

**IMPACTS OF THE URUGUAY ROUND  
ON THE WORLD RICE MARKET**

Karen Oerter

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**Center for Agricultural and Rural Development  
Iowa State University  
Ames, Iowa 50011**

Karen Oerter is a research scientist, Center for Agricultural and Rural Development, Iowa State University.

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## ABSTRACT

The Uruguay Round has produced the first global agreement to reduce agricultural trade barriers even though the reductions are gradual and limited. A study was done to evaluate the effects of Uruguay Round commitments on domestic support, export subsidization, import access, and tariffication on world agricultural commodity markets. A baseline was compared to two GATT scenarios; one in which income increases due to the Uruguay Round were assumed, and one in which no GATT-induced income increases were incorporated. This paper addresses the results of this study specifically as they pertain to the world rice market.

By 2002 the world rice market will be impacted substantially, not only due to greater access commitments by Japan and the Republic of Korea, but also due to expected increases in world consumption which will be stimulated by rising incomes, especially in the developing world. By the time of full implementation of the GATT agreement in 2000, income growth is expected to have significant and increasing impacts on world agricultural trade and prices. For some sectors, income increases will have greater impacts than the direct constraints imposed by the GATT agreement.

The magnitude of the overall impacts across all commodities is not likely to be as large as envisioned at the beginning of negotiations because of unilateral reductions in trade-distorting practices undertaken for some commodities by several countries since 1986. Also, final reduction commitments are much smaller than those being considered early in the negotiation process. Ultimately, countries are free to respond by adjusting policies to dampen the effects on their markets, as long as they remain within the GATT constraints.

## **IMPACTS OF THE URUGUAY ROUND ON THE WORLD RICE MARKET**

### **Introduction**

The 117-nation trade agreement signed in December 1993 concluded the Uruguay Round of trade negotiations under the General Agreement on Tariffs and Trade (GATT). Despite long and often bitter negotiations, stalemates, seemingly irreconcilable differences, and the passage of several earlier deadlines, the Uruguay Round has been declared a success. As the round opened at Punta del Este in 1986, agricultural trade reform was touted as a central issue with the goal of substantial liberalization. However it is obvious that real liberalization was not achieved. The bold proposals by the United States and Cairns Group for near elimination of trade-distorting practices were watered down by the time of the submission of the Dunkel text in December 1991, were further reworked by the Blair House agreement in December 1992, and all but negotiated away in the Uruguay Round Final Act of December 1993. Although the agreement did not realize full liberalization of agricultural commodity markets, incremental successes through the years of negotiations should not be minimized. Significant achievements were obtained as exemplified by negotiated reductions in import barriers and domestic support. Additionally, the Uruguay Round Agreement is arguably more important for what it prevents than for the changes it implies for trade distorting policies. For without the agreement and conflict resolution mechanisms, trade disputes in agriculture would likely escalate, possibly even into other economic sectors.

Agriculture was one of fifteen major sectors included in the Uruguay Round discussions. Although other sectors had conflicts, some of which were postponed until future rounds, the agreement made some important strides in other areas including finance and intellectual property. The Uruguay Round was conducted in, and contributed to, the environment which encouraged regional trade agreements such as the North American Free Trade Agreement (NAFTA) and unilateral policy changes such as Common Agriculture Policy (CAP) reform in the European Union

(EU) and PROCAMPO in Mexico. Expansion of several free-trade areas is currently under consideration. These reductions in trade distortion can be considered as fruits of the Uruguay Round.

Within agriculture, the idea of tariffication of import barriers was accepted, making trade barriers transparent for the first time. Schedules for reductions of tariff equivalents have been submitted by GATT member countries. Although the end tariff equivalents will still be largely prohibitive, the stage is set for future meaningful reductions. Perhaps the biggest reason that the Uruguay Round can be considered a success for agriculture is that the round ended with agriculture included. The achievements may seem small when compared to early proposals for reform, but given the political economy of world agriculture, they are real gains to the world community that should, indeed, be appreciated.

The implications of the Uruguay Round for sectors other than agriculture are beyond the scope of this study and will not be considered here, except for the assumption that combined impacts from all sectors will lead to increased income growth around the world. Other trade agreements that have not yet been negotiated are not assumed in this analysis, but NAFTA is incorporated in the baseline against which this analysis is compared. Therefore, the benefits of such agreements are not counted as Uruguay Round benefits.

The tariffication of nontariff barriers and their subsequent reduction result in tariff equivalents which are still mostly prohibitive above quota levels. Over the life of the Uruguay Round agreement, little impact will be felt from tariffication. Any such benefits are likely to come from future tariff reductions. The direct impacts on agriculture resulting from the Uruguay Round are primarily derived from import access and subsidized export quantity and expenditure commitments. This study evaluates prospects for world agriculture under a scenario that incorporates import access commitments, constraints on subsidized export quantities and expenditures, and increased income levels resulting from the Uruguay Round GATT agreement.

### Analytical System and Procedures for the Quantitative Analysis

To assess the impacts of the Uruguay Round Final Act, results for agriculture are compared under three alternative scenarios:

1. A baseline scenario that incorporates CAP reform, PROCAMPO, the Blair House oilseeds agreement, NAFTA, and existing policies in other major trading countries.
2. A GATT scenario A that incorporates proposed changes in the agricultural policies of major trading countries as per submitted country schedules and assumptions about increases in income resulting from GATT.
3. A GATT scenario B which is identical to scenario A except that no increases in income above baseline levels are assumed to result from a GATT agreement.

To get a better perspective on the direct impacts of the Uruguay Round, GATT scenario B is compared to the baseline. In this way, the "pure" effects of GATT constraints are assessed. Using this perspective, a greater appreciation for the impacts of GATT constraints is obtained, especially since projections of income increases stemming from a GATT agreement vary widely. Using different assumptions about income increases can produce substantially different results. The difference between the two GATT scenarios can be viewed as the impact attributable to the income increase assumptions used in this analysis.

This analysis is conducted by utilizing the agricultural commodity models of the Food and Agricultural Policy Research Institute (FAPRI). For major trading countries, the FAPRI models are econometric models that estimate the supply, utilization, net trade, and prices of wheat, feed grains, rice, and soybeans (Devadoss et al. 1989). Other FAPRI crops models used in this analysis include sugar, cotton, and corn gluten. Models have also been developed for beef, pork, poultry meat, and dairy markets. All the components of the modeling system used in this analysis are dynamic, meaning that both short- and long-term effects of policy changes can be identified. Policy instruments are explicit in these models so import, export, and domestic support policies can be modified as

required by proposed GATT provisions. The models are calibrated to reproduce recent historical data as closely as possible and to generate projections for the next ten years.

### **Model Simulations**

#### **FAPRI 1994 Baseline**

FAPRI baseline projections are based on assumptions about the general economy, agricultural policies, technological change, and the weather. The baseline scenario includes the CAP reform already implemented by the EU and the Blair House oilseeds agreement. It also includes PROCAMPO, the new producer support policy recently implemented in Mexico. NAFTA is incorporated into the baseline as well. The policy regimes in the United States and other developed market economies are assumed to continue according to the current legal provisions. The macroeconomic outlook assumed for this baseline is the one published in October 1993 by the WEFA Group for Argentina, Saudi Arabia, and the Republic of South Africa; in December 1993 for the United States; and in November 1993 by Project LINK for other countries of the world. A detailed description of the baseline scenario appears in FAPRI 1994a and FAPRI 1994b.

