, cotton and dairy industries, while Canada uses TRQs to protect its dairy and poultry industries. Greater TRQ access for those commodities may be difficult to attain. Finally, increased market access for the EU depends a great deal upon the results of the current reform discussions for the Common Agricultural Policy, and how the results of these reforms are integrated into any final agreement.

**Export Subsidies** - with the exception of the EU, most major countries are in agreement that export subsidies should be substantially reduced or eliminated. However, there is discussion concerning the definition of an export subsidy. For instance, the Cairns Group considers export credits to be export subsidies which should be phased out. The EU is wary of further reduction in export subsidies since they use them to keep their products competitive in international markets and ensure the livelihood of their farmers, both of which are stated EU policy goals. Also, the United States does not support the limiting of direct government credits or credit guarantees by the WTO.

**State Trading Enterprises** - the United States would like to negotiate more transparency and stronger disciplines on state trading enterprises (STEs). While some analysts contend that the United States does not use STEs, others argue that the Commodity Credit Corporation (CCC) is an STE as defined by the WTO and the United States has notified the WTO that the CCC acts in certain situations as an STE. Many Cairns Group members maintain STEs such as the Canadian Wheat Board, the Australian Wheat Board, and the Indonesian Badan Ursan Logistik, and are reluctant to negotiate their elimination. These nations, however, might not object to certain reforms, except for Canada, which recently stated that their marketing boards will not be a subject in these negotiations. New Zealand recently passed legislation which would eliminate the New Zealand Dairy Board, replacing it with a national dairy cooperative.

**Domestic Support Policies** - the Cairns Group would like to see an elimination of Blue Box policies while the EU has a desire to maintain them. The United States, following the 1996 Farm Bill, no longer officially has Blue Box policies, but may wish to better define the meaning of what is “trade distorting” and what is not so as to protect current U.S. Green Box policies. This is extremely important
as the Cairns Group and Latin American countries desire to tighten Green Box criteria and would like to see only targeted, transparent and decoupled domestic support. Further, the EU argues that new U.S. Green Box programs such as decoupled payments and disaster relief, are actually trade distorting and should be re-classified as such.

**Multifunctionality** - The overlap of trade policy and non-trade issues began with the debate over trade and the environment during the latter stages of negotiations on NAFTA and has continued since that time. Multifunctionality, or the use of market intervention and trade distorting policies to abate non-trade concerns, such as rural development, has risen in importance. Norway began the most recent debate raising concerns about food security, the environment, and rural development and indicating that countries should be able to use trade distorting policies to address these problems. Japan has supported this view, citing food security as the primary reason. The EU joined the fray by including food security, food safety and quality, protection of the environment, the preservation of finite resources and rural landscape, and fostering rural development as societal goals that justified market intervention by governments. Other supporters of multifunctionality are Korea, India, and Mauritius. Their arguments include the need to maintain political stability and food security, the economic well-being of rural peasantry, reducing population pressures in cities, the conservation of foreign exchange, and the importance of stimulating agricultural growth.

The United States argues than many of these non-trade issues can be addressed by using green box policies. New Zealand, Australia, and Argentina generally oppose the multifunctional approach, arguing that many non-trade concerns can be abated with target, decoupled program support.

**Accession to the WTO** - There are currently 134 members of the WTO. Another 32 countries have applied for admission. Among the most important of these potential entrants are China and Russia.

**China** - China has been intensely negotiating to gain accession to the WTO. Several market access agreements have been developed, such as the one signed with the United States in April 1999, and a subsequent agreement initiated with Australia in July 1999. However, several issues arise when considering China as a member of the WTO. First, China has numerous STEs, and therefore transparency and trade distortion are major issues. Second, while China currently captures only four percent of world agricultural trade, they are very prominent in wheat, maize, oilseeds, edible oil, cotton, textiles, and tobacco. China’s current level of agricultural tariffs range from 40 to 60 percent for those countries with which they have no bilateral agreements, revealing that they have room to significantly increase market access. Finally, many argue that a WTO which does not include the 1.2 billion potential consumers in China, is not a true world trading organization.

**Russia** - The Russian Federation has been an important U.S. trading partner since the early 1970s, purchasing large quantities of U.S. corn, wheat, and soybeans. In more recent years, however, Russia has become a major market for U.S. poultry and is a potential market for other meats and meat products, and high value agricultural products. In 1996, Russia was a net importer of $8.0 billion in
agricultural products. U.S. agricultural exports to Russia were valued at $835 million in 1998, 31 percent less than 1997 and 37 percent below the peak in 1996. Poultry meat ($535 million), beef and pork ($116 million), and snack foods ($29 million) accounted for 84 percent of all U.S. consumer ready food exports to Russia. Exports such as wheat, feed grains, rice, cotton, and tobacco were down two-thirds from 1997, while intermediate goods exports, such as wheat flour and animal fats, had declined 40 percent.

WTO membership will subject Russia and China to all WTO rules and obligations. Economic reform and greater transparency will be one likely result of the accession process. While Russia reformed and privatized its state trading regime for wheat and rice in the early 1990s, imports are under the tight control of the Plant Quarantine Service (PQS) (Young). The extent to which transparency of operations and the potential of the PQS to unduly restrict trade affects imports may require further investigation and monitoring as accession proceeds. WTO accession also should lead to more open markets, increased competition, and lower consumer prices in Russia and China. While there will be some adjustment and possible displacement, the net effects should stimulate trade, economic growth, and infrastructure development. Coupled with lower tariffs and a more open trading regime, these events should provide more market access for U.S. agricultural products over the long term. In addition, the United States will be able to rely on the dispute resolution process of the WTO to ensure market access or compensation should trade disputes arise.
Section II. Agricultural Trade Policies

The URA was a crucial first attempt to undertake substantial reform of trade distorting domestic agricultural policies and border measures. Nontariff barriers, such as quotas were converted to their equivalent tariff levels, while minimum market access requirements were established, export subsidies were brought under disciplinary rules, trade distorting domestic support measures were reformed, and a scientific basis was required for any phytosanitary regulations that might affect imports. A Dispute Settlement Body (DSB) was formed within the WTO, resulting in faster resolution of trade disputes. Despite this progress, if agriculture is seriously involved in the next WTO round, trade policy reform will likely be at the forefront of the negotiating agenda.

Worldwide, agricultural tariffs still average more than 40 percent, well above the average of six percent for manufactured goods. Important issues to consider for further negotiation include: tariffs, tariffication, and tariff-rate quotas, export subsidies, state trading enterprises, sanitary and phytosanitary regulations (SPS), technical trade barriers, GMOs, and the WTO dispute settlement process and procedures.

A. Tariffs, Tariffication, and Tariff-rate Quotas

Under URA provisions, all nontariff barriers were to be converted to tariff equivalents, a process called tariffication. These tariffs were then to be reduced by 36 percent over six years in equal annual installments. Each tariff had to be reduced by a minimum of 15 percent and all tariffs were bound so that they could be reduced further, but not raised without notification to trading partners and compensation for lost market access. Minimum import access requirements were established for products subject to tariffication for which imports represent less than five percent of domestic consumption. Tariff-rate quotas (TRQs) were established to ensure minimum access, with low or no duties applying to amounts within the quota limit and higher duties achieved through tariffication applied to amounts imported which exceeded the quota. Minimum access quotas were specified to increase from three percent of domestic consumption to five percent of domestic consumption during the implementation period. Special temporary safeguards were implemented for products under tariffication which can be imposed if increases in import volumes or declines in domestic prices exceed certain specified limits. In cases where imports were greater than five percent of domestic consumption, measures for maintaining access were to be implemented.

Developing countries were provided special treatment, with longer implementation periods (10 years), lower tariff reductions (24 percent average reduction and 10 percent minimum), and were allowed to set arbitrarily high bound tariffs. The least developed countries were exempt from tariff reductions.
Issues for Consideration

1. **Dirty Tariffication** - the practice of manipulating the tariffication process by either overstating domestic prices or understating world prices has sometimes resulted in high bound tariffs under the URA. Such high bound tariffs provide countries with an opportunity to raise or lower their applied tariffs as market conditions change. This results in an additional barrier to imports as world prices decline. Moreover, as countries prepare to establish their negotiating positions for the Millennium Round, they may be able to accept minimal reductions in high bound rates that are in fact even smaller reductions in the applied rates, thereby avoiding a reduction in the actual level of protection and providing very little improvement in market access. Reductions in bound tariffs will increase trade only if applied tariffs also are lowered.

   Japan’s rice policy provides an example of delayed tariffication and its impact on market access. The tariffication of Japanese rice imports implemented on April 1, 1999 will actually result in lower rice imports (Cramer, Hansen, and Wailes). Japan is projected to import 114,000 metric tons (mt) less than under minimum market access and, as a result, world prices are forecast to fall by $10 per mt. The new tariff regime implemented by Japan will result in an initial tariff of $1,000 per mt, while an additional over-quota tariff will be $3,000 per mt. The total tariff on over quota imports will be $4,000 per mt. Current short grain rice prices are about $270 per mt. These high tariffs are likely to be prohibitive for average quality rice and effectively reduce U.S. rice exports to Japan over the next two years. With an import market share of 50 percent, the United States rice industry will lose market share as these tariffs are implemented. Without substantial reduction in Japan’s applied tariffs for rice, it appears that only high quality California and Arkansas medium-grain rice can compete, but how effectively and for how long remains uncertain.

2. **Tariff Dispersion and Tariff Escalation** - differences in tariff levels among commodities or countries is known as tariff dispersion (Economic Research Service, 1998). Tariffs on oilseeds tend to be lower than tariffs on grains. In the EU for example, soybean tariffs are zero, while bound tariffs on wheat, corn, barley, oats, and rice range from $94/mt for oats to $224/mt for rice (OECD). In order to achieve increased market access, these bound rates and their corresponding applied rates must be reduced together.

   Tariff escalation refers to differences in tariffs for raw and processed products. Tariffs for processed products are typically above tariffs for raw materials. In the United States for example, bound tariffs on soybeans are zero, while the bound tariff on soybean oil is 19.1 percent. Tariff escalation discriminates against imports of processed goods, and provides greater protection for these processing industries, thereby discriminating against the importation of inputs used in the production of processed goods. Further progress in
agricultural trade liberalization can only be achieved if tariff reductions eliminate the discriminatory effects of tariff escalation on processed goods.

3. **Tariff-rate Quotas** - Josling notes that expanding TRQs makes high above quota tariffs irrelevant and increases market access. This assumes, however, that the TRQ is properly administered to allow the guaranteed minimum access quantity to be imported. Experience since the implementation of the URA suggests that TRQ administration is subject to political manipulation and corruption. While TRQs may represent an effective compromise between consumer and producer interests in trade, their effects have come under close scrutiny. If within quota tariffs are reflective of the actual price difference between domestic and world prices, then the TRQ should result in greater market access. If, however, the TRQ is administered in such a way that the within quota tariff exceeds this price difference, then the implementation of the quota can be considered to have decreased market access. Expanding the minimum quota amount of the TRQ is an effective method of increasing market access if the TRQ is properly administered.

   Close monitoring of TRQ administration, domestic and world price differences, and the resultant impacts on quantities imported is crucial for effective market access. The expansion and eventual elimination of TRQs may be an issue raised by some traders, possibly the Cairns Group. While this may be the ultimate goal of trade liberalization, it likely will not be politically acceptable to many other nations, such as the Japan, the EU, and some Latin American countries that use TRQs to manage imports while attempting to mitigate the social and economic impacts of displaced labor from sectors previously receiving high levels of protection.

   TRQs are superior in market access to quotas and licensing schemes, and their tariff structure is transparent, allowing world price signals to be reflected in the domestic supply/demand balance. The critical issue remains the transparency and the administration of TRQs which can be used to close markets to foreign competition, effectively eliminating, or substantially reducing market access.

4. **Tariff Reduction Methods** - many alternatives exist for tariff reduction. It is likely that the merits of each will be debated before a method is agreed upon. It may be that some combination of several methods is adopted. One possible option is the Swiss formula which results in higher tariff reductions for higher tariffs. For example, a 25 percent tariff would be reduced by 50 percent resulting in a new tariff on 12.5 percent, while a 100 percent tariff would be reduced by 80 percent and result in a new tariff of 20 percent (Economic Research Service, 1998) (figure 1). Using this method would result in more tariff reduction than under the linear, or constant percentage reduction method for high tariffs. The Swiss formula may be a compromise approach acceptable to WTO members.
It also would likely result in more effective tariff reduction and greater market access, partially offsetting some of the effects of dirty tariffication. The Swiss method also reduces the impacts of tariff dispersion and tariff escalation.

5. **Specific Request Tariff Reduction** - most tariff reduction methods use a “one size fits all” approach, whether it be the Swiss formula, the linear method, or some other technique. The specific request approach to tariff reduction treats each commodity separately, considering its own unique characteristics. For instance, many producers of seasonal and perishable commodities such as fresh fruits and vegetables face different production and marketing conditions and challenges than producers of grains. The specific request approach would allow the special needs of each product to be considered when negotiating tariff reduction and market access. Thus, seasonal, perishable producers may be granted a longer phase-in period and less overall reduction than other products to allow for more adjustment time and a lower level of potential import competition. However, this method may lead to longer and more complicated negotiations and a perception of inequitable treatment by producers of commodities which receive less favorable treatment.

**Figure 1. Impacts of Alternative Tariff Reduction Methods on Negotiated Tariff**

Slide in Accompanying File

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**B. Export Subsidies**

Export subsidy reduction and elimination may be one of the most contentious issues of the MR-WTO. Both the United States and the Cairns Group are calling for complete elimination of export subsidies. Argentina, Australia, and Canada also are strong and vociferous opponents of export subsidies, citing the adverse impacts on world price, and subsequently on their farmers.

Twenty five countries have export subsidy reduction commitments in their WTO schedules. The EU is the largest user of subsidies, reporting $8.4 billion in 1996 (Economic Research Service, 1998). Cheese, other dairy products, beef and poultry meat, olive oil, grains, and wine are the dominant products receiving subsidies by the EU government. The United States reported subsidies of $121 million in 1996, all for dairy products, with about 80 percent used for non-fat dry milk.

The URA requires that export subsidies be reduced by 21 percent in volume and by 36 percent in government expenditure over six years. Developing countries must make reductions of 14 percent in volume and 24 percent in government outlay over 10 years. Subsidies on additional products were
prohibited and reduction commitments apply to each product subsidized. Flexibility is provided in that subsidy reductions must be met only in the last year of the implementation period (2000).

Throughout the implementation period, all countries are obligated to report subsidy use to the WTO. In 1995 and 1996, the EU accounted for 84 percent of all reported export subsidies. South Africa accounted for about eight percent, followed by Switzerland with 5 percent, the United States with 0.7 percent, Norway with 0.6 percent, and the rest of the world with 2.3 percent. It is important to note, however, that South Africa terminated its export subsidy program in 1997. The EU exceed its export subsidy reduction commitments on seven products in 1996. The largest overrun was on wine at 547 percent, followed by rice at 144 percent, beef and sugar at 116 percent, olive oil at 104 percent, and fruits and vegetables at 102 percent. The only other export subsidy excesses in 1996 were by South Africa for cocoa. While figures for 1997 and 1998 are not yet available, it is expected that the data will show the EU has substantially increased its subsidies on exports of grains and meats due to recent declines in world prices.

Issues for Consideration

1. **Export Credit Guarantees** - many exporters, including the United States, Canada and the EU, use export credit to guarantee private bank loans for the purchase of agricultural products. As price and other subsidies have been disciplined under the URA, credit guarantees may come under closer scrutiny. The Organization for Economic Cooperation and Development (OECD) began negotiations to discipline the use of credit guarantees, but no agreement has yet been reached. In recent years, U.S. export credit guarantees for agricultural products have exceeded $5.0 billion and are used on most goods, from bulk commodities to consumer-ready foods. Credit guarantees provide a competitive advantage for agricultural products, but also may distort markets and price signals.

6. **Redefining export subsidies** - due to low prices and attempts by some governments to circumvent subsidy rules, there will be attempts to develop a broader, more inclusive definition for export subsidies. Along with credit guarantees, the exemption for international food aid may be challenged. The most serious challenge will likely come from export competitors in the Cairns Group and from some food importers.

