A Perspective on Oregon Wheat Growers' Interests in the Millennium Round of Agricultural Trade Negotiations

Linda M. Young, Agricultural Policy Coordinator,

Trade Research Center

Montana State University–Bozeman

Wheat Policy Lecture presented at the Oregon Wheat Growers League 73rd Convention, November 30, 1999.

Research Discussion Paper No. 39 February 2000

The purpose of research discussion papers is to make research findings available to researchers and the public before they are available in profession journals. Consequently, they are not peer reviewed.

A Perspective on Oregon Wheat Growers' Interests in the Millennium Round of Agricultural Trade Negotiations

griculture has a unique opportunity in the World Trade Organization (WTO) round of trade negotiations that begin in Seattle on November 30, 1999. Agriculture accounted for 9 percent of world trade in merchandise and services in 1998. However, as patterns of world trade change, other sectors have gained more prominence and agriculture's share of world trade has decreased. For example, in 1998, world trade in telecommunications and office equipment reached \$670 billion, while trade in agriculture was valued at \$580 billion. Even as the value of North American agricultural exports has increased, the share of agriculture in total exports declined from 29 percent in 1963 to 12 percent in 1997 (WTO 1999a). The mandate for further negotiations in agriculture presents a unique opportunity to make further progress toward world agricultural markets with fewer distortions. Given the declining share of agriculture in world trade and the importance of new traded goods and services, agriculture may not be given such a priority in future negotiations.

Trade is important to the United States on many levels. The United States is the world's largest single-country importer and exporter of merchandise trade, accounting for 17 percent of world imports and 12 percent of world exports in 1998 (WTO 1999a). The United States is also the world's largest exporter of agricultural products and is the second largest importer, following Japan. Overall, U.S. agricultural producers depend heavily on export markets, with over one-third of U.S. agricultural production destined for export markets. Over the past ten years, the United States has exported an average of 54 percent of the wheat produced in the United States (USDA-ERS, various years). The wheat industry in Oregon depends on export markets for the sale of at least 85 percent of its production (Oregon Wheat 1999).

Mandate for the 2000 Round

On November 30, 1999, trade negotiators from 134 countries will arrive in Seattle to work toward further liberalization of world trade. Although the complete scope of the negotiations is currently unknown, the United States and all other members of the WTO are obligated to begin another round of negotiations on agricultural trade no later than December 31, 1999. This was agreed to in the 1994 Uruguay Round Agreement (URA). The General Agreement on Trade in Services contains a similar mandate. In 1996, WTO ministers agreed in principle that the following topics would be included in the 2000 Round as well: investment, competition policy, transparency in government procurement, and trade facilitation (Hartridge 1999). Further discussions on the exact scope of the negotiations have occurred throughout the fall of 1999. It was expected that a ministerial declaration setting out the contents, limits, and terms of the negotiations would be drafted before

Agriculture has a unique opportunity to pursue further reform of world markets in the Millennium Round.

the negotiations begin. Disagreement over the scope and terms of negotiations has delayed the finalization of the declaration (*Bridges Weekly Trade Digest* 1999a). According to some observers, the negotiations are likely to last three years (World Trade Agenda 1999). Although countries have expressed diverse opinions on the scope and depth of the agenda, most countries agree on the importance of building on the achievements made in the Uruguay Round.

Brief Overview of the Uruguay Round

Ninety member countries began negotiations on the URA in 1986. Negotiations concluded in 1994. Major accomplishments of the round were further trade liberalization, strengthening of the rules governing international trade, and establishment of a new institution, the World Trade Organization, to govern the world trading system. For the first time, an agreement devoted to agriculture was achieved, the Uruguay Round Agreement on Agriculture (URAA). New areas included in the URA were trade in services, trade-related aspects of intellectual property rights, and trade-related investment measures.

The Uruguay Round Agreement established the World Trade Organization, giving a permanent institutional structure and a new name to the General Agreement on Tariffs and Trade (GATT). The GATT was established in 1948 and is the name commonly used to refer to both the trade agreements made previous to the establishment of the WTO and the temporary secretariat that administered them. The World Trade Organization is housed in Geneva. Functions of the WTO include implementing multilateral and plurilateral trade agreements, providing a forum for future multilateral trade negotiations, resolving trade disputes, conducting ongoing reviews of current agreements, and providing analysis of national trade policies (WTO 1996).

One indicator of the vigor of the multilateral trading system is the percentage of world trade covered by GATT/WTO rules. When the GATT was founded in 1948, 60 percent of world trade was conducted by GATT members (Figure 1). By 1997, 90 percent of world trade was conducted by WTO members. Currently, the WTO has 134 members, with 45 new members joining since the beginning of the Uruguay Round in 1986. An additional 32 countries have applied for membership, including China.

The URA includes previous agreements made through the GATT. The principles established in 1948 with the founding of the multilateral system remain unchanged. Trade without discrimination is one important principle with two facets: (1) the most-favored nation clause states that members are bound to grant to the products of other members no less favorable treatment than that accorded to the products of any other member; (2) national treatment entitles goods that have entered a market no less favorable treatment than that given to the equivalent domestically produced good.

The World Trade
Organization is vigorous
and growing ... 90% of
world trade is conducted
by WTO members.

Figure 1. World Merchandise Trade, 1948–1997



Note: Percent of total world trade conducted by GATT/WTO members.

Source: WTO, Annual Report 1998: International Trade Statistics, 1999, Table 11.2.

Current Levels of Agricultural Support

Government support for agriculture continues at high levels in many countries. Levels of support to agriculture in different countries can be compared by looking at a summary measure called producer subsidy equivalents (PSEs). The percentage PSE is an estimate of the support provided by government as a percentage of the value of production measured at producer prices. PSEs do not measure the impact of transfers in terms of how they affect production and trade. Total support for agriculture is given for six countries in Table 1 (OECD 1999). Japan and the European Union (EU) provide the highest levels of support. Their support levels had not significantly declined between 1986 and 1998, with EU support varying between 34 and 48 percent and Japan's varying between 55 and 66 percent. In contrast, Australia and Canada have provided low levels of support, and Canada's had decreased by more than half between 1986 and 1998. The average level of U.S. support declined from 24 percent (average for 1986-1989) to 15 percent (average for 1995-1998).

The trends for support for wheat are roughly the same as trends for total support for the countries discussed above. The U.S. PSE for wheat declined from an average of 43 percent (for 1986–1989) to an average of 25 percent (1995–1998) (Table 2). Furthermore, its composition has changed. In 1988, 21 percent of the U.S. wheat support (as measured by the PSE) was market

Government support for agriculture continues at high levels in many countries.