#### **GATT Scenarios**

The GATT scenario assumptions are based on submitted country schedules of commitments for Uruguay Round agricultural disciplines. These commitments, although negotiated reference values sometimes supplant discipline description amounts, are generally based on the Dunkel text with revisions and adjustments as specified in the Blair House agreement of November 1992. A more detailed list of country schedule commitments appears in 94-GATT 22.

Proposed changes to trade-distorting policies as outlined in the Dunkel text are aimed at four areas: internal support, export subsidies, market access, and sanitary and phytosanitary measures. The Blair House agreement modified internal support and export subsidy restrictions. Under the

Uruguay Round Final Act, actual commitment levels do not always reflect agreed-upon rules and may be substantially different from calculated values based on the Dunkel text or Blair House agreement. Implementation of trade-distortion reduction commitments is to take place from 1995 through 2000 for developed countries and from 1995 through 2004 for developing nations. Table 1 presents general descriptions of the Uruguay Round disciplines for market access, export subsidization, and internal support.

Market access is to be achieved in various ways. For developed nations with nontariff barriers, those barriers are converted into tariff equivalents and over a six-year period are reduced by a simple average of 36 percent from the 1986-88 average tariff equivalent over all agricultural goods. Tariffs for individual commodities are required to be reduced by a minimum of 15 percent over six years. Any tariff reduction of more than 15 percent that would result in increased imports of that commodity is assumed to revert to the 15 percent minimum. It is further assumed that the simple average reduction of 36 percent will be met through higher tariff reductions on minor commodities. Also, where import barriers are in place, access to the domestic market is required to be 3 percent of domestic consumption in 1995, increasing to 5 percent by 2000 (minimum access), or current access of 1986-88 average import levels, whichever is greater. However, in some cases, market access commitments different than those implied by the minimum and current access rules were submitted.

Export subsidization is subject to potential constraint in two ways. Expenditures are to be reduced 36 percent from the 1986-90 reference period average level, and quantities exported with subsidies are to be reduced 21 percent from the 1986-90 average level. The proposed quantity reductions were 24 percent in the Dunkel text, but were changed to the current 21 percent in the Blair House agreement and maintained at that level in the Uruguay Round Final Act. These reductions are to be made in equal increments from 1995 to 2000. However, the beginning level for reduction of either quantities or expenditures can be from 1986-90 average levels or 1991-92 average levels,



whichever is greater. In either case, the final reduction commitment must be no less than 21 percent of the 1986-90 average level. This is the "no front-loading" feature which does not necessitate a large adjustment in the first year and permits reduction of large stocks of grain via export channels for the EU. Export subsidies under a bona fide food aid program are not subject to reduction.

Internal support, as measured by an aggregate measure of support (AMS) using fixed reference prices, is reduced by 20 percent from the 1986 level. According to the Dunkel text, the AMS reductions were to be commodity specific, that is, each commodity was subject to AMS reductions. With the Blair House agreement, this was changed to an agricultural sector-wide AMS, allowing the AMS for some commodities such as U.S. sugar to avoid reduction as long as the aggregate AMS reduction is at least 20 percent. With the Blair House agreement, U.S. deficiency payments and EU compensatory payments of the reformed CAP were exempted from inclusion in AMS calculations, and therefore from reduction. This is consistent with the final agreement. From 1995 through 2000 the AMS is reduced evenly from the 1986 level. If obligations under export competition or import access require that internal prices be less than the support price calculated under the internal support rules, countries are allowed to maintain the support price at a level greater than the internal price through mechanisms such as deficiency payments as long as the AMS reduction requirements are met. Because credit is allowed for reductions in AMS since 1986, many countries have already met the AMS requirements through unilateral policy changes. Thus, strong instruments for discipline, introduced in the cases of market access and export subsidization commitments, are not imposed on internal supports. Countries are, however, constrained from expanding internal support indiscriminately.

The benefits of reducing trade barriers include more efficient allocation of resources leading to increased productivity and higher incomes. Assumptions about the increase in the level of incomes resulting from the Uruguay Round are from a study by Digital Research Institute (DRI). Table 2

presents the assumptions used in this analysis. Care should be taken to interpret these numbers correctly. They do not represent increases in income growth, but merely the increase in income levels in a specific year. The initial rates of growth are expected to be very small. These assumptions were applied to GATT scenario A only. GATT scenario B utilizes baseline levels of income. This is the only difference between the assumption sets used in the two GATT scenarios.

### **Results of the GATT Scenarios**

With assumptions incorporated to reflect commitments contained in the submitted country schedules, FAPRI models of world agriculture are solved to obtain results for the GATT scenarios. This section reports results for the international rice market, with respect to net trade and world prices. Because the Blair House agreement changed AMS calculations to agricultural sector-wide and not commodity specific, and this was part of the final act, most countries are expected to be GATT-legal in this respect by the beginning of implementation of new GATT rules in 1995. Because of this, there will be little change in production of major producing countries, except as is necessary to reduce excess supplies to meet subsidized export quantity restrictions and market access commitments.

### **Trade Impacts**

#### *Rice*

Results for net trade and world prices for rice are reported in Table 3 for 1995-1999 average levels for the baseline and scenario A, and for the baseline and both scenarios for 2000-2002. Since the changes in income resulting from a GATT agreement are expected to be relatively small in the first several years, the differences between scenario A and scenario B are small during the 1995-99 period. For this reason, results for scenario B are reported for the 2000-2002 period only. GATT implementation begins on July 1, 1995, and the final year of implementation is 2000 for developed countries and 2004 for developing countries, except where specifically negotiated. Changes in trade

levels are primarily the result of export subsidy and market access restrictions in the 1995-1999 period when income increases are relatively small. In the 2000-2002 period, however, income increases begin to have significant impacts on world grain markets. Table 4 gives a more detailed look at production, domestic use, and trade numbers for individual countries.

Although more than 500 mmt of rice worldwide (rough basis) are produced each year, relatively little is traded. Because of the thinness of the world rice market, increased market access in countries such as Japan, the Republic of Korea, and to a lesser extent the EU, are expected to have a substantial impact on world prices. Prices of substitute food grains, such as wheat, also put upward pressure on rice prices. Finally, the income increases assumed are largest for Asian countries which are also major rice consuming nations, further contributing to increased demand, leading to higher prices. World rice prices are projected to increase more than 10 percent and 7 percent in scenarios A and B, respectively, during the 2000-2002 period.

### **Country Impacts**

#### *Japan*

The largest direct impact of the Uruguay Round on the world rice situation is expected to be from Japanese minimum access commitments. Japan has agreed to an initial access quantity of 379 tmt starting in 1995, increasing to 758 tmt by 2000/2001. This amounts to 4 percent rising to 8 percent of domestic demand in the 1986-88 reference period. This proportion of domestic market access differs from other current access commitments (normally 3 percent rising to 5 percent) because a higher access quantity was negotiated as a trade-off for no tariffication of nontariff barriers through the year 2000, and is subject to further negotiation after that time. Negotiation of this access commitment was considered a major achievement of the Uruguay Round, and is certainly a significant concession by Japan.

