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Agricultural Trade Disputes in the WTO

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Abstract

Agricultural trade has generated more than its share of disputes in the past fifty years. Lack of a clear structure of rules to constrain government activity in these markets, coupled with the particularly sensitive nature of trade in basic foodstuffs, has been the main cause of this disproportion. New rules agreed in the Uruguay Round provided an improved framework for government policy in this area, and a temporary exemption was given to certain subsidies from challenge in the WTO (the Peace Clause). However, the expiry of the Peace Clause in 2003 and a growing willingness on the part of exporters to challenge domestic farm programs in other countries through action under the Dispute Settlement Understanding has once again stirred the agricultural pot. Now trade disputes are frequently leading to litigation, encouraged by the slow progress in the Doha Round of trade negotiations. In particular, the scope for domestic subsidies, under the Agreement on Agriculture and the Agreement on Subsidies and Countervailing Measures, has increasingly become the subject of litigation. Countries may have to further modify their domestic policies so as to reduce their vulnerability to challenge in the WTO.

Introduction

Agricultural trade accounts for a small and declining share of global merchandise trade.¹ But its share of trade disputes is large and shows few signs of declining.² For the first fifty years of the GATT/WTO multilateral trade system one could have put this down to imprecise rules and inadequate enforcement mechanisms in that sector (Josling, Tangermann and Warley, 1996). With the introduction of the Uruguay Round Agreement on Agriculture (URAA) much of the ambiguity was removed, but this did not stem the flow of disputes. Indeed, the strengthened legal provisions of the Dispute Settlement

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¹ Agricultural exports now make up eight percent of global exports.

² Of the 367 requests for consultations made to the Dispute Settlement Board, 100 have primarily been about agricultural trade, a share of 27 percent.

Understanding (DSU) gave encouragement to complainants to attempt to settle long-standing disputes that had eluded the weaker GATT dispute settlement process.

New disputes also emerged, reflecting changing trade concerns. Many of these new disputes related to health and safety issues, taking advantage of the more structured rules included in the SPS Agreement. Others dealt with market access issues, in part over the interpretation of the new obligations. More recently, agricultural disputes have challenged the scope for domestic and export subsidies, under the Agreement on Agriculture and the Agreement on Subsidies and Countervailing Measures. In the absence of an agreement in the Doha Round one might expect these conflicts to intensify, as countries attempt to use litigation to achieve what might otherwise be gained through negotiation. And if the Agreement on Agriculture does become revised in a successful Doha conclusion, there will no doubt be several more issues that will need to be resolved through the DSU. The prospect of litigative peace in agriculture remains remote.

This chapter reviews the agricultural disputes since the end of the Uruguay Round. After a section that provides an overview of the 100 or so cases that focus on agricultural products, the chapter identifies several disputes have been taken through all the stages of the dispute settlement process, and have therefore shed significant light on the obligations that countries adopted in the Uruguay Round. Following a discussion of these cases, a concluding section reviews their significance for trade and policy developments in agriculture.

An Overview of Agricultural trade disputes under the WTO

There have been about one-hundred disputes over agricultural trade notified to the DSB over the lifetime of the WTO. ³ Figure 1 shows the distribution of these agricultural cases over time. ⁴ On average there have been about eight disputes every year that can be classified as agricultural. ⁵ In the first couple of years of the WTO fifteen agricultural disputes were notified to the DSB. Four of these agricultural disputes focused on issues of implementation by the EC of the Uruguay Round commitments (DS 9, 13, 17 and 25, see Annex Table). ⁶ Over this period, the US initiated three disputes with Korea about the treatment of imported agricultural products, reflecting a long-running concern by US exporters (DS 3, 5, and 41). And two of the most prominent of the agricultural disputes

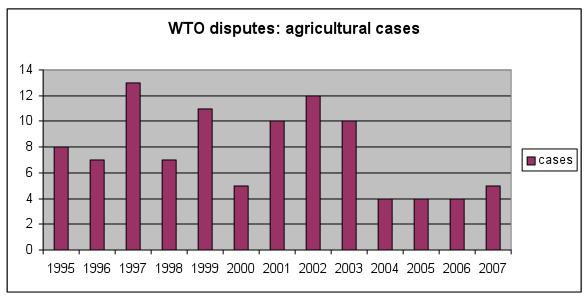
³ The definition of an "agricultural" case is somewhat arbitrary. In this chapter I include all cases that deal largely with agricultural trade even if the dispute is over an aspect of the SPS Agreement. However, in these cases I do not dwell on the implications for the SPS Agreement itself but focus on the importance for agricultural trade and policy. I have excluded cases dealing with fish and fish products. Where the disputes have a broad scope (such as the challenges to India's use of quantitative restrictions) I have chosen to exclude them, even though many agricultural products may have been affected.

