International Dairy Markets and the WTO

by
Don P. Blayney and James J. Miller

Introduction

International dairy markets have changed considerably since the start of negotiations for the Uruguay Round (UR) of the General Agreement on Tariffs and Trade (GATT) more than a decade ago. Three linked factors have fueled the changes. First, market forces have substantially changed dairy industries in major exporting and importing countries. Second, a number of countries have made major changes in domestic dairy policy or seen the full effects of policy changes made in the eighties. Last, the UR agreements themselves have affected the international dairy markets. These changes provide the context for future international dairy trade negotiations, whether the talks are part of a new "full" round or the ongoing negotiations under the Uruguay Round Agreement on Agriculture (URAA).

Agricultural trade was not addressed systematically under the GATT until the Uruguay Round. International dairy trade proved to be a difficult issue to address during the UR because most of the developed dairy industries of the world enjoyed relatively high domestic support and strong protection from foreign competition. The UR of the GATT, concluded in December 1993, signed in April 1994, and implemented beginning January 1, 1995 has changed the course of international dairy markets and the way future multilateral trade negotiations would be handled.

The UR established two important institutional structures: 1) the Uruguay Round Agreement on Agriculture (URAA) which explicitly makes agricultural trade subject to multilateral trade disciplines and, 2) the World Trade Organization (WTO), an institution with much greater powers for administering trade rules and resolving trade disputes. The WTO encompasses all of the arrangements and agreements concluded under the auspices of the GATT, including those from the Uruguay Round. The URAA created the agricultural trade rules that the WTO is charged with administering and enforcing. A key element of the URAA was recognition that agricultural trade reform is an ongoing process. As a result, WTO negotiations on agriculture began in Geneva, Switzerland in March 2000.

The discussions that follow focus on the dairy industries and WTO commitments of the major producing countries that participate in international dairy product markets. (Some WTO commitments for developing countries differ from those presented here). The progress made by the Uruguay Round toward reducing barriers to dairy product trade and disciplining domestic programs that might distort trade will be significant issues for many countries in future agricultural negotiations.

An Overview of International Dairy Markets

International dairy trade is mostly in manufactured products, primarily butter, cheese, and milk powders. Historically, internationally traded products have been equivalent to about 5 percent of world milk production. The production and trade discussions that follow are based on the period 1994-1999 which mostly coincides with the implementation period for the URAA.

Milk Production

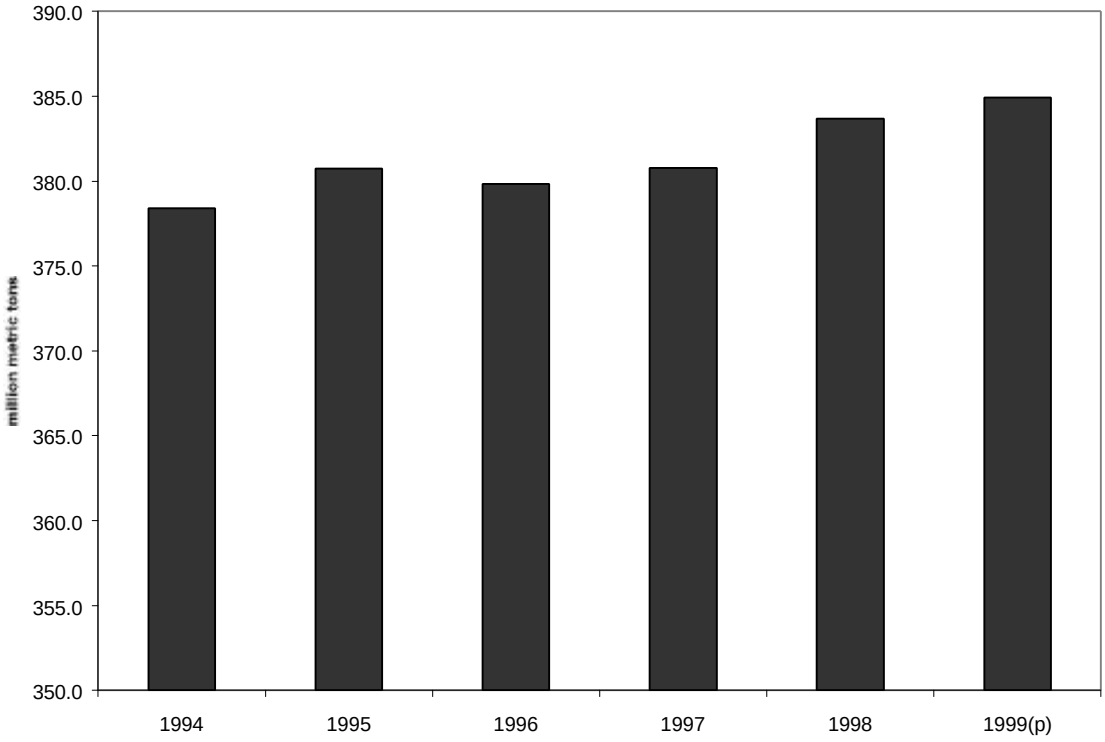
Milk is produced in almost every country in the world, not all of it from milk cows. Data for five milk types are reported by the Food and Agriculture Organization of the United Nations (FAO): cow, buffalo, sheep, goat, and camel. The largest share, accounting for almost 86 percent of the reported production during 1994-1999, was from cows. The quantities of sheep and goat milks are not large, but they are used to produce important cheese varieties traded internationally. From 1994 to 1999, milk production of all types grew about 5.3 percent, while cow milk production grew somewhat less.