*Republic of Korea*

The Republic of Korea has also agreed to open its domestic market to rice imports. Korea has agreed to an initial access level of 1 percent of domestic demand of the 1986-88 reference period, or 51.3 tmt in 1995, rising to 2 percent in the year 2000, and up to 4 percent in 2004, for a final access commitment of 205 tmt. Like Japan, Korea negotiated these specific levels in order to postpone tariffication of nontariff barriers. Although access quantities for Korea are much smaller than for Japan, the opening of the domestic market is a significant shift in rice import policy.

*European Union*

The European Union has agreed to maintain a current access commitment of 717 tmt, and although the EU has agreed to reduce import tariffs on rice by 36 percent, the bound rate remains prohibitively high at 416 ECU per metric ton in the year 2000. The EU will also be required to reduce its subsidized rice exports from a base level of 184 tmt to 145 tmt by the year 2000.

*United States*

The United States does quite well in the world rice arena due to the GATT. In scenario A, income increases are expected to increase demand for all types of rice, and other exporters will increase production and trade more than in scenario B. Higher rice prices will spur U.S. rice production, and exports expand to meet some of the increased excess world demand resulting from compliance with the GATT by Japan and the Republic of Korea. Subsequently, high quality rice producers (located primarily in California) are more likely to benefit than are producers of lower quality rice which must compete with indica production from Vietnam, Thailand, China, and Myanmar. Alternative supplies of japonica rice from the EU and Australia will compete in the new market for japonica rice in Korea and Japan. California's ability to expand production of japonica rice in order to capture more of that market is heavily constrained by availability of water for irrigation. ARP rates are 0 percent in the baseline for rice, leaving little ability to expand rice area in

the United States in response to higher world prices. If U.S. policy would turn to no ARP for rice, land would come out of the 50/85 program, which would add resources for expanding rice area. For the United States, production increases less than 2 percent in both GATT scenarios and domestic use of rice declines marginally. Rice exports increase 4 million hundredweight (cwt) in scenario A where there are more export opportunities for lower quality rice because of income increases in rice consuming countries. In scenario B, rice exports increase 3 million cwt, mostly to Japan and South Korea. However, the United States will have to comply with reducing subsidized rice exports from the 1991-1992 average level of 318 tmt, to 272 tmt in 1995, to 39 tmt in the year 2000.

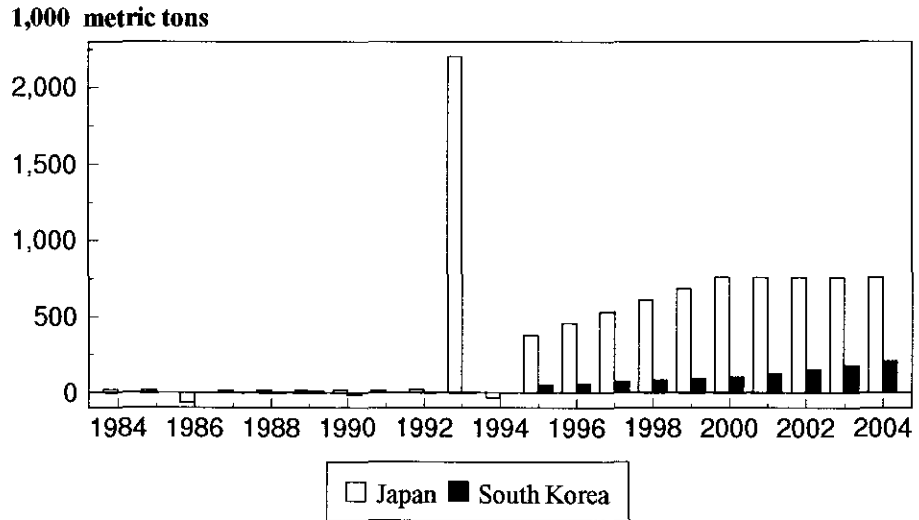
#### *Thailand*

Although there has been some evidence of Thailand increasing production of other crops on former rice growing area, the price increases expected with the implementation of Uruguay Round commitments will likely return some of this land to rice production. Thai rice production is projected to increase with an accompanying 200 tmt rise in rice exports by 2000-2002 in scenario A. Thailand has also committed to an initial tariff quota quantity of 238 tmt in 1995 and final tariff quota quantity of 250 tmt in the year 2004. The in-quota tariff quantities would be subject to a 30 percent tariff.

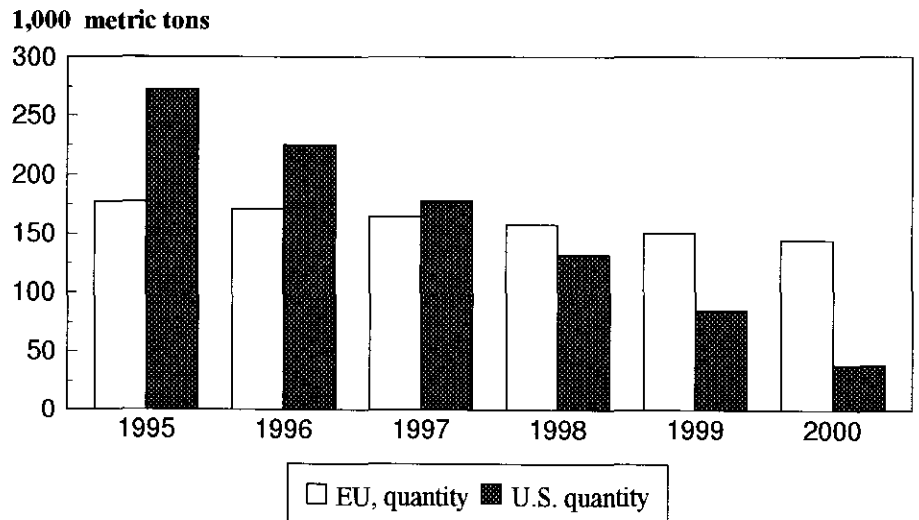
#### *Indonesia and the Philippines*

Indonesia and the Philippines are often importers of rice in years of poor harvest and exporters whenever the price becomes attractive and excess supply exists. In terms of GATT commitments, Indonesia has agreed to reduce the import tariff on rice from 180 percent to 160 percent, and the Philippines will drop the tariff from 100 to 50 percent. These rates will help to maintain a protective cushion for domestic producers. Indonesia also agreed to an in-quota tariff quantity of 70 tmt at a rate of 90 percent, while the Philippines has agreed to an initial in-quota quantity of 179 tmt climbing to 299 tmt at a rate of 50 percent. Indonesia also managed to negotiate levels for export subsidy

### Rice Import Access Commitments



### EU and U.S. Subsidized Export Commitments



reductions, starting with a base level of 300 tmt, and ending with 258 tmt of exports eligible for subsidy in 2004. The commitments made by Philippines and Indonesia are not expected to have a significant impact on the world rice market as the tariff rates remain prohibitively high.

#### *Other Participating Countries*

Several other countries that have submitted commitments are considered minor players in terms of their position in world trade in rice and or the magnitude of their commitments. Australia, Brazil, Canada, Egypt, Finland, Israel, Mexico, Norway, and Singapore have all submitted tariff reduction commitments ranging from 10 to 80 percent. Although minor players at the present time, some of these such as Australia and Egypt, have the climate and capability to increase high quality rice production for export. It remains to be seen what extent these other countries will capitalize on higher prices. Hungary has committed to an in-quota tariff quantity of 19 tmt at a rate of 25 percent, and Iceland has agreed to an in-quota tariff quantity of 0.5 tmt. These reductions in domestic protection, while modest, help to advance international trade in a very volatile world market.

