ELSEVIER

Agricultural Economics 15 (1996) 29–46

AGRICULTURAL ECONOMICS

Agreement on agriculture in the Uruguay Round of GATT: from Punta del Este to Marrakesh

Zuhair A. Hassan

Policy Branch, Agriculture and Agri-Food Canada, Ottawa, Ont. K1A 0C5, Canada

Accepted 12 November 1995

Abstract

To help appreciate the outcome of the negotiations, this paper will attempt to provide answers to the following questions. Why did the agreement take as long as 7 years to negotiate? What were the major obstacles to reaching an agreement? How did the negotiators reconcile differing points of view on issues such as the role of border measures and domestic policy measures in agriculture? What has been accomplished during the negotiations? Was the agreement successful in reforming agriculture? What are the likely effects on agricultural commodity prices in implementing the agreement?

1. Introduction

The government intervenes in the agricultural sector in many, if not all, countries in the world. Reasons for government intervention include the desires to provide farm price and income supports, to ensure food security, to improve the balance of trade, to reduce consumer prices, to address environmental and regional concerns, and to pursue sanitary and phytosanitary objectives.

In the 1980s, concerns about increased government intervention in agriculture were voiced more loudly than in earlier decades. At the same time, the unfavourable consequences of agricultural support and protection for commodity markets (such as low and unstable prices), the associated high costs incurred by governments and consumers, and the inadequacies of the existing General Agreement on Tariffs and Trade (GATT) rules for agriculture became more widely recognized. This situation prompted trade ministers to consider agricultural trade reform a key element in the round of Multilateral Trade Negotiations (MTN) envisioned to follow some time after the conclusion of the Tokyo Round of negotiations.

The negotiation agenda of the Uruguay Round was established in a meeting at Punta del Este in 1986. A major objective of the Uruguay Round of GATT was to reform the world agricultural trading system and make it more transparent. Negotiations of the Uruguay Round concluded with an agreement in Marrakesh in Morocco in 1994.

To help appreciate the outcome of the negotiations, this paper will attempt to provide answers to the following questions. Why did the agreement take as long as 7 years to negotiate? What were the major obstacles to reaching an agreement? How did the negotiators reconcile differing points of view on issues such as the role of border measures (import protection, export subsidies) and domestic policy measures in agriculture? What has been accomplished during the negotiations? Was the agreement successful in reforming agriculture? What are the

PII S0169-5150(96)01185-1

likely effects on agricultural commodity prices of implementing the agreement?

This paper contains three main sections. Section 2 provides an overview of developments in the Uruguay Round of GATT negotiations. Specifically, it highlights and compares the common ground and differences among the proposals and offers tabled by the United States, the European Union (EU) [1] (formerly the European Community), the Cairns Group, [2] Canada, and Japan. Section 3 focuses on the 1994 Agreement on Agriculture resulting from the Uruguay Round of GATT. It discusses key elements of the agreement (market access, domestic support, and export competition), the nature of exemptions available to developing countries, and exemptions from the general rules. Section 4 discusses the world price impacts of implementing the Agreement on Agriculture. It emphasizes why implementing the agreement is likely to have only small effects on world commodity prices.

2. Developments in the Uruguay Round of GATT

The Uruguay Round was the eighth round of multilateral trade negotiations under GATT. The previous seven rounds produced significant reductions in tariffs on manufactured goods, but little or no progress was made in opening international markets for agricultural trade. The 1986 Punta del Este declaration emphasized that negotiations would aim to achieve greater liberalization of agricultural trade and bring all measures affecting import access and export competition under stronger and more effective GATT rules and disciplines. In addition, the declaration outlined three objectives: (1) improving market access by reducing import barriers; (2) increasing disciplines on the use of all direct and indirect subsidies and other measures directly or indirectly affecting agricultural trade; and (3) reducing the adverse effects of sanitary and phytosanitary regulations on agricultural trade (General Agreement on Tariffs and Trade, 1986). It explicitly recognized that there is an obvious link between domestic agricultural policies and agricultural trade problems and implicitly acknowledged that existing waivers, derogations, and country-specific exceptions have not adequately served the agricultural sector. This section begins with a review of the initial negotiating proposals and ends with a discussion of the Blair House Agreement.

2.1. Initial negotiating proposals

Initial proposals on conducting the agricultural negotiations in the Uruguay Round were tabled by the United States (July 1987), the EU (October 1987), the Cairns Group (October 1987), Canada (October 1987), and Japan (December 1987). The Nordic countries (Finland, Iceland, Norway, and Sweden) and the Food-Importing Group (Jamaica, Egypt, and Mexico) also tabled proposals. A summary of selected proposals appears below and in Table 1.

The US proposal called for eliminating all subsidies that directly or indirectly affect trade, freezing and eliminating the quantities exported with the aid of export subsidies, and eliminating import barriers. These objectives would be achieved over a 10-year period. The Cairns Group and the Canadian proposals favoured eliminating trade-distorting policies or subsidies for all agricultural commodities. The EU proposal, on the other hand, suggested stabilizing world markets for cereals, dairy products, and sugar through market sharing or international commodity arrangements in an initial stage. In a second stage, the EU proposed reducing support levels over the long term. The Japanese proposal called for freezing and phasing out export subsidies, reducing existing tariffs through the traditional request and offer approach, and reducing trade-distorting effects of other subsidies.

With the exception of the US proposal, all these proposals favoured implementing short-term measures to provide early relief from distortions affecting agricultural trade. The United States maintained that an agreement on a long-term reform framework was required prior to discussing short-term measures.

[1] What is now the European Union was for most of the negotiations the European Community. During the negotiations it consisted of Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

[2] The Cairns Group consists of Argentina, Australia, Brazil, Canada, Chile, Colombia, Fiji, Hungary, Indonesia, Malaysia, New Zealand, the Philippines, Thailand, and Uruguay.

