Upcoming World Trade Organization Negotiations: Issues for the U.S. Rice Sector

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Abstract: Forthcoming World Trade Organization (WTO) negotiations in Seattle are likely to include issues important to the U.S. rice industry. Issues include increased market access, continued reduction in domestic support programs and export subsidies, tighter discipline on state trading enterprises, and uniform world trading rules and regulations for genetically improved commodities. The likely WTO accession by China is an important issue as well. Enhanced market opportunities for the U.S. rice sector depend, in part, upon progress in these areas.

Keywords: Rice, trade, policy, WTO, market access, tariff-rate quotas, export subsidies, domestic support.

The next round of multilateral trade negotiations under the World Trade Organization (WTO) begins in Seattle, Washington, on November 30, 1999. Officials from member countries of the WTO will initiate negotiations on agricultural trade and other trade-related topics. These discussions will continue the progress of reforming agricultural trade rules begun in the Uruguay Round, which concluded in 1994.

The Uruguay Round continued the process of reducing trade barriers achieved in the seven previous rounds under the General Agreement on Tariffs and Trade (GATT), which the WTO replaced. Among its most significant accomplishments was the Uruguay Round Agreement on Agriculture (URAA), under which WTO members committed to cut average tariff levels on all agricultural products, lower the volume of and expenditures on subsidized exports, and reduce aggregate spending on trade-distorting domestic support programs for agriculture. In addition, the URAA established new disciplines on the use of sanitary and phytosanitary (SPS) measures that could be used to restrict trade based on health and safety concerns, and improved the process for settling trade disputes.

The international rice market is characterized by a high level of government intervention, especially when compared with other grains and oilseeds. The bulk of this intervention is in the form of state control of trade, including state trading enterprises. With exports accounting for more than 40 percent of U.S. rice production, the outcome of the upcoming WTO Round will likely have important impacts on the U.S. rice sector.

This article briefly examines trade in the international rice market, identifying key importers and exporters, and segmenting rice trade by type of rice and quality. Next, accomplishments of the Uruguay Round important to rice are discussed. Finally, issues affecting rice trade that are likely to be a part of the upcoming WTO Round are examined.

World Rice Market Stratified by Type and Quality

The international rice market exhibits greater price volatility than other grain and oilseed markets. The greater price volatility arises from several unique characteristics of the international rice market. First, the international rice market is a “thin” market as only about 6 percent of global production is currently traded annually, well below the almost 20 percent for wheat, 12 percent for coarse grains, and nearly 25 percent for soybeans. Thus, variations in production can cause big movements in trading prices. Much of this “thinness” is due to government policies that bar or limit trade.

Second, nearly half of global rice production—grown in a large swath running from Pakistan, south and east through the Philippines—is dependent on the timing of the Asian monsoon. In fact, 90 percent of rice is produced in Asia. Other grains and oilseeds are produced over a more diverse area and are thus less dependent on any single weather pattern.

Third, the international rice market is stringently segregated by type and quality, with little substitution in consumption and production. Market segmentation makes the international rice market even thinner, further contributing to price volatility. More than 75 percent of world rice trade is indica, around 11 percent japonica, almost 9 percent aromatic rice, and the rest mostly glutinous rice.

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Fourth, rice is a critical part of the diet of billions of people in Asia with more than 40 percent depending on rice for over half their daily nutrition. The land and climate of much of Southeast and Northeast Asia are poorly suited for growing other grains and oilseeds, magnifying the critical importance of rice in the lives of billions of people, both as consumers and producers. With few viable substitutes, Asian consumers are not very responsive to changes in rice prices.

And finally, the level of government intervention in the international rice market—i.e., trade barriers, producer supports, and state control of trade—is substantially higher than for the other grains and oilseeds. This is a major factor contributing to price variation in the international rice market. For most developing Asian countries, maintaining adequate supplies of rice and low consumer prices are major policy goals. For higher income Asian countries—principally Japan, South Korea, and Taiwan—the main policy goal is to protect producers from lower priced imports.

The net impact of large government intervention is to shift price instability from domestic markets to the world market and thus magnify price and quantity adjustments. State trading further makes price discovery more costly as state trading enterprises are able to segregate markets by price.