Table 1. Total Producer Subsidy Equivalents for Selected Countries, 1986–1998

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	8.7	6.2	4.9	4.6	8.7	8.3	7.6	7	7.3	6.8	5.9	6.6	6.8
Canada	37.5	36.3	27.9	26.9	36.1	35.3	29.4	24.8	18.6	19	16.4	13.9	16.1
EU	48.2	48.3	41.4	36.3	44.3	49	46.5	45.3	42.3	40.5	34.2	37.9	45.3
Japan	66	65.8	62.6	58.3	55.8	55.4	61.5	57.8	58.1	61	64.5	60.5	63.2
Mexico	3.9	12.7	12.3	16.1	28.8	30.1	36.1	35.2	29.2	3.2	6.9	16.4	18.7
U.S.	30.4	27.6	19.5	17.8	20.6	19.1	18.5	19.9	17.1	11.7	14	14.4	21.6

Source: OECD 1999.

Table 2. Producer Subsidy Equivalents for Wheat for Selected Countries, 1986–1998

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	14	5.8	3	3.5	5.2	7.1	5	4.5	5.8	4.1	4.7	4.9	4.4
Canada	49.2	49.8	34.7	22	54.3	41.6	29.3	22.3	14.1	17	16.1	6.9	8.6
EU	55.3	57.7	47.8	29.7	43.4	57.7	52.2	58.3	57.3	49.4	38	43.6	55.5
Japan	89.7	89.6	85.8	83.7	86.8	84.8	84.9	88.1	87.4	86	85.9	86.4	86.2
Mexico	6.5	-19	5.3	-5.1	29	35.1	24.2	34.4	30.8	-5.1	21.7	15.6	29.7
U.S.	56.2	57.8	34.7	23.3	41.8	50.5	34	41.6	30.8	14.9	21.9	25.4	38

Source: OECD 1999.

Table 3. Composition of Wheat PSE, the EU and the United States, 1988 and 1998

	United	l States	Europea	n Union	
	1988	1998	1988	1998	
	percent				
Market price support	21	0	74	16	
Output and planted area	68.1	16.8	4	51	
Historical entitlement	0	72	0	0	
Input use, input constraints, overall farming income, and miscellaneous	10	10	21	32	

Note: Totals may not add to 100 due to rounding.

Source: OECD 1999.

price support and 68 percent was based on output and planted area (Table 3); by 1998, support had shifted, with 72 percent based on historical entitlements. In contrast, the EU has shifted to support based on area planted, but not to support based on historical entitlements. According to 1998 PSE estimates, U.S. wheat producers received about 70 percent of the support received by EU wheat producers, but eight times the support of Australian producers and over four times the support given to Canadian wheat producers.

Important Trade Issues for Wheat Growers

This section discusses five areas of importance to wheat growers: Market access, export subsidies, domestic support, state trading, and sanitary and phytosanitary issues. In each case, some background is provided on the Uruguay Round Agreement, current issues are discussed, and further issues for negotiation are presented.

Market Access

Background on the Uruguay Round Agreement

Agricultural trade has been hindered by tariffs and by a wide variety of other barriers to trade. Tariffs are taxes on imports. They can be set as a percentage of the value of the imported product, in which case they are called ad valorem tariffs, or set at a fixed per unit charge, in which case they are called specific duties. Barriers in addition to tariffs include quotas (a limit on the amount of a product imported), variable levies (a tariff that varies with the difference between the world price and the domestic price), voluntary export restraints (an agreement by the exporter to limit exports), and discretionary import licensing. Such barriers are labeled nontariff barriers. One accomplishment of the URAA was the conversion of agricultural nontariff barriers to tariffs. A maximum level for the tariffs, called a tariff binding, was set in many cases. For developed countries, tariffs are to be reduced by 36 percent, on a simple average basis, in equal increments over the implementation period. In developed countries, these provisions are being implemented over six years, beginning in 1995. In developing countries, the implementation period is 1995-2004. The conversion of nontariff barriers to tariffs is widely regarded as a significant achievement.

In 1998, U.S. wheat producers received 70% of the support received by EU wheat producers and eight times that of Australian producers.

Minimum access provisions apply to countries with no history of imports. These provisions do not guarantee that imports will occur. Provisions simply require that a low tariff be applied to a specified quantity of imports (a quota) and allow a higher tariff to be applied to imports over that amount. This is called a tariff rate quota (TRQ). Market access is given by the importing country through the low tariff applied to the quota. For developed countries, the low tariff quota was initially set at 3 percent of domestic consumption, increasing to 5 percent by the end of the implementation period.

In the process of converting nontariff barriers to tariffs, many over-quota tariffs were set at high levels. In some countries, this resulted in a reduction in market access. Current access provisions apply to countries where there is a history of imports and result in a TRQ similar to the one described above.

Current Issues

The agreement on market access has had mixed results. As only a 15 percent reduction was required for any tariff, governments were able to protect sensitive commodities. In addition, member governments calculated the tariff equivalent of nontariff barriers and many countries bound their tariffs at high levels. Some reduction in tariff rates for wheat will be achieved by the end of the implementation period (Table 4), but several countries will maintain substantial ad valorem tariffs bindings on wheat imports, including Japan (358 percent), Poland (91 percent), and the People's Republic of China (114 percent).

Table 4. Common Wheat Tariff Reductions, Selected Countries

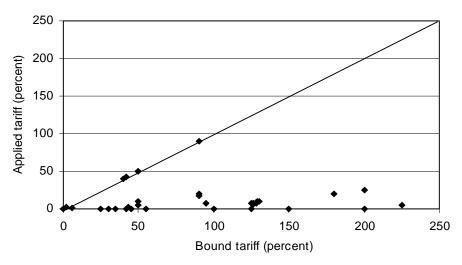
Country	Base percent	Reduction percent
Australia	0	0
Canada	90	15
Egypt	5	0
EU	142	36
Hungary	50	36
Indonesia	30	10
Japan	422.9	15
Morocco	45	24
Philippines	50	40
Poland	143	36
PR China	150	24
South Korea	10	82
Switzerland	477.6	15
Turkey	200	10

Source: Josling, Tangermann, and Wharley 1996; Gibson 1999.

The Economic Research Service (1998) reports that many countries apply tariffs that are lower than their bound rates (Figure 2). High bound tariff rates may allow some countries, such as Chile, to vary their tariff rates with the goal of stabilizing their domestic prices (Smith and Goodwin 1999).