⁴ For the purposes of this chapter a dispute is initiated by the request for consultations that is notified to the Dispute Settlement Board. It is then given a "DS" number. The WTO website keeps track of these individual disputes, and records any action taken.

⁵ The average number of requests for consultation notified to the CSB has been 28 per year since 1995.

⁶ The convention followed by the WTO of referring to the European Union as the EC (European Community) is adopted here. Though technically correct, this convention may seem a little anachronistic to the reader.

were litigated in 1996, both with their origin in the GATT and each involving the US and the EC (as was typical of many of the trade disputes at that time). These "legacy" disputes were over the EC's (1992) import regime for bananas (DS 16, 27, and 105) and the (1988) EC regulations over the use of hormones in beef (DS 26, 48). At least in the US, the justification for the strengthening of the GATT dispute settlement process through the DSU was in part based on the prospect of finally resolving these conflicts.



Source: Annex Table

As these disputes were being adjudicated, a burst of new litigation occurred in 1997, with 13 disputes that year, perhaps reflecting the lag from commercial concern to formal request for consultations. Most of the 1997 cases were concerned with the operation of tariff rate quotas (TRQs) and other import regulations, representing the tensions that accompanied the process of "tariffication" and the removal of non-tariff import barriers. Typical of the disputes at this time were the challenges to the operation of TRQs by the EC by Brazil (DS 69) on poultry and by New Zealand (DS 72) on butter, and to the TRQs of the Philippines on pork and poultry by the US (DS 74 and 102). One exception was the challenge by the US and New Zealand to the Canadian dairy policy (DS 103 and 113, discussed more fully below).

Disputes in 1998 also focused on market access issues, and the number of cases fell to more "normal" levels. Among these complaints was a challenge by Canada to transport restrictions on cattle, hogs and grain by the US (DS 144) that also reflected an attempt to settle an older dispute using the new-found legal structure of the WTO.⁸ A renewed burst of activity in 1999 was followed by a less contentious year in 2000, with the focus again

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⁷ Another dispute that had been prominent in the GATT era was over the EC subsidies to oilseeds. The final agreement that ended this dispute was negotiated at the same time that the modalities for agriculture in the Uruguay Round were agreed between the US and the EC, at Blair House in November 1992.

⁸ For a more detailed history of US-Canadian agricultural trade disputes see Barichello, et al, 2006.

on import regulations in both years. The year 2001 saw a number of safeguard complaints, in part due to the weakening of world prices at the turn of the century.

A significant shift in the type of agricultural disputes is noticeable in 2002, with the challenge by Australia, Brazil, and (later) Thailand to the EC sugar regime. The conflict was over the extent to which that regime in effect provided export subsidies about the scheduled limits. This was followed by a challenge from Brazil to the US policy towards upland cotton, on this occasion questioning the subsidies given to US producers. Thus the emphasis had shifted from disputes over import regulations and contingent protection to the farm policies that were becoming exposed to legal scrutiny. Litigation began to be discussed as a complement to the slow-moving Doha Round in the effort to curb subsidies notably in the US and EC. The cat was out of the bag.