The bulk of world rice trade occurs among developing countries. Thailand, Vietnam, the United States, China, India, and Pakistan are the largest exporters, typically accounting for 75 percent of global exports. Thailand, the world's largest exporter, ships mostly indica rice and smaller amounts of its premium fragrant or "jasmine" rice. India and Pakistan export indica and their premium aromatic or "basmati" rice. The United States and China export both indica and japonica rice. The United States is the only major exporter of "rough" or unmilled rice. Australia, Argentina, Uruguay, Egypt, Guyana, and Italy export smaller amounts of rice. Australia, Egypt, and Italy export japonica; the other three ship indica.

Based on quality, the United States, EU, Australia, and Egypt ship almost exclusively high quality rice. Thailand ships high, medium, and low quality. Vietnam ships medium quality to the Middle East and lower quality to most other markets. China exports high quality japonica to Japan and low quality indica to Asia and Africa. Except for aromatic and some high quality Indian parboiled, India and Pakistan ship low quality rice. The quality of Latin American rice varies, with Argentina and Uruguay exporting mostly high quality.

Although the import market is less concentrated than the export, it is similarly stratified. For indica rice, Indonesia, the Philippines, and Bangladesh are the largest buyers, taking mostly low quality. Iraq and Malaysia are typically medium quality import markets. Iran, Saudi Arabia, and South Africa import mostly high quality indica rice. Brazil is the largest non-Asian rice market, importing mostly high quality indica rice. Mexico and the EU are large importers of high quality indica rice, with Mexico taking mostly rough rice and the EU importing "brown" or husked rice. Africa imports mostly low quality rice and is a major recipient of U.S. food aid.

By type, Japan is the largest importer of japonica rice followed by Turkey, South Korea, and Jordan. Japonica typically sells at a premium to indica in global markets. Aromatic rice, which trades at prices above japonica, is purchased mostly by higher income countries such as the United States, the EU, Hong Kong, and the Middle East. In addition, higher income urban consumers in China import Thai jasmine rice.

The United States accounts for 12-13 percent of global rice exports. Its market share has steadily declined since the early 1980s when the United States was the largest exporter. Except for food aid, the United States does not export to the lower quality markets. The United States is losing market share in the Middle East and South Africa to Asian exporters, mostly Thailand and India. The largest market for U.S. rice is currently Latin America (mostly rough rice), the EU (mostly brown rice), Japan (both brown and milled), Saudi Arabia and South Africa (mostly parboiled), and Canada, mostly milled.

Accomplishments of the Uruguay Round

For rice, the major impact of the Uruguay Round of the GATT has been to increase global rice trade, especially for japonica rice. The URAA was signed in 1994 with the primary objective of reducing barriers to agricultural trade by increasing market access, reducing or eliminating export subsidies, and disciplining domestic support programs that distort production or trade. An examination of the URAA impacts on specific markets and on specific trade issues follows.

Japan and South Korea—The single largest impact to date of the URAA for the international rice market has been the partial opening of the Japanese and South Korean markets to rice imports through a minimum access quota. In the Uruguay Round, countries agreed to convert all nontariff barriers to bound tariffs, and thus base agricultural protection on tariffs. There were exceptions to this requirement. Among several exceptions was rice in Japan and South Korea, where, under a special "rice clause," import quotas were established.

As a developed country, Japan was required to open its domestic market to imports at 4 percent of base period (1986-88) consumption in 1995, rising to 8 percent by 2000. In the case of South Korea, a developing country, the corresponding quota is 1 to 2 percent of base period consumption in the first 5 years, rising to 2 to 4 percent in the next 5 years. The WTO minimum-access imports have been a major factor in expanding global japonica trade and rising japonica prices. Total imports by both of these countries are now more than 730,000 tons, double the 1995 level, with japonica accounting for the bulk of these imports.

Because climatic conditions limit the area where japonica can be produced, Japan's and South Korea's expanding imports have raised prices and shifted japonica supplies from other import markets. The United States, China, and Australia have supplied the bulk of Japan's and South Korea's rice imports. Of these three suppliers, only China has the potential to expand area significantly.

To date, the United States has been the largest supplier to Japan, accounting for slightly less than 50 percent of Japan's total WTO imports, almost all from California. The U.S. has not supplied any WTO rice to South Korea. China has accounted for the bulk of South Korea's WTO rice imports.