Some countries will have high tariffs on wheat at the end of the URAA implementation period.

Figure 2. Bound Versus Applied Tariffs for Wheat, Selected Countries



Source: USDA-ERS 1995.

The minimum access provisions discussed above resulted in many countries instituting tariff rate quotas for imports, where a low tariff is placed on imports of a specified amount. Concern exists over the fact that many countries have not imported the amount of the tariff quota. A comprehensive study of TRQ administration is currently being undertaken by the International Agricultural Trade Research Consortium. Abbott and Morse (1999) investigated TRQ implementation in developing countries. They argue that low fill rates for market access commitments are not due to the emergence of complex institutions to maintain protection. They state that high transportation costs and the unresponsiveness of demand to decreases in price make it likely that some quotas will continue to be underfilled. They note that overfill of tariffs is as common as underfill.

Issues for Negotiation

Further tariff reductions should be a priority for several reasons. Tariffs on agricultural goods vary widely but on average are quite high compared to those on manufactured goods (Table 5). Since 1948, under various GATT rounds, tariffs on manufactured goods have been reduced from a tradeweighted average of 40 percent to current levels of about 4 percent (Waino 1999).

Reduction in tariffs and quotas is desirable, as it places significant pressures on domestic policies (Sumner 1999). It may take several years for high tariffs to be reduced to the level that will allow imports. When this occurs, countries are likely to move away from policies that support market prices, due to the incompatibility of those policies with open borders. This could motivate a substantial restructuring of agricultural policies by countries still maintaining market-distorting policies.

Another issue is whether a different formula for tariff reductions should be used in the future. Different formulas could be used to reduce high tariffs more quickly, reducing the dispersion of tariff rates. However, switching formulas could absorb time in negotiations and cause a costly delay in

Further tariff reduction should be a priority ... open borders motivates a shift from market support policies.

Table 5. Average Unweighted Ad-Valorem Bound Tariff Rates Post-Uruguay Round for Agricultural Goods (from 20 countries)

Product	Percent	Product	Percent	
Grains	46.7	Dairy Products	47.1	
Oilseeds	41.7	Sugar	48.7	
Fats and Oils	41.6	Fresh Fruits and Vegetables	35.5	
Meats	39.3	Processed Fruits and Vegetables	35.3	
Milk	40.7	Other Agriculture	24.4	

Source: Josling 1998.

implementation. Several analysts argue for maintaining the current pace of tariff reductions through the Millennium Round of negotiations (Sumner 1999; Schott 1998; and Waino 1999). Sumner points out that if the current pace of tariff reduction were maintained without interruption that (almost) tariff-free trade would be achieved in 2010. This is a much shorter period of time than the one required to reduce manufacturing tariffs to low levels.

Export Subsidies

Background on the Uruguay Round Agreement

The agreement limits the use of export subsidies in the twenty-five countries who used them during the base period of 1986–1990 (USDA-ERS 1998). These countries must reduce the quantity of subsidized exports by 21 percent from base levels. In addition, they must reduce budgetary outlays for export subsidies by 36 percent from the base. In volume terms, the United States is bound to reduce its export subsidies for wheat from an average of 21.4 mmt in 1991–1992 to 14.5 mmt in 2000. The EU is committed to reducing the volume of its wheat export subsidies from 20.3 mmt in 1991–1992 to 13.4 mmt in 2000. Eight other countries made commitments on export subsidies for wheat including Bulgaria, Canada, the Czech Republic, Hungary, Mexico, the Slovak Republic, South Africa, and Turkey.

Subsidies cannot be applied to commodities that were not subsidized during the base period. In effect, the agreement bans the use of export subsidies by countries who did not use them during the base period, preventing the introduction of new export subsidies. In order to prevent countries from circumventing their commitments, food aid cannot be tied to the use of commercial transactions.

In the Uruguay Round members agreed to work toward the development of internationally agreed disciplines for the provision of export credits, export credit guarantees, and insurance programs (GATT 1994, p. 50). These negotiations are taking place through the Organization for Economic Cooperation and Development (OECD). Since 1978, the OECD has developed a successful framework covering the provision of manufactured goods (OECD 1998).

Continuing the current pace of tariff reform would result in tariff-free trade in 2010.

Current Developments

Most countries did not substantially change their policies to comply with the UR commitments on export subsidies. Canada is an exception, as it terminated the use of rail subsidies for wheat to export position in order to comply with its export subsidy commitments.

High grain prices resulted in a level of export subsidies substantially below WTO commitments in 1995 and 1996. For those years, WTO member export subsidies for wheat were 7 and 34 percent of total commitments (USDA-ERS 1998, p. 24). During the period of high prices, the EU imposed taxes on exports of wheat, prompting complaints by many wheat importers. Due to slow WTO reporting procedures, data is not publicly available on the use of EU export subsidies for wheat in 1997 and 1998. The United States has not used the Export Enhancement Program since August of 1995; however, it remains an option.

The EU accounted for 84 percent of the total (not wheat specific) export subsidies used in 1995. Only a few countries have exceeded their export subsidy commitments as reported so far to the WTO (USDA-ERS 1998).

Further Issues for Negotiation

Further reductions in, or complete elimination of, export subsidies should be an important objective of the 2000 Round (see Young, Johnson, and Smith 1999 for further discussion). Export subsidies do distort world markets, provide only indirect income support, and are relatively inefficient in improving U.S. producer welfare compared to other options. Moreover, the elimination of export subsidies is a stated goal of a number of countries, including those of the Cairns Group (defined in the glossary).

A key issue is whether the EU will agree to further reductions in export subsidies. Smith (1999) argues that political leaders in the EU may be unwilling to implement further changes to the Common Agricultural Policy in the next few years. However, EU policymakers may be willing to explore a reduction in internal supports and accompanying export subsidies over the longer term.

Some countries, including many in the Cairns Group will also seek restrictions on export credits. Export credits are widely viewed as a form of export subsidy. Wilson, Johnson, and Dahl (1999) have estimated the value of wheat export credit programs: Canada's export credit program was valued at U.S.\$ 12.55/metric ton, Australia's at \$26.95, the United States' at \$22.61, and France's at \$38.55. The relatively high value given to these export credit programs underscores the importance of an equitable and workable solution to this issue.

There is less agreement about the desirability of eliminating export credits than eliminating more direct export subsidy programs. One option may be to press for further restrictions on the use of export subsidies, while allowing negotiations on export credits through the OECD to come to fruition and perhaps form the basis for a separate agreement.