7. **EU Enlargement and Common Agricultural Policy (CAP) Reform** - as the EU expands to include ten additional countries in Central and Eastern Europe, it is almost certain that farm support costs under the CAP will increase. Even with announced price reductions in the recent CAP reform, the EU will likely exceed its subsidy reduction commitments for wine, fruits, and vegetables. Subsidy reduction commitments for beef and sugar also may be exceeded. It will be important to monitor these events during the MR-WTO negotiations to determine how closely the EU complies with its reduction commitments and whether ‘new’ methods of circumvention will emerge.

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8. **Inward Processing Relief (IPR)** - another emerging issue is the importation of raw products duty free, then the re-exportation of the processed, finished good with subsidy. In 1997, the EU implemented new rules allowing export subsidies on components of processed cheese. EU cheese exports under IPR have increased from 3,000 mt in 1995, 17,000 mt in 1996, to an estimated 65,000 mt in 1997 (EUROSTAT). Other countries have raised concerns that IPR could spread to other products, such as the use of subsidized grains to produce poultry and other meats (Economic Research Service, 1998). The export subsidy reduction commitments of the WTO would be weakened, possibly leading to the increased use of export subsidies on processed products by other countries and downward pressure on world prices.

C. Domestic Agricultural Policies

The URA disciplined domestic agricultural support policies for the first time in trade negotiations. The goal was to decrease the effect of domestic support on trade, and the policies which had the most trade distorting impacts were to be reduced. To accomplish these reductions, domestic policies were divided into three main categories, *Green Box*, *Amber Box*, and *Blue Box*.

**Amber Box** - Domestic agricultural support policies which have the largest potential impacts on trade. These policies include market price support, non-exempt direct payments such as marketing loans and loan forfeit benefits, storage payments, and non-product specific support such as irrigation programs and crop insurance. To reduce the impacts of these programs, there was a need to quantify them. As a result, the *Aggregate Measure of Support (AMS)* was created to measure the amount of trade distorting agricultural policies, and depending upon the nation, AMS was to either decline from or not exceed 1986-88 AMS levels. Developed countries agreed to reduce *Amber Box* programs by 20 percent over the six-year period ending in 2000, and developing countries agreed to a 13 percent reduction by 2004. For the first 24 countries to report data in 1995, all have met or exceeded their reduction commitments for a total of $115 billion of AMS, or 57 percent below base-period levels.

**Green Box** - Domestic agricultural support policies which have minimal trade distorting impacts and are exempt from reduction under the URA. The most commonly discussed policies included in the *Green Box* are those which provide de-coupled payments, that is, direct payments or other support not directly linked to inputs or production. Other policies in the *Green Box* include research and extension programs, domestic food aid, pest and disease control, income insurance, natural disaster relief, and environmental payments. The amount of *Green Box* payments in 1995 totaled $127 billion, a 54 percent increase over 1986-88 levels.

**Blue Box** - Domestic agricultural programs which would otherwise fall into the *Amber Box* category, but were allowed exemption in an effort gain acceptance of the agreement from the EU and the United States. These policies provide production limiting payments based on fixed area, yields or
livestock, or if the base of payments do not exceed 85 percent of base production levels. This category has allowed the United States to maintain loan deficiency payment programs and the EU to maintain compensatory payments, and amounted to $35 billion for the 24 countries reporting in 1995. Blue Box program payments were also included in the base calculation of the AMS.

Since the agreement to reduce trade distorting domestic agricultural support programs was implemented, numerous changes have occurred in domestic agricultural policies, most notably in the EU, Japan and United States. These countries, which accounted for 90 percent of reported AMS and Blue Box payments in use during 1995, now have decreased total use of these programs by 15 percent (EU) to 42 percent (US) to below 1986-88 period levels. In fact, the 1996 US farm bill further reduced use of Amber Box policies and eliminated the use of Blue Box policies. However, most countries reporting domestic support data, 16 out of 19, have increased use of Green Box policies. For instance, even though the United States has significantly reduced its use of AMS policies, but the overall level of support has increased since the 1986-88 base period due to additional payments for food stamps and loan deficiency payments. Domestic support increased to $12 billion in 1998 and at least $16.6 billion 1999 due to disaster relief payments, which also fall in the Green Box.

Issues for Consideration

1. **Current AMS Levels and Future Negotiations** - while many countries such as the United States, Canada, Colombia, New Zealand and Australia had reduced by 1995 their use of Amber and Blue Box policies to less than 40 percent of commitment levels, other countries such as the EU, Norway, South Africa, Brazil, Japan and Korea were still above 60 percent of commitment levels. This indicates that some countries, within the bounds of the agreement, still use a significant amount of trade distorting domestic policies. Also, it reveals that many countries have substantial room under their bounds and may legally increase the use of Amber and Blue Box policies in 1998. The United States could have more than doubled its use of trade distorting domestic policy support and still fall below its negotiated AMS levels. Finally, countries’ willingness to negotiate further reductions may be wavering for two reasons: 1) countries such as the EU, Korea and Japan are only slightly below their commitment levels and would be required to make substantial reductions in domestic policy support should the bounds be negotiated downward, and 2) some countries may want to increase their use of coupled payments as a way to achieve income support to producers and to stimulate development of rural communities.

2. **Green Box Policy Use** - the use of Green Box policies has increased in many countries and has led to the evolution of new exempt policies. However, since Green Box policies are defined as having minimal “trade-distorting effects or effects on production,” there is no quantitative measure of “minimal” nor are there any objective criteria for creating such a measure. Also, there is currently no limit on the use of Green Box policies, so the use of these policies can continue to rise. Finally, some argue that the use of decoupled payments may decrease risk to the producer by ensuring higher income. Decoupled payments
accounted for only 2.6 percent of *Green Box* expenditures in 1995; domestic food aid and infrastructure programs combined for more than 68 percent of such expenditures.

3. **Ignore Domestic Policies** - while it is now accepted practice to include domestic policies in multilateral agricultural trade negotiations, there are some who argue that doing so merely distracts from the goal of decreasing trade barriers and increasing market access (Sumner and Hallstrom). The overall level of support has increased in many countries, and as a result of negotiating domestic policies, the *Blue Box*, which contains trade distorting policies, was created merely to gain acceptance by the United States and EU of the domestic policy reduction section. An alternative approach would be to ignore domestic policies in the negotiation process and instead concentrate on reducing trade barriers, improving market access, and enforcing compliance. If this occurs, trade distorting domestic policies would become impractical because program expenditures would become excessively expensive in the presence of low border barriers that allow other countries unrestricted access to the market.
Section III. Technical Barriers to Trade

The WTO has noted that “classical trade barriers—tariffs and quantitative restrictions—have come down ... attention has turned to “invisible costs” resulting from documentation requirements, procedural delays, and lack of transparency and predictability in ... government rules and regulations.” The emergence of these invisible barriers has created an overall negative trading environment.

Technical barriers to trade (TBTs) are governed under the WTO. The URA resulted in an agreement designed to prevent TBTs from becoming unnecessary restrictions to trade. Technical regulations, packaging, standards, marking, labeling, and procedures for assessing conformity are specified within WTO rules. As tariffs have been lowered and import quotas eliminated, however, TBTs have emerged as a major impediment to trade. During 1996, USDA estimated that U.S. agricultural exports valued at more than $4.97 billion were being subjected to a growing set of restrictive TBTs. More than 300 TBTs have been reported in 63 countries (Roberts and Deremer).

An understanding of the interactions of trade agreements with food quality management systems (FQMS) such as the Codex Alimentarius Commission, the Hazard Analysis and Critical Control Points (HACCP) system, and the International Organization of Standardization (ISO) are crucial for reducing the use of TBTs as restrictions to trade.

While most TBTs are designed to limit or prevent the importation of products that might contaminate domestic animal herds or plant populations, many do not have a scientific basis and are used to restrict trade in order to protect an industry from international competition. TBTs reduce the efficiency of trading firms, often causing long delays at ports while shipments are reinspected and documentation is verified, leading to higher transactions costs. Some shipments may be rejected, resulting in the need to reroute the product or sell to a buyer of last resort, resulting in lower prices to producers. When TBTs are implemented without the support of science, they can become serious impediments to trade by causing retaliation from other countries, slowing commerce, causing a backlog of product, and ultimately, having negative impacts on both consumers and producers. Technical barriers to trade can be grouped into three main categories (Roberts and Deremer):

1) Sanitary and Phytosanitary (SPS) regulations are implemented by countries to protect human, animal, or plant life or health. The primary purpose of most SPS is to protect the safety and the integrity of the domestic and imported food supply. (See Section VI for more information on SPS issues).

2) Consumer measures regulate food safety and quality, including labeling, packaging, pesticide residues, nutritional content, and contamination.

3) Trade measures are implemented to prevent commercial fraud including shipping and financial documentation, standards of identity and standards of measurement.
According to the Codex Alimentarius Commission, its own standards, guidelines, and recommendations are now recognized as the reference point for all national food safety requirements, but many countries have been reluctant to fully recognize these standards because of inconsistencies with their own national food safety regulations.

Article 5 of the URA Sanitary and Phytosanitary (SPS) measures agreement requires all WTO members to conduct scientific and consistent risk assessments. The perception among many food safety experts, however, is that greater international food trade has increased the risk for cross-border transmission of infectious pathogens, especially food-borne illness and disease.

The United States has among the safest food supplies in the world, despite outbreaks of food borne illness and disease. In 1996, for example, 99.1 percent of the domestic food samples taken by the FDA did not contain pesticide residues which exceeded specified tolerance levels. For imported food samples, 97.4 percent were determined to contain no excessive pesticide residues. Even so, consumers and consumer groups remain concerned about the presence of harmful chemicals in food and the effects of food related illness. While some of these concerns may be misplaced, recent outbreaks of e.coli bacteria in meat only serve to reinforce consumer perceptions and fears of tainted food. The impacts of these events on the food industry have been substantial.

**Issues for Consideration**

1. **WTO Rules** - the TBT agreement of the WTO requires transparency of regulations for approval systems, but these requirements have not yet been litigated through the Dispute Settlement Body of the WTO. This issue should be closely monitored to determine how much flexibility may exist in the interpretation and application of WTO rules.

2. **Treatment of GMOs and EU Labeling** - mandatory labeling of GMO products in the EU will certainly be tested in the WTO. It is yet unclear whether the EU’s nontransparent, cumbersome labeling scheme constitutes a technical barrier which is an unnecessary impediment to trade. This issue may be raised by the United States or other affected parties and should be monitored closely.

3. **Harmonization of Regulations Among Institutions** - the WTO, along with the Codex and several other international institutions, appear to have overlapping responsibility governing many aspects of TBT regulation. While this may not be a major point for negotiation, it is an issue which may need to be developed further as the negotiations proceed. Confusion, inconsistency, and misinterpretation regarding the application and use of TBTs may result, leading to a climate favoring the unfettered use of TBTs to impose unnecessary impediments to international trade.
Section IV. State Trading Enterprises

The role and operation of state trading enterprises (STEs) has taken on added importance as nations prepare for the MR-WTO. While the GATT recognized and acknowledged that STEs could distort trade, it did little to establish effective disciplines to reduce those distortions. As a result, it has been charged by some WTO members that STEs can be used to circumvent URA commitments related to market access, domestic support, or export subsidies by either limiting imports or stimulating exports. STEs are likely to be a central issue in any agricultural negotiations. The lack of transparency related to operations and pricing are the major concerns noted by the United States and some other countries.

STEs are defined under the WTO as: “governmental and nongovernmental enterprises, including marketing boards, ... granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through purchases or sales the level or direction of imports or exports” (Economic Research Service, 1998). Josling points out that import purchase decisions made by STEs may be based more on political rather than commercial criteria.

In recent years, STE activity has been concentrated in the trade of grains, butter, and milk powder. About one-third of world wheat trade is accounted for by the Australian and Canadian Wheat Boards (Economic Research Service, 1998). While the EU and the United States maintain government roles in wheat trade, Kazakhstan, Poland, and other Central European countries have boards which co-exist with the private trade. About one-half of world wheat imports are controlled by STEs. China and Japan import through government monopolies. Other countries with state trading agencies, such as Egypt, Pakistan, and Indonesia, allow the private trade to operate.

Vietnam, the world’s second largest rice exporter, along with China and Australia, operate STEs and account for about one-half of global rice exports. STEs account for one-third of world rice imports. Indonesia, the Philippines, China, Japan, Korea, North Korea, and Malaysia utilize STEs to import rice.

The New Zealand Dairy Board had been the primary STE in dairy products, accounting for 30 percent of world trade. Australia, Canada, and Poland also rely on STEs for dairy exports, while the U.S. CCC plays a major procurement and provides for public tender sales. Mexico is the primary dairy importer to use an STE and accounted for 35 percent of world imports in 1998.

Issues for Consideration

1. Inclusion of the Commodity Credit Corporation (CCC) as an STE - the CCC is considered an STE by many members of the Cairns Group because it has statutory authority to acquire commodities and offer them through public tender to the private trade. One issue is that the acquisition of grains, followed by their sale to foreign importers, all under the auspices of the U.S. government, is in fact, a state trading operation.

   One option is the development and adoption of a narrower definition of STEs which would exclude the CCC. This would most likely be viewed as highly self-serving on the part
of the United States and would not garner much support among trading partners. In the process, it is nearly certain that such a change would result in the exclusion of state trading activities by other countries which might not be considered a positive move by some U.S. interests.

2. **Market Power and Restrictions on Competition** - STEs have the market power to operate as a monopolist or monopsonist, reducing producer prices or raising consumer prices. Even with the Canadian Wheat Board, when comparing U.S. grain prices to those in Canada, the U.S. farm prices for wheat and feed barley were higher than in Canada in most periods (Stone et al). After driving down farm prices, STEs can force private firms from the market. The resulting profits may be used to circumvent subsidy reductions and practice price discrimination.

3. **Lack of Price Transparency** - STEs have the ability to cover up export subsidies or import restrictions. Statutory authority also provides STEs with special rights and privileges not available to the private trade.

4. **Distortion of Market Signals** - if STEs use price pooling whereby producers receive the same price regardless of market conditions, then market signals are distorted. The resultant impacts on global resource use, market efficiency, and the environment may need to be considered.

5. **Violation of Protection by Tariffs Principle** - one of the founding principals of the GATT, now part of the WTO, is that countries should use only tariffs to protect markets due to their market and price transparency. STEs with statutory authority to control imports or exports have the potential to implement operational policies which may act as nontariff barriers to trade.

6. **STEs in China, Russia, and Other Accessing Nations** - both China and Russia maintain STEs. While neither country is yet a member of the WTO, both have applied and will likely be admitted in the near future. In China, provincial governments control the domestic marketing of grains and, along with the national government, control imports and exports. It is especially difficult to determine if China’s grain trade is reflective of the actual supply/demand balance in the country or due to policies and processes of the state. Cotton, textile and vegetable oil trade in China are under the control of STEs as well. Procurement of domestic grains is under control of national and regional governments in Russia. Saudi Arabia maintains as STE for barley imports, as does Algeria for wheat and dairy products. The government of Vietnam controls the exports of rice. As these countries continue their accession process to the WTO, the role and importance of STEs in each should be monitored. Negotiating rules related to price and operational transparency may facilitate the accession of countries into the WTO.
Section V. Export Sanctions

A continuing issue for U.S. agriculture is the use of export sanctions and the impact of sanctions on U.S. agricultural exports. Such sanctions, often imposed as part of a broader foreign policy decision, are usually imposed unilaterally by the United States, though some sanctions have had the support of other nations.

An important element in the debate on trade sanctions is the definition of the term “economic sanctions.” A variety of policy actions can be interpreted as being “sanctions,” but the impact on U.S. exports of these various actions can have significantly different impacts depending upon the restrictions imposed in a specific case. A very broad, but generally acceptable, definition of economic sanctions is: “Any unilateral restriction or condition on economic activity with respect to a foreign country or foreign entity that is imposed by the United States for reasons of foreign policy or national security” (U.S. International Trade Commission, p. 1-1).

This definition can include many actions. In the most extreme case, this definition would include a total prohibition on trade with the sanctioned country. Lesser forms of sanctions might include limitations on economic or military aid, limitations on credit, limitations on financial transactions, requirements for registration of exports or imports, or regulatory restrictions that hamper the flow of trade. Sanctions can be implemented on a unilateral or multilateral basis and can apply to specific products or all trade. Import tariffs, import quotas, export taxes, phytosanitary barriers, and other non-tariff barriers typically are not included as a form of trade “sanction.”