Table 1
Initial negotiating proposals, 1987

Objective	Country/group of countries				
	US	Cairns Group	Canada	EU	Japan
Long term	Eliminate over 10 years all agricultural subsidies which directly or indirectly affect trade	Eliminate trade-distorting policies	Eliminate trade-distorting subsidies and all access barriers	Reduce the negative effects of support on world markets	Reduce tariffs
	Freeze and eliminate over 10 years the quantities exported with the aid of export subsidies	Prohibit non-tariff barriers		Reduce the imbalance between supply and demand	Eliminate export subsidies
	Eliminate import barriers over 10 years	Eliminate derogations and exceptions from GATT rules			Reduce trade-distorting effects of other subsidies
					Recognize food security needs
Short term	None	Do not reduce existing levels of access	Reduce all trade-distorting subsidies and improve access opportunity	Stabilize world markets for cereals, dairy products, and sugar through international commodity agreements	Freeze export subsidies
		Freeze and then reduce all export and production subsidies affecting trade		Freeze support for cereals, rice, sugar, oilseeds, dairy products, beef, and veal at 1984 levels	
Aggregate measure of support (AMS)	Producer subsidy equivalent (PSE) type	PSE type	Trade distortion equivalent (TDE) based on PSE	PSE type	Not required

Examples of the proposed short-term measures include freezing existing levels of access, freezing export and production subsidies, and reducing all trade-distorting subsidies.

The proposals discussed above, with the exception of the Japanese proposal, envisioned using a producer subsidy equivalent [3] (PSE) type aggregate measurement of support (AMS) as a yardstick to set targets and monitor progress in reducing support or as the measure on which to take a binding commitment. Japan argued that the PSE approach reflects neither the wide-ranging purposes pursued by agricultural policies such as food security, preserving land and environment, and achieving regional development, nor the special characteristics of agriculture in specific countries. In 1988, several countries submitted elaborations of their initial proposals. For example, the United States proposed the conversion of all non-tariff import barriers into fixed tariffs (tariffication), with the tariffs to be eliminated over time.

2.2. Midterm review of the Uruguay Round

The various agriculture proposals were the subject of considerable discussion throughout the year prior to the Midterm Ministerial Review of the Uruguay Round in Montreal in December 1988. The meeting ended in a stalemate. [4] In agriculture, the impasse was rooted in two areas: (1) the insistence by the United States that agreement first be reached on the elimination in the long term of all trade distorting subsidies and protection before negotiations could begin on the short-term measures to cope with the current agricultural trade problems (such as freezes and cutbacks), and (2) the reluctance of the European Union to consider significant policy reforms. After this initial standoff, however, the participants reached an accord in Geneva in April 1989 (General Agreement on Tariffs and Trade, 1989). The agreement included a long-term objective and a framework for achieving it, as well as short-term undertakings in effect until the completion of negotiations. [5] In the short term, the participants agreed to ensure that (1) current domestic and export support and protection levels in the agricultural sector were not exceeded; (2) tariff and non-tariff market access barriers in force in April 1989 were not intensified or extended to additional products, including processed agricultural products; (3) access opportunities for individual products in 1989 and 1990 were on average not less than those in 1987 and 1988; and (4) support prices to producers set directly or indirectly by governments were not raised to levels greater than those in force in April 1989. Countries also stated their intention to reduce support and protection in 1990.

For the long term, the April 1989 agreement stated that the objective of the Round was to establish a fair and market-oriented agricultural trading system. Participating countries would reach this objective through a reform process consisting of negotiated commitments on support and protection, and by establishing strengthened and more operationally effective GATT rules and disciplines. Negotiations would take place on specific policies and measures, on AMS commitments, or on a combination of these approaches. The improved rules and disciplines (applicable to all contracting parties) and the negotiated commitments would encompass all measures directly or indirectly affecting import access and export competition (including internal support). Finally, credit would be given for measures implemented since the September 1986 declaration, which had contributed positively to the reform programme.

The Midterm Agreement clearly showed a recognition by the participants that both trade measures outside the GATT provisions and trade measures within GATT provisions, but maintained under waivers, derogations, and exceptions, were subject to negotiation (Gifford, 1989). They included variable import levies, minimum import prices, unbound tariffs, and some quantitative access restrictions. For example, Switzerland's entire agricultural trade policy and the permission for the United States to impose import quotas in certain situations would be

[3] The PSE is defined as the value of monetary transfers to producers from consumers and taxpayers, resulting from a given set of agricultural policies in a given year.

[4] The areas in which agreement could not be reached included agriculture as well as intellectual property, textiles and clothing, and safeguards.

[5] The April 1989 accord also included arrangements on sanitary and phytosanitary regulations.

subject to GATT rules and negotiated commitments. [6] Tariffication of such measures would also be on the table.

To achieve the long-term objective, participants would table detailed proposals on the conduct of the negotiations by December 1989. The detailed proposals were to address the following areas: the AMS, the GATT rules and disciplines, sanitary and phytosanitary regulations, tariffication, decoupled income support, and special and differential treatment for developing countries. The April 1989 accord specified the end of 1990 as the deadline for agreement on the long-term reforms programme including the length of time over which it would be implemented.

2.3. Detailed negotiating proposals

In accordance with the work programme agreed upon in April 1989, a number of GATT participants tabled detailed proposals for long-term agricultural reform. A summary of the proposals submitted by the United States (October 1989), the Cairns Group (November 1989), the EU (December 1989), and Japan (November 1989) appears in Table 2. The proposals called for reform in four major areas of policy instruments: border protection, export competition, internal support, and sanitary and phytosanitary measures (International Agricultural Trade Research Consortium, 1990). [7]

On border protection, the United States and Cairns Group proposals supported the technique of tariffication for dealing with non-tariff barriers. The EU was willing to accept some form of tariffication, conditional on rebalancing some internal support reductions with tariff equivalents and the inclusion of a corrective factor to offset larger-than-normal fluctuations in exchange rates and world prices. Where necessary, the Japanese proposal would permit border protection measures for food security reasons (which was understood to refer to the domestic supply of rice) and favoured negotiating new rules and disciplines.