In 1999 Japan adopted a rice tariffication scheme that allowed it to halve its rate of growth in minimum access imports from a rate of .8 percent of base period use to .4 percent in return for allowing over-quota imports. Japan has set its 1999/2000 fiscal year (April-March) tariff for over-quota rice at 351 yen per kilogram, or nearly 5 times the average price of U.S. rice exported to Japan in 1998/99. The tariff is scheduled to drop slightly in 2000/01 to 341 yen. To date Japan has not imported any over-quota rice from any source. Japan's import quota will remain at the 2000 level of 7.2 percent of base period use until another agreement is reached. Even with Japan's recent tariffication, total quota imports for both countries will be nearly 800,000 tons in 2000, or almost one-half of global japonica trade.

The United States—First, under the URAA the United States agreed to lower its rice tariffs—already quite low—by 36 percent in six equal installments by 2000 starting in 1995. The United States also agreed to establish quantity and budgetary ceilings for export subsidies and reduce these 21 percent and 36 percent by 2000. The United States does not currently provide direct export subsidies for rice exports. The United States continues to include rice in international food aid shipments. The Export Enhancement Program (EEP) provided targeted export assistance in former U.S. markets, but there have been no EEP sales for rice in 4 years

The Uruguay Round was the first time the GATT disciplined domestic support programs. Under the URAA, countries were required to reduce outlays, termed aggregate measures of support (AMS), on many domestic policies that provide producers with direct economic incentives to increase production. In discussions leading up to the URAA, domestic policies were segregated into categories to indicate the relative acceptability of the policies. In the final agreement, domestic policies deemed to have the largest effect on production and trade ("Amber Box" policies) are to be disciplined by requiring limitations or gradual reductions in aggregate support levels. Policies presumed to have the least effect on production and trade ("Green Box" policies) are exempt from disciplines. As a developed country, the United States is required to reduce its AMS for Amber box category of domestic support by 20 percent over 6 years starting in 1995.

The 1996 Farm Act, enacted more than a year after the UR was concluded, contained important policy reforms that reduced trade-distorting domestic support policies. Under the 1996 Farm Act, producer support in the United States is provided in the form of direct payments that are not tied to current planting levels, thus fitting in the URAA "Green Box" category where policies are exempt from URAA reduction commitments. Since rice is a program crop, participating rice producers are eligible for production flexibility contract payments (PFCs). In 1997/98, the PFC payment rate was $2.71 per cwt, compared with a market price of $9.70. Participating producers received payments on 85 percent of their contract acreage based on their program yield.

In addition to annual PFC payments, a marketing loan program is provided to U.S. rice producers. Producer support under the marketing loan program includes both loan deficiency payments and marketing loan gains. Payment rates are based on the difference between the announced world price and the established loan rate, with payments resulting when the announced world rice price is less than the loan rate. The marketing loan program fits the URAA "Amber Box" category. Under the URAA, developed countries agreed to reduce aggregate outlays for all commodities-not rice specifically—in this category of support 20 percent by 2000/01. Thus, no reductions for rice are necessarily required to meet the 20 percent AMS commitment.

There were no marketing loan payments from 1996/97 through 1997/98, and payments were negligible in 1998/99. However, low world prices are responsible for sizable marketing loan payments in 1999/2000.

Because of economic hardships stemming from falling farm incomes and weather-related disasters, the U.S. Congress provided supplemental emergency assistance payments to recipients of PFC payments in both 1998/99 and 1999/2000. These emergency payments increased payments to rice producers by 50 percent in 1998 and doubled the total level of direct payments in 1999.

The European Union—The EU's URAA commitments were similar to the U.S. commitments. The EU converted its variable import levies to fixed tariffs and agreed to lower these tariffs 36 percent by 2000. The base period chosen for establishing these fixed tariffs was the average level during 1986-88. Tariffs were assigned by categories—paddy, husked, semi/wholly milled, and brokens. The EU also agreed to bind the difference between the import price and its internal support price so that the level of protection will not increase if the EU reduces its internal support price.