The year 2003 saw another ten disputes on agricultural issues reported to the DSB. Two cases reflected the changed nature of food trade: the resurrection of an earlier challenge by the US to the EC's system of protecting Geographical indications (GIs), and a challenge by three countries to the slow process of authorizing the release of biotech products on the EC market (DS 291, 292, and 293). 10 At the end of 2003 the Peace Clause expired, widening the net of subsidies that could be appealed under the SCM. 11 There was no immediate rush to litigation, though a number of countries actively explored the possibility for successful challenges. The panel report on the US-cotton dispute (DS 267) emerged in September 2004 and that on EC-sugar (DS 265, 266 and 283) was circulated in October 2004. The reports and their broad confirmation by the Appellate Body gave renewed hope to those who saw the DSU as an effective way of forcing policy change in the EC and the US. But in fact the number of new cases initiated since 2004 has been markedly less than before, perhaps reflecting the influence of continued negotiations in the Doha Round. Nevertheless the most significant cases in the past three years have been those that have challenged US domestic support notification (DS 357 and 365), again reflecting the emphasis since 2002 on using current agreements to rein in farm support policies.

In contrast to the GATT dispute settlement process, which was used primarily by developed countries, the DSU mechanism has been used by a number of developing countries to resolve agricultural disputes.¹² The number (and percentage) of cases brought by individual WTO members is shown in Figure 2. About half of the complaints have been lodged by four countries, the US, the EC, Argentina and Brazil. It is of course normal for exporters to bring challenges to the policies of importing countries, and for the larger countries to be able to afford the expense of litigation. Small countries may hesitate to use the dispute settlement mechanism knowing that even if successful they

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⁹ An interesting issue was raised by Brazil (DS 154) on the preferential treatment for coffee imported by the EC from competitor countries under regional trade agreements.

¹⁰ The original US GI case (DS 174) had been held in abeyance, and was revived following a new policy initiative by the EC. Australia took out a case in 2003 (DS 290) that then was joined with the earlier case.

¹¹ For more detail on the effect of the Peace Clause on agricultural disputes see Steinberg and Josling, 2003.

¹² For a comprehensive treatment of the difficulties faced by developing countries in using the GATT dispute settlement process see Barton, *et al*, 2006.

have little chance of achieving the desired policy change. But the fact that twenty-three countries initiated requests for consultation (and many more joined disputes as third parties) shows that there appeared to be a need for such an outlet for commercial tensions in agricultural trade.

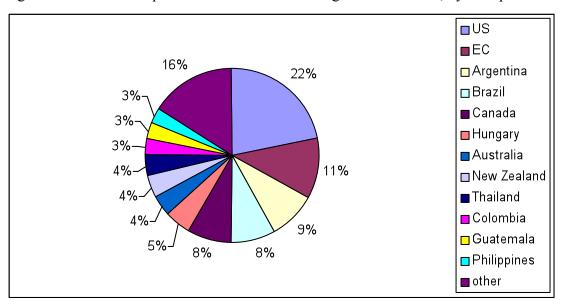


Figure 2: Shares of Requests for Consultation on Agricultural Trade, by Complainant

Source: Author's calculations based on WTO website

If agricultural cases are initiated by frustrated exporters it is natural that their complaints would be focused on the major (and most protected) import markets. Imports of agricultural products tend to be less concentrated than agricultural exports, reflecting the balance between population and land. But the same concentration of disputes among a few countries is evident from the list of respondents. Figure 3 shows the distribution of post-WTO agricultural disputes by respondent.

The distribution of respondents does not appear to reflect the trade pattern. Once again, twenty-three countries have been named as respondents in requests for consultations, and many of these are exporters. In fact, the EC, the US and Chile have had to respond to over one half of all complaints. And exporters such as Argentina, Australia, Brazil, Canada, Hungary and Mexico have all been the respondents in agricultural disputes. This emphasizes the often overlooked feature of agricultural trade policy that exporters are sometimes as protectionist as importers when it comes to parts of the agricultural sector that are less than competitive. So the disputes are often among exporters for whom

domestic politics often complicates commercial diplomacy and leads to ambivalence in trade policy.¹³

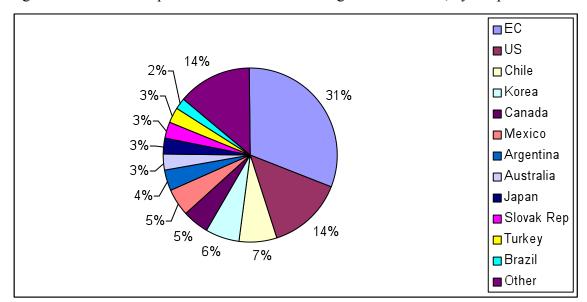


Figure 3: Shares of Requests for Consultation on Agricultural Trade, by Respondent