#### *China and Vietnam*

China and Vietnam are not GATT members, so they are not required (and cannot be expected) to comply with any of the specific rules applied to GATT member nations. This does not mean that implementation of the GATT will not have an effect on the economies of these nonmember nations. On the contrary, China can be expected to increase production and exports of japonica rice in scenario B, and in fact possesses the resources to expand area planted to japonica rice. But income increases in scenario A are projected to increase consumption more than production, and China will export less rice in this situation. Because of higher world prices in both GATT scenarios and expanded rice trade stemming from increases in income in scenario A however, producers of lower quality rice, such as Vietnam, are also expected to gain some increased exports.

### Summary and Conclusions

The United States is expected to respond within the framework of existing commodity programs for crops by reducing ARP rates within the disciplines negotiated under the Uruguay Round. In subsequent rounds, if deeper cuts are made in export subsidies and if market access becomes greater, the United States may not be able to respond in the same manner as these GATT scenarios suggest. Idle land in the United States is not an unlimited resource. When ARP rates reach zero, world price increases will rise more sharply giving other countries a better opportunity to respond. U.S. rice producers are heavily constrained by the availability of irrigation water needed to produce high quality rice in California, high production costs, and disease problems. (USDA 1994) Low cost rice producers such as Vietnam, Myanmar, China, and Thailand would likely most benefit from future negotiations. More importantly, compliance with GATT will prevent any countries from expanding any trade distorting domestic support, which has in the past significantly hampered world rice trade.

For agriculture as a whole, the EU may gain substantially because of the idle land resulting from CAP reform while grain exporters such as Canada, Argentina, and Australia would likely benefit more from future rounds. Future reductions in trade-distorting policies will produce different distributions of benefits.

It is possible that other countries will respond in ways not assumed here. The case of the EU grains programs is just one example. Since one of the ultimate goals is to put world agriculture on a level playing field with equal opportunities for competition, this must be viewed as a fair result. There are some important implications of reaching these goals, however. Efficient producers will have advantages over less efficient ones. Where agriculture has been heavily protected, significant structural change might be necessary not only to compete on world markets, but merely to remain in business. Resource allocation is likely to shift to the efficient producers, or even to other industries. In the long run, countries must be willing to accept these changes as agriculture becomes more open.



In the short run, these implications will probably become justification for cautious negotiations as they were in the Uruguay Round.

While the final agreement is viewed in a generally positive light, there are also some negative impacts. Income growth will offset world price increases only in those countries with industries which benefit from the Uruguay Round. These countries will be able to increase import expenditures. Those countries which do not benefit sufficiently from the GATT agreement may not be able to import necessary quantities of food and other products. Often, these are already among the world's poorest countries. Many of these countries are currently beneficiaries of subsidized exports of agricultural commodities. Reduction of these subsidies will reduce their ability to import food. At the same time, higher world prices will rarely stimulate their domestic agricultural sectors to respond sufficiently to offset smaller imports. The developed countries which benefit most from the Uruguay Round will be faced with moral issues raised by these distributional effects.

Arriving at an international trade agreement that includes agriculture, even a compromise agreement, is the first step in what promises to be a long process toward achieving real trade liberalization for what has been one of the world's most protected industries. The impacts of the Uruguay Round will include some surprises. Because implementation of commitments to reduce trade barriers has not yet begun, the scenarios presented here are only a best guess of what might happen. The authors hope that guess is a well-informed one, but only the future will tell. As the actual impacts of the Uruguay Round begin to unfold toward the end of the 1990s, countries will adjust their expectations and their negotiating positions for future rounds. There will be more international pressure to reduce trade distortions just as certainly as there will be continued domestic pressures to maintain protection. However, the Uruguay Round ended with agriculture included, and future rounds will likely build on what has been accomplished to this point. This is perhaps the greatest achievement of the Uruguay Round.

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**Table 1. Uruguay Round Disciplines**

	Developed Countries	Developing Countries
Implementation Period	1995-2000	1995-2004
Export Subsidy Reductions:		
Base Level	The greater of 1986-1990 or 1991-1992 average	The greater of 1986-1990 or 1991-1992 average
Expenditure	36 percent reduction from base level	24 percent reduction from base level
Quantity	21 percent reduction from base level	14 percent reduction from base level
Internal Support Reductions:		
Base Level	1986-1988 average	1986-1988 average
AMS	20 percent reduction from base level	13 percent reduction from base level
Credit allowed starting from:	1986	1986
de minimis provision	exempt if support is less than 5 percent of value of value of production	exempt if support is less than 10 percent of value of production
Market Access (higher of the Minimum or Current Access):		
Base Level	1986-1988 average	1986-1988 average
Minimum Access	3 percent of base level consumption in 1995 increasing to 5 percent by 2000	3 percent of base level consumption in 1995 increasing to 5 percent by 2000
Current Access	Base level imports	Base level imports
Tariffication:		
Base Level	1986-1988 average	1986-1988 average
Total Reduction		
Minimum Reduction	36 percent on average, with a minimum of 15 percent per individual tariff line	24 percent on average, with a minimum of 10 percent per individual tariff line

For several countries, including Canada, the European Union, Japan, and the United States, specific commitment levels were agreed upon. These may differ from the levels implied by the above general statements on disciplines. For these cases, the specific levels supersede the rules for implementation.

**Table 2. Percent increase in GDP resulting from GATT**

	1995	2000	2002
<b>World</b>	0.07	(Percent) 0.90	1.46
<b>Developed</b>			
Australia	0.07	0.88	1.42
Canada	0.06	0.64	1.04
European Union	0.06	0.68	1.10
Japan	0.09	1.09	1.76
New Zealand	0.10	1.18	1.90
Other Western Europe	0.06	0.68	1.10
South Africa	0.05	0.59	0.95
United States	0.06	0.65	1.04
<b>Former Centrally Planned</b>			
Eastern Europe	0.06	0.76	1.23
Former Soviet Union	0.07	0.77	1.23
<b>Developing</b>			
<b>Africa and Middle East</b>			
Algeria	0.05	0.57	0.91
Egypt	0.05	0.58	0.93
Morocco	0.05	0.57	0.92
Nigeria	0.05	0.58	0.93
Saudi Arabia	0.05	0.58	0.93
Tunisia	0.05	0.57	0.91
<b>Asia</b>			
China	0.16	2.00	3.24
India	0.10	1.14	1.84
Indonesia	0.17	2.01	3.25
Pakistan	0.17	2.02	3.27
Philippines	0.17	2.06	3.33
South Korea	0.17	2.02	3.27
Taiwan	0.17	2.02	3.27
Thailand	0.16	2.01	3.25
Vietnam	0.10	1.14	1.84
<b>Latin America</b>			
Argentina	0.12	1.45	2.34
Brazil	0.12	1.45	2.34
Mexico	0.05	0.63	1.01
Paraguay	0.12	1.47	2.37