Prior to the completion of the URAA, the EU-U.S. Blair House Accord in 1992 altered the way import duties for cereals and rice are applied. Alterations apply to milled and husked imports, not to paddy, which remains fixed at levels set originally in URAA. The other duties are variable based on the difference between the intervention price and the representative import price. The representative import price and derived import duty are set every 2 weeks for each category. After complaints from importers about the representative price, the EU adopted a cumulative recovery system for any importers who believed they paid too much based on the reference price. This program was not judged successful and was terminated on December 31, 1998.

A major reason EU rice imports have not been greatly affected by WTO commitments is that a large share of EU rice imports result from import concessions. Egypt can ship 32,000 tons at a reduced duty level of 25 percent. African, Caribbean, and Pacific (ACP) countries can export long grain rice to the EU at a reduced tariff and Overseas Countries and Territories (OCT), primarily the Dutch Antilles, can export to the EU duty free. Combined ACP and OCT quotas total 160,000 tons annually. Excluding inter-EU trade, the EU annually imports more than 500,000 tons of rice (milled basis), with the United States supplying more than 300,000 tons, mostly brown rice.

Although the URAA included provisions for countries that previously protected their markets through quotas or other non-tariff barriers to ensure minimum market access, this provision had no significance to the EU because its rice imports have historically been well in excess of 5 percent of domestic consumption.

As part of the compensation package to third countries for Austria, Finland, and Sweden joining the EU, additional duty-free and reduced duty concessions were granted for rice. These included 63,000 tons of milled rice at zero duty, 20,000 tons of brown rice at a reduced tariff of 88 ECUs per ton, and 80,000 tons of broken rice at a tariff equal to the normal brokens tariff less 28 ECUs per ton. The U.S. allocation was 38,721 tons for milled rice, 7,642 tons for brown rice, and 7,281 tons for brokens.

The EU also agreed to reduce its expenditures on export subsidies by 36 percent and volume by 21 percent over the next 6 years. Rice has historically been a heavily protected commodity in the EU. EU prices are substantially above world trading levels. Most of the EU's rice exports are shipped as food aid, under preferential trading arrangements, or with export subsidies. Excluding trade within the EU, the EU typically exports more than 200,000 tons of rice annually, mostly to Mediterranean countries, Eastern Europe, and Russia.

Intervention buying currently provides the primary means of producer price support in the EU. From April through July, the EU purchases all rice offered by member country producers assuming it meets quality specifications. The purchases provide an attractive marketing option when world prices are low. Intervention prices are adjusted during the year. This form of support falls under the "Amber Box" category. The URAA eliminated threshold prices that had kept producer prices high since the origin of the Common Agricultural Policy in 1967.

From 1970 through the mid-1990s very little intervention buying occurred as the EU relied heavily on export subsidies to move surplus production into export markets. In 1997 intervention purchases became large as world prices dropped, substantially making intervention sales an attractive alternative for EU producers. The EU entered the 1999/2000 market year (September to August) with extremely large intervention stocks, mostly Italian japonica rice.

Prior to the URAA, the EU undertook policy changes that relied less on market price support and more on direct payments. As part of the EU's CAP reform started in 1992 for cereals, reforms for rice began in 1997/98 and follow the pattern established for cereals. The reforms call for compensatory area payments in return for cuts in intervention support prices for paddy rice of 15 percent. They are being implemented as a 5-percent cut a year over a 3-year period starting in 1997/98. As total payments to producers are not expected to decline much, little impact on plantings is expected.

There is a ceiling on the area for which the compensatory payments are paid. The ceiling is based on the annual average rice plantings in each country from 1993/94 to 1995/96 (1992/93 to 1994/95 for Spain and Portugal). If rice plantings exceed the EU maximum guaranteed area, penalties are applied. Compensatory payments fall under the "Blue box" WTO policy category. Payments in this category are temporarily exempt from reductions if the amount of payments is based on fixed area and yields. The Blue box was intended to be a temporary measure.

Developing Countries—Several URAA commitments pertained to *developing countries*. Similar to Japan and South Korea, the Philippines invoked a "rice clause" that guaranteed a tariff-rate quota rising to 238,940 tons by the end of the implementation period. However, to date imports have far exceeded this level every year since 1995 and are projected to remain well above this quota for at least the next decade. Indonesia negotiated a separate agreement on rice imports, guaranteeing 70,000 tons of imports annually. Like the Philippines, Indonesia's rice imports have far exceeded this level every year this decade and are projected to exceed 2 million tons annually for the next decade.