The United States, the Cairns Group, and Japan supported a complete phasing out of export subsidies, whereas the EU preferred to deal with export subsidies in line with reductions in border protection and an aggregate measurement of support.

The US and Cairns Group proposals on internal support were similar in arguing for phasing out or reducing trade-distorting domestic policies. The EU proposal, on the other hand, aimed to re-establish balanced markets by reducing an all-encompassing measurement of support. The Japanese proposal emphasized the special nature and many roles of agriculture, particularly its role in food security and on the importance of domestic support policies in making it possible for agriculture to play those roles.

The four proposals differed in how they would approach reform of internal support. The United States and the Cairns Group would classify all domestic policies according to three categories in descending order of trade-distorting nature: (1) prohibited (United States) or reduced (Cairns Group), (2) permitted but subject to discipline, and (3) permitted. The EU would establish commodity-specific 'support measurement units', encompassing all policies having "a real impact on the production decisions of farmers". The support measurement unit would account for the effects of both border protection and export subsidies. Japan also favoured categorization of domestic support policies into those that would be reduced, disciplined, and permitted.

Regarding internal support commitments, the US proposed that commitments specific to the policy and the commodity be taken for the prohibited policies to be phased out, while a reduction commitment would be taken on AMS for policies to only be disciplined. The Cairns Group envisioned reduction commitments on policy-specific parameters (such as support prices or expenditures), with the AMS used to express the target reduction. The EU would take reduction commitments on the support measurement unit itself and not on policies or parameters. Japan also proposed to take commitments on AMS and not policies or parameters.

With respect to GATT rules and disciplines, the EU proposed to retain Article XI, allowing quantitative import restrictions. Japan supported the continu-

[6] Section 22 of the US Agricultural Adjustment Act requires the US Secretary of Agriculture to establish import quotas (or impose higher tariffs) if imports of a commodity interfere with the operation of the price support programme (even when the programme does not contain domestic supply control measures).

[7] This discussion will emphasize internal support, border protection, and export competition.

Table 2
Detailed negotiating proposals, 1989

Policy area	Country/group of countries			
	US	Cairns Group	EU	Japan
Internal support	Categories: prohibited, to be disciplined, permitted	Categories: prohibited, permitted but subject to discipline, and permitted	Reduce support and protection to re-establish balanced markets using a support measurement unit (SMU) similar to AMS	Categories: to be reduced, disciplined, permitted
	Phase out prohibited policies over 10 years through policy-specific commitments. Reduce disciplined policies through AMS commitments	Reduce the most trade-distorting policies over a period of 10 years or less through commitments on producer support prices and budgetary expenditures	Measure reductions against the reference year of 1986	Reduce commitments made on an AMS and not on specific policies and parameters
Border protection	Convert non-tariff barriers to bound tariffs. Reduce these and existing tariffs to zero or low levels over a 10-year period	Favour conversions to bound tariffs of most non-tariff barriers	Consider including elements of tariffication if the problem of rebalancing can be addressed	Negotiate new rules and disciplines taking into account the special nature and roles of agriculture, particularly food security
	Replace non-tariff barriers with a tariff rate quota during the 10-year transitional period	Reduce all tariffs (existing and converted) over a period of 10 years or less to low levels or zero	Permit quantitative import restrictions through a reformulated Article XI	Permit tariff and non-tariff barriers as necessary for food security reasons
	Allow tariff 'snapback' as a safeguard mechanism during the 10-year transitional period	Create or expand global tariff quotas during transition period		Modify Article XI: 2(c) (i) to make it apply more effectively
		Explore the use of safeguard mechanisms during the transitional period		
Export competition	Phase out over a 5-year period	Prohibit new subsidies and phase out existing subsidies over 10 years or less	Amounts granted to exports may not exceed that levied by the exporting country on imports	Reduce progressively and eliminate eventually

ation of Article XI: 2(c) (i), but wished to expand its scope to include food security concerns in addition to supply controls. The United States proposed, and the Cairns Group favoured, tariffying non-tariff barriers, and both recommended eliminating all waivers and derogations from existing rules, and prohibiting all measures not explicitly provided for in GATT rules.

2.4. Framework proposal on agricultural reform programme

The detailed proposals submitted in late 1989 by the United States, Cairns Group, EU, and Japan along with proposals from several other countries, were subject to further elaboration and clarification during the first half of 1990. In July 1990, following the clarification exercise, the Chairman of the Negotiating Group on Agriculture (Mr. Art de Zeeuw) circulated a draft text entitled "Framework Agreement on Agriculture Reform Program". The text contained an outline for a framework and a process by which to bring the agricultural negotiations to a conclusion. The proposed framework included four areas: internal support, border protection, export competition, and sanitary and phytosanitary regulations (General Agreement on Tariffs and Trade, 1990).

The Chairman's text identified two categories of policies in the area of internal support. Support in one category would be excluded from the commitment to progressive and substantial reduction, but would still be subject to an overall ceiling on support as well as to monitoring and review. [8] Support in the other category would be reduced from 1991–1992 over an agreed number of years through commitments on an AMS. The AMS would encompass market price support, direct payments to producers, and input and market cost reduction measures available only to agricultural production. The AMS would be expressed by total monetary value per commodity using the base year 1988 and a fixed-reference-price based on 1986–1988 data for market price support. Where the calculation of an AMS was not feasible, the specified commodities would be subject to commitments equivalent to those applied to commodities for which an AMS could be calculated.

Regarding border protection, the Chairman's text outlined a combination of tariffication and tariff rate quotas. Tariffication would consist of converting all border measures into tariffs. [9] The magnitude of the established tariff would be equivalent to the existing gap between external and domestic prices. [10] All existing tariffs and newly established tariffs would be reduced beginning 1991–1992 over an agreed number of years. Minimum access levels, established through tariff rate quotas and related to current consumption levels, would also be reduced, and tariff rate quotas would need to be expanded over an agreed number of years. Special safeguard provisions would apply in case of import surges or world price movements that exceed specified limits. In addition, the text recognized the possibility of negotiating specific solutions in particular situations for some products (understood to refer to such issues as rebalancing and Article XI).