Table 3. World rice trade under the baseline and GATT

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
Net Rice Exports					
China	1,010	7	826	-16	8
European Union	-429	-124	-526	-56	-51
India	641	58	461	124	182
Indonesia	-67	-25	58	-204	-44
Japan	0	-531	0	-758	-758
Pakistan	1,013	88	1,088	156	136
South Korea	0	-72	0	-128	-128
Thailand	4,860	161	5,671	201	141
United States	2,243	86	2,235	126	88
Vietnam	2,112	188	2,511	283	203
Rest of World	-11,384	164	-12,325	273	223
World Prices		(U.S. Dollars per Metric Ton)			
Rice (FOB Bangkok)	287.15	26.80	342.24	36.37	25.03

Table 4. World rice country impact tables under the baseline and GATT

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
China			(1,000 Metric Tons)		
Production	135,847	0	141,947	0	30
Domestic Use	134,837	-7	141,120	16	-8
Net Exports	1,010	7	826	-16	8
European Union					
Production	1,385	30	1,414	30	30
Domestic Use	1,813	152	1,938	86	81
Net Imports	429	124	526	56	51
India					
Production	77,977	115	80,123	408	301
Domestic Use	77,128	20	79,803	235	37
Net Exports	641	58	461	124	182
Indonesia					
Production	33,268	0	35,530	8	1
Domestic Use	33,323	27	35,453	221	48
Net Imports	67	25	-58	204	44
Japan					
Production	9,464	0	9,489	0	0
Domestic Use	9,339	531	9,422	758	758
Net Imports	0	531	0	758	758
Myanmar					
Production	8,992	10	9,506	17	12
Domestic Use	8,635	4	9,242	25	-3
Net Exports	339	6	261	-9	15
Pakistan					
Production	3,456	32	3,624	88	76
Domestic Use	2,442	57	2,528	-75	62
Net Exports	1,013	88	1,088	156	136
Thailand					
Production	13,761	43	14,635	72	53
Domestic Use	8,879	-115	8,944	-134	-89
Net Exports	4,860	161	5,671	201	141

Table 4. Continued

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>United States</b>					
Beginning Stocks	1,407	-20	1,458	-32	-38
Production (rough basis)	8,054	100	8,223	-4	104
Domestic Use	4,825	-15	5,041	26	-25
Net Exports	3,204	123	3,193	180	126
Ending Stocks	1,432	-28	1,446	-31	-36
<b>Vietnam</b>					
Production	14,909	70	15,685	132	98
Domestic Use	12,797	-124	13,174	-161	-105
Net Exports	2,112	188	2,511	283	203

**Table 5. World sugar and cotton trade under the baseline and GATT**

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Net Raw Sugar Exports</b>	(1,000 Metric Tons)				
Australia	3,433	10	3,569	21	14
Brazil	2,358	16	3,059	30	49
China	-721	-20	-1,017	-72	-72
European Union	3,892	-43	3,772	-47	-58
Former Soviet Union	-3,700	-1	-4,214	-3	-3
Japan	-1,800	1	-1,801	2	2
United States	-1,428	-10	-1,429	-16	-16
Rest of World	-2,033	47	-1,938	85	83
<b>Net Cotton Exports</b>					
Australia	464	6	581	10	0
China	441	-2	306	-10	9
European Union	-749	-6	-724	7	-11
India	167	5	164	-26	3
Japan	-393	-3	-324	-1	-5
South Korea	-218	0	-139	0	-2
Taiwan	-255	-4	-220	-3	0
United States	1,464	26	1,376	51	28
Rest of World	-920	-21	-1,021	-28	-23
<b>World Prices</b>	(U.S. Dollars per Metric Ton)				
Sugar (FOB Caribbean)	236	6	242	13	9
Cotton (Cotlook A Index)	1,457	37	1,463	12	-21



Table 6. World meat trade under the baseline and GATT

	----1995-1999 Avg----		----2000-2002 Avg----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
Net Beef Exports	(1,000 Metric Tons)				
Argentina	280	-22	284	-23	6
Australia	1,202	20	1,038	97	84
Brazil	325	-19	352	-26	5
Canada	-68	-8	-49	-28	-28
Eastern Europe	36	0	73	-2	2
European Union	450	30	201	-87	-85
Former Soviet Union	-160	-3	-83	-8	0
Japan	-899	-23	-998	-57	-56
Mexico	-143	0	-48	0	0
New Zealand	488	17	523	40	39
United States	-250	12	-95	19	-8
Rest of World	-1,262	-6	-1,199	75	41
Net Pork Exports					
Canada	309	11	279	19	18
China	147	0	172	0	0
Eastern Europe	81	28	30	54	88
European Union	572	-147	702	-428	-440
Former Soviet Union	-102	-1	-197	-3	0
Hong Kong	-239	-6	-239	-10	1
Japan	-761	-19	-877	-96	-88
Mexico	-69	3	-103	1	2
Other Western Europe	0	-11	0	-21	-21
Taiwan	335	2	359	2	2
United States	-135	131	16	421	379
Rest of World	-137	9	-143	61	61
Net Broiler Exports					
Brazil	302	-17	298	-30	3
Canada	-94	15	-140	13	8
Eastern Europe	0	-2	35	-4	1
European Union	501	-199	479	-222	-222
Former Soviet Union	-81	0	-183	0	0
Hong Kong	-212	1	-239	1	0
Japan	-605	5	-743	-5	-2
Mexico	-114	0	-133	0	0
Saudi Arabia	-266	-5	-284	-7	1
Thailand	217	1	257	1	1
United States	997	155	1,230	199	154
Rest of World	-643	46	-576	55	57

Table 6. Continued

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
	(U.S. Dollars per Metric Ton)				
Omaha Steer Price	1,583	30	1,839	19	9
U.S. Barrow & Gilt Price	1,017	28	1,037	17	14
U.S. 12-City Price	1,220	30	1,256	22	12

Table 7. World dairy trade under the baseline and GATT

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Net Butter Exports</b>					
	(1,000 Metric Tons)				
Australia	73	1	64	-1	-1
Canada	2	0	4	0	0
Eastern Europe	-43	0	-40	0	0
European Union	126	4	133	26	24
Former Soviet Union	-262	1	-263	-1	0
Japan	-16	0	-14	-1	-1
Mexico	-10	0	-8	0	0
New Zealand	261	3	276	-1	-1
Other Western Europe	44	0	42	0	0
United States	107	-8	107	-12	-12
Rest of World	-283	-1	-301	-10	-10
<b>Net Cheese Exports</b>					
Australia	76	5	95	31	30
Canada	-14	-6	-15	-5	-5
Eastern Europe	7	1	7	4	3
European Union	357	-9	365	-95	-95
Former Soviet Union	-20	0	-20	0	0
Japan	-149	6	-171	9	12
Mexico	-31	1	-33	4	3
New Zealand	140	6	170	38	36
Other Western Europe	68	1	68	4	3
United States	-123	-12	-123	-30	-30
Rest of World	-310	7	-343	42	41
<b>Net Nonfat Dry Milk Exports</b>					
Australia	125	2	114	-1	0
Canada	18	0	-1	0	0
Eastern Europe	53	1	60	1	1
European Union	257	12	295	33	32
Former Soviet Union	0	0	0	0	0
Japan	-86	-7	-81	-12	-12
Mexico	-152	4	-157	6	6
New Zealand	157	3	167	0	1
Other Western Europe	24	0	20	1	1
United States	134	-32	134	-54	-54
Rest of World	-531	17	-551	25	26
<b>FOB Prices, N. Europe</b>					
	(U.S. Dollars per Metric Ton)				
Butter	1,359	8	1,151	6	5
Cheese	1,826	78	1,833	392	379
Nonfat Dry Milk	1,647	90	1,544	147	151