Under the URAA, all member countries were required to cap trade-distorting support at 1986-88 levels, and make reductions off this base. Developed countries were required to reduce their AMS by 20 percent over 6 years and developing countries to reduce their AMS by 13 percent over 10 years.

This requirement has not had much impact on rice production in developing Asian countries-which account for the bulk of global rice production—for two reasons. First, the URAA allowed developing countries “special and differential” exemptions for certain input and investment subsidies, which cover most programs used to support rice production in these countries. Domestic support in these countries is typically provided by fertilizer subsidies, provisions for certified seeds and other inputs at below-market prices, and sometimes credit assistance. Second, trade-distorting support measures such as price supports are not subject to reduction if in total they do not exceed 10 percent of the value of production-the *de minimis* provision for developing countries. Few developing countries have domestic reduction commitments.

In addition, developing countries committed themselves to not using export subsidies. However, there is very little use of export subsidies by Asian or Latin American rice exporting countries. In fact, except for small amounts exported by the EU, little rice is exported under subsidies by any country. The bulk of government involvement in the Asian rice market is through state control of trade, often in the form of state trading enterprises. This is especially true for several major Asian rice importers and exporters.

Sanitary and Phytosanitary Measures—The Uruguay Round Sanitary and Phytosanitary (SPS) Agreement imposed new rules and procedures on measures countries may take to protect human, animal, or plant life or health. Such regulations can not be used as a pretext for protection. The UR requires SPS measures to be applied in a consistent manner across countries and commodities and does not allow them to be used as an arbitrary barrier to trade. This Agreement could increase the transparency of countries’ SPS regulations and provides an improved means for settling SPS-related trade disputes.

Currently, Mexico and Central America effectively ban Asian rice imports through SPS measures. This gives the United States a major trade advantage in this important region. However, the application of unsound phytosanitary requirements has at times been a problem for U.S. rice exports to Latin America, in particular to Mexico and Central America. Phytosanitary requirements, often motivated to protect domestic industry, have periodically stopped U.S. shipments, resulting in losses due to demurrage charges and canceled sales.

Most recently, in November 1999 Costa Rica prevented the unloading of U.S. rough rice based on alleged phytosanitary requirements during the domestic harvest period. In the past, Honduras, El Salvador, Panama, the Dominican Republic, and Mexico have applied arbitrary phytosanitary restrictions during local harvest to protect domestic producers.

Dispute Resolution—Compared to GATT procedures, the Uruguay Round improved the multilateral dispute resolution process by limiting the ability of a single country to block the formation of a dispute resolution panel or veto an adverse ruling. This procedural change occurred nearly 50 years after the founding of the GATT.

The WTO’s 2000 Round To Examine Unresolved Issues

While the URAA increased international rice trade, several issues critical to rice remain unresolved. Important issues in the upcoming WTO Round pertaining to the U.S. rice industry are likely to be those remaining from the last round, such as increased market access, continued reduction in domestic support and export subsidies. Developments in new areas—such as creating tighter discipline on state trading enterprises (STEs), disciplining use of export credit guarantees, reducing technical barriers to trade, and establishing uniform world trading rules and regulations for biotechnology products could also be important to the U.S. rice sector.

Market Access—Several major rice markets are still highly protected, most importantly Japan and South Korea. Without a new agreement, Japan’s tariff-rate quota (TRQ) will remain at 7.2 percent of base period (1986-88) use, or 682,000 tons, after 2000. Recent tariffication by Japan has slowed the increase in minimum access imports and placed a prohibitively high tariff on above-quota imports. The URAA allowed Japan to replace an outright ban on over quota imports with an extremely high tariff. The tariff level is based on the difference between the domestic price—premium quality japonica rice—and the price of imported rice during the base (1986-88) period. At that time Japan’s rice imports consisted of small amounts of low quality indica for processing. The level of both Japan’s tariff and TRQ will be major issues in the upcoming round.

South Korea’s imports are scheduled to continue expanding until 2004 but will still be only 4 percent of base period (1986-88) use or a little more than 185,000 tons (milled basis). What will happen with South Korea’s TRQ after 2004 is a major policy issue.