Further reductions in, or complete elimination of, export subsidies should be an important objective of the 2000 Round.

Domestic Support

Background on Domestic Support Provisions of the Uruguay Round Agreement

Domestic support provisions of the URA constrain the use of specified types of government support to agriculture. The provisions attempt to strike a balance between the desire to reduce the impact of government support on world markets and political pressure to continue such support. Policies were grouped by their impact on production and trade into three categories, called "green," "amber," and "blue" boxes. The criterion for policies labeled as "green box" is that they have no or minimum impact on production and trade. The green box includes a long list of policies such as advisory services, domestic food aid, income insurance and safety net programs, set-aside payments, environmental programs, and decoupled income support (Josling, Tangermann, and Wharley 1996, p. 204). Income support must meet specific criteria to qualify as decoupled. Payment amounts cannot be based on the volume of production in any year (after the base year), nor can payment be related to market prices or input use.

Policies included in the "amber box" have the largest impact on production and trade. The amber box includes policies that support market prices, reduce input costs, and make direct government payments (that are not decoupled). The aggregate measure of support (AMS) is a measure of the assistance given by government to all commodities through policies that meet amber box criteria. For example, for the United States the AMS in 1995 and 1996 included dairy, peanuts, and sugar price supports based on administered prices, marketing loans and loan deficiency payments, loan forfeit benefits, storage payments, commodity loan interest subsidies, irrigation and grazing programs, crop insurance, and state credit programs (USDA-ERS 1998, p. 17). The use of amber box policies is constrained for all countries to the AMS given in the base period of 1986–1988. Twenty-eight countries have agreed to reduce their AMS by 20 percent over six years (USDA-ERS 1998).

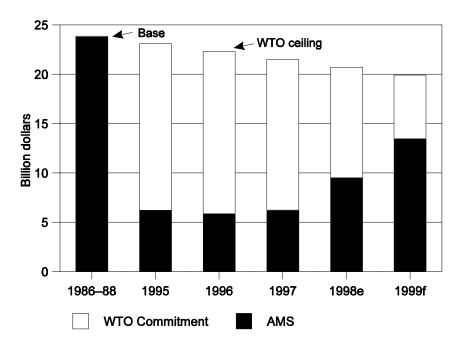
The final category of policies is the "blue box." The blue box includes programs that limit production and make payments that do not meet the criteria for decoupled support to producers. Blue box policies are given an exemption from inclusion in the aggregate measure of support if they meet specified criteria. These criteria include the following: (1) payments are made on fixed acres and yields; (2) payments are for 85 percent or less of the base level of production; (3) livestock payments are for a fixed number of head. The blue box exemption was included in the URAA due to concerns of the EU and the United States. As a result, U.S. deficiency payments and EU compensation payments are not included in those countries' aggregate measures of support.

Current Developments

The AMS for the United States has been substantially under its commitment for the years 1995–1999, as indicated in Figure 3. Changes in U.S. farm policy implemented in the Federal Agricultural Improvement and Reform Act (FAIR) have contributed to keeping the U.S. AMS low. The FAIR Act eliminated deficiency payments and implemented market transition payments that are decoupled. With the elimination of deficiency payments, the United States no longer has expenditures in the blue box.

The AMS for the United States has been substantially under its commitment for the years 1995–1999.

Figure 3. U.S. Aggregate Measure of Support: Base, Commitments, and Actual



Notes: 1998 estimated and 1999 forecast.

Source: Glauber 1999.

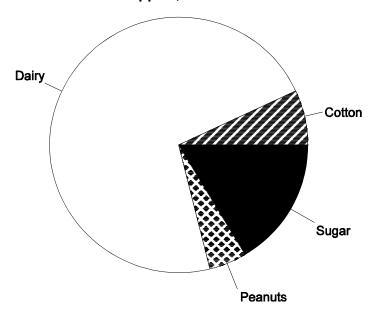
Because market transition payments meet green box criteria, U.S. green box expenditures have increased. Unless U.S. farm programs change substantially or crop prices drop unexpectedly, it appears unlikely that the United States will exceed its commitment on the AMS in upcoming years.

No expenditures for wheat were included in the U.S. 1997 AMS, as wheat met the de minimis conditions. The de minimis condition is that expenditures below a certain level, 5 percent of the value of production for developed countries, are not included in the AMS. In 1997, expenditures for wheat marketing loan gains were \$16.582 million and for wheat loan deficiency payments were \$24,000. Other important expenditures for wheat, such as those for the conservation reserve program and production flexibility contract payments, fall into the green box and are not included in the AMS. Wheat producers have expressed concern that expenditures for loan deficiency payments and marketing loan gains may be a difficult issue in the upcoming round. However, it does not appear likely that expenditures for those programs will cause the United States to exceed its commitments on the aggregate measure of support.

In 1997, the U.S. AMS included expenditures for only four commodities: cotton, dairy, peanuts, and sugar, as shown in Figure 4. Wheat and other program crops have moved to a package of policies that largely provide decoupled support for producers. In contrast, cotton, dairy, peanuts, and sugar commodities continue to rely on policies to increase market prices. All of the countries that reported their 1995 AMS to the WTO more than met their AMS commitment for that year. In fact, WTO member

No expenditures for wheat were included in the U.S. 1997 AMS, which included expenditures for cotton, dairy, peanuts, and sugar.

Figure 4. Commodity Composition of U.S. Aggregate Measure of Support, 1997



Source: USDA-ERS 1997.

expenditures on the amber and blue boxes (the two boxes categorized as trade distorting) was 73 percent of the base level. The EU, Japan, and the United States have the largest expenditures on amber box policies (Figure 5).

Future Issues on Domestic Support for Negotiation

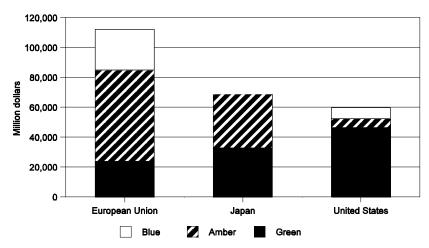
Further reductions in the use of domestic agricultural policies categorized as trade distorting (such as amber box policies included in the aggregate measure of support) are held by many economists as an important objective for the next round. One way to accomplish this objective is to commit to further reductions in the aggregate measure of support. To have any effect on trade, these cuts would have to be substantial, as most countries have not been constrained by their current commitments on the aggregate measure of support. Limits to aggregate measures of support for product groups instead of an overall limit for all commodities could, over time, reduce the unbalanced level of support between commodities.