Table 8. Impacts on European Union agriculture under the baseline and GATT

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
Wheat	(1,000 Metric Tons)				
Production	81,898	-422	86,435	-4,566	-4,659
Domestic Use	67,812	46	69,259	86	-6
Net Exports	15,128	-434	17,194	-4,902	-4,902
Rice					
Production	1,385	30	1,414	30	30
Domestic Use	1,813	152	1,938	86	81
Net Imports	429	124	526	56	51
Barley					
Production	44,516	355	46,182	1,313	1,313
Domestic Use	41,526	225	42,751	470	469
Net Exports	3,050	130	3,428	844	844
Corn					
Production	26,583	-246	27,888	-463	-531
Domestic Use	27,828	438	28,721	679	608
Net Imports	1,309	691	863	1,137	1,137
Soybeans					
Production	742	3	727	4	1
Domestic Use	15,109	-16	15,348	-29	10
Net Imports	14,370	-19	14,623	-33	9
Soybean Meal					
Production	10,534	-11	10,700	-20	7
Domestic Use	21,153	-88	21,627	-125	-125
Net Imports	10,624	-78	10,931	-105	-132
Soybean Oil					
Production	2,388	-2	2,426	-5	2
Domestic Use	1,752	10	1,820	22	-2
Net Exports	624	-12	604	-26	3
Sugar					
Production	17,060	-43	16,922	-39	-59
Domestic Use	13,157	2	13,161	8	0
Total Exports	6,002	-43	5,882	-47	-68
B Quota	2,500	-170	2,500	-340	-340
C Exports	3,502	127	3,382	292	272

Table 8. Continued

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
Beef			(1,000 Metric Tons)		
Production	7,979	14	8,066	220	222
Domestic Use	7,562	-16	7,875	307	307
Net Exports	417	30	191	-87	-85
Pork					
Production	14,613	-51	15,092	-39	-36
Domestic Use	14,041	96	14,390	390	404
Net Exports	572	-147	702	-428	-440
			(Million Head)		
Cattle Inventory	75.9	0.5	75.2	1.4	1.5
Hog Inventory	110.6	-0.1	112.3	-0.1	-0.1
Sheep Inventory	101.9	0.0	102.8	0.0	0.0
Broiler			(1,000 Metric Tons)		
Production	8,069	-144	8,470	-285	-284
Domestic Use	7,499	85	7,924	-29	-28
Net Exports	569	-229	546	-256	-256
Per capita consumption			(Kilograms, retail weight basis)		
Beef	15.2	0.0	15.7	0.6	0.6
Pork	28.2	0.2	28.7	0.8	0.8
Broiler	21.8	0.2	22.6	-0.1	-0.1
Mutton	3.9	0.0	3.4	0.0	0.0
All	69.1	0.4	70.3	1.3	1.3
Prices			(ECU per metric ton)		
Beef, Intervention	2,916	0	2,916	0	0
Pork, Basic	1,897	-4	1,897	-24	-24
Mutton, Basic	4,185	0	4,185	0	0
Beef, Producer	2,665	60	2,665	-52	-52
Pork, Producer	1,198	-50	1,198	-208	-210
Mutton, Producer	3,600	-4	3,600	-4	-4
Poultry, Producer	1,201	-39	1,201	-54	-54
Consumption expenditure			(ECU, at producer prices)		
Per capita, for all meat	148	-2	150	-9	-9

Table 8. Continued

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
			(Million head)		
Milk cow, numbers	21.7	0.0	20.9	0.1	0.1
			(Million metric tons)		
Milk, production	111.8	0.1	111.5	0.0	0.0
Milk, fluid consumption	31.8	0.0	31.1	0.2	0.1
			(ECU per metric tons)		
Milk, farm price	287	-2	291	-9	-10
Milk, target price	258	0	258	0	0
			(Million metric tons)		
Industrial quota	107.3	0.0	107.3	0.0	0.0
			(1,000 metric tons)		
Butter					
Production	1,574	6	1,538	25	27
Consumption	1,443	-1	1,393	-2	2
Net Exports	132	7	145	27	25
Cheese					
Production	5,198	-10	5,370	-63	-64
Consumption	4,840	9	4,997	44	41
Net Exports	358	-18	374	-107	-106
Nonfat dry milk					
Production	1,282	6	1,261	25	27
Consumption	1,002	-4	957	-7	-4
Net Exports	280	10	304	32	31
			(ECU per metric ton)		
Support prices					
Butter, intervention	2,781	0	2,781	0	0
Cheese, threshold	3,269	-38	3,269	-215	-224
Nonfat dry milk, intervention	1,638	0	1,638	0	0
Producer prices					
Butter	3,059	0	3,071	-1	-1
Cheese	4,156	-36	4,177	-207	-216

Table 9. Impacts on Australian agriculture under the baseline and GATT

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
(1,000 Metric Tons)					
Wheat					
Production	15,473	41	16,492	367	257
Domestic Use	3,928	0	4,168	0	0
Net Exports	11,509	33	12,172	315	214
Barley					
Production	5,916	-12	6,007	-193	-155
Domestic Use	3,135	10	3,245	58	47
Net Exports	2,773	-24	2,761	-249	-203
Sorghum					
Production	1,432	-5	1,502	-33	-23
Domestic Use	878	-5	877	-3	3
Net Exports	556	0	625	-30	-25
Sugar					
Production	4,509	6	4,706	14	9
Domestic Use	1,076	-3	1,137	-6	-4
Net Exports	3,433	10	3,569	21	14
Cotton					
Production	498	5	617	9	-1
Domestic Use	32	0	33	0	0
Net Exports	464	6	581	10	0

Table 9. Continued

	----1995-1999 Avg----		----2000-2002 Avg----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Beef</b>			(1,000 Metric Tons)		
Production	1,863	9	1,664	80	66
Domestic Use	662	-11	626	-16	-18
Net Exports	1,202	20	1,038	97	84
			(Million Head)		
Cattle Inventory	26.4	0.1	27.5	0.6	0.4
Sheep Inventory	143.8	-0.2	138.2	-1.6	-1.1
Milk cow, numbers	1.6	0.0	1.5	0.0	0.0
			(Million metric tons)		
Milk, production	7.5	0.0	7.4	0.2	0.2
Milk, fluid consumption	1.9	0.0	2.0	0.0	0.0
			(Australian dollars per metric ton)		
Milk, farm price	335.31	6.11	350.07	23.22	22.67
<b>Butter</b>			(1,000 metric tons)		
Production	126.9	0.8	120.1	-1.1	-0.9
Consumption	54.9	-0.2	57.0	-0.6	-0.5
Net Exports	72.0	1.0	63.1	-0.5	-0.5
<b>Cheese</b>					
Production	237.3	4.0	271.4	25.8	24.9
Consumption	161.6	-1.0	175.4	-4.8	-5.4
Net Exports	75.7	5.0	96.0	30.5	30.2
<b>Nonfat dry milk</b>					
Production	164.0	1.0	155.2	-1.4	-1.2
Consumption	39.4	-0.5	40.9	-0.7	-0.7
Net Exports	124.6	1.5	114.2	-0.7	-0.5