The Foreign Agricultural Service (FAS), USDA publishes cow milk production data for 33 major milk producing and dairy trading countries. Production in the 33 countries grew relatively modestly during 1994-99, from 378.4 to 384.9 million metric tons (1 metric ton=2204.6 pounds)—less than 2 percent. However, some rather dramatic production movements, both up and down, occurred in some countries and regions.

Milk production rose sharply over the 1994-1999 period in the major exporting countries of Oceania and South America, such as New Zealand, Australia, Argentina, and Uruguay, in part due to relatively high international dairy product prices and low prices and diminished returns for other pastoral products in international markets. Milk output grew substantially in India and China as their domestic markets expanded. Production edged upward in the United States as domestic demand increases boosted prices, particularly during the late nineties.

In Western Europe and Japan, production controls, stagnant domestic demand for dairy products,

Figure 1. Cow Milk Production in 33 Selected Countries



high costs, and (for the European Union (EU)) implementation of URAA export subsidy disciplines resulted in steady to slightly lower milk production. Canada, a country that also employs supply management programs, implemented domestic program changes that, at least temporarily, led to some increased production. The former Soviet Union and other eastern European countries have undergone massive structural adjustments following the days of central planning. Milk production fell sharply as most subsidies were withdrawn and inefficient farms failed. Recently, production in some of these countries has stabilized or slightly increased, but in others has continued to decline.

Traded Products

Butter, cheese, and dried milk products are the major dairy products traded internationally. A more detailed look at the production, consumption, and stock levels of these products is available in the FAS publication, **Dairy: World Markets and Trade**, which is available on the Internet at http://www.fas.usda.gov and is the source for the charts included in this article.

Butter

The international butter market consists of two rather distinct segments of roughly the same size: anhydrous milkfat (AMF) and solid butter. Demand for and trade in both products have varied greatly in response to economic conditions in recent years and have shown no clear-cut trends. Demand for AMF is primarily in relatively affluent countries of Asia and Latin America that use it for commercial reconstitution of beverage milks and for products like ice cream. The major butter importers are Russia, the Middle East and North Africa, and the EU (for fixed negotiated amounts from New Zealand).