Estimates of the impact of sanctions vary widely based on the type of sanctions under consideration. The economic costs of sanctions can include direct costs, or the cost of lost exports sales due to the prohibition of exports or higher consumer costs due to the prohibition of imports from the sanctioned country. In addition, a number of indirect costs that are less easily quantified may also arise. These may include the compliance costs associated with enforcement of any trade sanctions, damage to the exporting country’s reputation as a reliable supplier, lost opportunities for forming critical business relationships or joint ventures, and lost competitiveness as trade opportunities are taken up by firms from other countries (U.S. International Trade Commission, p. 4-1). Estimates of the cost of sanctions for the entire U.S. economy have ranged from $5 billion to $20 billion annually in lost export sales to the target countries during the early to mid 1990s (U.S. International Trade Commission, p. 4-2; Huffbauer). Since agricultural exports accounted for less than 10 percent of total U.S. exports during this period, only a fraction of this loss in export sales would be directly related to agricultural products, but the concentration of the losses could have a major impact on the affected commodities and their prices.

In the recent past, seven countries have been under some form of trade sanctions that have prohibited exportation of U.S. agricultural products. The countries have included North Korea (imposed in 1950), Cuba (1963), Libya (1986), Iraq (1990), Serbia-Montenegro (1992), Iran (1995), and Sudan (1997). In July 1999, the sanctions on U.S. agricultural exports to Libya, Iran, and Sudan were lifted, permitting a
resumption of exports to these nations. The economic status and trade patterns for each of these countries is shown in Table 1. On the whole, the sanctions imposed on these countries have had minimal impact on aggregate U.S. agricultural exports. In 1996, these countries imported a total $6.3 billion of agricultural products, accounting for 1.4 percent of worldwide agricultural imports. Libya and Iran accounted for two-thirds of this 1.4 percent. Imports by these countries accounted for 14 percent of world rice trade, 10 percent of world wheat imports, 4.8 percent of world vegetable oil imports, 5 percent of world barley imports, and 3 percent of corn imports (Jurenas).

Though the sanctions on Cuba and North Korea were imposed in such distant past that data on their past trade with the United States are relatively meaningless in assessing the impact of sanctions on U.S. exports, data on other countries do provide some insight into the impact of sanctions:

$ **Iraq:** In 1989, Iraq was the ninth largest market for U.S. agricultural exports, buying $749 million in agricultural products. At that time, Iraq was the largest single market for U.S. rice exports, purchasing $392 million of rice (the countries of the European Union purchased a total of $498 million in rice during that year). Iraq was also the eighth largest importer of U.S. wheat (purchasing 1 million tons valued at $170 million) and the fifth largest market for U.S. soybean meal exports ($71 million) in 1989.

$ **Iran:** Sanctions were imposed on Iran in 1995. In 1994, Iran was the fifth largest market for U.S. rice exports (purchasing $73 million).

$ **Sudan:** Sanctions were imposed on Sudan in 1997. In 1995, Sudan was the fourth largest market for U.S. dried lentil exports (purchasing $1.3 million).

An important aspect of any action to impose export sanctions is that the burden of any such action tends to fall disproportionately on a relatively small segment of the agricultural sector. That is, because a country’s imports tend to be concentrated in a relatively small number of products, any decision to impose sanctions on that country will impose a large share of the burden on those producers whose products dominate the sanctioned country’s purchases. The loss to U.S. producers of rice export markets in Iran and Iraq provide the strongest example of the disproportionate impact that trade sanctions can impose on a segment of U.S. agricultural producers. An additional issue is the impact of sanctions on U.S. imports from the sanctioned country. Among the nations still facing sanctions, Cuba has the largest capacity to export agricultural products to the United States if sanctions are lifted.

Though the imposition of sanctions is a domestic policy decision, some issues in the upcoming round of WTO negotiations could affect the future use of sanctions. Given the progress on market opening that was accomplished in the Uruguay Round Agreements, some countries have expressed concern about the impact of further liberalization on food security. The primary concern of these countries is that, once dependent on food imports, they would then be exposed to disruptions in supply that could arise if export sanctions, based on either political or economic considerations, are imposed at some future date. Some countries that would
be required to open their markets may demand some form of guarantee that exporters’ capacity to impose sanction be limited. The form that such guarantees might take is unclear, but any such provisions would have to be consistent with WTO’s existing rules of compliance. One form of compliance might permit an importing country to retaliate against an exporting country that imposes sanctions on agricultural exports by imposing tariffs on imports on non-agricultural goods exported from the country imposing the sanctions. Such an arrangement would be comparable to the existing rules of WTO, which permit an exporting country to impose retaliatory tariffs when another country has violated the rules governing import access.

The U.S. imposition of tariffs on products from the European Union following the recent banana and beef decisions are examples of the use of these rules. Such rules would be of limited effectiveness, and while feasible in those cases where export restrictions are imposed for economic reasons (e.g., exports are restricted in response to higher prices), the rules would be ineffective in those cases where comprehensive sanctions prevent exports of both agricultural and non-agricultural products to the target country. In such cases, the complete termination of trade between the two countries would leave the importing country with no targets for retaliatory tariffs.

An additional issue is the impact of sanctions on U.S. imports from the sanctioned country. Among the nations still facing sanctions, Cuba has the largest capacity to export agricultural products to the United States if sanctions are lifted. Sugar, tobacco, and winter vegetables might be among the products that would be imported by the United States if sanctions on Cuba are lifted (U.S. International Trade Commission, pp. 3-5 to 3-7).

**Issues for Consideration**

1. **Retaliation by Importing Countries** - a country that is the target of sanctions on non-agricultural products may retaliate by imposing tariffs on imports on goods not subject to the sanction. For instance, even though the United States placed sanctions on Burma in 1997 prohibiting new investment by U.S. citizens and companies, Burma (Myanmar) could retaliate by implementing tariffs or other import restrictions on U.S. agricultural products.

2. **Inequitable Distribution of Burden on U.S. Producers** - while the United States may place sanctions prohibiting exports to a particular country, those sanctions will only affect producers of those products which are traditionally exported to the targeted country. For instance, Iraq was the largest single market for U.S. rice exports, purchasing $392 million the year prior to being placed under sanctions by the United States. Losing this market had a significant negative impact on U.S. rice producers and has allowed other rice producing countries to increase their share of the market.

3. **Food Security** - some countries have expressed concern about the impact of further trade liberalization on food security. A primary concern of these countries is that once they become dependent on food imports, they may become exposed to disruptions in supply that
could arise as a result of export sanctions imposed at some future date. Therefore, some countries may require some form of guarantee which limits food exporters’ capacity to impose sanction in return for reducing import barriers and allowing greater market access.
<table>
<thead>
<tr>
<th>Country</th>
<th>Date of Sanctions</th>
<th>Sanctions in Force</th>
<th>Population (Millions)</th>
<th>GDP (Billion)</th>
<th>GDP Per Capita</th>
<th>Agricultural Products</th>
<th>Exports (Billion)</th>
<th>Export Products</th>
<th>Export Partners</th>
<th>Imports (Billion)</th>
<th>Import Products</th>
<th>Import Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Korea</td>
<td>1950</td>
<td>Yes</td>
<td>21</td>
<td>$21.8</td>
<td>$900</td>
<td>Rice, Corn, Potatoes, Soybeans, Pulses, Cattle, Pigs, Pork, Eggs</td>
<td>$0.9</td>
<td>Minerals, Food, Fish</td>
<td>China, Japan, S. Korea, Germany, Hong Kong</td>
<td>$1.9</td>
<td>Petroleum, Grain, Coal</td>
<td>China, Japan, Hong Kong, Germany, Russia, Singapore</td>
</tr>
<tr>
<td>Cuba</td>
<td>1963</td>
<td>Yes</td>
<td>11</td>
<td>$16.9</td>
<td>$1,540</td>
<td>Sugarcane, Tobacco, Coffee, Rice, Potatoes, Beans, Livestock</td>
<td>$9.0</td>
<td>Sugar, Nickel, Tobacco, Shellfish, Citrus, Coffee, Medical Products</td>
<td>Russia, Netherlands, Canada</td>
<td>$3.2</td>
<td>Petroleum, Food, Machinery, Chemicals</td>
<td>Spain, Russia, Mexico</td>
</tr>
<tr>
<td>Libya</td>
<td>1986</td>
<td>No</td>
<td>5.7</td>
<td>$38</td>
<td>$6,700</td>
<td>Wheat, Barley, Olives, Dates, Citrus, Vegetables, Peanuts, Meat, Eggs</td>
<td>$9.0</td>
<td>Crude Oil, Petroleum, Natural Gas</td>
<td>Italy, Germany, Spain, France, Turkey, Greece, Egypt</td>
<td>$6.2</td>
<td>Machinery, Transport, Equipment, Food</td>
<td>Italy, Germany, UK, France, Turkey, Tunisia, Eastern Europe</td>
</tr>
<tr>
<td>Iraq</td>
<td>1990</td>
<td>Yes</td>
<td>21</td>
<td>$42.8</td>
<td>$2,000</td>
<td>Wheat, Barley, Rice, Vegetables, Dates, Fruit, Cotton, Cattle, Sheep</td>
<td>N/A</td>
<td>Crude Oil</td>
<td>Jordan, Turkey</td>
<td>N/A</td>
<td>Manufactured, Products, Food</td>
<td>France, Turkey, Jordan, Vietnam, Australia</td>
</tr>
</tbody>
</table>

Export and Import figures include all products, agricultural and non-agricultural.
Table 1. Countries Under Sanctions by the United States (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Date of Sanction</th>
<th>Sanction in Force</th>
<th>Population (Millions)</th>
<th>GDP (Billion)</th>
<th>GDP Per Capita</th>
<th>Agricultura l Products</th>
<th>Exports (Billion)</th>
<th>Export Products</th>
<th>Export Partner s</th>
<th>Imports (Billion)</th>
<th>Import Products</th>
<th>Import Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>1997</td>
<td>No</td>
<td>33.6</td>
<td>$26.6</td>
<td>$875</td>
<td>Cotton, Groundnuts, Sorghum, Millet, Wheat, Gam, Sesame, Sheep</td>
<td>$.62</td>
<td>Cotton, Sesame, Livestock, Meat, Gam</td>
<td>Saudi Arabia, UK, China, Italy, Arabic</td>
<td>$1.5</td>
<td>Food, Petroleum, Industrial Goods, Machinery, Medicine, Chemicals, Textiles</td>
<td>Saudi Arabia, S. Korea, Germany, Egypt</td>
</tr>
</tbody>
</table>

Source: CIA Factbook, Central Intelligence Agency
Export and Import figures include all products, agricultural and non-agricultural.
Section VI. Sanitary and Phytosanitary Regulations

Sanitary and phytosanitary (SPS) regulations are implemented by countries to protect human, animal, or plant life or health. The safety and integrity of the domestic and imported food supply is a primary justification for many SPS measures. Sanitary regulations are used to ensure that animal based products such as meats, poultry, and dairy products meet or exceed specified standards. Phytosanitary regulations are applied to fruits, vegetables, bulk commodities, and other plant based products to ensure that they comply with specified phytosanitary standards.

Under provisions of the URA, sanitary and phytosanitary (SPS) regulations must rely upon the use of scientific risk assessment to be implemented or maintained as valid trade restrictions. Primary provisions of the URA SPS agreement included:

• **Basic Rights and Provisions:** SPS measures for the protection of human, animal or plant life or health must be based on sound science, and may not discriminate between members where identical or similar regulations prevail.

• **Harmonization:** SPS measures based on international standards in the Codex Alimentarius Commission (Codex), the International Organization of Epizootics (OIE), and the International Plant Protection Convention (IPPC). SPS regulations must be based on relevant international standards when such measures exist. Higher levels of protection may be used, however, if a country chooses to do so; however, these deviations must be justified.

• **Equivalence:** Importing countries must allow products from exporters using different SPS measures so long as the exporter objectively demonstrates that its SPS measures achieve the importer’s desired level protection.

• **Risk Assessment:** Scientific evidence, scientific process and methodology, inspection, sampling, testing, ecological and environmental conditions, and quarantine or other appropriate treatments must be applied. Temporary import restrictions are allowed if unfamiliar risks arise, but scientific risk assessment and evaluation of the temporary measure must be conducted.

• **Recognition of Insect or Disease Free Zones (Regionalization):** Pest or disease free areas within an export country may be recognized so long as the export country objectively demonstrates to the import nation that the zone is free of the insect or disease, is likely to remain free, or the incidence of contamination is low. The burden of proof rests with the exporter. Prior to the adoption of these provisions most countries required that the entire exporting nation be free of a particular insect or disease before allowing imported products. These measures have been used by Argentina and Mexico to export fresh/chilled beef and avocados, respectively, to the U.S. market.

The adoption of the regionalization provisions was a major contribution of the URA SPS agreement. Argentina, Australia, Canada, the EU, Japan, New Zealand, Thailand, and the United States
led the SPS negotiations and have been the most progressive countries in applying the new regulations. U.S. tomatoes have gained access to Japan, while New Zealand has agreed to accept salmon from Canada and Australia has agreed to import cooked poultry. Regulatory transparency remains a problem. By 1998, 80 WTO members had yet to make notification of proposed SPS measures (Economic Research Service, 1998). Most were low income countries and members of the EU. Most major export and import nations are attempting to comply with URA provisions related to SPS. All formal disputes over SPS have so far been between countries with rigorous standards and enforcement policies. This somewhat negates claims that the new SPS measures may foster assaults on the relatively high food safety and environmental standards of developed nations. Evidence also suggests, however, that some of the most crucial tests of the effectiveness and credibility of the WTO may be directly or indirectly related to the use of SPS as unfounded barriers to trade.

Issues for Consideration

1. **Reopening of SPS Agreement** - some countries, mainly in the EU, have indicated that the MR-WTO would be an appropriate forum to reopen the URA SPS agreement. The primary objectives would be to expand product coverage, pursue upward harmonization, fine tune existing provisions, or even to gut the existing agreement and renegotiating in its entirety. Other countries, however, are opposed to reopening of the agreements because in their view the present process is effectively meeting the obligations of the agreement, concerns about the length of time required to renegotiate new protocols, and the belief that any reopening would result in attempts to increase standards to unnecessarily high levels. The progress of this issue should be monitored.

2. **Inclusion of Genetically Modified Organisms (GMOs)** - it is unclear if the SPS agreement of WTO provides adequate guidance to resolve issues related to the acceptance of GMOs and this issue may be one of the most contentious of the MR-WTO. Much of this debate has transpired between the United States and the EU, but other countries could soon become involved. The United States uses a Coordinated Framework approach for the regulation of biotechnological product development. Only the final product and its uses are subject to regulation. The EU has developed a separate regulatory system for GMOs which regulates both the process of production and the final product. The EU system is cumbersome and time consuming, requiring as much as three times longer for approval than the U.S. system. The protracted approval process in the EU cost U.S. exporters of GMO corn $200 million in lost sales in 1998 (FAS, USDA).

3. **Labeling Requirements in the EU** - GMO labeling requirements imposed by the EU are not based on scientific evidence, and are instead evolving as a consumer information issue. EU scientists agree that GMOs are safe for consumption and the environment, but EU governments want to provide consumers with information so that choices can be made between GMO and non-GMO products. Any labeling scheme will likely have negative connotations, discriminate against GMO products, and therefore, reduce their sales. For these reasons, coupled with the lack of scientific basis for mandatory labeling, the United States opposes the EU labeling scheme.
4. *The Role of International Standards* - there are no international standards which mandate the regulation of GMOs or regulatory processes among countries used to approve them. OECD is attempting to develop a process of harmonization. In addition, there are no international standards for the regulatory process of adopting SPS measures; however, Codex is currently working on a set of standards. Another option is for the WTO to adopt a more prominent role in the SPS mediation process. Without a transparent process, it may be possible for countries to prolong approval processes unnecessarily and to delay the presentation of scientific evidence. Consequently, the issue of process transparency is important and should be monitored.
Section VII. Agricultural Trade and Environmental Issues

The rising level of environmental regulations in developed countries has created an emerging set of issues in agricultural trade policy. As the cost of compliance for environmental regulations has increased, the potential impact of such regulations on producers’ export competitiveness has become an increasingly important issue.

At least three issues must be examined when considering the relationship between environmental regulation and international trade. These issues are as follows: 1) the potential impact of environmental regulations on international competitiveness and the pattern of trade; 2) the potential impact of regulatory harmonization across countries as a requirement for trade; and 3) the potential proliferation of environmental trade barriers.