Accession of China and Taiwan—Accession of China and Taiwan into the WTO would have a significant impact on world rice trade. On November 15 China and the United States signed a bilateral agreement that would permit the United States to endorse China’s accession to the WTO. This agreement represents a crucial step in China’s WTO accession process.

Several important steps remain. China must still conclude bilateral agreements with a number of other WTO members, including the EU, Canada, Argentina, and Thailand. Multilateral negotiations on China's accession protocol must also be completed. China must then complete its own domestic legislation and procedures for accession.

In the agreement, China agreed to cut tariffs on all agricultural commodities to an average of 17 percent. China will also establish large and increasing tariff-rate quotas for wheat, corn, rice, and cotton with a substantial share allotted to private traders. China also agreed to prohibit the use of export subsidies for agricultural exports, including rice.

China produces and consumes both indica and japonica rice. Area is shifting from lower quality indica—mostly grown in the south—to higher quality japonica. The bulk of the japonica is produced in the northeast. It is likely that China would opt to continue exporting high-quality japonica to Japan, a lucrative market.

Policy changes this spring indicate China is willing to adopt more market-oriented policies that would result in declining rice production, especially for lower quality early rice grown in the south. If China joined the WTO, it would have to partially open its rice market to imports. This could have a major impact on the world rice market given China's massive consumption, nearly 40 percent of total global rice consumption.

In April 1999, China committed to a 2.66-million-ton TRQ for rice in 2000, rising to 5.32 million in 2004. Half the quota is for japonica (medium/short grain), the remainder is for indica (typically long grain). The TRQ is not a purchase commitment, but an opportunity for market access conducted in a fair and transparent manner. China committed to reserve 50 percent of short and medium grain imports and 10 percent of the long grain imports for the private traders. Currently, all grain trade in China is controlled by the government.

Imports of this magnitude would have a massive impact on world trade volumes and international prices. However, it is unlikely that China would import the full TRQ. Also, it is unlikely China would import very much japonica rice, as only about 2 million tons are traded worldwide. The United States is not likely to supply any substantial amounts of rice to China as U.S. prices are well above Asian levels. However, certain niche markets—primarily for higher income urban consumers—could be supplied by U.S. producers. In addition, any overall increase in global trade would likely benefit the U.S. rice industry to some degree.

If Taiwan joins the WTO, it would be required to open its market to an identical share of base use as required of Japan. For 2000, this amount equates to about 144,720 tons on a brown rice basis. Taiwan consumes mostly high quality japonica rice. The United States would be a likely supplier of much of Taiwan's rice imports.

State Trading Enterprises—The upcoming WTO Round will look to further discipline the activities of STEs. Of major concern is the lack of transparency in pricing by STEs and the possibility that some countries are using STE to circumvent URAA rules. About one-half of global rice exports is by STEs and STEs account for one-third of rice imports. STEs account for all or the bulk of rice trade for several current WTO members—Indonesia, Malaysia, Australia, the Philippines, and South Korea. In addition, several countries seeking WTO membership—China, Taiwan, Vietnam, and Russia—use STEs to conduct rice trade.

Biotechnology (transgenic rice)—The upcoming WTO will likely tackle issues associated with trade in biotechnology products. Differences among countries' regulations regarding biotechnology pose significant potential barriers to trade in these varieties. Trade in genetically improved varieties could be facilitated through mutual recognition of countries' regulations, harmonization of existing regulations between countries, and by the negotiation of an international standard. However, trade could be impeded by harmonizing to a stricter standard.

Japan, the EU, and South Korea-all rice importing countries—are drafting or planning to establish regulations on genetically modified commodities. Both Japan and the EU are major markets for U.S. rice exports.

Although transgenic rice has yet to be commercially produced in the United States, transgenic varieties are expected to be commercially available to U.S. producers early in the next century. Development of transgenic rice in the United States is currently aimed at improving agronomic characteristics, primarily herbicide resistance. Other products in development include rice varieties tolerant to cold, heat, and drought stress.

In addition, rice breeders are using biotechnology to improve the nutritional quality of rice as demonstrated by the recent international development of a rice variety with increased levels of iron and vitamin A. This development was led by researchers at the Swiss Federal Institute of Technology and was financed primarily from the New York-based Rockefeller Foundation with additional funding from the European Commission's agricultural research program. This rice could overcome a variety of food deficiencies that are particularly common in developing countries.