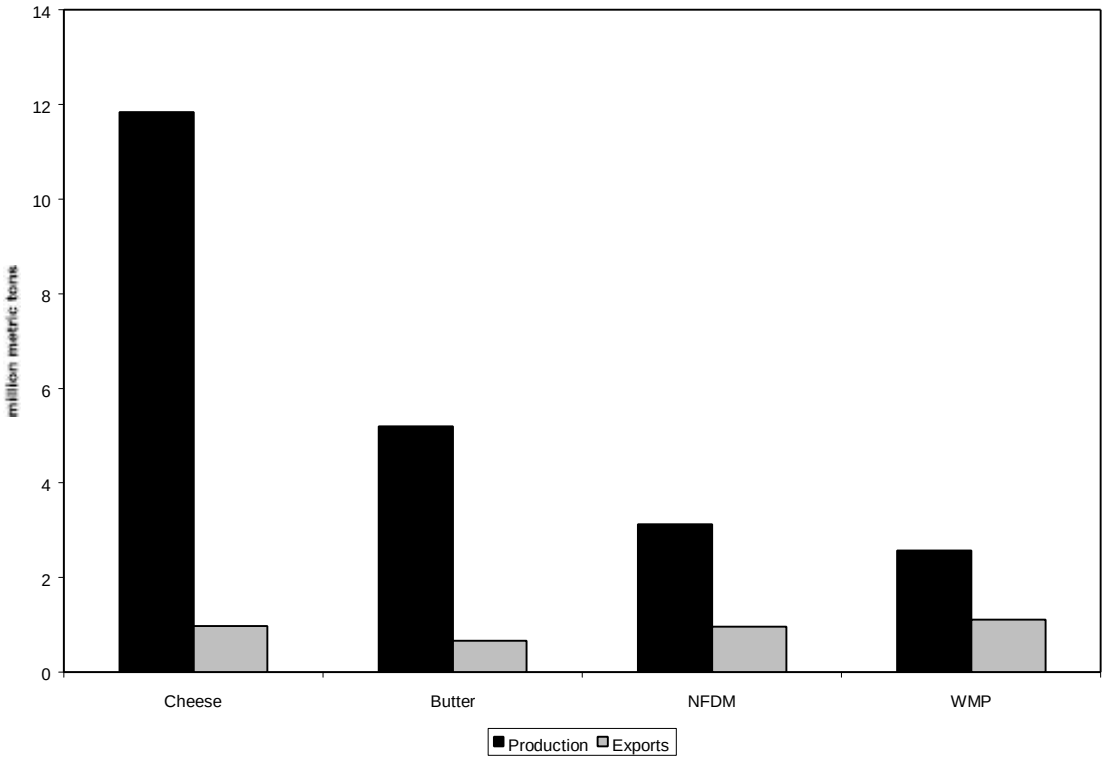
About half of the world's recorded butter exports come from New Zealand alone, and Oceania accounts for about two-thirds. There is known to be significant additional trade among countries of the former Soviet Union and Eastern Europe, but data are either unavailable or unreliable. The EU is the only other large butter exporter, although its share is much smaller than before URAA implementation. The United States normally is not a significant international butter market participant.

Cheeses

The international cheese market continues to grow steadily, but slowly, in response to economic growth in Latin America, westernization of diets in Asia, and the spread of pizza to every part of the world. World cheese exports grew only about 1 percent annually from 1994 to 1999. Japan, the United States, the EU, and sometimes Russia are the largest importers. The Middle East and North Africa is another important market, particularly for some cheese types.

The EU remains the largest exporter of cheese, although its exports have fallen because of the URAA export subsidy disciplines. All of Western Europe accounts for over half of the world cheese exports with most of the remainder coming from Oceania. With growing milk production, New Zealand and Australia boosted cheese production and exports substantially as decreasing European exports created opportunities. The United States has been a relatively minor exporter of mostly specialty cheese products.

Figure 2. Dairy Product Production and Exports, Selected Countries, 1994-1999(p) average