Another useful step toward less distortion in global agricultural markets would be elimination of the blue box. EU payments to beef and wheat producers are not fully decoupled. If the blue box were eliminated, the EU would need to change some of their wheat and beef policies to meet the criteria for decoupled support, or these payments would be moved to the amber box and included in the EU aggregate measure of support.

Although further reductions in domestic support (through reductions in the AMS) would be helpful in achieving the goal of less distortion in agricultural markets, it is not clear that the provisions on domestic support should

To have an effect on trade, cuts in the aggregate measure of support would need to be substantial.

Figure 5. Total Domestic Support for the European Union, United States, and Japan, 1995



Source: USDA-ERS 1998.

be a priority for the next round. Sumner (1999) argues that both past and any future agreements on domestic support are unlikely to be effective. From his point of view, the complexity of the wide array of domestic programs makes it impossible to create effective and enforceable commitments on internal support. His arguments lead to the conclusion that negotiators should devote more effort to reducing barriers to trade at the border, which in itself will motivate the adaptation of domestic policy to less distorting measures.

There are also questions over the degree to which policies included in the green box stimulate production (MacLaren 1983). Little empirical research has been undertaken on the extent to which green box policies distort trade. Some analysts argue that there is widespread agreement that most of the policies have minimal impacts on production and trade (Josling, Tangermann, and Wharley 1996), and they further argue that governments would not be prepared to give up these relatively benign policies in trade negotiations. More progress is likely to be made by focusing on other tradedistorting concerns. This question is discussed more thoroughly in the conclusion to this paper.

Sanitary and Phytosanitary Measures

As trade rules for agriculture are strengthened and tariffs and quotas are reduced, concern increases that governments may use sanitary and phytosanitary regulations (SPS) as a way to protect their domestic industries. This was one motivation for strengthening the SPS agreement in the Uruguay Round. The SPS agreement **matters**. Roberts, Josling, and Orden (1999) estimate that U.S. agricultural exports face 286 questionable SPS barriers, with foregone exports valued at \$5 billion. This is the equivalent of 9 percent of U.S. agricultural exports in 1998. Officials from countries exporting to the United States have identified 69 contentious technical barriers to U.S. agricultural markets.

U.S. agricultural exports face 286 questionable sanitary and phytosanitary barriers, with foregone exports valued at \$5 billion.

Background on the Sanitary and Phytosanitary Agreement of the Uruguay Round

Sanitary and phytosanitary regulations for imports are adopted by countries to protect human, animal, and plant life and to prevent certain biological and chemical risks. The SPS agreement provides incentives for a country to adopt internationally recognized standards as a basis for their SPS measures (Young and Miljkovic 1999). At the same time, countries are allowed to develop more stringent standards that reflect their risk preferences, even if those standards differ from international standards. If a country or trading bloc adopts standards that differ from applicable international standards, the standards can be challenged through the Dispute Settlement Understanding of the WTO. If a challenge is made, the country must demonstrate that its standards are based on science. The country's assessment of the actual risks involved must include available scientific evidence, relevant inspection, sampling and testing methods, the prevalence of specific diseases or pests, and the existence of pest- or disease-free areas. Another criterion of the SPS agreement is that a country's regulations must be consistent. For example, where similar conditions for disease, pests, or other risks prevail, regulations cannot be more restrictive for imports than for goods produced in the home country, or more restrictive for some countries than for others. Finally, the decisionmaking process under which regulations are developed must be accessible to the public at home and abroad.

Current Developments

The SPS agreement has resulted in some tangible benefits for agriculture. The agreement's reliance on science-based standards has been the catalyst for unilateral reform by eight important traders: Argentina, Australia, Canada, EU, Japan, New Zealand, Thailand, and United States. As a result, some import restrictions have been discontinued (Roberts 1998). For example, the United States lifted import restrictions on uncooked beef from foot and mouth disease-free areas of Argentina, and Japan lifted import restrictions on U.S. tomatoes.

In order to increase transparency, the SPS agreement requires countries to notify trading partners of proposed changes in regulations. In the first three years of the agreement, 52 nations made 966 notifications, increasing the information available about intended changes in regulations. As a result, some regulations were modified before implementation in response to concerns expressed by trading partners.

The URA stresses the use of consultation in resolving disputes. For example, consultations between the United States and South Korea over Korea's shelf-life requirements for imports resulted in a negotiated settlement acceptable to both parties. In the 47 years prior to the URA, no disputes concerned with SPS measures advanced to formal dispute settlement through the GATT. Between 1995 and 1998, nine SPS-related disputes were formally addressed by the WTO. The increase in the number of formally addressed SPS disputes is attributed by some analysts to reflect an increase in global trade, the stricter rules negotiated in the URA, and a growing faith in the system.

Issues for Further Negotiations

A pressing issue to be addressed in the next round is the development of rules governing trade in genetically modified organisms (GMOs). GMOs have been broadly accepted by producers, consumers, and regulators in the United States. This is not true in many other countries, where there is strong resistance to GMOs due to concerns over human health and the environment.

To date, this issue has largely affected U.S. exports of corn and soybeans. The slow pace and uncertainty of EU regulatory approval of genetically modified corn has resulted in lost sales for U.S. corn producers. The governments of the EU, Japan, Australia, and New Zealand have announced mandatory labeling requirements for genetically modified foods. Trade experts, including Deputy U.S. Agriculture Secretary Richard Rominger, predict that disputes over trade in genetically modified crops will dominate other trade issues (Genetic IS, Inc. 1999).

In response to these concerns, some U.S. grain handlers have developed segregated supply chains for GMO and non-GMO grains. Segregation of corn and soybeans into GMO and non-GMO categories is likely to increase the cost of handling and the time required for transportation. Segregation also raises the issue of the development of appropriate standards for grain sold as non-GMO. Questions of liability exist for all members of the supply chain involved in delivery of non-GMO grain.

Because international standards have not yet been developed for trade in genetically modified foods, countries are allowed to set their own standards. Many governments want clarification of rules for trade in GMOs on the agenda for the Millennium Round. Two possible outcomes of the negotiations are the development of standards for GMOs by international organizations and rules for labeling of GMOs. Given the diversity of international opinion on GMOs and the strength of resistance in many countries, the development of standards for GMOs will be difficult. Even if standards are adopted that reflect the U.S. scientific consensus that GMOs are safe, it is likely that trade disputes will continue. Given the actions of several governments so far, it is possible that they will continue to limit access of GMOs to their markets.