Issues for Consideration

1. *International competitiveness* - a major concern in many developed countries is that environmental regulations will have a negative impact on the international competitiveness of a nation’s industries. This concern is typically expressed in one of two forms. The first concern is that, with trade liberalization, firms will move their production to countries with weak environmental regulations to avoid the cost of such regulations. The second concern is that, with trade liberalization, nations will be forced to weaken their environmental regulations in an attempt to prevent the migration of firms to countries with weaker regulations.

Several studies have been conducted on the impact of environmental regulations on international competitiveness and the pattern of trade, few of these studies have examined the impact of environmental regulation on agricultural trade. Most studies have examined the impact of environmental regulations on international trade in industrial products.

Though the evidence is somewhat mixed, most studies have concluded that environmental regulations have not contributed to a major change in the trade patterns of industrial products. Studies that examined the impact of the cost of environmental regulations on the trade balance of industrial products have found, for example, that such regulations have not had a significant impact on the trade balance of most U.S. industries. Such studies have typically examined the impact of a variety of factors – including wage rates, exchange rates, and the cost of environmental regulations – and have not been able to find a consistent relationship between the cost of regulations and the trade balance of an industrial sector. One explanation for this result is that environmental regulations are only one of many factors that affect an industry’s international competitiveness. For example, the chemical industry in the United States is heavily regulated but consistently hold a balance of trade surplus. If the cost of environmental regulations was a major factor in international trade patterns, then it would be expected that the chemical industry would migrate to other countries and the United States would be expected to be a net importer of chemical products. Another
explanation is that many developed countries enacted environmental regulations at approximately the same time and have similar levels of expenditures on environmental compliance (Table 2). If this is true, then the competitive impact of such regulations would be expected to be minimal among these countries.

The applicability of such studies to agricultural trade may be limited by two factors. First, until the past decade, many environmental policies in agriculture such as the Conservation Reserve Program and the Environmental Quality Incentives Program were voluntary, rather than mandatory, in nature and employed public subsidies, rather than regulatory penalties, to achieve environmental objectives. Such policies would not be expected to have a significant impact on the trade competitiveness of agricultural producers. Stronger environmental policies in agriculture, including regulations that require producers to pay the compliance cost of such regulations, represent a significant change in agricultural policy that impose greater cost on producers. Second, the impact of such regulations on trade competitiveness depends, as in other industries, on a variety of factors. For example, the share of total cost of production created by such regulations, the availability or creation of lower cost methods of complying with such regulations, and the regulatory costs faced by competitors in other nations would be factors in determining the impact of environmental regulations on international trade. As with other industries, additional factors – the cost of other inputs, the productivity of the industry, or exchange rates – may play a greater role in determining international trade patterns than do environmental regulations.

2. Regulatory Harmonization as a Requirement for Trade - given the growing impact of environmental regulations on agriculture, a frequently mentioned alternative for future trade negotiations is that countries could eliminate any competitive disadvantages by harmonizing environmental regulations. Though such proposals often lack specific details on how such harmonization would be accomplished, one of two methods would...

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2Though no data are available on the share of total cost created by environmental regulations in agriculture, data from manufacturing industries suggests that such costs vary widely among industries. For example, two common measures of the cost of environmental regulations are (a) the percent of total capital expenditures that are spent on pollution abatement and (b) the gross annual abatement costs measured as a percent of the value of shipments in an industry. In essence, these measure (a) the share of capital investment devoted to environmental regulations and (b) the share the value of shipments consumed by the gross annual operating costs of complying with environmental regulations. In 1991, industries ranged from as high as 25 percent of total capital expenditures on pollution abatement (petroleum and coal products) to as low as 0.73 percent (printing and publishing) and 1.75 percent (non-electrical machinery). For all industries, 7.5 percent of new capital expenditures were devoted to pollution abatement costs. Using the second measure, industries ranged from as high as 1.8 percent of the value of annual shipments being devoted to environmental compliance costs (petroleum and coal products) to as low as 0.15 percent (printing and publishing) and 0.24 percent (non-electrical machinery). For all industries, the gross annual cost of pollution control was 0.62 percent of the total value of shipments (Jaffe, et al).
presumably be used to achieve such harmonization. Either negotiators would have to negotiate directly on a shared set of regulations that all countries would agree to follow, or countries would be permitted to impose trade barriers on imported products that were not produced under environmental regulations similar to those required of domestic producers.

The first of these alternatives – the negotiation of shared environmental standards – would represent a major expansion of the negotiating responsibilities granted to the WTO. Such negotiations would be required to encompass a nearly overwhelming variety of environmental standards on a wide range of environmental factors – water quality, air quality, or wildlife habitat preservation, to name a few. Trade negotiators typically have not dealt with such detailed dimensions of policy. In food safety, for example, negotiators have dealt only with the principles to be used in resolving disputes and have not dealt with the detailed issues required to achieve harmonization in every aspect of food safety regulations. It is doubtful either that countries would be willing to grant such authority to their negotiators or that negotiators would be able to deal with the complex detail of negotiating harmonized environmental standards common to all trading partners.

The second of these alternatives – the use of trade restrictions to achieve environmental harmonization – would be perhaps be more feasible from a negotiating standpoint, but would raise other issues. A primary issue would be one of measuring the impact of environmental regulations on trade and determining when import restrictions were justified. As noted earlier, very little data exists on the impact of environmental regulations on producers’ costs, and virtually no data exists comparing such costs across countries. Consequently, determining whether the costs of environmental regulations were affecting trade patterns – and whether trade restrictions were justified to harmonize such costs – presents a major challenge in implementing any such agreement.

3. Potential Proliferation of Environmental Trade Barriers - a final issue for consideration is the potential proliferation of trade barriers that might occur if countries are permitted to use trade restrictions as a means of achieving harmonization of environmental regulations. Again, though many proposals for achieving regulatory harmonization do not include detailed provisions for how such harmonization might be achieve, recent history might be useful in considering the impact of harmonization on U.S. agriculture.

As noted earlier, it is unlikely that negotiators could successfully establish common environmental regulations for all trading partners. Instead, if harmonization is to be achieved by permitting countries to use trade barriers such as tariffs for achieving harmonization (i.e., if countries are permitted to impose tariffs – or outright bans – on imports that fail to meet domestic environmental standards) then a system similar to that used for sanitary and phytosanitary regulations would likely be adopted by negotiators. For example, the Uruguay Round Agreement requires that any phytosanitary regulations
imposed on imports meet the standards that such regulations must be non-discriminatory, or provide equal treatment for domestic and imported products, and based on science.

Presumably, any agreement that permitted countries to impose trade barriers for environmental purposes would be based on this same model. In recent years, disputes have arisen on wide variety of sanitary and phytosanitary regulations, and the difficulty of resolving these disputes is apparent. If countries were permitted to impose trade restrictions for environmental purposes, would this cause a proliferation of trade barriers and give rise to a new set of disputes over the scientific validity of such barriers? And if such a proliferation occurred, would U.S. producers – who commonly assume that harmonization might be beneficial – be the target of a new round of trade restrictions on exports based on environmental rather than phytosanitary regulations? Though it is impossible to determine the likely outcome of any such negotiations without knowing the details of such an agreement, any movement toward harmonization that creates the potential for a proliferation of trade barriers must be evaluated for both its impact on those U.S. producers who might gain when such rules are applied to products imported into the United States and its impact on those U.S. producers who might face additional restrictions on their ability to export in the face of newly proliferating trade restrictions.
Section VIII. Dispute Resolution

The development of a streamlined dispute settlement process was one of the objectives of the Uruguay Round of GATT. Many contend that the Dispute Settlement Body (DSB) created by the URA, along with its dispute settlement process, is a marked improvement over the GATT system based on consensus and the use of veto power by single member nations. Since its inception in 1995, the DSB has settled five important SPS and other agricultural cases. The EU hormone ban, the EU banana case, the EU-Brazil market access case, and the U.S. challenge of Japan’s varietal testing requirements on fresh fruit. It is almost certain that both the hormone and the banana case would have been vetoed by the EU under the former GATT process and would have not been settled. Further, there have been more agricultural cases adjudicated before the URA DSB of the WTO than during any previous period of time (Economic Research Service, 1998).

The primary result of the URA DSB is that the dispute settlement process among contracting parties of the WTO is one of litigation rather than the consensus-based process used under the GATT. Major changes in the process of the DSB are: 1) the automatic formation of a dispute settlement panel; 2) panel reports cannot be vetoed by a single WTO member; 3) adoption of the report and its findings is automatic unless appeal is exercised; and 4) the panel is directed to make an objective assessment and determination in each case.

While the DSB of WTO is much faster and decisive than the GATT, there are several issues worth noting which might be considered to improve the agricultural dispute settlement process.

Issues for Consideration

1. Calculation of Damages - in both the hormone and the banana case the requested damages by the United States were reduced by one-half by the DSB. This substantial reduction has raised concern among some parties that the process of damage calculation should be reviewed to determine its objectivity and the extent to which it may subject to manipulation. An objective, transparent process would allay these fears and lead to a more credible perception of the process.

2. Seasonality and Perishability of Products - there is little evidence that the DSB accounts for either the seasonality or perishability of agricultural products. A faster preliminary ruling process would result in the expeditious return to normal trade and reduce the potential for shrinkage, spoilage, or the complete loss of food products due to dispute. While this may be beyond the current purview of the DSB, it is an issue which may take on increased importance in the future.

3. Enforcement, Compliance, and Credibility - concerns have been raised about the ability of the WTO to monitor and enforce its own decisions to ensure that countries comply with DSB rulings. The WTO is an organization of sovereign nations bound together by mutually agreed upon rules and standards. It appears unlikely that there is any mechanism, beyond force, or threat of force, to ensure that members will accept adverse rulings and comply with their multilateral obligations. The most likely solution to
this issue rests with each country is maintaining its capability to ensure that judgements in its favor are under compliance. Without this, the WTO may revert to a system of ineffective, irrelevant rulings, having little or no credibility.
Section IX. Anti-Dumping and Countervailing Duty Petitions

Unfair foreign pricing and the use of export and production subsidies distort trade and may adversely restrict businesses activity, industrial development, and competition. Antidumping and countervailing duty legislation is designed to mitigate the effects of unfair foreign pricing and trade distorting subsidies. There are special provisions related to regions, agriculture, and the semi-finished products analysis which have been applied to recent agricultural cases. There does appear to be, however, a reluctance to use these provisions on a widespread basis.

Trade policy changes, differing rates of economic growth between countries, exchange rate fluctuations, and the emergence of new competition all influence trade to make the international market more risky for U.S. producers. Concurrently, the likelihood of increasing protection by other countries should be considered, especially given the present backdrop of sagging economic growth in Asia, growing unemployment in the European Union, and the prospects for economic decline in parts of Latin America.

Provisions of the URA are generally consistent with current U.S. trade law. WTO AD/CVD provisions now apply to all members, not only those who choose to abide by them as was the case under GATT. Consequently, the transparency and due process provisions of these policies are important to ensure that AD/CVD orders do not become nontariff trade barriers.

When price comparisons are made between countries under the URA, allowances are made for conditions and terms of sale, taxation levels, physical product characteristics, levels of trade, and any other differences which affect price comparisons. Differences in import taxes and profits are also considered. Allowances are made for the conversion of prices into a common currency for purposes of comparison.

Import injury determinations shall be made on positive evidence and involve an objective examination of both (a) the volume of the dumped imports and the effect of the dumped imports on prices in the domestic market for like products, and (b) the impacts of these imports on domestic producers. Imports shall be investigated to determine whether there has been a significant increase in imports, either in absolute terms or relative to production or consumption of the product. Authorities shall investigate price undercutting by making a price comparison between the price of the product of the importing member and the price of the dumped imports. Import price effects on the extent to which domestic prices have been depressed or price increases have been prevented shall be investigated. No one or several of these factors can provide decisive guidance.

It must be demonstrated that the dumped imports are causing injury and that there is a causal relationship between the dumped imports and the injury to the domestic industry. Any known factors other than dumped imports which are injuring the industry must also be considered in reaching a decision. These factors may include the volume and prices of imports not sold at dumping prices, contraction in demand or changes in patterns of consumption, restrictive trade practices, developments in technology, and productivity and export performance of the domestic industry. Injuries caused by these other factors must not be attributed to the dumped imports. In cases where injury is threatened by
dumped imports, the application of antidumping measures shall be considered and decided with special care.

Issues to Consider

1. **Regional Industry** - the use of a regional industry is used only sparingly in AD/CVD petitions. More use may be appropriate when analyzing agricultural products, especially those which have production concentrated in a limited region of the United States during a specified period of the year, or season.

2. **WTO Positive Determination** - the current U.S. standard requires a finding of ‘no reasonable indication of material injury’ in order for a petition to move forward. The WTO requires a positive determination that there is evidence of material injury. This may be an issue to raise in order that the two legal statutes become more closely aligned.

3. **U.S. Material Injury Determination** - the present statute requires only that imports are a cause of material injury, not that imports are the most important, or even an important cause of material injury. Ranking causes of material injury would establish the priority of each cause. If imports were not among the top three causes of material injury, then the petition would be dismissed.

4. **Consistent Methodology** - a consistent methodology to determine the point at which foreign goods become U.S. products may need to be developed. In the live cattle petition against Canada and Mexico, it was unclear when Mexican stocker cattle became U.S. cattle and when Canadian feeder cattle became U.S. fed cattle. It is likely that similar problems will occur in other analyses involving agricultural goods. A standard to determine at which stage of production a foreign raw material or live animal becomes a U.S. product may need to be considered.
Section X. Conclusions and Implications

The Millennium Round of the World Trade Organization will be critical in continuing the process of market expansion begun in the Uruguay Round of the GATT. Greater access to international markets is considered by many to be essential to the continued growth and prosperity of U.S. agriculture. Trade growth is considered by some analysts as especially important as U.S. farm programs change and producers become more dependent on commercial markets to maintain the size and scale of their farm and ranch operations. But trade has created additional import competition for some U.S. producers and additional market instability for others.

Issues carrying over from the URA will relate to increased market access, reduction of export subsidies, possible further discipline of domestic programs, fine tuning or reopening of the sanitary and phytosanitary agreement, technical barriers to trade, and revisiting dispute settlement. New WTO issues most likely to emerge will include: trade and acceptance of genetically modified organisms and how they may be included in the agreement, export sanctions, accession issues for China, Russia, and other new WTO applicants, environmental issues, multifunctionality, animal welfare, and differing negotiating positions among countries.

Dirty tariffication, TRQ procedures and administration, and differing methods of tariff reduction will emerge as key issues affecting negotiations on market access. Export subsidy issues will relate to possibly redefining subsidies, the possible inclusion of export credit guarantees, and EU reform of the CAP and its impact on subsidy use and program costs. Domestic support issues will focus on the amount of cushion available to each country under the AMS cap, the increased use of Green Box policies and possible calls for reductions in their use, and methods for further reducing trade distortions, with one possible alternative being to concentrate efforts on border measure reductions.

Technical trade barrier negotiations should center on transparency of regulations, possible inclusion of GMOs, and the need for harmonization among international institutions. State trading enterprise issues will include lack of pricing and operational transparency, and the extent to which STEs violate the non-tariff trade barrier principle of WTO. This round of multilateral trade negotiations will be the first attempt to discipline STEs under multilateral trade rules. Sanitary and phytosanitary negotiations will focus on whether to reopen the URA on SPS, how to handle GMO issues, EU labeling requirements for GMOs, and the need for international standards for GMOs.