As for export competition, the Chairman's text suggested that all assistance to exports be reduced, and that the reduction be larger than that for internal support and border protection. Commitments to reduce export competition could be based on aggregate budgetary assistance, per-unit assistance, total quantities exported with export subsidies, or a combination of commitments on these parameters.

Concerning the negotiation process, the Chairman's text proposed that all participants table coun-

[8] Policy support not subject to reduction includes support through general government services to agriculture and rural communities (e.g. research, extension and training, inspection, pest and disease control, and marketing and promotion), environmental and conservation programmes, resource diversion and retirement programmes, disaster relief, crop insurance, domestic food aid, public stockholding for food security purposes, regional development, and income safety net programmes. However, in order to qualify as exempt from reduction, these policies would have to conform to certain criteria. Among those criteria were the following stipulations: (1) assistance was required to be provided through a taxpayer-funded government programme, not involving transfers from consumers, (2) assistance could not be linked to current or future levels of production, (3) assistance could not be restricted to any specific agricultural product or product sector, and (4) assistance must not have the effect of providing price support to producers.

[9] The new tariffs resulting from tariffication ('tariff equivalents') would be expressed as specific or ad valorem rates.

[10] External prices would be actual c.i.f. unit values for the importing country. Domestic prices would be the average price ruling in the domestic market.

Table 3
Agricultural offers, 1990

Policy area	Country/group of countries				
	US	Cairns Group	Canada	EU	Japan
Internal support					
Commitments	Reduction by no less than 75% for commodity-specific support and 30% for non-commodity specific support	Reduction by no less than 75%	Reduction by 50%	Reduction by 30% for AMS commodities, 10% other commodities	Reduction by 30% in real terms
Implementation period	10 years from 1991–1992	10 years from 1991–1992	10 years from 1991–1992	10 years from 1986	10 years from 1986
Base year	1986–1988	1988	1987 (crops), 1988 (livestock)	1986 (after 'credit' taken)	1986 and 1988
Border protection					
Modality	Tariffication	Tariffication	Tariffication	Tariffication with conditions	Tariffication not basic approach
Products to be tariffied	All products	All products	All products except those subject to non-tariff measures explicitly allowed by the new or revised Article XI: 2(c) (i)	All products including table wine, dried grapes, processed cherries, and some fruits and vegetables	

Commitments	Binding with reduction on a formula basis of no less than 75% from 1991–1992 for all tariff and tariff equivalents, with a 50% ad valorem equivalent ceiling at the end of the implementation period	Binding with a trade-weighted 75% reduction over 10 years beginning in 1991–1992, a minimum 50% reduction per tariff line, and a ceiling binding of 50% at the end of the implementation period	Existing tariffs reduced using a harmonizing formula over 10 years by a maximum reduction of 38% per tariff line	Binding with annual reduction in tariff equivalents (fixed components) by an absolute amount reflecting the incidence of the AMS reduction	A target reduction rate through a request/offer approach for products for which commitments using an AMS are not offered and for which import restrictions are not imposed. Rate equivalent to the one implemented by Japan in the Tokyo Round for all agricultural products
			Tariff equivalents reduced using a harmonizing formula of 50% over 10 years or to a binding ceiling of 20% by the end of the implementation period		
Export competition					
Commitments	Reduction of budgetary outlays and quantities exported with export subsidies by at least 90%. Export subsidies on processed products to be eliminated over 6 years	Reduction of budgetary outlays, per-unit export assistance, and quantities exported with export subsidies by no less than 90%	Phase out of existing government funded export subsidies	Reduction in support and protection resulting in lower export subsidies as the difference between the community prices and world prices is narrowed	Elimination of export subsidies

try lists with baseline data on internal support, border protection, and export competition by October 1, 1990.

The Chairman's text was accepted by negotiators in late July 1990 as a means of intensifying the negotiations. Most negotiators reserved their negotiating positions with regard to the specific proposals in the text, but all agreed to the suggested process, i.e. tabling of country lists no later than October 1, 1990. In addition, participants agreed to submit initial offers by October 15, 1990. Contracting parties expected that the ensuing negotiations would be concluded at a meeting of Ministers in Brussels in early December 1990, thus completing the Uruguay Round.

2.5. *Agricultural offers*

Participants tabled agricultural offers between October 15 and November 21, 1990. A comparison of offers tabled by the United States, the Cairns Group, Canada, the EU, and Japan appears below. The objectives of the comparison are to highlight common ground and differences among the five proposals and to illustrate the complexity and diversity of the issues under discussion. Details concerning commitments, implementation period, modalities, and the base year appear in Table 3. The following discussion addresses internal support, border protection, and export competition.

2.5.1. *Internal support*

In the area of internal support, common ground and differences existed (in addition to those summarized in Table 3) among the five offers on issues such as classifying programmes, capping support, and using an instrument for the expression of commitments.

General agreement existed among the offers on classifying programmes into two main categories: permitted and disciplined. Permitted policies would be those that are minimally trade distorting and not subject to any reduction commitment. Disciplined policies would be those deemed to have an impact on trade, and they would be subject to reduction commitments. The offers differed, however, concerning the relationship between the two categories, as to whether the disciplined category is a residual of the permitted or vice versa. Japan defined disciplined policies first and then dealt with the rest as permitted, whereas other offers favoured the reverse process. Other countries proposed first to establish criteria for permitted programmes, then defined disciplined measures as those that do not meet the criteria for permitted policies.

Regarding the criteria for classifying policies, the Cairns Group and the United States proposed a similar set of criteria for exempting current and future policies from reductions. Japan, on the other hand, offered more flexible conditions for exempting support given for food security concerns. Canada linked classification of policies to countervailability. All offers agreed that a restrictive set of criteria for the permitted category must be established.