Source: Author's calculations based on WTO website

It was indicated above that many of the cases involving agricultural trade were focused on import regulations and other aspects of market access. This is confirmed in Table 1, where the 100 disputes are grouped on the basis of the grounds for challenge. Forty percent of the requests for consultations were on market access issues: if one includes challenges over health and safety standards imposed by importers and the contingent protection through anti-dumping duties, countervailing levels and safeguards, the share increases to 77 percent. By contrast, only ten percent of the disputes were over issues related to domestic support and export competition.¹⁴

As with other disputes, agricultural challenges are often settled without the aid of a panel and formal litigation. Table 1 also shows the proportion of cases in each category that resulted in the establishment of a panel. The relationship between the grounds for complaint and the likelihood of a panel being established is significant. Forty-four percent of agricultural disputes reached the panel stage. But in the case of market access challenges, only one third of the cases resulted in a panel: only one quarter of the disputes

¹³ One would expect these intra-exporter conflicts to be less when trade negotiations are in progress, as the tendency will be for exporters to focus on importing countries. But the Doha Round has progressed so

haltingly that disputes among exporters have not been noticeably muted.

¹⁴ The Agreement on Agriculture distinguishes between market access, domestic support and export competition. This distinction is not always useful when considering disputes. Nor is the distinction between complaints under the URAA and other parts of the WTO (GATS, SCM, etc.). Complainants regularly include multiple grounds for challenge. The categories in the table are therefore based on a subjective view of the main issues involved and not a listing of the legal grounds for challenge.

over anti-dumping and countervailing duties reached that stage. So these cases are apparently easier to resolve, in part because the trade remedies and often the challenged import regulations are themselves temporary. Disputes over export subsidies and domestic support tend to be more intractable, and involve potentially significant domestic policy changes.

Table 1: Classification of Agricultural Cases in the WTO, 1995-2007

		panels established	
	no of cases	number	percent
Market access	40	13	33%
Domestic support	3	3	100%
Export subsidies	7	5	71%
SPS	11	6	55%
A/D, CVD	15	4	27%
Safeguards	11	7	64%
UR Implementation	4	2	50%
Other	9	4	44%
Total	100	44	44%

Source: Author's calculations based on WTO website

The current (January 2008) status of the agricultural cases considered here is shown in Table 2. Of the forty-four panels established to consider agricultural cases, thirty-two have reported and a further eight have yet to report. In the other four cases the challenge was withdrawn, or the panel has been in abeyance for several years: a further case was replaced by another one covering the same complaint. Twelve cases were notified to the DSB as having been resolved bilaterally, without the need for as panel, and a further 43 cases were presumably resolved, though the DSB was never notified of the outcome.

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¹⁵ Note, however, that the SPS cases more often resulted in the establishment of panels, as many of these trade barriers are less likely to be transitory (Josling, Roberts and Orden, 2004).

¹⁶ In two cases the DSB has agreed to establish a panel but the panelists have yet to be appointed.

¹⁷ A challenge by Colombia against Chilean safeguards (DS 228) was replaced by a similar challenge with slightly revised complaints (DS 230).

¹⁸ The reluctance of the parties to a dispute to report the successful resolution of that dispute to the DSB is understandable in strategic terms. However, one assumes that all interested parties are aware of the details of the solution, so it would make the assessment of the significance of the DSU simpler if notification were mandated.

Table 2: Current Status of Agricultural Disputes in the WTO

number of cases

Adopted by DSB	32
Report awaited	8
No report issued	2
Withdrawn	2
Replaced	1
Resolved	12
Resolution not notified to DSB	43
	100

Source: Author's calculations based on WTO website

The number of disputes that are notified to the DSB overstates the number of policies or procedures that are actually in dispute. It has been common for two or more countries to complain about the same alleged violation of WTO rules. Correcting for this duplication, and for the fact that some countries revise or extend their complaints, the number of separate perceived violations falls to eighty-three. The number of these that actually went to panels also overstates the number of panel decisions. In a number of cases, similar complaints have been grouped and dealt with by the same panel. Indeed, many of the most contentious cases have been brought by countries acting in concert: the grouping of countries in the banana disputes, the EC- hormones case, the EC- GI case and the EC-biotech case are examples of coordination among complainants. The number of separate cases that went to panels is therefore thirty-five, generating thirty-one separate legal opinions.