Trade and environmental issues will most likely focus on the impacts of increased regulation on competition, methods to ensure that environmental proliferation is not allowed to unduly restrict trade, and the potential for the harmonization or the development of more consistent environmental regulations across countries. Modification of dispute resolution may include the calculation of damages due to unfounded trade restrictions, product seasonality and perishability issues for agriculture, enforcement and compliance with WTO rulings, and the ultimate credibility of the WTO dispute settlement body and process. Antidumping and countervailing issues will likely include methodological questions related to processed goods and when the become a domestic product, consistency of laws regarding the use of positive determinations to establish material injury, and the need to establish causality between imports and material injury.
Multifunctionality, or the use of market intervention and trade distorting policies to abate non-trade concerns, began with the debate over trade and the environment during the latter stages of negotiations on NAFTA and has continued since that time. Many argue that countries should be able to use trade distorting policies to address non-trade problems. Japan and the EU support this view, citing food security, food safety, environmental quality, and the preservation of rural lifestyles as the main reasons.
Part Two

Overview of Agricultural Trade Situation and Issues
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Agricultural Trade Overview

U.S. agricultural exports have increased 42 percent in tonnage since 1985, growing from 118 mmt to a peak of 167 mmt in 1996. Concurrently, the value of U.S. agricultural exports more than doubled, from $29 billion to $60 billion. Since then, exports have declined 18 percent in tonnage and 13 percent in value, dropping to $52 billion in 1998. About 90 percent of the drop in tonnage is due to lower exports of wheat, feed grains, and oilseeds, most of which was previously destined for Asian markets. The decline in export value was due to lower commodity prices as tonnage for red meats and poultry, dairy products, vegetables, fruits, cotton, and rice has continued to rise.

While U.S. agricultural exports to Asia have fallen due to recession, Japan remains the number one market for U.S. agriculture with purchases of $9.1 billion in 1998. Other top markets in 1998 were the European Union ($7.9 billion), Canada ($7.0 billion), Mexico ($6.2 billion), and Korea ($2.2 billion). Taiwan ($1.8 billion), Hong Kong ($1.5 billion), China ($1.3 billion), Egypt ($904 million), and Russia ($835 million) rounded out the top ten markets for U.S. agricultural exports.

U.S. agricultural imports have increased 88 percent since 1985, going from 17 mmt in 1985 to 32 mmt in 1998. Import value expanded by 85 percent during the same period, from $20 billion to $37 billion. Imports of feed grains, fruits, vegetables, and vegetable oils have all doubled since 1985, while imports of red meats have increased 18 percent. One of the fastest growing imports has been malt beverages, increasing 106 percent since 1985. Major imports suppliers in 1998 were Canada ($7.8 billion), the EU ($7.4 billion), Mexico ($4.7 billion), Indonesia ($1.4 billion), and Colombia ($1.3 billion). Other top 10 suppliers were Brazil ($1.2 billion), Australia ($1.1 billion), New Zealand ($958 million), Thailand ($749 million), and China ($741 million).

Agriculture has been one of the few U.S. industries to consistently generate a trade surplus, doing so each year since 1960. The peak U.S. agricultural trade surplus occurred in 1996 at $27 billion. Since then, the agricultural trade surplus has fallen 44 percent to $15 billion in 1998.

Figure 2. US Agriculture Trade 1970 - 99

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Section I. Animals and Animal Products

**U.S. Cattle Trade, 1985 - 1998**

The United States is a net importer of cattle, typically importing about ten to twenty times as many head as it exports. The United States exported 285,000 head of cattle in 1998 worth $163 million, representing less than one percent of U.S. cattle production. Mexico accounted for 160,000 head ($86 million) of U.S. cattle exports, or 56 percent of the total. Mexico has typically been the leading market for U.S. cattle with the exception of 1995 when Mexico imported only 14,600 head ($14 million) as a result of a weak peso and economic recession. The United States exported almost three times as many cattle to Canada in 1998 compared to 1997. Most of this increase was due to more cattle feeding spurred by greater slaughter capacity in Canada.

U.S. cattle imports were 2,034,000 head ($1.14 billion) in 1998, which was on trend for the period which began in 1990. Cattle imports represented 5.5 percent of U.S. slaughter, down from the peak of 7.5 percent in 1995. During 1998, the United States imported 1,313,000 head ($937 million) from Canada and 720,000 head ($206 million) from Mexico. Only in 1995 were cattle imports an uncharacteristically high 2,790,000 head ($1.41 billion), when Mexico was forced to significantly decrease herd size due to high costs and drought, and the declining peso which stimulated Mexican exports. Following 1995, Mexico lost its position to Canada as the leading import supplier of cattle to the U.S. market. Because Mexico is rebuilding its herd, and Canadian slaughter capacity is growing, U.S. live cattle imports from Mexico and Canada should become more equal over the next several years. However, the value of cattle imports from Canada will most likely stay significantly higher than from Mexico since Canada primarily ships fed steers ready for slaughter while Mexico ships mainly calves and feeders.

**Trade Barriers and Other Issues**

- Resolution of U.S. antidumping/countervailing duty petition against Canada.
- Trans-shipment of non-NAFTA origin cattle through Mexico.

**U.S. Cattle Exports, 1985 - 1998**

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**U.S. Cattle Imports, 1985 - 1998**

Slide in Accompanying Files
**U.S. Hog Trade, 1985 - 1998**

The United States is a net importer of live hogs, with an even larger deficit than live cattle. The United States exported 229,000 head of hogs in 1998 worth $23 million, with 208,000 head ($18 million) going to Mexico. Mexico accounted for 91 percent of hog export volume and 76 percent of value. Mexico is usually the leading market for U.S. hog exports with the exception of 1995, when Korea surpassed Mexico as the number one market. The second largest market for U.S. hogs has typically been Canada, followed by Japan and Korea.

U.S. live hog imports reached a record level of 4,123,000 head worth $273 million in 1998. This was 33 percent increase above 1997 and almost 50 percent over 1996. However, the 1998 value of U.S. live hog imports was actually 11 percent less than the 1997 value of $306 million, and just slightly surpassed the 1997 value of hog imports of $271 million. An anti-dumping/countervailing duty petition was filed with the ITC by U.S. pork producers against Canada. Canada has consistently supplied all hog imports to the U.S. market. While Canada will remain as the number one import supplier of hogs to the U.S., the future volumes will be at least in part contingent upon the resolution of the AD/CVD petition.

**Trade Barriers and Other Issues**

- Concerns over imports from Canada.
- Resolution of AD/CVD petition.
- Concerns about hog cholera in the EU.

**U.S. Hog Exports, 1985 - 1998**

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**U.S. Hog Imports, 1985 - 1998**

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**U.S. Beef Trade, 1985 - 1998**

The United States was a net exporter of beef in 1998, generating a trade surplus of $500 million. Because of differences in the types of beef traded, however, import volume exceeded exports by 200,000 mt. U.S. beef exports have increased six fold since 1985, growing from 110,000 metric tons (mt) to 714,000 mt in 1998. The value of U.S. beef exports declined to $2.3 billion in 1998, down from the record $2.6 billion in 1995. The decline in value was due to lower prices, as tonnage continued to increase. The international market also has become more important to beef producers, indicated by the fact that the share of U.S. beef production entering the export market has increased from about two percent in the mid 1980s to 8.1 percent in 1998. This share is expected to exceed 10 percent by 2005. Japan imported 369,000 mt of beef ($1.3 billion) in 1998, continuing its lead as the largest market for U.S. beef and larger than the next largest three markets, Mexico, Canada and Korea, combined. Mexican imports of U.S. beef have expanded 400 percent since 1985, reaching 142,000 mt ($398 million) in 1998, solidifying Mexico’s position as the second largest export market for U.S. beef.

U.S. beef imports have increased 29 percent since 1995. In 1998, the United States imported 892,000 mt of beef valued at $1.8 billion. Beef imports have increased from 8.0 percent of total U.S. beef consumption in 1985 to 10.2 percent in 1998. Much of the increase in beef imports has been due to a strong U.S. dollar, competitively priced ground beef from Australia and New Zealand, the elimination of U.S. tariffs on beef from Canada, and the implementation of a 20,000 mt fresh beef quota for each of Argentina and Uruguay. Canada is now the largest import supplier of beef to the U.S. market, with 306,000 mt ($736 million) in 1998, followed by Australia with 285,000 mt ($468 million), and New Zealand with 198,000 mt ($329 million). This represents a shift in the trade pattern prior to 1996 period, when Australia was the largest supplier to the United States, followed by New Zealand and Canada.

**Trade Barriers and Other Issues**

- Impacts and consequences of EU ban on hormone treated beef.
- Wider acceptance of U.S. beef products through increased market access.
- Imposition of countervailing duties on selected U.S. beef products by Mexico.
- Korean tender offer beef purchasing system.
- Latin American countries want greater access to global markets through more transparent implementation of TRQs.
- EU use of high export subsidies for beef and one of most export-subsidized products reported to WTO for 1996.
- Argentina and Uruguay now exporting fresh and chilled beef to U.S. markets under regionalization provision of the URA.
The United States is a net exporter of pork. U.S. exports of pork increased significantly between 1985 and 1996, from 41,000 metric tons ($76 million) to 306,000 metric tons ($1.01 billion). Since that time, the quantity of pork exports has risen to its highest level, 399,000 metric tons in 1998, or 6.5 percent of U.S. pork production. The value of pork exports has remained relatively stable at $1.03 billion. As with beef, the largest export market for U.S. pork is Japan, importing 174,000 metric tons ($596 million) in 1998. The next largest markets for U.S. pork are Mexico (51,000 metric tons), Russia (41,000 mt) and Canada (40,000 mt), with the order of importance alternating among the countries in recent years.

The United States imported 290,000 metric tons of pork valued at $682 million in 1998, continuing a rather stable level in both volume and value which began in 1994, but down from higher levels in the late 1980's and early 1990's. Currently, pork imports represent 3.8 percent of U.S. consumption. Canada is the largest import supplier of pork to the U.S. market with 214,000 metric tons ($416 million) in 1998, or 74 percent of the total imported quantity, and 61 percent of the total value of U.S. pork imports. The only other significant sources of pork imports are the European Union (EU) and Hungary.

**Trade Barriers and Other Issues**

- Mexico recently imposed countervailing duty on U.S. pork.
- Concerns about hog cholera in the EU.

**U.S. Pork Exports, 1985 - 1998**

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**U.S. Pork Imports, 1985 - 1998**

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While U.S. lamb and mutton exports are comparatively small, recent attention has focused on imports of lamb and mutton and the position of the United States as net importer. The United States imported 52,000 mt ($171 million) of lamb and mutton in 1998, representing a 37 percent volume increase over. Australia has been the primary supplier of lamb/mutton to the United States throughout the 1990s, and in 1998 accounted for 69 percent of U.S. imports with 36,000 mt ($97 million). The only other significant supplier of lamb/mutton to the U.S. is New Zealand, which exported 16,000 mt ($74 million) to the U.S. in 1998. Australia and New Zealand combined account for over 99 percent of U.S. lamb/mutton imports.

U.S. import volumes and values of lamb/mutton represented more than 31 percent of U.S. lamb/mutton consumption in 1998. This condition led to the filing by the U.S. sheep industry of a Section 201 petition against Australia and New Zealand claiming harm the U.S. industry under the Trade Act of 1974. The International Trade Commission voted unanimously in favor of the U.S. industry, and on July 7, 1999, President Clinton imposed a five-year tariff-rate quota on lamb meat from Australia and New Zealand. The initial quota level will be 70 million pounds, with an in-quota tariff of 9 percent and an over-quota tariffs as high as 40 percent. As a result, it is expected that U.S. lamb/mutton imports will remain relatively stable over the next several years.

**Trade Barriers and Other Issues**

- Possible retaliation by Australia and New Zealand for U.S. tariff-rate quota.
- Competitiveness of U.S. industry following reduction in federal support.
- Perception of inconsistent U.S. trade policy by U.S. trading partners.
**U.S. Poultry Meat Trade, 1985 - 1998**

The United States was a net exporter of poultry meat in 1998, generating a trade surplus of $1.7 billion. U.S. broiler output represented 33 percent of total world production, and U.S. exports represented over 40 percent of total world exports. U.S. exports of broiler meat have increased dramatically since 1985, from 198,000 metric tons to 2.2 million metric tons (mmt) in 1998. This represents an increase of over 1,000 percent, and was 17 percent of U.S. broiler production compared to 3 percent of production in 1985. While the value of U.S. broiler exports was $1.74 billion in 1998, this was a decrease from the $1.9 billion record in 1997. Most of the lower value was due to lower prices. The largest export market for the U.S. broiler meat in 1998 was Russia at 678,000 mt ($483 million), down from an peak of 930,000 mt ($715 million) in 1997. The next largest markets were Hong Kong (509,000 mt), Mexico (126,000 mt), Japan (93,000 mt) and Canada (75,000 mt). Mexico replaced Japan as the number three U.S. broiler meat export market in 1997. Mexico has also been the leading importer of U.S. turkey meat throughout the 1990s.

The United States produced 51 percent of total world turkey production in 1998 and shipped 46 percent of total world exports during that same year. The share of U.S. production entering the export market has increased from less than one percent in the mid 1980s to 9 percent in 1998. U.S. exports have increased fourteen fold since the mid-1980s, growing from 12,340 metric tons in 1985 to 182,000 metric tons 1998, with a record level of exports of 253,000 metric tons in 1997. The value of U.S. exports declined to $202 million in 1998 from the record $290 million in 1997. The largest export markets for U.S. turkey products in 1998 were Mexico at 107,000 mt ($122 million), Russia at 26,000 mt ($26 million), and Hong Kong at 16,000 mt ($16 million).

In 1998, imports of poultry meat were 8,600 mt for a total of $28 million. Canada accounted for 93 percent of U.S. poultry meat import volume, and 86 percent of value. While imports have gradually risen throughout the decade, they currently represent only .02 percent of poultry meat consumption in the United States.

**Trade Barriers and Other Issues**

- Canada has restrictive tariff-rate quota; 60,000 mt quota for U.S. chicken meat, 40,000 mt for all other countries, and 238% bound tariff.
- Canada and Australia have now agreed to accept cooked poultry imports.
- EU uses high export subsidies for poultry meat.
U.S. Poultry Exports, 1985 - 1998
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U.S. Poultry Imports, 1985 - 1998
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U.S. dairy products trade consists primarily of non-fat dry milk (NFDM) and cheese exports and imports of cheese. The United States exported 81,000 mt of NFDM in 1998 worth $136 million. The United States had no NFDM imports. U.S. exports of NFDM are down from the 1985 level of 350,000 mt worth almost $200 million; however, 1998 exports of NFDM were the highest reported during the 1990s. U.S. exports of NFDM represented 28 percent of production. The largest market for 1998 U.S. NFDM exports was Mexico at 15,000 mt ($25 million). The Philippines was the second largest market in 1997, but dropped to fourth in 1998. Algeria has consistently been a major market, though at much lower levels in 1998 than 1995.

The United States is a net importer of cheese. The U.S. exported 37,000 mt of cheese in 1998, off just slightly from the peak established in 1997. These exports represented slightly more than one percent of production and were worth $117 million. Japan, Mexico and Canada are typically the largest three export markets for U.S. cheese. U.S. cheese imports were168,000 mt worth $635 million in 1998. Imports represented 31 percent of U.S. cheese consumption, the highest percentage on record. Historically, the largest supplier of U.S. cheese imports has been the EU, which shipped 88,000 mt ($387 million) of higher priced cheese varieties. New Zealand supplied 28,000 mt ($77 million), followed by Norway, Australia and Canada.

Trade Barriers and Other Issues

- Latin American countries want greater market access.
- Restrictive U.S. TRQs on dairy, with high bound tariffs on cheese, butter and NFDM.
- Canada uses restrictive TRQ for dairy.
- New Zealand Dairy Board may be converted to private cooperative.
- One of most export-subsidized products reported to WTO for 1996.
- The United States uses high export subsidies for NFDM.
- EU uses high export subsidies for cheese and other dairy.
- High STE participation in butter and milk powder trade around the world.
- Inconsistency of U.S. dairy policy with U.S. goals to increase market access.

U.S. Non-Fat Dry Milk Exports, 1985 - 1998

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Section II. Grains, Oilseeds and Products


The United States accounted for 25 percent of total world wheat trade in 1998, generating a trade surplus of $3.4 billion. The volume of U.S. wheat exports in 1998 were approximately the same as 1990 at 27 mmt, with a record 32 million tons exported in 1995. The value of U.S. wheat exports declined from a record $6.3 billion in 1996 to $3.7 billion in 1998. The share of U.S. wheat production entering export markets has declined in recent years, from over 60 percent in the early 1980s to 41% in 1998. Egypt and Japan are the largest buyers of U.S. wheat, with Egypt purchasing 4.2 mmt ($513 million) in 1998, while Japan bought 3.1 mmt ($472 million). The next three largest export markets were Mexico at 1.6 mmt ($214 million), the Philippines at 1.5 mmt ($223 million), and Pakistan at 1.3 mmt ($150 million). While Egypt and Japan are usually the top two markets for U.S. wheat, the next three have fluctuated significantly.