Concerning the type of permitted programmes, all five offers agreed that generally available programmes such as general services, disaster relief, resource diversion, and retirement programmes would be exempted from reductions commitments. There were differences, however, regarding the treatment of safety nets, credit concessions, fuel tax concessions, and investment subsidies. Canada, the Cairns Group, and the United States classified safety nets as permitted programmes, whereas the EU considered safety nets as programmes to be disciplined. The converse was true for credit concessions, fuel tax concessions, and investment subsidies. Canada, the EU, and Japan regarded investment subsidies, credit concessions, and fuel tax concessions (not applicable for Japan) as permitted programmes, whereas the Cairns Group and the United States categorized them as disciplined programmes. With regard to capping support, the Cairns Group and the EU were prepared to set an overall ceiling on support. The ceiling would include both disciplined and permitted policies. This was to ensure that countries would not shift government funded support from disciplined to permitted. Canada, Japan, and the United States did not establish overall ceilings.

As for the use of an AMS-type measure for expressing and implementing the commitments, the Cairns Group and the United States offered commitments on the basis of specific policies, and offered to use an AMS as a technique for reducing only internal support, with separate commitments being taken on border protection and export competition. However, the EU and Japan offered commitments on the basis of an AMS, and favoured the use of an AMS as an instrument for reducing internal support, border protection, and export competition, (not available for Japan), leaving each country with enough flexibility to choose a mix of policies to achieve the required reductions. Canada offered commitments to reduce internal support on the value of government expenditures (or revenue foregone) and not on the basis of an AMS. Canada indicated that the AMS measurement of internal support overestimates domestic support levels because it is based on a comparison with an international reference price that cannot be regarded as a representative price in the current situation of extensive trade distortions and market access barriers.

Most offers agreed that where the calculation of an AMS was not feasible, the commodities concerned were to be subject to equivalent commitments. The Cairns Group and the United States offered commitments based on producer price support (and/or quantity of production eligible to receive them), support through commodity-specific budgetary expenditure, or revenue foregone. The EU offered commitments based on production assistance for commodities such as flax, cotton, tobacco, and fruits and vegetables for processing and on border measures for fruits, vegetables, and wine. Japan offered commitments based on tariffs. In addition, differences existed on issues related to (1) expressing the AMS in total monetary value terms (Canada, the Cairns Group, the EU, and the United States) or per-unit terms (Japan); (2) calculating the AMS on a commodity-specific basis (the Cairns Group and the United States) or a product sector basis (Canada, the EU, and Japan); (3) including border measure effects in the AMS (Canada, the EU, and Japan); (4) excluding the value of deficiency payments paid on export from the AMS (the Cairns Group); (5) allocating to individual commodities their share of the other disciplined policies that are generally available to all commodities (Canada, the EU, and Japan) or including this in a single, sector-wide AMS (the Cairns Group and the United States); (6) using a current world price or a 3-year moving average of world prices as a reference price (the Cairns Group); (7) adjusting the AMS to take into account effective supply control and set-aside programmes (Canada, the EU, Japan, and the United States); and (8) adjusting the AMS to take into account the effect of inflation (the Cairns Group, Japan, and the United States).

2.5.2. Border protection

Similarly, both common ground and differences were evident in the area of border protection regarding such issues as modalities of tariffication, Article XI, and minimum access levels.

All offers (except the one from Japan) considered tariffication as a basic approach in the negotiations. Japan argued that quantitative restrictions were necessary measures for basic food commodities. The EU accepted the principle of tariffication subject to incorporating a corrective factor to offset currency and market price fluctuations and the rebalancing [11] of support and protection to reduce disequilibrium among commodities. The United States and the Cairns Group favoured the use of safeguard mechanisms based either on a price trigger or a quantity trigger to enable recourse to temporary tariff increases. In addition, the EU proposed to calculate tariff equivalents as the difference between a representative world price and average commodity support (intervention price), increased by 10%. The United States, the Cairns Group, and Canada, on the other hand, used the difference between the domestic price and the world price.

The offers by Canada and Japan proposed that quantitative import restrictions continue to be permitted under GATT Article XI: 2(c) (i) and that existing restrictions be brought into conformity with a clarified interpretation of Article XI: 2(c) (i). Japan favoured the expansion of the scope of Article XI: 2(c) (i) to include food security concerns.

With regard to current access opportunities, the Cairns Group, Canada, the EU, and the United States were prepared to maintain current access opportunities on terms at least equivalent to those existing. Japan, on the other hand, offered to consider the maintenance or improvement of the present access opportunities, taking into account the discussions on the clarification of conditions of GATT Article XI:

[11] Rebalancing involves the introduction of tariffs and tariff quotas for some products to reduce disequilibrium in support and protection.

2(c) (i) and the supply and demand situations of the products concerned in Japan.

Minimum access levels were offered by the United States, the Cairns Group, and Canada. The United States and the Cairns Group offered 3 and 5%, respectively, of domestic consumption, whereas Canada offered 5% of production for Article XI: 2(c) (i) products and offered to negotiate a minimum access commitment for tariffied products.

2.5.3. Export competition

Common ground and differences in the area of export competition related to issues such as definition of export subsidies, depth of commitments, and food aid.

Views differed on the definition of an export subsidy. Except for the treatment of deficiency payments, the United States and the Cairns Group offered similar lists of government funded programmes. The United States excluded deficiency payments on quantities exported from export competition and identified them as internal support, whereas the Cairns Group considered these payments as export subsidies. The EU did not provide any descriptions of export subsidy programmes. Japan does not have any export subsidies.

Concerning the commitments on export subsidies, Canada, the Cairns Group, and the United States offered larger reductions for export subsidies than for internal support and border protection, whereas the EU maintained that reducing support and protection would reduce export subsidies.