Labeling GMO commodities and food is another possible solution. Although labeling is costly, it broadens consumer choice in importing countries and prevents import bans. However, if labeling is not based on science, it may violate WTO rules in the Agreement on Technical Barriers to Trade. Solutions to the conflicts posed by trade in genetically modified foods and clarification of the respective roles of science and consumer preferences are needed in the next round.

The development of trade rules for genetically modified foods is an important issue for the entire agricultural industry, including wheat growers. Genetically modified wheat varieties are in the pipeline. Roundup Ready ® wheat is likely to be the first genetically modified wheat product of economic importance and will be available soon (Talbert 1999). Also in

A pressing issue to be addressed in the next round is the development of rules governing trade in genetically modified organisms (GMOs).

the pipeline are wheat varieties with desirable production characteristics, such as disease and insect resistance and improved nitrogen use, and with desirable end-use characteristics for animal feeding and human consumption (Sparks, Inc. 1998).

State Trading Enterprises

Background and Current Developments

State trading is prevalent in the international wheat market. In 1996, around 40 percent of wheat imports were conducted by countries that use state trading enterprises to conduct imports (Abbott and Young, forthcoming). The major concern over importing STEs is that they may use their power (often a monopoly right to import) to increase protection of domestic agricultural producers beyond WTO commitments in a disguised manner. This could result in lower imports than would occur otherwise. Another concern is that decisions about the source of imports may be influenced by political considerations, again resulting in some distortions in trading patterns.

A slightly smaller percentage of wheat exported is through STEs, around 33 percent for the 1994–1997 marketing years. The major concerns about exporting STES are that their operations result in an implicit export subsidy and that they price-discriminate among trading partners.

The United States has made further disciplines on state trading an important goal of the Millennium Round. One factor behind U.S. concern is the potential accession of countries who use state trading to the WTO, such as China, Russia, and other eastern European countries. Josling (1998) notes that reforms under the URAA have highlighted the question of whether STE traders have unfair advantages in world markets. Until the enactment of Canada-U.S. Free Trade Agreement, the United States and Canada competed with each other in the world wheat market but did not trade with each other. With the advent of free trade, the nature of their relationship changed, and the United States began to import wheat from Canada. The juxtaposition of two very different systems for wheat marketing have highlighted questions about the how the level and pricing of Canadian wheat exports to the United States are affected by marketing features unique to state trading.

State trading was recognized as legal in the original 1947 GATT agreement. In the URA, state trading enterprises are defined as enterprises that have been granted exclusive or special rights through which they influence, through purchases or sales, the level or direction of imports or exports (Understanding on the Interpretation of Article XVII, GATT 1994). Importing STEs are required to make purchases on the basis of commercial considerations, and they are not allowed to increase the protection given to any product beyond that provided by their tariff schedules. The GATT/WTO may request information on the operation of any STE, but they are not required to disclose information that would jeopardize their commercial operations.

Miner (forthcoming) discusses U.S. concerns over unfair pricing and trade practices by the Canadian Wheat Board (CWB). Nine investigations and studies have been under taken by the U.S. government and none have

produced evidence that the CWB is violating trade agreements or pricing unfairly. Miner notes that STEs have the capacity to circumvent trade laws, as do multinational enterprises, and stresses the need to create stricter disciplines to deal with both. Carter and Loyns (1996) argue that the CWB must price grain competitively in world markets and that it is likely that the operations of the CWB have a minimal impact on world markets. These points are relevant in assessing the priority that should be given to reform of STEs, as discussed in the conclusions to the paper.

Importers maintain STEs in order to achieve domestic policy goals. Low and stable prices for consumers and high prices for producers are objectives frequently held by governments that import wheat. Research indicates that many countries alternately tax and subsidize their wheat consumers in order to achieve stable prices. As consumer subsidization is common, STEs are not solely used to tax consumers and reduce demand (Abbott and Young forthcoming).

There has been a significant decline in the prevalence of state trading importers in the last twenty years. In 1973–1977, it was estimated that 91 percent of world wheat imports were conducted by STEs. In 1997, the percentage of imports accounted for by STEs declined to 40 percent (Abbott and Young, forthcoming; Young 1999). Reform has been motivated by three factors. Most importing countries who have reformed their STEs have done so during a period of financial crises (Young 1999). Reform of their STEs was one part of a package of reforms required in order to receive acutely needed loans and financial assistance from the World Bank and International Monetary Fund. These countries reformed their STEs as part of a larger package of reforms to move their economies toward market—oriented policies. The World Bank and the IMF provided both a carrot and a stick for these countries. I argue that it may be difficult to gain support for further disciplines on STES in the WTO process, which is not likely to be able to offer the same level of incentive.

A recent report by Ackerman and Dixit (1999) examines state trading across commodities. They conclude that only a few of the nine major agricultural STEs examined are able to affect international trade substantially.

Issues for Negotiation

There are two difficulties in evaluating potential benefits to U.S. agriculture of further disciplines on state trading enterprises. One is that investigations of both importing and exporting STEs have been hampered by the lack of data needed for conclusive empirical analysis. A clear consensus does not exist on the size of the economic impact that state trading has on world markets. Another difficulty in assessing further disciplines on STEs is ambiguity over what is being proposed. To date, U.S. government position statements submitted to the World Trade Organization have not included any specific proposals on how further discipline on STEs would be achieved.

Analysts have proposed that one avenue to address many of the issues presented by both import and export state traders is competition policy. Due to the complexity of the issues involved in competition policy and the

To date, U.S.
government position
statements submitted to
the World Trade
Organization have not
included any specific
proposals on how
further discipline on
STEs would be achieved.

divergent starting positions of WTO members, WTO progress on competition policy may require several years. An advantage to this approach is that the breadth of issues included may make it possible to reach consensus on a package of reforms.

For importing state traders, one option may be to obligate the countries maintaining STEs to purchase a minimum amount from the world market, comparable to Japan and South Korea's current obligations for rice under the URAA (Josling 1998; Miner 1998). A second option is to require governments to remove the monopoly powers of importing STEs and allocate a share of tariff rate quotas and import requirements to the private sector. Some governments, such as Egypt and Pakistan, have STEs that coexist with the private sector. However, partial reform is difficult if the government does not fully support goals behind reforms, as the government can make it difficult for a private enterprise to compete with a government enterprise. A third option is that importing STEs be required to provide sufficient information to indicate that they are meeting their obligations.

For exporting state traders even fewer concrete suggestions have been made publicly about how to increase transparency. One suggestion is that exporting STEs be subject to audits by some sort of international regulatory agency (Smith 1999). However, this idea has yet to receive serious evaluation.