U.S. wheat imports have increased from less than one percent of U.S. wheat consumption in the early 1980s to 7 percent of consumption in 1998. Canada is the largest supplier of wheat to the United States, shipping 2.0 mmt valued at $280 million in 1998. This accounts for over 99 percent of U.S. wheat imports. Durum wheat accounts for 21 percent of import volume and 28 percent of the value. While the peak in U.S. wheat imports from Canada occurred in 1994 in terms of volume (2.5 mmt) and 1997 in terms of value ($355 million), 1998 imports were well above the levels of the late 1980s and early 1990s.

Trade Barriers and Other Issues

- High STE participation, particularly by Canadian Wheat Board and Australian Wheat Board, ½ of world wheat trade controlled by STEs.
- China would become a more prominent wheat exporter if WTO accession gained.
- EU has high bound tariffs ($100/mt-$150/mt) and has government participation in wheat.
- Iraq, previously a large market for U.S. wheat, is now off-limits due to U.S. sanctions.
- U.S. desire to increase market access and decrease export subsidies.
- Monitoring Canadian durum wheat exports to the U.S.


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The United States produced 42 percent of the world’s corn and had 65 percent of the world market in 1998. The United States was a net exporter of corn in 1998, generating a trade surplus of $4.3 billion; a record surplus of $8.4 billion occurred in 1996. U.S. corn exports of 4.1 mmt in 1998 were two-thirds the level reached in 1995, and are now near the same level reached in 1985. Lower export prices and tonnage accounted for the decline in export value. While exports remain a major share of U.S. corn production, the share of production exported varies widely across years, from 40 percent during some years in the 1980s to 20 percent during most of the 1990s. Japan purchased 14 mmt ($1.5 billion) of U.S. corn in 1998, retaining its position as the largest market. Mexico at 5.2 mmt ($590 million), South Korea at 4.4 mmt ($463 million), Taiwan at 3.5 mmt ($376 million), and Egypt at 1.9 mmt ($188 million) were the next four largest markets for U.S. corn exports. Mexico’s imports of U.S. corn have increased more than three-fold since 1985, leading to a significant shift in the destination of U.S. corn exports.

The United States imported 225,000 metric tons of corn in 1998 worth $25 million, with Canada supplying over 95 percent of the total. U.S. corn imports currently represent far less than one percent of domestic corn consumption, and have not risen above .33 percent since 1980. U.S. imports are not expected to significantly increase in the near future, and will likely continue to decrease due to high U.S. stocks and low prices.

Trade Barriers and Other Issues

- EU has high bound tariffs; approximately $100/mt.
- Acceptance of U.S. GMO corn by the EU.
- Segregation and labeling issues for GMO and non-GMO corn.
- China could become a more prominent corn exporter if accession to WTO gained.
- Minimum domestic purchasing requirements imposed by some Latin American countries.
**U.S. Grain Sorghum Trade, 1985 - 1998**

The United States is a net exporter of grain sorghum. U.S. sorghum exports have declined in recent years, from 6.7 mmt in 1985 and 1990 to 4.9 mmt in 1998. U.S. exports represented nearly 70 percent of total world sorghum trade. The value of U.S. sorghum exports has also declined during this period, reaching $532 million in 1998, down from a recent peak of $739 million in 1996. The share of U.S. sorghum production entering the export market has fluctuated in recent years, from a low of 16 percent in 1985 to a high of 54 percent in 1988. In 1998, nearly 36 percent of total U.S. sorghum production was exported. Mexico was the largest export market for U.S. sorghum in 1998, purchasing 3.2 mmt valued at $349 million. Following Mexico were Japan at 1.2 mmt ($134 million), the EU at 204,000 mt ($24 million), Israel at 66,000 mt ($7.4 million), and Ethiopia at 50,000 mt ($5.9 million). Mexico and Japan have typically been the top two markets for U.S. sorghum exports, while the EU and Israel have alternated in the third and fourth spots since 1990. The United States has not typically imported grain sorghum.

**Trade Barriers and Other Issues**

- Increased market access will be sought as the Philippines and the EU currently have high tariffs and low quotas; Philippines is 45%, EU is $100/mt.
- Enforcement of SPS agreement.
- EU use of subsidies in barley and wheat create competitive pressures.
- Removal of U.S. trade sanctions.

**U.S. Non-Fat Dry Milk Exports, 1985 - 1998**

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**U.S. Barley Trade, 1985 - 1998**

The United States was a net importer of barley in 1998, generating a trade deficit of $57 million. U.S. barley exports fell by 73 percent in recent years, declining from 2.1 mmt in 1990 to 1.6 mmt in 1997 to 561,000 mt in 1998. The value of U.S. barley exports declined to $75 million in 1998, down from the record $245 million in 1990; exports of barley remained as high as $210 million in 1996 and 1997. The share of U.S. barley production entering export markets has fluctuated from 27 percent in the 1988 to 3.3 percent in 1985, with the 1998 barley exports representing 8.5 percent of production. The largest markets for U.S. barley in 1998 were Japan at 315,000 mt ($33 million) and Mexico at 103,000 mt ($23 million). These have been the largest two markets since 1995. Others in order of importance are Taiwan, Cypress and Canada.

Nearly 720,000 mt of barley were imported into the United States in 1998 at a value of $91 million. The import share of U.S. barley consumption has increased from 2 percent in 1980 to 17 percent in 1993 before falling to 7 percent in 1998. Canada is the largest supplier of barley to the U.S. market, shipping 688,000 mt worth $89 million in 1998. Canada typically supplies more than 95 percent of total U.S. barley imports. While imports of barley were significant in 1998, they were well below the peak of 2.0 mmt ($181 million) in 1994.

**Trade Barriers and Other Issues**

- EU has high bound tariffs on barley; approximately $100/mt.

**U.S. Corn Exports, 1985 - 1998**

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**U.S. Corn Imports, 1985 - 1998**

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The United States was a net exporter of rice in 1998, generating a trade surplus of $1.0 billion. U.S. rice exports increased 90 percent during the past 13 years, growing from 1.9 mmt in 1985 to 3.7 mmt in 1998. The value of U.S. rice exports in 1998 was $1.2 billion, the highest level in recent history. The share of U.S. rice production entering the export market has varied, but nearly 45 percent of production has been exported in recent years. The largest market for U.S. rice was Brazil at 583,000 mt valued at $140 million, marking the first time since 1994 that Brazil has been a significant export market. Mexico at 396,000 mt ($91 million), the EU at 367,000 mt ($143 million), Colombia at 298,000 mt ($74 million), Japan at 253,000 mt ($116 million), and Canada at 170,000 mt ($73 million) were the other major markets. Mexico and the EU have both been strong markets for U.S. rice since 1990, and Canada, while never the largest, has been significant with steady growth throughout the entire time period.

U.S. rice imports have increased five-fold since 1985. In 1998, the United States imported 296,000 metric tons of rice valued at $187 million. Rice imports have increased from 3 percent of total U.S. rice consumption in 1985 to 8 percent or rice consumption in 1998. Thailand is the largest supplier of U.S. rice imports, shipping 222,000 mt valued at $126 million to the United States in 1998. India supplied 34,000 mt ($40 million) of U.S. rice imports in 1998, and together with Thailand are often the sources of 85 to 95 percent of U.S. rice imports.

Trade Barriers and Other Issues

- Japan has restrictive market access regime with high import tariffs and a TRQ; $4000/mt.
- EU has high bound tariffs on rice and uses high export subsidies for rice; $225/mt.
- Vietnam, China, and Australia use STEs for exports and account for ½ of all rice exports.
- India, Philippines, China, Japan, Korea, North Korea, and Malaysia use STEs for rice imports and affects 1/3 of world rice imports.
- Iraq was previously the largest single country market for U.S. rice prior to U.S. sanctions.
- Iran market for U.S. rice recently re-opened due to lifting of U.S. sanctions.


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The United States was a net exporter of soybeans in 1998, generating a trade surplus of $4.8 billion. U.S. producers were responsible for 48 percent of total world soybean production in 1998 and supplied 55 percent of world soybean exports. U.S. soybean exports have fallen since 1996, declining from 26 mmt in 1996 and 1997 to 20 mmt in 1998. The value of U.S. soybean exports declined to $4.8 billion in 1998 after reaching a record value of $7.4 billion in 1997. The decline in value resulted from a decline in both the volume of exports and the price of exports. Nearly 28 percent of U.S. soybean production enters export markets. This export share has declined in recent years, however, and was the lowest since 1980. The four largest export markets for U.S. soybeans in 1998 were the EU at 6.4 mmt ($1.5 billion), Japan at 3.4 mmt ($826 million), Mexico at 3.0 mmt ($754 million), and South Korea at 1.3 mmt ($305 million). While the EU and Japan have decreased their purchases of U.S. soybeans since 1995, the Mexican market for U.S. soybeans has increased by more than 200 percent since 1985 and 1990.

U.S. soybean imports have varied from a maximum of 259,000 mt in 1997 to a minimum of 64,000 metric tons in 1990. In 1998, the United States imported 149,000 mt of soybeans valued at $42 million. These imports represent less than 1 percent of total U.S. soybean consumption. Canada is the only significant supplier of soybean imports to the U.S. market, shipping 145,000 metric tons of soybeans valued at $39 million in 1998. Canada has been the source of more than 99 percent of U.S. soybean imports in recent years.

Trade Barriers and Other Issues

- China could become a more prominent exporter in world oilseeds and edible oils markets if accession to WTO gained.
- Iraq previously a large market for U.S. soybean meal prior to U.S. sanctions.
- Segregation and labeling issues for GMO and non-GMO soybeans.
- Recent imports from Brazil may be due to low world prices and high U.S. loan rates.
U.S. Soybean Meal and Oil Trade, 1985 - 1998

The United States is a net exporter of soybean meal (SBM); less than .5 percent of domestic consumption is accounted for by SBM products. In 1998, the U.S. exported 7.7 mmt valued at $1.6 billion in 1998, the second highest volume and value in recent history. Using a conversion factor of .79, 9.75 mmt of soybeans were processed to provide the 1998 SBM export volume. U.S. soybean meal exports have increased 62 percent since 1985. The share of U.S. SBM production entering the export market has decreased from 25 percent in the mid 1980s to 18 percent in 1998.

Historically, the largest market of U.S. soybean meal has been the EU, accounting for 20 percent of exports in 1998. China only recently became a market for U.S. SBM, and reached 779,000 mt ($159 million) in 1998. Canada has consistently been a strong market for U.S. SBM, and purchased 774,000 mt ($165 million) in 1998. Other large export markets for U.S. SBM in 1998 were the Philippines at 758,000 mt ($145 million) and Venezuela at 438,000 mt ($91 million). Soybean meal exports to the EU declined from 2.0 mmt in 1985 to 207,000 mt in 1990, before rebounding to 1.3 mmt in 1997. China began importing U.S. soybean meal in 1996, and currently is the second largest trading partner, while U.S. exports to the Philippines have increased more than four-fold since 1985.

In 1998, the United States exported a record high 1.4 mmt of soybean oil valued at $908 million, but imported only 29,000 mt worth $20 million. Using a conversion factor of .19, 7.52 mmt of soybeans were processed to provide the 1998 soybean oil export volume. Major markets for U.S. soybean oil include China at 522,000 mt, Hong Kong at 213,000 mt, and Mexico at 104,000 mt. While China and Mexico have typically been large soybean oil markets, Hong Kong has been prominent only since 1997. Further, India and Peru have also been consistent markets for U.S. soybean oil.

Trade Barriers and Other Issues

• Continued acceptance of SBM made from GMO soybeans.
The United States was a net importer of canola in 1998, importing 355,000 mt while exporting 240,000 mt. The value of U.S. canola exports was $60 million while the value of imports was $106 million. The United States did not export canola prior to 1988, but by 1998 nearly 36 percent of U.S. canola production was entering export markets. Canola imports have increased from 4 percent of total U.S. canola consumption in 1987 to 47 percent of canola consumption in 1998. Major markets for U.S. canola are the EU at 120,000 mt and Canada at 112,000 mt. Since 1994, almost all imports of canola have been shipped by Canada.

The United States was a net importer of canola meal in 1998, importing 1.3 mmt, while exporting 19,000 metric tons. U.S. imports represent 30 percent of total world canola meal trade. The United States did not export canola meal prior to 1988, and now only 5 percent of U.S. production is sold in export markets. In fact, the United States imported all of its canola meal consumption prior to 1987, and in 1998 nearly 77 percent of U.S. canola meal consumption was imported. U.S. imports of canola meal have increased ten-fold since 1985, growing from 120,000 metric tons to 1.23 mmt in 1998.

The United States is also a net importer of canola oil by 343,000 mt and $238 million in 1998. That year, U.S. exports of canola oil totaled 156,000 mt ($97 million), with Mexico accounting for over half of these exports. Other major markets were Canada, which has consistently been a strong market, Hong Kong which previously purchased minimal amounts of U.S. canola oil, and Japan. The United States imported 499,000 mt of canola oil valued at $335 million in 1998. As with canola, Canada was the supplier of virtually all canola oil imports.
**Sunflower, Sunflower Oil and Corn Oil Trade, 1985 - 1998**

The United States is a net exporter of sunflowers. In 1998, the United States exported 214,000 mt worth $109 million while importing only 32,000 mt ($11 million). Sunflower exports have greatly fluctuated since 1985, when U.S. exports reached a high of 538,000 mt ($163 million). Major markets for U.S. sunflowers in 1998 were the EU at 156,000 mt, Turkey at 18,000 mt, and Canada at 11,000 mt. While the EU and Canada have consistently been solid markets, 1998 marked the first time Turkey bought more than a few thousand tons.

The United States was also an exporter of sunflower oil in 1998, exporting 336,000 mt worth $225 million, while importing only minimal amounts. U.S. exports reached their peak in 1995 at 471,000 mt, fluctuating since that year. Mexico has been the largest market for U.S. sunflower oil since 1994, and in 1998 was shipped 136,000 mt ($89 million). Following Mexico was Algeria at 50,000 mt, a major market since 1990, first-time market India at 26,000 mt, and Egypt at 25,000 mt.

The United States is a net exporter of corn oil, with exports of 522,000 mt in 1998 worth $401 million. As with sunflower oil, imports are negligible. The top five markets in 1998 for U.S. corn oil were the EU at 131,000 mt, Turkey at 67,000 mt, Saudi Arabia at 56,000 mt, United Arab Emirates at 30,000 mt, and Korea at 28,000 mt. All of these countries have been significant markets for U.S. corn oil throughout the 1990s.

**Trade Barriers and Other Issues**

- EU acceptance of vegetable oils processed from GMO crops.

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**U.S. Sunflower Oil Exports, 1985 - 1998**

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**U.S. Corn Oil Exports, 1985 - 1998**

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Section III. Horticultural Products

U.S. Vegetable Trade, 1985 - 1998

The United States has consistently been a net importer of vegetables with a deficit of $1.5 billion in 1998. Exports have also been important, however, in 1998 the United States exported 1.8 mmt of vegetables valued at $1.05 billion. This represents the highest volume since 1994 and the highest value of the period. Volume has remained between 1.7 and 1.8 mmt since 1994, with value ranging from $950 to $1,050 million. Canada is the largest export market for U.S. vegetables at 1.3 mmt ($752 million) in 1998, varying little since 1990. Japan has traditionally been the second largest market for U.S. vegetables, followed by Mexico, Hong Kong and Taiwan. Japan has decreased in terms of volume and value as an export market for U.S. vegetables since its peak in 1995, falling to 165,000 mt ($123 million) in 1998. Meanwhile, Mexico has recovered as a market since the economic downturn in 1995, and Hong Kong and Taiwan have stayed relatively stable.

Of the 1.8 mmt ($1.05 billion) of vegetables exported in 1998, the largest categories in terms of volume were potatoes (295,000 mt), lettuce (258,000 mt), and onions (225,000 mt). Other important vegetable exports were broccoli, tomatoes, carrots and sweet corn. High value U.S. vegetable exports were lettuce at $167 million, followed by tomatoes ($121 million), broccoli ($96 million), potatoes ($89 million), and onions ($85 million).