Regarding the issue of bona fide food aid, the Cairns Group and the United States offered disciplines to (1) assure a level of food aid that is sufficient to continue to provide assistance to developing countries in meeting the food needs of their people, and (2) ensure that food aid transactions are carried out under conditions that prevent any circumvention of commitments on export subsidies.

2.6. Ministerial meeting in Brussels

A meeting of Trade Ministers from all GATT countries was held in Brussels in early December 1990 with the objectives of resolving any remaining problem areas, approving a final package, and concluding the Round. However, agriculture was at an impasse because of the inability of the negotiators to bridge the gap between the EU on one side and the United States and the Cairns Group on the other over the issue of reducing support and protection. Specifically, Ministers failed to agree to negotiate specific binding commitments in each of the areas of internal support, market access, and export competition, as opposed to a commitment on overall support only, with improvements in market access and export competition expected to result from it. An informal compromise proposal by the Agriculture Minister of Sweden (Mr. Mats Hellstrom) that suggested a 30% reduction in the three areas from the 1990 levels over a 5-year period did not break the deadlock. Thus, the round of negotiations was suspended on December 7, 1990. Following the suspension of negotiations, the Director General of GATT, Mr. Arthur Dunkel, was charged with undertaking intensive consultation on all areas of negotiations in which differences remained in order to lay the basis for continuing the talks.

2.7. The Dunkel text on agriculture

The Director General of the GATT announced in February 1991 that the major obstacle to negotiations on agriculture had been overcome, and the negotiations would resume on March 1, 1991 in Geneva. For reasons having to do with the negotiating authority of the US administration, it was commonly expected that the negotiations would have to be completed in a matter of a few months. Negotiators in Geneva agreed to negotiate specific binding commitments in each of the three areas of domestic support, market access, and export competition, and to reach an agreement on sanitary and phytosanitary issues.

With the anticipated time frame turning out to be unfeasible, intensive consultations took place during the last three quarters of 1991. These consultations centred on initiating a technical work programme to facilitate negotiations to achieve specific binding commitments on domestic support, market access, and export competition; and to reach agreements in the areas of sanitary and phytosanitary measures, and the implementation of special and differential treatment for developing countries. By early November 1991, negotiators achieved a great degree of progress in clarifying the technical issues and identifying the political options. That is, the negotiations were well placed to enter the phase of political decisions.

In December 1991, the GATT Director General attempted to break the stalemate in the negotiations by issuing the Draft Final Act (the so-called Dunkel text). The draft agreement was not accepted in its entirety by the EU, and the negotiations remained stalled over the US and EU differences on agriculture. The main point of contention was the size of the volume of reductions to be applied to subsidized exports.

Most of the year 1992 was spent on bilateral meetings between the United States and the EU. The agreement reached among the EU Ministers in May 1992 to reform the Common Agricultural Policy (CAP), however, was helpful in moving the negotiations forward. And in November 1992, the United States and the EU signed the Blair House Agreement, which settled their differences concerning export competition and domestic support. With the Blair House Agreement, the AMS commitment became sector wide (total AMS), instead of commodity specific. In addition, the Blair House Agreement put direct payments linked to production-limiting programmes (e.g. US deficiency payments and compensatory payments of CAP) into a 'blue box' category, exempting them from the reduction commitment. The Blair House Agreement reduced the size of the required reductions in the volume of subsidized export from 24% to 21%. Finally, the Blair House Agreement reconciled the oilseeds dispute between the United States and the EU and included a vague agreement on rebalancing. Thus, the Blair House Agreement paved the way for the resumptions of the negotiations in Geneva, and most of 1993 was spent on discussing issues related to market access.

3. Agreement on agriculture

The agricultural agreement has four main sections: the Agreement on Agriculture; the concessions

Table 4
Agreement on agriculture, 1993

Policy area	Modality	Commitments	Base period	Implementation period
Market access	Tariffication with some exceptions	Ordinary custom duties, including those resulting from tariffication reduced by 36% (24% developing countries), as a simple average across tariff lines, with a minimum reduction of 15% (10% developing countries) for each tariff line	1986–1988	6-year for developed countries (10-year for developing countries) commencing in 1995
Domestic support	Total AMS	Total AMS reduced by 20% (13.3% for developing countries)	1986–1988	6-year for developed countries (10-year for developing countries) commencing in 1995
Export competition	Quantity of subsidized exports and expenditures on export subsidies	Budgetary expenditures and quantities exported reduced by 36% (24% developing countries) and 21% (14% developing countries), respectively	1986–1990 (Where subsidized exports have increased since 1986–1990, the 1991–1992 level may be used as the beginning point of reduction, although the end-point remains that based on 1986–1990.)	6-year for developed countries (10-year for developing countries) commencing in 1995

and commitments GATT members are to undertake on market access, domestic support, and export competition; the Agreement on the Application of Sanitary and Phytosanitary Measures; and the Ministerial Decision concerning least-developed and net food-importing countries (General Agreement on Tariffs and Trade, 1993). Discussion here focuses on the areas of market access, domestic support, and export competition. Details concerning commitments, implementation period, modalities, and the base year appear in Table 4.

3.1. Market access

Market access concessions relate to the binding and reduction of tariffs, to current and minimum access opportunities, and to safeguard provisions. The Agreement on Agriculture considers tariffication (with some exceptions) of existing border measures as the basic approach for reducing non-tariff barriers. Tariffication consists of converting all border measures into tariff equivalents (ordinary customs duties). The calculation of tariff equivalents (whether expressed as ad valorem or specific rates) is made using the 1986–1988 gap between external and domestic prices. All existing customs duties (tariffs) and the newly established ones (tariff equivalents) are to be reduced according to the commitments in Table 4.

Tariffication provides for rules assuring the maintenance of current access levels and the establishment of minimum access opportunities. Specifically, minimum access levels in the first year of the implementation period shall represent not less than 3% of domestic consumption in the base period 1986–1988. These levels are to reach 5% of the base figure by the end of the implementation period. If access levels before the implementation period exceed these minimum levels, they must be continued at least at those higher levels.