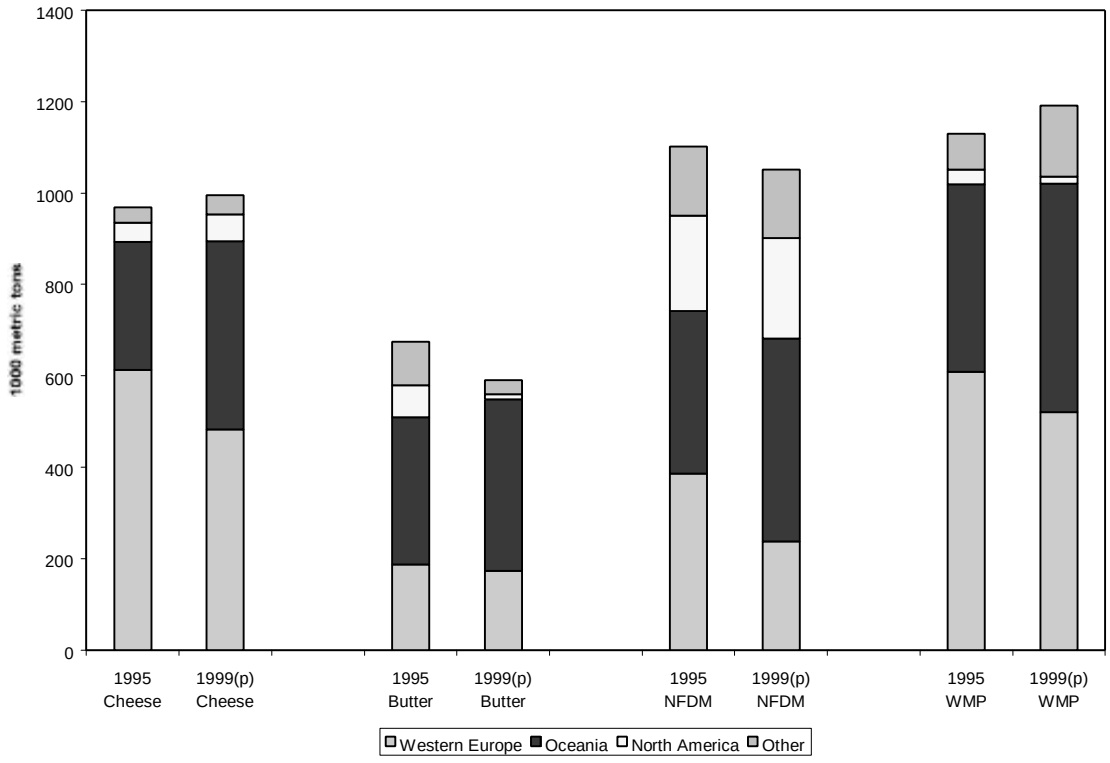
Milk Powders

Milk powders are very widely imported, particularly by tropical countries, for reconstitution into beverage milks. Both commercial and home reconstitution is common, and milk powders are particularly important for child feeding. At one time, commercial reconstitution was done in large centralized plants using skim milk powder either alone, recombined with AMF, or combined with vegetable oil. Increasingly, commercial reconstitution has been decentralized and shifted to whole milk powder use. This shift has been aided by whole milk powder's greater reconstitution flexibility, new inexpensive whole milk packaging that maintains acceptable flavor, and the disappearance of any price premium between skim and whole milk powders. Use of milk powders as ingredients in processed foods continues to be relatively small in most importing countries.

Most East and Southeast Asia countries import significant amounts of milk powders. The regions' importance had been growing considerably until economic problems temporarily curtailed demand. The more populous countries of the Middle East and North Africa continue to be important markets, although import demand there has not grown much. Many countries in Latin America import substantial quantities of milk powders. Relatively rapid population growth in the region has boosted demand, although a series of economic crises have led to erratic growth in import demand.

Milk powder export supplies consist of about equal amounts of skim milk and whole milk powders. About four-fifths of milk powder exports come from the EU and Oceania. Lesser amounts come from Poland, Argentina, and (for skim milk powder) the United States. The U.S. skim milk powder export sales have been generally lower than during the early nineties, in part because of URAA limitations on export subsidies and in part because of domestic market conditions.

Figure 3. World Exports by Region and Product, 1995 and 1999(p)



Whey Products

Although extensive data are not available, trade in whey products (dry whey, modified whey products, and whey protein concentrate) has grown substantially. These products, byproducts of cheese production, can offer almost all of the nutrition of skim milk powder at a very low price. Whey products, particularly whey protein concentrate, are used for child nutrition beverages in the poorest countries and for domestic food aid in slightly more affluent countries. Although these products may not meet the flavor standards of more affluent consumers, they fill a very important nutrition role for the poorest people. The emergence of this market has caused prices of whey protein concentrate to become a floor for international prices of skim milk powder. If skim milk powder prices fall enough, countries quickly shift from whey products to milk powder. For wealthier importing countries and exporting countries, whey products are used to provide specific functional and nutritional characteristics to processed foods and animal feeds.

Further Observations on International Markets

The EU and Oceania continue to be the dominant exporters of dairy products. International trade in the products remains equivalent to about 5 percent of total world milk production. Changes or realignments over the past decade in some major blocs have had large repercussions--the dissolution of the Communist bloc, the dissolution of the Soviet Union itself, expansion of the EU, and formation of MERCOSUR in South America. Asia (other than Japan) has grown dramatically as an importing region and Latin American countries have emerged as both exporters and importers. Growing trade in whole milk powder, whey products, and other less documented products such as ice cream suggest that dairy export opportunities have become more diverse. In addition to these changes, the URAA altered many aspects of international dairy markets. The URAA is the focus of the rest of this paper.

Uruguay Round Accomplishments and Concerns

The guiding principle of the WTO, like the GATT before it, is trade liberalization. The general principles are transparency, national treatment, most favored nation status, preference for tariffs as import controls, and dispute settlement. These general principles are augmented by the specific disciplines for agriculture in the URAA relating to market access, export subsidies, internal agricultural support, and a separate agreement covering sanitary and phytosanitary (SPS) measures. (Further information on general URAA topics can be found in "Agriculture in the WTO" an International Agriculture and Trade Situation and Outlook Report, December 1998. It can be accessed at this site.) The URAA, like all such negotiated agreements, represented a mixture of things accomplished and things not yet accomplished.