U.S. imports of vegetables reached a record 3,833,000 mt ($2.6 billion), averaging an increase of 13 percent annually since 1985. Mexico supplies about 60 percent of U.S. vegetable imports, shipping 2.3 mmt ($1.6 billion) in 1998. Canada was number two with 1.2 mmt ($615 million), followed by the EU, Costa Rica, and Guatemala. Potatoes were the largest vegetable imports in terms of volume at 876,000 mt followed closely by tomatoes at 758,000 mt. Onions (271,000 mt) and broccoli/cauliflower (228,000 mt) were other major vegetables imported into the United States. Tomatoes by far composed the largest value of U.S. vegetable imports at $758 million in 1998, followed by potatoes ($342 million), onions ($153 million), and broccoli/cauliflower ($144 million).

Trade Barriers and Other Issues

- Latin America wants greater access to U.S. vegetable market.
- Consumer concerns regarding pesticide use, contamination and food safety.
- One of most export-subsidized products reported to WTO for 1996.
- Specific request approach for tariff reduction being pursued by some countries.
- Additional access to Japan and other markets.
- Variety of pest-related issues.
- EU uses high export subsidies for vegetables.
Onions

The United States is a net importer of onions with a deficit of $68 million. In 1998, the U.S. exported 225,000 mt ($85 million) of onions, over half of which were shipped to Canada at 117,000 mt ($50 million). Other major markets were Japan at 47,000 mt ($12 million) and Mexico at 20,000 mt ($7 million). This order of markets for U.S. onion exports has persisted since 1990, except in 1994 when Japan was a slightly larger market than Canada. The U.S. imported 271,000 mt ($153 million) of onions in 1998, of which about 80 percent of volume (211,000 mt) and value ($124 million) were shipped by Mexico. Canada, the EU and Peru were the other major suppliers of onions to the U.S. market.
Tomatoes

The United States is a net importer of tomatoes in the amount of $637 million. In 1998, U.S. exports were 130,000 mt ($121 million), with 90 percent of this shipped to Canada, 120,000 mt ($107 million). Following Canada was Mexico at 4,800 mt ($3.7 million) and the EU at 3,200 mt ($7.6 million). Before 1995, Hong Kong was the second largest market. The United States imported 847,000 mt ($758 million) of tomatoes in 1998, with Mexico supplying about 86 percent of volume (734,000 mt) and 76 percent of value ($567 million). Canada and the EU are also significant suppliers of tomatoes to the United States, shipping 62,000 mt ($101 million) and 47,000 mt ($81 million), respectively. While Mexico has been the leading supplier of tomatoes to the U.S. market for the entire time period, Canada surpassed the EU as an import supplier for the first time in 1998.

U.S. Tomato Exports, 1985 - 1998

Carrots

The United States is a net exporter of carrots. The United States exported 116,000 mt of carrots in 1998 worth $60 million, 88 percent of which went to Canada, 102,000 mt ($52 million). The United Arab Emirates, Japan, Mexico and the EU were other major markets for U.S. carrots, though much smaller than Canada. The United States imported 84,000 mt ($23 million) of carrots in 1998, of which most came from either Canada, 63,000 mt ($18,000), or Mexico, 19,500 mt ($4 million). This order has persisted throughout recent history, although prior to 1990, Mexico provided only a few thousand metric tons of carrots to the U.S. market.
Potatoes

Potatoes are the largest trade volume for U.S. vegetables. The United States is also a net importer of potatoes. The United States exported 295,000 mt of potatoes worth $89 million in 1998. About 80 percent of both the U.S. potato volume and value were shipped to Canada. Mexico was the next largest market for U.S. potatoes at 32,000 mt ($11 million). This order has persisted for the entire time period. The United States imported 876,000 mt ($340 million) worth of potatoes in 1998, over 99 percent of which were shipped by Canada. Canada has historically been the leading import supplier of potatoes to the U.S. market. No other country has supplied more than 2,000 mt of potatoes in recent history.
Broccoli

The United States exported 136,000 mt of broccoli valued at $96 million in 1998, continuing an upward trend which began in the early 1990s. The United States is a net importer of broccoli, however. The two primary markets for U.S. broccoli since 1994 have been Canada and Japan; the United States exported 75,000 mt ($47 million) of broccoli to Canada in 1998 and 50,000 mt ($40 million) to Japan. Other significant markets for U.S. broccoli are Hong Kong and Taiwan. The United States imported 228,000 mt ($144 million) of broccoli and cauliflower in 1998. About 80 percent of these imports were shipped by Mexico, with Guatemala at 29,000 mt ($21 million) and Canada at 15,000 mt ($7 million) being the other significant suppliers of broccoli and cauliflower to the U.S. import market.

U.S. Broccoli Exports, 1985 - 1998

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Lettuce and Sweet Corn

In 1998, the United States exported 312,000 mt of lettuce worth $167 million. About 80 percent of these exports were shipped to Canada, with the remainder going to Mexico, Hong Kong, Japan and Singapore. While Mexico was the second largest export market for U.S. lettuce in 1997 and 1998, Hong Kong was a larger market in terms of volume prior to 1997 and remains a larger market in value. The United States imported lettuce in 1998 and previous years, primarily from Mexico and Canada, but the total import volumes and values are less than 10 percent than that of exports. The United States exported 74,000 mt ($61 million) of sweet corn in 1998. Japan was the largest market, with Hong Kong, the EU, Canada and Mexico comprising the remainder of the top five U.S. sweet corn export markets. While Japan has maintained its position as the largest export market for U.S. sweet corn, the other four countries have fluctuated widely in both volume and value of trade.

U.S. Lettuce Exports, 1985 - 1998

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U.S. Sweet Corn Exports, 1985 - 1998

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**U.S. Fruit Trade, 1985 - 1998**

The United States was a net exporter of fruit products in 1998, generating a trade surplus of $248 million. U.S. fruit exports have doubled in the past thirteen years, rising from 1.2 mmt to 2.5 mmt. The value of U.S. fruit exports declined to $1.8 billion in 1998 from the record $2.1 billion in 1997. The largest export markets for U.S. fruit products in 1998 were Canada at 845,000 mt ($606 million), Japan at 413,000 mt ($323 million), Hong Kong at 275,000 mt ($196 million), the EU at 235,000 mt ($167 million), and Taiwan at 205,000 mt ($154 million).

U.S. fruit imports have increased 190 percent since 1985. In 1998, the United States imported 2.6 mmt of fruit valued at $1.6 billion. Mexico was the largest supplier of fruit, 1.0 mmt valued at $591 million. Chile at 409,000 mt ($433 million) and Costa Rica at 322,000 mt ($103 million) were the other major suppliers.

**Trade Barriers and Other Issues**

- Latin America wants greater access to the U.S. fruit market.
- Consumer concerns regarding pesticide use, contamination and food safety.
- One of most export-subsidized products reported to WTO for 1996.
- Japan’s varietal testing requirements restrict imports.
- Specific request approach for tariff reduction being pursued by some.
- Variety of pest-related issues.
- EU uses high export subsidies for fruits.
- Importing country interest in on site verification for compliance with SPS and food safety standards.

**U.S. Fruit Exports, 1985 - 1998**

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**U.S. Fruit Imports, 1985 - 1998**

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U.S. Citrus Trade, 1985 - 1998

The United States was a net exporter of citrus in 1998, generating a trade surplus of $235 million. U.S. exports of citrus, composed primarily of oranges and tangerines, have increased 57 percent since 1985, growing from 411,000 mt in 1985 to 648,000 mt in 1998. The value of U.S. citrus exports increased to $371 million in 1998, a 54 percent increase since 1985. The three largest markets for U.S. citrus products in 1998 were Canada at 210,000 mt ($110 million), Hong Kong at 161,000 mt ($95 million), and Japan at 129,000 mt ($77 million). South Korea imported only 92 mt of U.S. citrus in 1985, but increased its imports to 35,000 mt valued at $25 million in 1998.

U.S. citrus imports have increased 260 percent since 1985. In 1998, the United States imported 275,000 mt of citrus valued at $136 million. In order of importance, citrus imports consisted of limes, mandarins, oranges, and lemons. Mexico is the largest import supplier of citrus to the U.S. market, shipping 171,000 mt ($50 million) in 1998. Other countries supplying citrus to the United States are the EU at 48,000 mt ($50 million), Australia at 28,000 mt ($32 million), and the Bahamas at 14,000 mt ($1.2 million).

U.S. Orange Exports, 1985 - 1998
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U.S. Citrus Imports, 1985 - 1998
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The United States was a net exporter of apples in 1998, generating a trade surplus of $252 million. U.S. apple exports have tripled since 1985, growing from 177,000 mt to 559,000 mt. The value of U.S. apple exports declined to $328 million in 1998, down from a record $432 million in 1994. In 1998, nearly 20 percent of U.S. apple exports were shipped to Taiwan. Canada was the second largest export market for U.S. apples at 91,000 mt ($67 million). Mexico’s imports of U.S. apples increased from 2,000 mt in 1985 to 69,000 mt valued at $38 million in 1998. Mexico’s apple purchases from the U.S. reached a record level of 153,000 mt ($87 million) in 1994.

In 1998, the United States imported 142,000 mt of apples valued at $76 million. The largest suppliers of apples to the U.S. market in 1998 were New Zealand at 42,000 mt ($27 million), Canada at 41,000 mt ($20 million), and Chile at 37,000 mt ($17 million). The growth of apple imports from New Zealand caused a shift in the trade pattern prior to 1997, when Canada was the largest supplier to the United States, followed by New Zealand and Chile.

**Trade Barriers and Other Issues**

- SPS issue concerning entry of U.S. apples into Mexico.

**U.S. Apple Exports, 1985 - 1998**

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**U.S. Apple Imports, 1985 - 1998**

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**U.S. Berry Trade, 1985 - 1998**

The United States was a net importer of berries in 1998, with a trade deficit of $73 million. U.S. berry exports have decreased from 73,000 mt in 1990 to 66,000 mt in 1998. Despite the decline in the volume, the value of U.S. berry exports increased to $120 million in 1998. Canada imported 47,000 mt of U.S. berries valued at $75 million in 1998, continuing its lead as the largest market for U.S. exports, and purchasing 71 percent of total U.S. berry exports. Japan’s imports of U.S. berries have doubled since 1990, reaching 8,300 mt ($23 million) in 1998, solidifying Japan’s position as the second largest export market for U.S. berries.

U.S. imports of berries have increased 25 percent since 1990. In 1998, the United States imported 115,000 mt of berries valued at $194 million. In volume terms, Canada is the largest import supplier of berries to the U.S. market. Mexico follows shipping 49,000 mt of berries valued at $88 million.

**Trade Barriers and Other Issues**

- Recent SPS and food safety issues concerning berries from Mexico and Guatemala.
**U.S. Grape Trade, 1985 - 1998**

The United States was a net importer of grapes in 1998, generating a trade deficit of $176 million. U.S. grape exports tripled from 1985 to 1997, growing from 91,000 mt to 269,000 mt. In 1998, grape exports fell to 207,000 mt, the lowest since the early 1990s. The value of U.S. grape exports declined to $262 million in 1998, down from the record $336 million in 1997. Canada purchased 82,000 mt of grapes from the United States in 1998 valued at $102 million, continuing its lead as the largest market for U.S. grapes. The next three largest markets were Hong Kong at 32,000 mt ($43 million), Mexico at 24,000 mt ($22 million), and the EU at 10,000 mt ($18 million). The Mexican market for U.S. grapes has grown rapidly since 1995.

U.S. grape imports have doubled since 1985. In 1998, the United States imported 406,000 mt of grapes valued at $438 million. Chile was the largest supplier of grape imports to the U.S. market at 289,000 mt ($277 million), followed by Mexico at 101,000 mt ($144 million). These two countries have been the top two sources of imported grapes throughout the entire period, typically accounting for over 95 percent of all U.S. grape imports.

**Trade Barriers and Other Issues**

- Potential for more competition from Latin American countries impacting U.S. markets.

**U.S. Grape Exports, 1985 - 1998**

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**U.S. Grape Imports, 1985 - 1998**

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U.S. Melon Trade, 1985 - 1998

The United States was a net importer of melons in 1998, with a trade deficit of $170 million. U.S. melon exports have increased 83 percent since 1990, reaching 216,000 mt in 1998. The value of U.S. melon exports declined to $81 million in 1998, down from the record $86 million in 1995. The decline in value was due to lower prices, as tonnage continued to increase. Canada was the largest market for U.S. melon exports in 1998 at 198,000 mt valued at $73 million. Japan was the second largest market at 11,000 mt ($5 million), but shipments to Japan remained well below the record level of 31,000 mt ($16 million) in 1994.

U.S. melon imports have tripled since 1985. In 1998, the United States imported 837,000 mt of melons valued at $251 million. The largest import suppliers of melons to the U.S. market were Mexico at 445,000 mt ($146 million), Costa Rica at 118,000 mt ($34 million), Honduras at 112,000 mt ($26 million), and Guatemala at 101,000 mt ($28 million) with the order of importance alternating among the countries in recent years. Mexican melon shipments to the United States have doubled since 1985, while imports from Costa Rican exports have increased from 900 mt in 1985 to 118,000 mt in 1998.

Trade Barriers and Other Issues

- Overlap of foreign production with U.S. market windows.


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U.S. Processed Fruit Trade, 1985 - 1998

The United States exports processed fruits in frozen, canned, and dried form. The United States exported 54,000 metric tons of frozen fruits valued at $151 million in 1998, excluding juices. U.S. exports of frozen fruits have increased 84 percent since 1992, growing from 29,000 mt to 54,000 mt in 1998. The largest markets for U.S. frozen fruits were Japan at 23,000 mt ($38 million) and Canada at 23,000 mt ($25 million), the EU at 3,500 mt ($4 million), and Australia at 2,200 mt ($3 million). The United States exported 152,000 mt of canned fruits, excluding juices, in 1998 at a value of $144 million. The three largest markets for U.S. canned were Canada 44,000 mt ($46 million), the EU at 37,000 mt ($23 million), and Japan at 27,000 mt ($23 million).

The United States exported 223,000 mt of dried fruits valued at $385 million in 1998. U.S. dried fruit exports have fallen 4 percent since 1992. The five largest markets for U.S. dried fruits in 1998 were the EU at 90,000 mt ($158 million), Japan at 52,000 mt ($89 million), Canada at 21,000 mt ($45 million), and Singapore at 12,000 mt ($14 million). The markets accounted for 73 percent of total exports.

The United States imported 602,000 mt of prepared or processed fruit valued at $595 million in 1998, excluding juices. The volume of U.S. processed fruit imports has increased only 2 percent compared to 1992, with the highest level of imports reached in 1997. The three largest suppliers of processed fruits to the United States in 1998 were the Philippines, largest in volume at 121,000 mt ($91 million), Thailand at 119,000 mt valued at $101 million, the highest value, and Mexico at 69,000 mt ($85 million). Imports from both the Philippines and Thailand have declined since the early 1990s, while imports from Mexico have nearly doubled during the decade. Imports from China have tripled since 1995, with China shipping 56,000 mt to the U.S. market valued at $47 million in 1998.


U.S. Processed Fruit Imports, 1985 - 1998

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The United States was a net importer of fruit juices in 1998, generating a trade deficit of $9 million. U.S. exports of fruit juices have increased 40 percent since 1992, growing from 202 million gallons to 283 million gallons in 1998. The value of U.S. fruit juice exports declined to $656 million in 1998, down from the record $662 million in 1997. The decline in value was due to lower prices, as export volume continued to increase. Representing 72 percent of total U.S. fruit juice exports in 1998, the three largest markets were the EU at 84 million gallons ($147 million), Canada at 79 million gallons ($241 million), and Japan at 42 million gallons ($114 million). This represents a significant change in the pattern of U.S. exports earlier in the decade, with U.S. exports to Japan declining from 52 million gallons ($118 million) in 1992.

The United States imported 713 million gallons of fruit juices valued at $666 million in 1998. Imports of fruit juices have fluctuated in recent years, reaching a low of 579 million gallons ($630 million) in 1995 and a high of 809 million gallons ($659 million) in 1994. The largest suppliers of U.S. fruit juice imports in 1998 were Brazil at 199 million gallons valued at $144 million, Argentina at 110 million gallons ($86 million), Mexico at 86 million gallons ($90 million), the EU at 68 million gallons ($99 million), and China at 49 million gallons ($30 million). The pattern of U.S. imports has changed significantly during the past decade, as Mexico increased shipments to the United States from 19 million gallons in 1992 to 86 million gallons in 1998. U.S. imports from China increased from 500,000 gallons in 1992 to 49 million gallons in 1998. Much of the growth in imports from Mexico has been in shipments of orange juice, while much of the growth in imports from China has been in apple juice.
The United States is a net exporter of edible nuts with a surplus of $730 million. In 1998, the United States exported 528,000 mt of edible nuts valued at $1.4 billion, representing the lowest levels since 1994. About half of these nut exports were sent to the EU. Canada was the second leading market for U.S. tree nuts in 1998 at 93,000 mt ($160 million). Other large export markets were Mexico at 34,000 mt ($47 million), Japan at 33,000 mt ($126 million), and India at 16,000 mt ($51 million). While a decline in exports has occurred since the peak of 1995, overall volume and value of U.S. tree nut exports, as well as the top five markets of the EU and Canada, have stayed consistently strong since 1990.