**Table 10. Impacts on Canadian agriculture under the baseline and GATT**

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Wheat</b>	(1,000 Metric Tons)				
Production	28,212	47	29,030	287	221
Domestic Use	8,678	15	8,817	-51	-81
Net Exports	19,489	92	20,231	411	331
<b>Barley</b>					
Production	12,833	-1	13,169	-10	0
Domestic Use	8,303	8	8,513	37	12
Net Exports	4,512	-9	4,633	-46	-12
<b>Corn</b>					
Production	7,096	1	7,415	0	3
Domestic Use	7,201	-5	7,499	7	-8
Net Exports	-140	7	-119	-6	10
<b>Beef</b>					
Production	945	-1	976	2	0
Domestic Use	1,013	7	1,024	30	28
Net Exports	-68	-8	-49	-28	-28
<b>Pork</b>					
Production	1,198	5	1,165	12	11
Domestic Use	889	-6	886	-7	-7
Net Exports	309	11	279	19	18
	(Million Head)				
Cattle Inventory	11.6	0.0	11.6	0.0	0.0
Hog Inventory	10.4	0.0	10.4	0.1	0.0
<b>Broiler</b>	(1,000 Metric Tons)				
Production	658	7	709	7	4
Domestic Use	752	-7	849	-6	-4
Net Exports	-94	15	-140	13	8

Table 10. Continued

	----1995-1999 Avg----		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
			(Million head)		
Milk cow, numbers	1.4	0.0	1.3	0.0	0.0
			(Million metric tons)		
Milk, production	7.6	0.0	7.6	-0.1	-0.1
Milk, fluid consumption	2.9	0.0	3.1	0.0	0.0
			(Canadian dollars per hecto liter)		
Milk, fluid price	59.21	0.00	61.73	0.00	0.00
Milk, industrial price	51.87	0.00	53.86	0.00	0.00
			(Million hecto liters)		
Industrial quota	38.2	0.0	36.2	0.0	0.0
			(1,000 metric tons)		
Butter					
Production	79.2	0.2	78.2	0.8	0.0
Consumption	77.2	0.2	74.3	0.8	0.0
Net Exports	2.0	0.0	3.9	0.0	0.0
Cheese					
Production	290.1	-4.3	301.1	-1.7	-4.2
Consumption	304.9	2.5	316.9	3.8	1.3
Net Exports	-14.7	-6.8	-15.8	-5.5	-5.5
Nonfat dry milk					
Production	50.3	0.4	37.2	1.2	0.0
Consumption	32.6	0.3	38.8	1.2	0.0
Net Exports	17.7	0.1	-1.6	0.0	0.0
			(Canadian dollars per metric ton)		
Support prices					
Butter	5,460	0	5,582	0	0
Nonfat dry milk	3,628	0	3,789	0	0
			(Canadian dollars per kilogram)		
Retail prices					
Butter	6.17	0.00	6.33	0.00	0.00
Cheese	11.18	0.00	11.90	0.00	0.00
Nonfat dry milk	9.35	0.00	10.26	0.00	0.00

Table 11. Impacts on Japanese agriculture under the baseline and GATT

	---1995-1999 Avg---		-----2000-2002 Avg-----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
(1,000 Metric Tons)					
Wheat					
Production	705	0	627	0	0
Domestic Use	6,327	5	6,406	17	0
Net Imports	5,669	5	5,811	19	0
Rice					
Production	9,464	0	9,489	0	0
Domestic Use	9,339	531	9,422	758	758
Net Imports	0	531	0	758	758
Barley					
Production	304	0	273	0	0
Domestic Use	1,700	-2	1,679	-24	-28
Net Imports	1,390	-3	1,409	-27	-32
Corn					
Production	2	0	2	0	0
Domestic Use	16,012	-34	16,184	-125	-103
Net Imports	16,010	-34	16,182	-126	-103
Soybeans					
Production	183	1	182	2	1
Domestic Use	5,151	1	5,347	4	0
Net Imports	4,978	0	5,172	1	-1
Soybean Meal					
Production	2,993	0	3,131	0	0
Domestic Use	3,866	3	3,999	19	-1
Net Imports	875	3	869	19	-1
Soybean Oil					
Production	712	0	745	0	0
Domestic Use	697	1	721	4	0
Net Imports	-15	1	-24	4	0
Sugar					
Production	860	0	869	0	0
Domestic Use	2,659	-1	2,670	-2	-2
Net Imports	1,800	-1	1,801	-2	-2

Table 11. Continued

	----1995-1999 Avg----		----2000-2002 Avg----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Beef</b>	(1,000 Metric Tons)				
Production	604	0	587	-1	-1
Domestic Use	1,503	23	1,585	57	55
Net Exports	-899	-23	-998	-57	-56
<b>Pork</b>					
Production	1,416	-2	1,403	-18	-17
Domestic Use	2,178	17	2,281	77	71
Net Exports	-761	-19	-877	-96	-88
	(Million Head)				
Cattle Inventory	5.1	0.0	5.0	0.0	0.0
Hog Inventory	10.6	0.0	10.5	-0.1	-0.1
<b>Broiler</b>					
Production	1,370	0	1,405	-1	0
Domestic Use	1,985	-5	2,159	4	2
Net Exports	-615	5	-753	-5	-2
<b>Per capita consumption</b>	(Kilograms, retail weight basis)				
Wagyu Beef	1.1	0.0	1.0	0.0	0.0
Dairy Beef	7.1	0.1	7.5	0.3	0.3
Pork	11.8	0.1	12.2	0.4	0.4
Poultry	11.8	0.0	12.6	0.0	0.0
Fish	35.7	0.0	36.3	0.0	-0.1
All	67.5	0.2	69.7	0.7	0.6
<b>Prices</b>	(Yen per kilogram)				
Wagyu Beef, wholesale	1,961	-14	2,096	-50	-53
Dairy, import beef, whlsle	523	-16	548	-40	-42
Pork, wholesale	553	-11	562	-45	-45
Wagyu Beef, retail	4,481	-25	4,718	-88	-93
Dairy, import Beef, retail	1,615	-28	1,659	-70	-73
Pork, retail	1,570	-18	1,576	-72	-72
Poultry, retail	1,013	3	1,006	0	-2
<b>Meat consumption</b>	(1,000 yen, at retail prices)				
Per capita	102.8	-0.1	107.3	-0.4	-0.7

Table 11. Continued

	----1995-1999 Avg----		----2000-2002 Avg----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
			(Million head)		
Milk cow, numbers	1.1	0.0	1.0	0.0	0.0
			(Million metric tons)		
Milk, production	8.9	0.0	9.3	0.0	0.0
Milk, fluid consumption	5.3	0.0	5.5	0.0	0.0
			(Yen per metric ton)		
Milk, farm price	88,110	0	88,110	0	0
			(1,000 metric tons)		
Butter					
Production	95	0	100	-1	-1
Consumption	111	0	114	0	0
Net Exports	-16	0	-14	-1	-1
Cheese					
Production	35	6	36	8	10
Consumption	184	0	207	-1	-2
Net Exports	-149	6	-171	9	12
Nonfat dry milk					
Production	214	-7	231	-11	-12
Consumption	300	0	312	1	0
Net Exports	-86	-7	-81	-12	-12