In the case of tariffied products, safeguard provisions to protect domestic agriculture will apply if the volume of imports entering a country exceeds a trigger level that relates to the existing market access opportunities (defined as imports as a percentage of domestic consumption), or (but not concurrently) if the price of imports falls below a trigger price equal to the average 1986–1988 reference price.

3.1.1. Exceptions to tariffication

To allow certain countries to postpone the application of tariffication to sensitive commodities (such as rice in Japan; rice, oranges, and beef in Korea; and staple products in developing countries) a special treatment clause was introduced into the agreement. Under certain conditions this clause allows the maintenance of import restrictions up to the end of the implementation period. Imports of the so-called 'designated products' were less than 3% of domestic consumption in the base period 1986–1988. No export subsidies were maintained consistency provided since the beginning of the base period (1986) for the designated products. Effective production controls were applied to the primary products. Special treatment of the designated products reflects factors of non-trade concern, such as food security and environmental protection. And minimum access opportunities were provided. The minimum access opportunities correspond to 4% (1% for developing countries) of base period domestic consumption from the first year of the implementation period. After that, they are increased to 8% (4% for developing countries) in the sixth year (tenth year for developing countries). For developing countries, market access opportunities in other products have been provided for under this agreement.

3.2. Domestic support

All domestic support in favour of agricultural products, except measures exempted from reduction, shall be reduced by 20% (13.3% for developing countries) as measured by the total AMS.

3.2.1. Exemptions

Measures that have no, or at most minimal, trade distortion effects or effects on production are excluded from reduction commitments. These policies are to conform to certain criteria. A publicly funded government programme, not involving transfers from consumers, is to provide the support. Also, this publicly funded programme should not provide support to producers. Examples of these 'green box' policies include general government services such as research, disease control, training, extension, inspection, marketing and promotion, and infrastructure; direct payments to producers, such as decoupled income support, structural assistance, payments for relief from natural disasters, structural adjustment assistance under environmental programmes, and payments under regional assistance programmes; public stockholding for food security purposes; and domestic food aid.

In addition, three other kinds of support need not be included in the total AMS reduction commitments. First, in the case of developing countries, such support includes development programmes to encourage agricultural and rural development, investment subsidies that are generally available to agriculture, input subsidies that are generally available to low-income resource-poor producers, and programmes to encourage diversification from growing illicit narcotic crops. Second, direct payments made under production-limiting programmes if such payments are based an fixed area and yield, or made on 85% or less of the base level of production, or made on a fixed number of head in the case of livestock. Finally, a de minimis provision allows the exclusion of production-specific domestic support that does not exceed 5% (10% for developing countries) of the total value of production of individual products, or non-product-specific domestic support that does not exceed 5% (10% for developing countries) of the value of total agricultural production.

3.2.2. Peace provisions

Domestic support measures classified as the 'green box' policies are not subject to countervailing duties or certain other trade actions. In general, other domestic support is not subject to countervailing duties or certain other trade actions, unless such support causes or threatens injury or exceeds the 1992 level of support to a commodity. Countries are to show due restraint before initiating any countervailing duty investigation. The peace provisions will apply for 9 years.

3.3. Export competition

In regard to export competition, the agreement indicates that commitments to reduce export competition shall be based on aggregate budgetary assistance and total quantities exported with export subsidies. Expenditures and quantities shall be reduced according to the commitments shown in Table 4. The commitments apply to each individual commodity. The base period is 1986–1990. If subsidized exports have increased since the 1986–1990 base period, the 1991–1992 level may be used as the beginning point of reduction, provided that the endpoint is still based on the 1986–1990 base period level.

3.3.1. Implementation

The agreement provides for some flexibility of reduction commitments in the second through the fifth years of the implementation period. In particular, a member may provide export subsidies exceeding annual commitments, provided that the cumulative amount of budgetary expenditures (quantities), from the beginning of the implementation period through the year in question does not exceed the cumulative amounts that would have resulted from full compliance with the relevant annual expenditure (quantity) commitments level specified in the members' schedule by more than 3% (1.75%) of the base period budgetary expenditure (quantities). The total cumulative amounts of budgetary expenditures and quantities over the entire implementation period are no greater than the totals that would have been with full compliance.

3.3.2. Exemptions for developing countries

In the case of developing countries, there are no commitments on subsidies to reduce the costs of marketing exports of agricultural products including handling, upgrading, other processing, and international transport and freight; and internal transport and freight charges on export shipments provided by governments on more favourable terms than for domestic shipments.

3.3.3. Peace provisions

Export subsidies that conform fully to the provisions of the agreement shall be subject to countervailing duties only upon a determination of injury or threat based on volume, effect on prices, or consequent impact. Countries are encouraged, however, to show due restraint before initiating any countervailing duty investigations. Again, the peace provisions will apply for a period of 9 years.

4. World prices

There is keen interest in measuring the effects on future world commodity prices attributed to the

Table 5
Impact on world prices under a GATT scenario, 2000

Commodity	Baseline ($US t^{-1})	GATT ($US t^{-1})	Change ($US t^{-1})	Change (%)
Grains				
Wheat (FOB Gulf)	133.93	137.67	3.74	2.8
Wheat (Australian export)	108.66	114.30	5.64	5.2
Corn (FOB Gulf)	101.52	104.06	2.54	2.5
Barley (FOB Gulf)	114.38	115.71	1.33	1.2
Sorghum (FOB Gulf)	98.45	100.50	2.05	2.1
Rice (FOB Bangkok)	287.15	313.95	26.80	9.3
Oilseeds				
Soybeans (FOB Gulf)	228.01	234.11	6.10	2.7
Meal (FOB Decatur)	200.49	203.95	3.46	1.7
Oil (FOB Decatur)	497.89	517.96	20.07	4.0
Sugar (FOB Caribbean)	236.00	242.00	6.00	2.5
Cotton (Cotlook A Index)	1457.00	1494.00	37.00	2.5
Dairy (FOB N. Europe)				
Butter	1359.00	1367.20	8.2	0.6
Cheese	1826.00	1903.60	77.6	4.2
Non-fat dry milk	1649.00	1736.70	89.7	5.4
Livestock and poultry				
Beef (Omaha Steer Price)	1583.40	1613.82	30.42	1.9
Pork (US Barrow and Gilt)	1016.86	1044.68	27.82	2.7
Broiler (US 12-City)	1219.95	1249.89	29.94	2.4

Source: Helmar et al. (1994).