To see the impact of these opinions it is necessary to consider the details of several of the most important cases. Six such cases are discussed here: three of them relate to issues of market access and import regulations; the other three to subsidies given to domestic producers under farm support programs. The market access cases include the banana case, with a rich history of market discrimination by the EC in favor of its own former dependencies and colonies, the beef hormone case, considered a landmark in the litigation over health and safety standards; and the EC-GI case that touched upon the provisions of the TRIPS that mandate the protection of regionally-named foods. The subsidy cases include the landmark Canada-dairy case, that addressed the question of whether export subsidies could result from domestic price setting; the US-cotton case that explored the application of the SCM Agreement to agricultural subsidies; and the EC-sugar case that extended the Canadian dairy ruling.

Market Access Complaints in Agriculture

Bananas

Trade in bananas has elicited a series of disputes over the years, pitting the post-colonial regimes of the EC countries against the US-based multinational companies that had a foothold in those parts of Europe that did not have tropical colonies. The banana controversy in the GATT was stimulated initially by the changes in the European import rules implied in the EC's policy of "Completing the Single Market" which were introduced at the start of 1993. ¹⁹ Moving from the varied import systems run by individual countries to an EC-wide policy that could be operated without internal trade barriers proved to be a challenge. "Dollar" bananas appeared to lose some of their market access to those coming from the former colonies of France and the UK. Some countries in Latin America settled on a market sharing deal with the EC but others complained to no avail.

The Uruguay Round, with its strengthening of the Dispute Settlement process, came along at an opportune time for the disaffected group. Two panel reports under the GATT, in 1993 and 1994, had failed to improve the market position for "dollar" bananas. ²⁰ The third panel, reporting on 22 May 1997, proved more to be effective. "Bananas III", as the report became known, found the EC in multiple violation of trade rules. The various steps taken to resolve this conflict continue to this day.

As a "pure" market access case the banana issue would have been interesting enough. But the case tackled much more than the conflicts over post-colonial discrimination. It was the first panel to consider an argument that a country had contravened the General Agreement on Trade in Services (GATS). By allocating import licenses to domestic firms based on past shipments the banana import regime gave valuable trading permits to the competitors of the US-based multinationals. The EC had agreed to end discrimination in "wholesale trade services" in the Uruguay Round. This aspect of the case increased its importance and provided a potentially useful clarification of the relationship between rules for goods trade and those for trade in services.

Four different stages in the unfolding dispute can be distinguished. The stage was that leading up to the request for consultations in September 1995. During this stage the dispute was essentially one of market access by Central American companies in the EC market as a result of the consolidation of import quotas when the Single Market regime was adopted. The process of accommodation of these bananas was not easy, but the Banana Framework Agreement (BFA) at least in part met these concerns. The second phase began when the impact of the BFA became apparent and the firms that felt that they were losing market opportunities began to pressure their governments for action. This phase continued through the adoption of the panel report as amended by the appeal process and the EC's announcement that it would change its policies to comply. The third stage of the process started with the realization by the complaining parties that the change

²⁰ The panel reports had no impact. The EC effectively prevented their adoption by the General Council, following a long GATT tradition of blocking unfavorable reports.

¹⁹ For more detail on the banana case see Josling and Taylor, Chapter 9.

in regulations had not in fact solved the problem and that further action was needed. This stage continued for another year, and could only be resolved by a change in policy that was safe from WTO challenge. Such a change was finally agreed between the EC and the US on April 11, 2001, about eight years after the deliberations of the first banana panel. The changes revolved around the substitution of the import license regime for a "tariff only" approach, while keeping the preferential tariff for ACP suppliers. The fourth phase of the dispute (still under consideration) centers on the height of the MFN tariffs faced by the Central American exporters.