Scope of the Round

History has shown that a successful round of trade negotiations requires that a broad set of issues be discussed so that trade-offs can be made and consensus reached. The EU and important food importers, such as Japan and South Korea, are unlikely to support further reform of agricultural trade. Some developing countries also do not support further trade liberalization under the WTO. India, which leads a group of developing countries, has expressed opposition to further reform, arguing that developing countries have not gained from the Uruguay Round and that the URAA deals only with issues of importance to developed countries (*Bridges Weekly* 1999b; WTO 1999b).

Only agriculture and services are mandated to begin new negotiations at the turn of 2000. Although other topics have been proposed for the 2000 Round, it is unclear at this time what the scope of the agenda will be. Agricultural interests should consider pressing for a round that is comprehensive enough to attract the support and involvement of a wide group of countries.

Conclusions

It is widely recognized that much remains to be done to complete the reform in agricultural trade begun in the Uruguay Round Agreement. I was asked to analyze issues important to wheat growers and to provide opinions on their relative importance. I used two criteria in ranking potential reforms. The first criterion is concerned with the outcome and is the economic importance and lack of ambiguity of the reform. The second criterion is concerned with process and is clear and consistent goals that articulate how reforms will be implemented (Schott 1998, p. 13). The

History has shown that a successful round of trade negotiations requires that a broad set of issues be discussed so that trade-offs can be made and consensus reached.

second criterion is required in order to gain support from other countries and to form a consensus.

Reduction of tariffs and reduction or elimination of export subsidies are top priorities to be addressed in the Millennium Round. Reduction of tariffs to levels that actually increase trade increases overall economic welfare. Producers who are competitive in world markets and consumers will benefit. Open borders limit the types of domestic agricultural policies that can be effectively implemented and motivate a shift to policies that have smaller effects on markets. Tariffs are amenable to negotiations, as they can be quantified and reduced by formulas, even when countries have different starting points. Tariff reductions will be supported by many countries. Finally, as the history of manufacturing tariffs shows, with sustained effort, success can be achieved in tariff reductions. Waino, Gibson, and Whitley (1999) provide rationale for three goals for tariff reductions. First, tariffs under 2 or 3 percent should be eliminated upfront. This will facilitate trade and prevent countries from cutting low tariffs in the next round to meet their obligations. Second, within-quota tariffs should be eliminated to reduce the problems associated with TRQs and their administration. Third, specific tariffs should be converted to ad valorem tariffs to increase transparency. These are sound suggestions. If adopted along with obligations to continue the current pace of reform, substantial progress would be made.

Continued reduction in export subsidies would remove significant distortions from world wheat markets. Many countries, and some negotiating blocs such as the Cairns Group, support this goal. In this case as well, a continuation of the current pace of reform would eliminate export subsidies by 2011 (Glauber 1999). This gives the European Union more than ten years to gradually restructure their agricultural policies.

The development of trade rules for genetically modified organisms receives a middle ranking in terms of priorities for wheat growers in the next round. The economic importance of this issue could be large. Unsatisfactory resolution could embroil the U.S. grains industry in lengthy and costly disputes with a number of major importing countries. A high level of rancor on this issue could be detrimental to the operation of the WTO (Perdikis and Kerr 1999) and make it difficult to progress in other important areas. This issue receives a middle ranking due to anticipated difficulty in negotiating a workable solution.

Continued reform in the provisions on domestic support also receives a middle ranking. As Sumner points out, it is difficult to develop an index of support that adequately captures the diverse and complicated domestic agricultural policies that exist. However, the current framework has value and should not be lightly dismissed. To be effective, large cuts would need to be made in the aggregate measure of support. This would provide further incentive for governments to move toward decoupled income support. Reductions on the basis of commodity groups instead of an overall limit to domestic support would result in less disparity in the support provided to different commodities. Elimination of the blue box would force the EU to further decouple their payments to wheat (and beef) producers or move those payments to the amber box.

Reduction of tariffs and reduction or elimination of export subsidies are top priorities.

The development of trade rules for genetically modified organisms receives a middle ranking.

Further disciplines on state trading receives a low ranking as a priority for wheat growers. There is little empirical evidence to support the contention that the operations of exporting or importing state traders have an important impact on world markets. Although officials in the U.S. government have expressed concern about state trading since 1994, they have not yet presented a clear and effective proposal to address those concerns. It may be more fruitful to pursue negotiations on STEs within the context of broadly based discussions on competition policy. Outside of the United States and possibly the EU, there is relatively little support for further disciplines on state trading. One useful outcome could be an agreement by importing state traders to provide the detailed domestic market information needed to determine whether their STEs are obstructing trade.

Wheat growers have a great deal to gain from a round that results in increased market access, reduced export subsidies and domestic support, and progress in trade rules for genetically modified organisms. These reforms will support market prices. However, it is likely that the gains from international economic growth and stability, and their effect on income and demand, would be even larger. This implies that wheat growers have a stake in the success of the entire round, in the growth of the WTO, and in global institutions that promote economic stability.

Wheat growers have a stake in the success of the entire round, in the growth of the WTO, and in global institutions that promote economic stability.

Linda M. Young is the Agricultural Policy Coordinator for the Trade Research Center, Montana State University-Bozeman. She received her Ph.D. from the University of California-Davis. Her research interests include agricultural policy and trade, emphasizing the grain and livestock markets.