Table 12. Impacts on U.S. agriculture under the baseline and GATT

	---1995-1999 Avg---		----- 2000-2002 Avg -----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
(1,000 Metric Tons)					
<b>Wheat</b>					
Beginning Stocks	20,554	-134	21,870	-75	-124
Production	67,480	194	74,545	2,279	824
Domestic Use	36,170	-98	37,437	37	-20
Net Exports	30,658	342	37,225	2,034	679
Ending Stocks	21,207	-185	21,758	135	32
<b>Rice (Rough Basis)</b>					
Beginning Stocks	1,407	-20	1,458	-32	-38
Production	8,054	100	8,223	156	104
Domestic Use	4,825	-15	5,041	-26	-25
Net Exports	3,204	123	3,193	180	126
Ending Stocks	1,432	-28	1,446	-31	-36
<b>Corn</b>					
Beginning Stocks	38,963	-620	43,665	238	279
Production	222,866	1,276	237,209	3,869	3,825
Domestic Use	178,743	157	190,729	1,235	1,366
Net Exports	42,613	953	46,097	3,066	2,122
Ending Stocks	40,473	-454	44,041	-194	629
<b>Sorghum</b>					
Beginning Stocks	3,331	-27	3,423	37	-10
Production	17,286	130	18,152	539	232
Domestic Use	12,151	68	12,654	259	91
Net Exports	5,125	55	5,495	273	110
Ending Stocks	3,342	-19	3,426	43	23
<b>Barley</b>					
Beginning Stocks	2,790	-30	2,867	-10	5
Production	9,632	90	10,716	161	-39
Domestic Use	8,303	62	9,076	172	18
Net Exports	1,343	17	1,635	19	-34
Ending Stocks	2,775	-20	2,872	-40	-18
<b>Oats</b>					
Beginning Stocks	1,396	-6	1,443	-2	-2
Production	3,323	-13	3,577	-4	-15
Domestic Use	4,241	-17	4,467	-2	-16
Net Exports	-913	3	-916	0	2
Ending Stocks	1,391	-6	1,470	-5	-3

Table 12. Continued

	---1995-1999 Avg---		----- 2000-2002 Avg -----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
(1,000 Metric Tons)					
<b>Soybeans</b>					
Beginning Stocks	6,825	-114	7,155	-268	-73
Production	59,669	4	63,838	446	14
Domestic Use	39,150	50	41,691	314	-16
Net Exports	20,305	19	22,233	147	-18
Ending Stocks	7,038	-177	7,069	-282	-26
<b>Soybean Meal</b>					
Beginning Stocks	232	-1	224	1	0
Production	28,647	38	30,596	240	-13
Domestic Use	23,613	102	24,998	248	139
Net Exports	5,040	-64	5,597	-9	-151
Ending Stocks	226	-1	226	0	0
<b>Cotton</b>					
Beginning Stocks	1,097	-9	1,133	-8	6
Production	3,795	15	3,865	8	-9
Domestic Use	2,351	-14	2,515	-42	-31
Net Exports	1,458	32	1,380	48	24
Unaccounted	33		33		0
Ending Stocks	1,116	-12	1,136	-5	3
<b>Sugar</b>					
Beginning Stocks	1,287	0	1,420	0	0
Production	7,173	-3	7,447	-3	-5
Domestic Use	8,572	5	8,845	11	2
Net Exports	-1,440	-8	-1,444	-14	-7
Ending Stocks	1,328	0	1,466	0	0
(U.S. Dollars per Metric Ton)					
<b>Farm Prices</b>					
Wheat	109.02	3.19	120.57	2.03	1.00
Rice	155.29	11.18	174.45	15.18	10.42
Corn	88.01	2.33	92.45	3.67	0.31
Sorghum	81.44	1.80	85.10	2.20	0.01
Barley	95.20	1.19	98.98	0.00	-1.66
Oats	90.70	1.05	90.34	1.58	-0.74
Soybeans	210.68	5.94	220.13	7.57	0.99
Cotton	1,253.69	28.91	1,258.26	8.87	-16.37
Sugar (N.Y. Spot)	471.19	0.00	471.19	0.00	0.00

Table 12. Continued

	----1995-1999 Avg----		----- 2000-2002 Avg -----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
<b>Beef</b>	(1,000 Metric Tons)				
Beginning Stocks	225	-1	213	1	-1
Production	11,204	-22	10,642	59	-13
Domestic Use	11,454	-35	10,741	38	-6
Net Exports	-249	12	-95	19	-8
Ending Stocks	225	-1	209	2	0
<b>Pork</b>					
Beginning Stocks	171	0	178	6	5
Production	7,886	42	8,035	306	253
Domestic Use	8,018	-89	8,021	-119	-129
Net Exports	-135	131	16	421	379
Ending Stocks	174	1	176	10	8
<b>Broilers</b>					
Beginning Stocks	17	0	21	1	0
Production	11,573	61	13,388	154	89
Domestic Use	10,575	-95	12,157	-45	-65
Net Exports	997	155	1,230	199	154
Ending Stocks	18	0	22	1	1
<b>Meat Consumption</b>	(Kilograms per Capita)				
Beef	29.9	-0.1	27.0	0.1	0.0
Pork	23.2	-0.3	22.4	-0.3	-0.4
Broilers	33.9	-0.3	36.9	-0.1	-0.2
Turkeys	8.4	0.0	9.1	0.0	0.0
Total	95.4	-0.7	95.4	-0.4	-0.6
<b>Meat Expenditures</b>	(Dollars per Capita)				
Beef	190	2	193	2	1
Pork	100	1	100	1	1
Broilers	69	1	80	2	1
Turkeys	20	0	23	0	0
Total	379	5	395	5	2
<b>Producer Prices</b>	(Dollars per Metric Ton)				
Nebraska Steers	1,583	30	1,839	19	9
Barrows and Gilts	1,017	28	1,037	17	14
12 City Broilers	1,220	30	1,256	22	12



Table 12. Continued

	----1995-1999 Avg----		----- 2000-2002 Avg -----		
	Baseline Level	GATT A (Change)	Baseline Level	GATT A (Change)	GATT B (Change)
Milk					
			(1,000 Metric Tons)		
Production	72,849	-184	76,066	-240	-385
Fluid Use	26,345	10	26,660	68	-18
Cheese					
			(1,000 Metric Tons)		
Beginning Stocks	233	0	249	-1	0
Production	3,356	-11	3,764	-17	-26
Domestic Use	3,454	1	3,861	12	3
Net Exports	-102	-12	-102	-29	-29
Ending Stocks	237	-1	254	-1	0
Butter					
Beginning Stocks	108	1	92	6	6
Production	655	-1	658	-1	-1
Domestic Use	549	7	562	8	7
Net Exports	108	-8	108	-11	-11
Ending Stocks	107	1	81	9	9
Nonfat Dry Milk					
Beginning Stocks	66	3	108	11	14
Production	447	0	465	0	0
Domestic Use	285	31	310	47	46
Feed and Waste	9	0	9	0	0
Net Exports	141	-32	141	-53	-53
Ending Stocks	79	4	113	17	20
Producer Price					
			(Dollars per Metric Ton)		
All Milk	275	0	283	2	-1
Wholesale Prices					
			(Dollars per Metric Ton)		
Cheese	3,004	15	3,106	38	-11
Butter	1,477	-11	1,504	-7	-15
Nonfat Dry Milk	2,442	-153	2,463	-148	-158