Though GATT and WTO complaints often cite more than one Article which the offending country is supposed to have violated, the banana case is unusual for the lengthy list of purported violations. To illustrate this, the list of legal bases for complaints in the banana case is given in Table 3. The essence of the case was the discriminatory allocation of quotas and the license procedures used to effect the quotas. But non-discrimination as a principle recurs throughout the GATT and the GATS, and thus the same policy measures can be in multiple violation. The EC may have thought that the Lomé waiver was satisfactory cover, but this did not survive the scrutiny of the panel.

The failure of the BFA to satisfy the varied interest of the Latin American producers led directly to the request on February 5, 1996 by Ecuador, Guatemala, Honduras, Mexico and the United States for consultations with the EC. After the necessary consultations had reached no conclusion the complainants requested the formation of a panel.²¹ The panel was established by the Dispute Settlement Body (DSB) on May 8, 1996.

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²¹ The EC was to argue before the panel that this period of consultation had been inadequate: given the long gestation period of this conflict it seems unlikely that any further interchange of information or explanations would have improved the situation.

Table 3: Basis for Complaints about the EC Banana Import Regime

GATT Article I:1	Non Discrimination
Article II	Schedule of Concessions
Article III	National Treatment
Article X	Transparency
Article XI	Elimination of quantitative restrictions
Article XIII	Non-discriminatory administration of quantitative restrictions
Import Licensing Agreement Article 1	General Provisions
Article 3	Non-automatic licenses
Agricultural Agreement Article 4.2	No discretionary import licensing
GATS Article II	Most Favored Nation Treatment
Article XVI	Market Access
Article XVII	National Treatment
TRIMS Article 2	National Treatment and Quantitative Restrictions

Source: Josling and Taylor, 2003

The list of complainants is also of interest. Columbia, Costa Rica, Nicaragua and Venezuela had been the "beneficiaries" of the BFA, and apparently were not willing to risk the wrath of the EC by trying to better their access. But the EC had not managed to satisfy Guatemala, and that country joined with Honduras in an exactly parallel complaint. Ecuador had joined the WTO only on January 26, 1996, and so was anxious to test its newly acquired rights.²² The US had originally intended to stay on the sidelines: it would not have been consistent with the attempt to build up relations with the Caribbean to be seen to challenge the EC's preferences in that region. But 1996 was an election year. Having sold the WTO to the US Congress partly on the basis of the strengthened DSU, it was vulnerable to the argument that holding the EC to the trade rules was an important aspect of US trade policy. Direct pressure from the US-based multinational corporations, in particular the Chiquita corporation, swung the Clinton administration behind the complaint. At a stroke this raised the stakes and turned a thorny issue of preference systems into a matter of high principle and policy.²³ Along with the beefhormone dispute the banana case focused attention on the willingness of the EC to subjugate its policy preferences to the judgment of a WTO panel. If it proved unwilling, this would not be lost on those whose support for the extension of multilateral trade rules was tenuous at best.

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²² The EC indicated in its submission to the panel that Ecuador had been persuaded with undue haste (only two weeks after its membership) to join the others as a co-complainant. But one imagines that the Ecuadorian government had anticipated such action before its membership was approved.

²³ Mexico followed the lead of the US in part because of the Mexican ownership at that time of one of the firms (del Monte) and in part as an expression of North American solidarity on a matter of WTO principle.

The substantive issues covered by the GATT that were considered by the panel were of three types: tariff questions; quota allocation questions; and the legality of the import licensing regime. Several of these issues had also to be considered in the light of agreements that came out of the Uruguay Round, including the Licensing Agreement as well as the Agreement on Agriculture and the Trade-related Investment Measures (TRIMS) Agreement. In addition, the panel considered the compatibility of the licensing regime with the EC's obligations under the GATS.

The tariff issue was perhaps the easiest of the three. The Complainants charged that the differential tariff rates that applied between third country bananas and non-traditional ACP imports was a violation of MFN.²⁴ No objection was lodged against the duty-free imports from the ACP where these were necessary to conform to the requirements of the Lomé Convention. The WTO had been granted the EC a waiver from its Article I obligations in December 1994 (extended in October 1996): the EC argued that this was adequate to cover the whole import regime, and not just the traditional ACP imports. The only tariff question of particular interest to the panel, then, was whether this waiver covered non-traditional imports from ACP countries. They decided that as the waiver was not specifically limited to the traditional trade quantities, it must be assumed that "the preferential tariff for the non-traditional ACP bananas is clearly a tariff preference of the sort that the Lomé waiver was designed to cover." (WTO, 1997a, page 333) As a consequence the EC "won" the tariff argument and defined in part the relationship between the Lomé Convention and the WTO.