GATT agreement. Depending on each observer's interests, price increases may be welcomed or feared. During 1994, several organizations (e.g. the United States Department of Agriculture (1994) the Australian Bureau of Agricultural and Resource Economics (Andrews et al., 1994), and the Center for Agricultural and Rural Development (CARD) at Iowa State University) carried out studies to assess the future impacts of a GATT agreement on world agricultural prices.

According to the CARD study, under the GATT scenario, world commodity prices would be subject

Table 6
Main modifications to the Dunkel text

Policy area of commitment	Dunkel	Blair House	Agreement on Agriculture
Domestic support			
AMS	Commodity-specific commitment	Sector-wide commitment	Sector-wide commitment
Direct payments under production-limiting programmes	Part of AMS	Not part of AMS	Not part of AMS
Market access			
Tariffication	No exceptions		With some exceptions
Minimum access	No commodity aggregation		Commitments can be aggregated
Export competition			
Quantity of subsidized exports	Reduce to 76% of 1986–1990 level	Reduce to 79% of 1986–1990 level	Reduce to 79% of 1986–1990 level
Beginning level for reduction	1986–1990 level	1986–1990 level	Higher of 1986–1990 or 1991–1992 level

Table 7
Domestic support reduction: US proposals and offer, Dunkel text and Agreement on Agriculture

US			Dunkel text (1990)	Agreement on agriculture (1993)
Initial offer (1987)	Detailed negotiating proposal (1989)	Agricultural offer (1990)		
Eliminate over 10 years all agricultural subsidies which directly or indirectly affect trade	Phase out trade distorting policies over a 10-year period	Reduce by no less than 75% for commodity-specific support and 30% for non-commodity specific support over a 10-year period	Reduce each commodity specific AMS by 20%, over a 6-year period	Reduce a sector wide AMS by 20%, over a 6-year period
	Continue policies that are minimally trade distorting			
	Discipline other policies which have an impact on trade			

to relatively small adjustments by the year 2000 (Table 5). At the end of the implementation period, world wheat, corn and barley prices would be 5.2%, 2.5%, and 1.2%, respectively, higher under the GATT scenario than they otherwise would have been. Rice prices, on the other hand, would increase by 9.3% because of the increased market access in Japan and the Republic of Korea. GATT will have an impact on some dairy product prices, specifically cheese and non-fat dry milk prices (Table 5). The CAP reform package gave little attention to dairy products, except for the 2.5% reduction in butter intervention prices in 1993 and 1994. The other two studies produced similar results.

Results from these studies can be explained by a number of factors. First, countries such as the United States and the EU have reduced support levels since 1986. Second, with the Blair House Agreement (see Table 6), the AMS commitment was changed from a commodity specific commitment to a sector wide one allowing some commodities to avoid reduction as long as the reduction of total AMS is 20%. Third, the Blair House Agreement put some kinds of support, such as the United States deficiency payments and compensatory payments of CAP, into a 'blue box' category, exempting them from the reduction commitment. Fourth, reduction in internal support is as little as 20%, meaning that: (1) many countries, including the United States and the EU, are already below the AMS ceiling as it is applied in the future; and (2) support and protection will not be eliminated as originally advocated by the United States (Table 7).

The conclusions of these studies are clear: The Uruguay Round of GATT will have small effects on world grains, oilseeds, dairy, and livestock prices in the context of other factors affecting prices over the next 5 to 10 years. These include supply and demand shifts in major producing and consuming regions caused by such phenomena as income growth, changing tastes, technological change, and changes in policies other than trade policy.

Acknowledgements

I am grateful to Lars Brink of Agriculture and Agri-Food Canada and one anonymous reviewer for providing valuable comments on an earlier draft of this paper.

References

Andrews, N., Roberts, I. and Hester, S., 1994. The Uruguay Round outcome: implications for agricultural and resource commodities. ABARE paper presented at the National Agricultural and Resources Outlook Conference, Canberra, February.

General Agreement on Tariffs and Trade, 1986. Ministerial declaration on the Uruguay Round. MIN.DEC, Geneva, September.

General Agreement on Tariffs and Trade, 1989. Mid-term Agreement on Agriculture. MTN.TNC/11, Geneva, April.

General Agreement on Tariffs and Trade, 1990. Framework Agreement on Agriculture Reform Program. NG5/W/170, Geneva, July.

General Agreement on Tariffs and Trade 1993. Agreement on Agriculture. MTN/FA II-AI A-3, Geneva, December.

Gifford, M.N., 1989. Current status of the agricultural negotiations in the MTN and the positions of the major players. In: Proceedings of a Conference on Agriculture in Uruguay Round of GATT Negotiations. Department of Agricultural Economics and Business, University of Guelph, pp. 27–35.

Helmar, M.D., Smith, D.B. and Meyers, W.H., 1994. An analysis of the Uruguay Round: global implications for agriculture. GATT Research Paper 94-GATT21, Center for Agricultural and Rural Development, Iowa State University, Ames.

International Agricultural Trade Research Consortium, 1990. Report of the task force on the Comprehensive Proposals for Negotiations in Agriculture. Working Paper 90-3, March.

US Department of Agriculture, 1994. The Effects of the Uruguay Round Agreement on U.S. Agricultural Commodities. Economic Research Service, GATT-1, March.