Expanded import access and conversion of nontariff barriers to tariff rate quotas: Highly restricted import access was the rule among major dairy-producing countries prior to implementing the URAA, except for Australia and New Zealand. Import restrictions were also used in some importing countries to protect local milk production or to raise revenue. Mechanisms used at various times included quantity quotas (as in the United States and Canada), prohibitive levies (EU), import monopolies (Mexico and Japan), and duties and other taxes. Tariff rate quotas (TRQs) (levels of import access at relatively low tariffs with higher over-quota tariffs) were established under URAA for most tradable dairy products formerly subject to import restrictions. For developed countries, almost all tariffs, including the over-quota tariffs, were to be reduced by a minimum of 15 percent and an average of 36 percent. If the former access was less than 5 percent, TRQs were generally set at 3 percent of consumption, rising to 5 percent by the end of the 6-year implementation period. For those relatively few important markets that allowed access of more than 5 percent, minimum access was set equal to their current access.

Reduced subsidized exports and expenditures on export subsidies: Most of the dairy exports from the EU, other western European countries, and Canada were traded with large, sometimes very large, export subsidies. The United States also exported large quantities under subsidy (the DEIP and below-cost government sales), although the product coverage was less comprehensive and less continuous. Even Australia and some eastern European countries, not usually connected with export subsidy programs, have used them at times. The URAA required countries to reduce amounts exported with subsidy by 21 percent from a 1986-90 base and to reduce the value of

those subsidies by 36 percent. For example, the United States and the EU agreed to 21-percent reductions in subsidized exports of dry skim milk to 68,000 and 243,000 tons, respectively. With only rare exceptions, subsidies were not allowed at all on a product unless the country had used them during the base period.

Reduced overall agricultural support: For many developed countries, support for dairy is a significant share of the total support for agriculture. The URAA required a reduction of 20 percent in overall (sometimes called aggregate) agricultural support from a 1986-88 base. A system was devised to identify whether particular support measures were trade-distorting or not, and the measures considered not trade-distorting were excluded from the calculation of the aggregate agricultural support measure. The URAA did not require countries to commit to reduction in the support of specific or individual agricultural commodities.

Other policies producing actual or potential trade distortions: State trading enterprises (STEs) were not addressed in a significant way in the URAA beyond general rules affecting subsidy and market access policies, even though their actions may distort trade. Several important importing STEs (including those of Mexico and Japan) were eliminated or curbed during the UR negotiation period. For dairy product exports, the New Zealand Dairy Board is a very important STE. The Canadian Dairy Commission and (at least sporadically) various government support agencies in other countries function as minor STEs.

Revenue pooling is common for milk. Pooling was not specifically mentioned in the URAA because it is not necessarily a trade issue. However, pooling or other fluid pricing mechanisms may provide a means to circumvent specific URAA provisions. Canada's special export class was successfully challenged before the WTO as an export subsidy and therefore must come into compliance with their commitments. Australia had a temporary transition plan with similar effects. Similarly, domestic price discrimination can lead to artificially low prices for manufactured products, discouraging imports and making it easier to export.

Sanitary and phytosanitary (SPS) regulations are essential for protecting a country's food safety and animal and plant health, but sometimes have been used as barriers to legitimate trade. The SPS Agreement required that such measures be based on objective science and applied in a nondiscriminatory manner, but allowed countries to establish stricter-than-international standards if based on legitimate scientific rationales. Despite relatively strong existing SPS measures imposed internally on dairy products in most countries--to prevent disease transmission or drug or chemical contamination--they have not generally been major impediments to dairy product trade.

Establishment of procedures for efficient dispute settlement: Extensive involvement of governments in dairy markets makes dispute settlement a particularly important adjunct to the trade principles applied to dairy products. For example, the United States and New Zealand successfully challenged Canadian subsidized exports as excessive.

Particular Concerns for Dairy Markets

Elimination of nontariff barriers: The URAA successfully eliminated most nontariff barriers affecting international dairy trade. Despite the lack of rigorous procedures to convert nontariff barriers to a TRQ system, transition to TRQs from earlier measures was relatively smooth in most countries. However, differences among countries in the level and coverage of TRQs remain controversial. Relative out-of-quota tariffs among countries vary tremendously, in part because they purportedly reflect the level of protection afforded by the pre-existing quotas and other nontariff barriers. These tariffs are gradually being reduced in approximately equal percentages over the implementation period. As a result, those countries that had been the most protective will end the transition period still having large tariffs, both absolutely and relatively.