The EC was less fortunate in the case of quota allocation. The argument over the allocation of quotas went to the heart of the complaints over the EC banana regime. At its simplest, the argument revolved around whether the quotas under which banana imports are allowed were allocated in a way consistent with Article XIII of the GATT, which stipulates that they should be allocated in a non-discriminatory way and one that disturbs trade as little as possible. The chapeau of Article XIII:2 states that

"In applying import restrictions to any product, Members shall aim at a distribution of trade in such product approaching as closely as possible the shares which the various Members might be expected to obtain in the absence of such restrictions..." (WTO, 1995)

The Complaining parties charged that the EC had allocated the banana import quotas in a way that was inconsistent with this Article. Some countries (the ACP and those that had signed the BFA) had country-specific quotas, while other countries had no such quotas but had to compete for the "other" category of imports. Moreover they argued that the quotas given to those countries were too large and did not reflect market developments. The allocation method also gave the BFA countries exclusive right to fill any shortfall in supplies under the BFA quotas.

²⁴ Guatemala and Honduras, in their joint complaint, added a further tariff issue, arguing that the tariff on third country bananas was above the bound rate of 20 percent. This was in violation of Article II, which refers to the schedules of bindings.

The EC argued that the WTO waiver covered any discrimination under Article XIII as well as Article I. It further argued that it was in effect running two import regimes in parallel, and thus any discrimination between countries covered by different quota schemes was not in violation of the GATT. The traditional ACP bananas were given preference but this was undoubtedly covered by the waiver and thus could be put on one side: the rest of the banana imports were covered by a tariff quota as entered in the EC schedule, even though ACP countries received a (waiver consistent) preference on the tariff to be paid. The panel pointed out that this was the first time a whole quota regime had been called into question, as opposed to the operation of an isolated quota provision. It could also have been said that the spread of tariff quotas that emerged from the Agreement on Agriculture made this issue of much greater significance. The allocation of quotas (as well as the distribution of licenses, as discussed below) is of increasing interest in agricultural trade policy.

The panel found that the EC only had one quota regime for purposes of analyzing its compatibility with Article XIII, regardless of how the EC has chosen to administer the different quotas (WTO, 1997a, para. 7.82). The EC had reached an agreement with the BFA countries, allocated shares in respect of non-traditional ACP bananas, and granted country-specific quotas to ACP countries. This was the regime as laid down in Regulation 404/93. Moreover, it did discriminate against the countries outside the BFA and the ACP. Columbia and Costa Rica had a substantial interest in the EC market and thus could reasonably have been included in the BFA: Nicaragua and Venezuela did not have such a substantial interest and had less of a claim than some of the complaining countries (Guatemala, Honduras and Mexico). The EC's quota allocation scheme thus violated Article XIII and would have to be modified. On the other hand, the panel found that the quota allocation for the ACP bananas, even if in violation of Article XIII, was covered by the WTO waiver for the Lomé Convention.

If the quota allocation system ran afoul of Article XIII, the licensing system that gave expression to the quotas came in for the most severe condemnation by the panel. This system was judged with respect to its transparency and its tendency to discriminate. The system itself was complex, which in itself made for a lack of transparency. But the complaining parties charged that the intention of the license system was to favor firms that had historically imported bananas from the Windward Isles and French overseas territories. This discrimination was contrary to Articles I (non-discrimination) and III (national treatment) of the GATT. It was also claimed that the CMOB violated Article X of the GATT that requires that countries administer trade measures, including licenses, "in a uniform, impartial and reasonable manner". Moreover, it was argued that the EC's licensing system contravened the Agreement on Import Licensing Procedures (Licensing Agreement) that had been incorporated into the basic rules of the WTO at the conclusion

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²⁵ Ecuador and Panama were not GATT/WTO members at the time of the BFA. Ecuador was deemed by the panel to have the right to challenge the quota allocation of the BFA upon joining ("all Members have rights") though as the EC pointed out it might have been better to have dealt with this issue in the Protocol of Accession.