The United States imported 238,000 mt ($630 million) of edible nuts in 1998, with the largest sources being the Philippines at 41,000 mt ($42 million), India at 34,500 mt ($165 million), Mexico at 34,000 mt ($86 million), and Brazil at 28,000 mt ($113 million). These countries have been the top sources for U.S. nut imports for the entire time period. While the Philippines is the largest supplier of edible nuts to the United States, it is only number four in terms of value. Brazil is the fourth largest U.S. import supplier in volume terms but second in value. The reason for this divergence is the type of nut imported from each country, which is explained below.


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Edible Nut Exports

The United States exported 197,000 mt of almonds in 1998 valued at $760 million, which represents 37 percent of edible nut export volume and 56 percent of value. Sixty percent of these exports are sent to the EU, which has historically been the largest export market for U.S. almonds. U.S. almond exports peaked in 1995 at 276,000 mt ($1.0 billion) as the EU purchased 172,000 mt ($671 million) that year. Other significant export markets during the 1990s have been Japan, India, and Canada. U.S. peanut exports composed the next largest volume of U.S. edible nut exports at 187,000 mt (35 percent of total), which represented the lowest level of peanut exports since 1994, and was down 42 percent since the peak of 264,000 mt in 1995. The value of U.S. peanut exports in 1998 was $192 million, 14 percent of total edible nut exports, also the lowest reported since 1994. The largest export markets for U.S. peanuts in 1998 were the EU at 77,000 mt ($72 million), Canada at 65,000 mt ($65 million), and Mexico at 21,000 mt ($19 million). These have been the three largest markets since 1994. Before then, Japan ranked third. Following peanuts in terms of both export volume and value in 1998 were U.S. walnut exports, at 66,000 mt ($151 million). This represents the lowest level of walnut exports since the early 1990s. The largest
export markets have been the EU, Japan, Canada, and Israel. In 1998, Mexico, previously a small market for U.S. walnuts, ranked as the fourth largest U.S. market.

Other important edible nuts exported by the United States are pistachios and pecans. In 1998, the U.S. exported 29,000 mt of pistachios worth $120 million, mainly to the EU at 13,300 mt ($55 million), Hong Kong at 8,000 mt ($29 million), and Canada at 2,500 mt ($11 million). In pecans, the U.S. exported 13,000 mt in 1998 valued at $55 million. The three largest markets were the EU at 4,500 mt ($23 million), Mexico at 3,300 mt ($7 million), and Canada at 3,200 mt ($19 million). These countries have traditionally been the largest three largest markets.

**U.S. Almond Exports, 1985 - 1998**

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**U.S. Peanut Exports, 1985 - 1998**

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**Edible Nut Imports**

Coconut meat, cashews and pecans are the top U.S. edible nut imports. The United States imported 78,000 mt of coconut meat in 1998 valued at $65 million. Most of these imports were shipped by the Philippines, 41,000 mt and $41 million, followed by the Dominican Republic and Thailand. These three countries have historically been the three largest sources for coconut meat imports. Cashews are the next largest imported nut in terms of volume at 69,000 mt, but are by far the largest value of nut imports at $319 million. The two largest suppliers of cashew imports to the United States are India and Brazil. Since cashew imports are higher valued than coconut meat imports, this explains why the Philippines is number four in terms of U.S. edible nut import value behind India, Brazil and Mexico even though India is clearly the leader in terms of quantity. Mexico is ahead of the Philippines in nut import value due to pecans, another high valued nut, which Mexico ships to the United States. While the United States imports a relatively small amount of pecans, the value of these imports was $84 million in 1998.
Peanut Imports

In 1998, the United States imported 44,500 mt of unroasted peanuts worth $38.4 million, down from 51,700 mt ($41.6 million) in 1997. The leading supplier of peanut imports is Argentina, which shipped 34,500 mt ($32.8 million) to the U.S. in 1998. Other major suppliers are Mexico at 4,800 mt ($2.0 million), Nicaragua at 2,300 mt ($1.0 million), and South Africa at 2,200 mt ($1.8 million). The United States also imports peanut butter/paste and blanched peanuts. U.S. imports of peanut butter and paste were 18,100 mt in 1998, down slightly from the previous two years. Canada supplied 80 percent of these imports, with Argentina providing most of the remainder. U.S. imports blanched peanuts in 1998 were 8,100 mt ($8.9 million), with 77 percent of this shipped by Argentina and the remainder from China.

Trade Barriers and Other Issues

- Transhipment of Chinese peanuts, raw and in paste form, through Canada and Mexico.
- Imports of peanuts in confectionary products from Canada.
- Inconsistency of U.S. domestic peanut policy with increased U.S. market access.
Section IV. Sugar, Cotton and Tobacco

U.S. Sugar Trade, 1985 - 1998

The United States is a net importer of sugar, generating a trade deficit of $1.9 billion in 1998. U.S. sugar exports have decreased by 64 percent since the peak of 423,000 mt in 1995, declining to 144,000 mt in 1998. Prior to 1996, when the dramatic decrease in U.S. sugar exports began, export volumes typically ranged between 340,000 and 465,000 mt. The value of U.S. sugar exports fell to $53 million in 1998, declining 67 percent from the record $160 million in 1995. The share of U.S. sugar production entering the export market has decreased from about nine percent in the early 1990s to two percent in 1998. Mexico imported 38,000 mt ($11 million) of U.S. sugar in 1998, becoming the largest market for U.S. sugar for the first time. In the early 1990s, Jamaica was the largest market for U.S. sugar at approximately 40,000 mt annually ($13-$17 million), and Canada was the number one export market in 1994 and 1995.

U.S. imports of sugar declined from 2.9 mmt in 1997 to 2.04 mmt in 1998, and the import share of U.S. sugar consumption declined during the past thirteen years from 34 percent in 1985 to 22 percent in 1998. The leading suppliers of sugar to United States in 1998 were the Dominican Republic at 292,000 mt ($113 million), Brazil at 215,000 mt ($94 million), the Philippines at 183,000 mt ($82 million), Australia at 150,000 mt ($63 million), and Argentina at 138,000 mt ($38 million). These countries’ shares of U.S. sugar imports have varied widely over time; however, with the exception of Canada being the second largest source in 1994, the top five have remained the same since 1985. U.S. sugar imports are controlled by a TRQ established in 1989.

Trade Barriers and Other Issues

- Latin American countries want greater market access.
- U.S. uses TRQs to protect market and there are quota allocation issues.
- One of most export-subsidized products reported to WTO for 1996.
- Inconsistency of U.S. sugar policy with U.S. goals to increase market access.

U.S. Sugar Exports, 1985 - 1998

U.S. Sugar Imports, 1985 - 1998

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The United States is a net exporter of cotton typically importing only minimal amounts. In 1998, the United States exported 1.623 mmt (7.45 million bales) of cotton valued at $2.46 billion. This represents the highest volume level of cotton exports since 1995; however, the downward trend in value which began in 1996 continued. Thirty percent of U.S. cotton production was exported in 1998, which is significantly below the 36 to 45 percent range which began in 1993. Mexico was the top market for U.S. cotton in 1997 and 1998, reaching 402,000 mt ($616 million) in 1998. Prior to 1997, Japan, now third, was typically the largest market for U.S. cotton. Korea, the second leading market for U.S. cotton in 1998 at 165,000 mt ($266 million), has historically been a major cotton export market.

U.S. cotton imports have been extremely low compared to exports. Only in 1996 did U.S. imports reach more than a few thousand metric tons when 174,000 mt valued at $283 million was imported. As a result, the import share of cotton consumption is between zero and three percent.

**Trade Barriers and Other Issues**

- U.S. uses TRQs to protect market; 14.25¢/lb.
- China could become more a prominent cotton exporter if accession to WTO gained.
- China uses STE for cotton.
- Acceptance of GMO cotton and cotton fabrics.

**U.S. Cotton Exports, 1985 - 1998**

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**U.S. Cotton Imports, 1985 - 1998**

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U.S. Tobacco Trade, 1985 - 1998

The United States has been a net exporter of tobacco since 1994, with a 1998 surplus of $689 million. In 1998, U.S. exports of tobacco were 212,000 mt valued at $1.46 billion, down slightly from 1997. Flue-cured tobacco accounted for slightly over half of U.S. tobacco exports in 1998 with 111,000 mt valued at $777 million being shipped. The remainder of tobacco exports consisted of light-air cured at 52,000 mt ($422 million) and other types at 49,500 mt ($259 million). The largest market for all types of U.S. tobacco exports is the EU, which accounted for 104,000 mt ($684 million), followed by Japan at 39,000 mt ($211 million) and Turkey at 20,000 mt ($138 million). Thailand and Malaysia are also significant markets for U.S. tobacco. Prior to 1994, Thailand was the third largest market.

The United States imported 224,000 mt of tobacco in 1998 valued at $771 million. In most years, tobacco import tonnage exceeds export tonnage by 10,000 to 75,000 mt. However, the value is much lower due to the United States importing mainly filler, 172,000 mt valued at $716 million in 1998, down 30 percent from 1997, and scrap, 49,000 mt ($21.5 million). The largest source of tobacco imports is Turkey which shipped 66,500 mt worth $293 million. Other large suppliers include Brazil at 37,000 mt ($77 million) and the EU at 23,000 mt ($69 million). These have been the top three sources for U.S. tobacco imports since for the entire time period. Furthermore, Argentina and Malawi, among the top five sources since 1990, both had significant decreases in tobacco shipments to the United States in 1998.

Trade Barriers and Other Issues

• The future trade impacts of tobacco litigation in the United States and other countries are unknown.


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U.S. Tobacco Imports, 1985 - 1998

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Section V. Fishery Products

The United States is a net importer of edible fishery products, with a 1998 trade deficit of $5.9 billion. U.S. exports of fishery products were valued at $2.15 billion, down 26 percent since in 1996. Edible fishery products includes shrimp, other crustaceans such as crawfish, salmon, trout, catfish and other fish. The largest market for U.S. fishery exports is Japan, which accounted for $903 million in 1998, less than half of 1994 and 1995 levels. In fact, the downward trend in U.S. fishery exports is predominately accounted for by decreases in exports to Japan. Canada at $435 million and the EU at $347 million, both of which have been relatively stable markets since 1994, were the next largest U.S. markets.

The United States imported $8.0 billion of fishery products 1998, representing an increase of five percent over 1997 and 23 percent above 1994. The largest source of fishery products since 1996 has been Canada, shipping $1.41 billion to the United States in 1998. The second largest source is Thailand, from which the United States imported 1.39 billion in 1998. Prior to 1996, Thailand was the leading supplier of fishery products to the United States. Other leading sources 1998 were Ecuador at $697 million, Mexico at $479 million, Chile at $369 million, and China at $323 million.

Trade Barriers and Other Issues

• High tariffs in the EU, Taiwan, China and Korea in various U.S. fishery products.
• Import quotas in Japan.
• Environmental issues related to over-fishing, protection of endangered species around the world, and agricultural chemical run-off affecting production of fish and shrimp.

U.S. Fishery Products Exports, 1985 - 1998

U.S. Fishery Products Imports, 1985 - 1998

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The United States is a net importer of shrimp, importing more than twenty-five to thirty times the amount of exports. In 1998 the United States exported $94 million of shrimp while importing $3.1 billion. Further, while U.S. shrimp exports have experienced a declining trend since 1995, shrimp imports have grown. The largest market for U.S. shrimp is Canada, which purchased 5,300 mt valued at $44 million in 1998. This was down from 6,500 mt ($58 million) in 1995. Other significant markets in 1998 include Mexico at 2,500 mt ($15 million) and Japan at 710 mt ($8 million). Canada, Mexico and Japan have been the three largest markets for U.S. shrimp exports since 1994.

U.S. imports of shrimp have increased 27 percent since 1996. This increase is largely due to increased imports from Thailand, accounting for 90 percent of the movement. U.S. imports of shrimp from Thailand were 62,000 mt valued at $1.1 billion in 1998, down in volume but up in value from previous years. Other U.S. import suppliers include Ecuador at 61,000 mt ($572 million), Mexico at 31,000 mt ($382 million), and Indonesia at 15,000 mt ($189 million). In addition, with the exception of Thailand, U.S. imports of shrimp from most major sources have generally been on an upward trend, reaching peaks in either 1997 or 1998.
**U.S. Salmon Trade, 1994 - 1998**

The United States is a net importer of salmon, with a trade deficit of $174 million in 1998 as exports were 110,000 mt valued at $442 million imports were 122,000 mt valued at $616 million. However, the United States was a net exporter of salmon each year prior to 1997. The switch from net exporter to net importer occurred because salmon exports fell 39 percent since 1995 and 56 percent since 1988 while imports have risen 143 percent since 1992 and 570 percent since 1985. The largest market for U.S. salmon in 1998 was Japan, which imported 38,000 mt valued at $193 million. This represents a 72,000 mt ($350 million) drop from 1994 levels and accounts almost all of the overall decline. The next largest markets for U.S. salmon in 1998 were Canada at 32,000 mt ($95 million) and the EU 29,000 mt ($113 million), both down from previous years.

U.S. imports of salmon come primarily from Canada and Chile, jointly accounting for 87 percent of U.S. imports in 1998. Canada shipped 55,000 mt ($277 million) of salmon to the United States in 1998, up 55 percent since 1994. Chile was the source of 51,000 mt ($262 million), an increase of 260 percent above 1994. While Canada shipped primarily whole or eviscerated salmon to the U.S., Chile was the major source of other types of salmon imports such as canned salmon.

**Trade Barriers and Other Issues**

- Norwegian subsidies to the salmon industry have led to an increased presence in the Japanese market and a decrease in market share for the United States.

**U.S. Salmon Exports, 1985 - 1998**

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**U.S. Salmon Imports, 1985 - 1998**

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**U.S. Trout, Catfish and Crawfish Trade, 1994 - 1998**

Other aquiculture products which are traded in significant amounts are trout, catfish and crawfish. The United States has a trade deficit in each of these products. In 1998, the U.S. trade deficit in trout was 1,900 mt valued at $6.9 million, for catfish it was 500 mt ($1.3 million), and for crawfish it was 2,000 mt ($6.7 million). Since 1994, the trade deficit in trout has been increasing, decreasing for catfish, and for crawfish a trade surplus of 3,300 mt ($10.6 million) became a deficit for the first time in 1998.

The largest export market for U.S. trout in 1998 was Canada at 560 mt valued at $1.7 million, about 85 percent of total exports. Other trout markets include China, a relatively new and growing market, and Japan, which has been declining. The United States imported 2,600 mt of trout valued at $9.1 million in 1998. Major sources are Canada at 780 mt in 1998 ($3.5 million), Argentina at 613 mt ($1.2 million), and Chile at 594 mt ($2.6 million).

The largest export market for U.S. catfish in 1998 was the EU at 92 mt valued at $642 thousand, about 73 percent of total exports. Other trout markets include are dispersed and have fluctuated widely over the years, but have included Vietnam, Japan, and Mexico. The United States imported 630 mt of catfish valued at $2.1 million in 1998. Major sources are Vietnam, new supplier, Brazil, which has been increasing shipments of catfish to the United States, along with Canada and Guyana.

In 1998, the United States exported 800 mt of crawfish valued at $3.0 million, which was a continuation of a downward trend which began in 1994. The EU is the market for over 98 percent of U.S. crawfish exports. The United States imported 2,800 mt of trout valued at $9.7 million in 1998. China is typically the source for most, if not all, of U.S. crawfish imports.

**Trade Barriers and Other Issues**

- Increase in imports of catfish from Vietnam and crawfish from China.

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U.S. Catfish Exports, 1985 - 1998
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U.S. Catfish Imports, 1985 - 1998
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U.S. Crawfish Exports, 1985 - 1998
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