- Abbott, P.C., and B.A. Morse. "Tariff Rate Quota Implementation in Developing Countries." Working paper. Department of Agricultural Economics, Purdue University, West Lafayette, IN, August 1999.
- Abbott, P.C., and L.M. Young. "Wheat-Importing State Trading Enterprises: Impacts on World Wheat Markets." *Canadian Journal of Agricultural Economics*, forthcoming.
- Ackerman, K.Z., and P.M. Dixit. *An Introduction to State Trading in Agriculture*. Agricultural Economic Report No. 783, U.S. Department of Agriculture, Economic Research Service, Washington, DC, October 1999.
- Bridges Weekly Trade News Digest "Differences Cloud Progress Toward Seattle, Let Deadline Slip By." 3(44)(1999a).
- Bridges Weekly Trade News Digest "WTO: Voices Speak Out in Favor of a Re-balancing New Round and Against Further Liberalization." 3(18)(1999b).
- Carter, C.A, and R.M.A. Lyons. *The Economics of Single Desk Selling of Western Canadian Grains*. Alberta Agriculture, Canada, March 1996.
- General Agreement on Tariffs and Trade (GATT). The Result of the Uruguay Round of Multilateral Trade Negotiations: The Legal Text. GATT Secretariat, Geneva, 1994.
- Genetic IS, Inc. *GMF Market Intelligence*. Fairfield, Iowa, No. 33, June 22, 1999.
- Gibson, P. Personal communication from unpublished database. U.S. Department of Agriculture, Economic Research Service, Washington, DC, November 12, 1999.
- Glauber, J.W. "U.S. Preparations for the WTO Negotiations." Talk presented at the conference 2000 WTO Negotiations: Issues for Agriculture in the Northern Plains and Rockies, Trade Research Center, Great Falls, Montana, November 1–2, 1999.
- Hartridge, D. Address given to the United Nation's Economic and Social Council (ECOSOC) High-Level Segment meeting, Geneva, July 5, 1999. (http://www.wto.org/wto/speeches/ecosoc2.htm), August 9, 1999.
- Josling, T. "State Trading and the WTO: Agricultural Trade Policy Aspects." Paper presented at the conference *The Role of the State in Agricultural Trade*, Stanford University, November 19–21, 1998.

- Josling, T., S. Tangermann, and T.K. Wharley. *Agriculture in the GATT*. New York: St. Martin's Press, 1996.
- MacLaren, D. "The Output of the Risk-Averse Firm: Some Comparative Statics for Agricultural Policy." *Journal of Agricultural Economics* 34(1)(1983):45–56.
- Miner, W. "Reforming the WTO Rules on State Trading for Agriculture." Paper presented at the conference *The Role of the State in Agricultural Trade*, Stanford University, Nov. 19–21, 1998.
- Miner, W. State Trading and Canada–U.S. Grain Trade: The Search for Solutions. Policy Issues Paper, Trade Research Center, Montana State University–Bozeman, forthcoming.
- Oregon Wheat. "Wheat Markets and Trade. Oregon Wheat Growers League." Briefing Paper, March 8, 1999.
- Organization for Economic Co-operation and Development (OECD). *Producer and Consumer Subsidy Equivalents Database*, Directorate for Food, Agriculture and Fisheries Agricultural Electronic Data Products, Paris, 1999.
- ———. The Export Credit Arrangement: Achievements and Challenges 1978–1998. Paris, 1998.
- Perdikis, N., and W.A. Kerr. "Can Consumer-Based Demands for Protection Be Incorporated in the WTO? The Case of Genetically Modified Foods." Invited paper presented at the joint meetings of the Canadian Agricultural Economics Society and the Western Agricultural Economics Society, Fargo, ND, July 11–14, 1999.
- Roberts, D. Implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures: The First Two Years. International Agricultural Trade Research Consortium, Working Paper No. 98-4, Geneva, May 1998.
- Roberts, D., T.E. Josling, and D. Orden. *A Framework for Analyzing Technical Barriers in Agricultural Markets*. Technical Bulletin No. 1876, Washington, DC: Economic Research Service, U.S. Department of Agriculture, March 1999.
- Schott, J.J., ed. *Launching New Global Trade Talks: An Action Agenda*. Special Report No. 12. Washington, DC: Institute for International Economics, September 1998.
- Smith, V.H. Personal communication, Department of Agricultural Economics and Economics, Montana State University–Bozeman, October12, 1999.

- Smith, V.H., and B.K. Goodwin. *Chile's Wheat Trade Environment: The Economics of Price Banks, Import Tariffs, and Policy Transparency*. Research Discussion Paper No. 30, Trade Research Center, Montana State University–Bozeman, June 1999.
- Sparks Companies, Inc. Biotechnology: Fundamentally Reshaping the Agriculture, Food and Fibre Industry, a Multi-Client Study. McLean, Virginia, November 1998.
- Sumner, D.A. "Growing Opportunities: U.S. Interests in Agricultural Trade Agreements." 2000 WTO Negotiations: Issues for Agriculture in the Northern Plains and Rockies. Young, Johnson, and Smith, eds. Bozeman: Trade Research Center, Montana State University, 1999.
- Talbert, L. Personal communication. Department of Plant Sciences, Montana State University–Bozeman, October 7, 1999.
- U.S. Department of Agriculture, Economic Research Service (USDA-ERS). *Foreign Agricultural Trade of the United States*. Commercial Agriculture Division, Washington, DC, various years.
- ———. *Agriculture in the WTO*. International Agriculture and Trade Reports, WRS-98-4, Washington, DC, December 1998.
- U.S. Department of Agriculture, National Agricultural Statistics Service (USDA-NASS). "All Wheat: Supply and Disposition by Marketing Years," various years.
- Waino, J. "Agriculture and the Evolution of Tariff Bargaining." *Agricultural Outlook*. U.S. Department of Agriculture, Economic Research Service, Washington, DC, August 1999.
- Waino, J., P. Gibson, and D.B. Whitley. "Implementation of Uruguay Round Tariff Reductions." *Agricultural Outlook*, U.S. Department of Agriculture, Economic Research Service, Washington, DC, November 1999.
- Wilson, W.W., D.D. Johnson, and B.L. Dahl. "Transparency and Export Subsidies in International Wheat Competition." *Agricultural Economics Report No. 415*. Department of Agricultural Economics, North Dakota State University, Fargo, ND, May 1999.
- World Trade Agenda. "Year-End Launch for a New Trade Round Will Be Fraught—As Many Political as Economic Targets." (http://tradeagenda.com/wta2/new_round.htm), August 9, 1999.
- World Trade Organization (WTO). "About the WTO." (http://www.wto.org/about_wpd.html), December 5, 1996.
- ——. Annual Report 1998: International Trade Statistics. Geneva, 1999a.

- ——. "Seattle Preparations Enter New Phase." *Focus* 37 (January-February)1999b.
- Young, L.M. "Prevalence and Reform of State Trading Importers in World Grain Markets." Invited paper presented at the joint meetings of the Canadian Agricultural Economics Society and the Western Agricultural Economics Society, Fargo, ND, July 11–14, 1999.
- Young, L.M., and D. Miljkovic. *The Sanitary and Phytosanitary Agreement of NAFTA and the GATT*. Briefing No. 8. Trade Research Center, Montana State University-Bozeman. Also available at www.trc.montana.edu. April 1999.
- Young, L.M., J.B. Johnson, and V.H. Smith, eds. 2000 WTO Negotiations: Issues for Agriculture in the Northern Plains and Rockies. Bozeman: Trade Research Center, Montana State University, 1999.