The very tight U.S. dairy market of 1998-99 illustrated one inherent advantage of a TRQ system over the previous rigid quotas. Over-quota imports began once domestic prices reached levels that made such imports profitable and stopped when the prices fell to levels where importing was no longer profitable. The uncertainty and lumpiness of government policy actions were avoided.

*The aggregation question***:** Dairy markets will always seek to equalize the value of milk in alternative uses by adjusting the flows of milk into alternative products and markets. Policy-related distortions do interfere with the completeness of this process. However, most policy regimes have worked by adjusting relative values rather than by direct controls. In general, policy measures that allow the product mix to adjust to market conditions and changes will minimize unnecessary market distortions.

Aggregation has particular relevance to the trade policy questions of import access and disciplines on export subsidies. Import restrictions or export subsidies equivalent to the same amount of milk will have roughly the same net impact on markets. Allowing market forces to adjust the product mix and country flows results in international product markets staying in closer balance and adjusting more smoothly. The Uruguay Round established a general guideline that product categories be defined narrowly, mostly because of considerations relating to commodities other than dairy. Although a few countries were allowed to aggregate products into some form of milk equivalent, most countries' obligations were much more detailed.

Import access: Access to protected dairy markets was expanded under the URAA. Most countries had to increase the amounts that could enter at relatively low tariff rates. However, the import access for most countries did not equal the nominal 3 and 5 percent of total dairy product consumption because fluid milk and some other fresh dairy products generally were excluded from the calculations. The products excluded accounted for sizable shares of total consumption in some cases and were not the same across countries. In addition, little was done to aggregate or globalize the typically rigid import access.

Export subsidy disciplines: Limits on the quantities of and expenditures on subsidized exports held them well below the levels periodically reached previously. Along with some domestic policy reforms, the export disciplines helped international dairy markets become generally stronger and less policy-disrupted, at least until the onset of economic difficulties in Asia and Russia. Even so, international dairy markets remain very distorted by export subsidies. About a third to a half of exports of the major traded dairy products are subsidized.

The URAA called for proportional reductions in the quantities of and expenditures on subsidized exports. This allowed wide differences in the use of export subsidies among countries to persist.

The export disciplines were specifically applied to cheese, butter, dry milks, and miscellaneous products. Since the international cheese market and EU subsidized exports had grown steadily until 1995, the EU limit on subsidized cheese limited EU cheese exports. Milk that would have been manufactured into cheese for the relatively robust cheese market had to be diverted into the weaker markets for butter and dry milks. These additional subsidized EU butter and powder exports reduced international prices from mid-nineties levels and market opportunities for non-subsidizing exporters were reduced. Meanwhile, the international cheese market was left with less supply diversity and generally less cheese, even though Australia and New Zealand dramatically increased cheese capacity to take advantage of higher cheese prices.

The URAA was unclear about what actions a member could take if their subsidized exports were below its limits during the early years of implementation. The EU interpreted the agreement as allowing unused quantities or expenditures to be "rolled over" into following years, except for the final year. The United States then also reallocated unused DEIP quantities during May 1998-June 2000. As a result, subsidized exports of particular dairy products in recent years have been larger than the nominal annual limits, although the limits for the multiyear implementation period were observed.

Concluding Remarks

Progress toward removing dairy product trade barriers and eliminating potentially trade-distorting domestic agricultural policies has been made during the 6-year implementation period of the URAA. Today, as when the Uruguay Round of the GATT began, the EU, Australia, and New Zealand are the chief suppliers of the major traded dairy products, with the United States normally playing a minor role. Significant economic and structural changes in Eastern Europe, South America, and the former Soviet Union have altered the import side of international markets. Cheese, butter, and dry milk powders are still the major traded dairy products, although markets for whey products and others are emerging. Continuing trade issues that are important for all dairy trading countries include more standardized approaches to setting levels of and administering TRQs, similar standardization of export subsidy disciplines, and addressing perceived disparities in interpretation or implementation of commitments among countries. The United States and other countries or country groups recently announced their proposals for the current agricultural trade negotiations. These proposals are general in nature but embody many of the issues that have been identified above. They are available on the Internet at http://www.wto.org.