²⁶ The Appellate Body later reversed this finding.

of the Uruguay Round.²⁷ In addition it was charged that the arrangement violated the TRIMS agreement, which contains a list of trade-related investment measures such as purchasing requirements that are deemed to be inconsistent with national treatment in the GATT. The requirement that firms have to purchase bananas from the ACP in order to apply for "B" Licenses was therefore a violation of this provision.

Perhaps the most significant challenge to the import licensing regime was the suggestion that it was inconsistent with the General Agreement on Trade in Services (GATS). The GATS was one of the major innovations of the Uruguay Round, putting service trade on a similar footing to that in goods. Non-discrimination and national treatment are fundamental principles of the GATS, as they are in the GATT. But the GATS contains some restrictions on the applicability of these principles. The banana case was the first major test of the scope of these rules and their relation to those in goods trade.

The first task of the panel was to clarify the relationship between the GATT, with its emphasis on the conditions under which goods are traded, with the GATS, which deals with services. Clearly the trading of goods requires a number of services. If goods markets are distorted by discriminatory trade policies, does it follow that the provision of services that accompany those goods and effectuate the trade is also distorted? Or would that constitute "double jeopardy" for the country implementing such contested regulations? The EC argued before the panel that it should not be made to justify its policy under both the GATT and the GATS, as it was not imposing any measure that discriminated directly on the provision of services. The fact that the "necessary" quota system impacted service providers was not enough to establish a violation of the GATS. The US argued that, to the contrary, the way the license system worked was to make it much more difficult and expensive for the US corporations to compete with those based in Europe. Thus the licensing system was indeed contrary to GATS.

The panel had little difficulty in deciding that the same measure can both violate GATT and the GATS. Indeed the specificity with which the import regime for bananas distributed licenses, by operator category and activity, made it difficult to argue that measures had no effect on the competitiveness of particular firms. The panel found that the EC regime did indeed violate the non-discrimination and national treatment provisions of the GATS. The Lomé waiver was of no help here, of course, as it related to the obligations under the GATT, specifically Article I. Once again, though, the issue was

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²⁷ The Licensing Agreement provided more detail on the way in which licensing measures were to be administered, and is included as an Annex 1A agreement in the Marrakesh Agreement which established the WTO.

²⁸ The US had a particular reason to push the GATS complaint, as it had championed the inclusion of services in the WTO. As with the DSU, the GATS was a major selling point within the US to convince skeptics that the WTO was worthwhile. To have at hand a convenient case to explore the implications of the GATS was fortunate. The EC, in general content to include services in the Uruguay Round, chose to nominate "wholesale trade services" as one of the sectors in its liberalization offer. This meant that it was subject to the general "national treatment" provision of the GATS, along with "non-discrimination".

²⁹ An important aspect of the GATS is that it takes the WTO a significant step towards considerations of the impact of policies on firms as opposed to goods. Thus the arguments that the panel had to consider dealt with the competitive position of companies and involved commercially-sensitive information.

not so much the import of traditional ACP bananas but the BFA quotas and the third-country quotas. The panel ruled that the EC be required to change its import regulations to avoid conflict with the GATS.

Beef hormones

Just as the banana case started well before the establishment of the WTO, the beef-hormone dispute was also a legacy from the GATT. The events leading up to the EC ban on the domestic use of hormones in cattle raising and hence on imports of hormone-treated beef are important in explaining the political longevity of this US/EC dispute. European livestock producers were searching for ways to stimulate growth in cattle, and took eagerly to the use of hormones, but sometimes with inadequate knowledge of the consequences of misuse of such chemicals. Regulatory control sometimes slipped between the cracks, as coordination and harmonization of national regulations progressed haltingly in the EC.

European authorities first proposed a hormone ban in response to public anxieties that emerged following highly publicized reports of "hormone scandals" in the late 1970s. The first incident was reported in 1977, when some schoolchildren in northern Italy exhibited signs of premature hormonal development that investigators initially suspected was linked to illegal growth hormones in veal or poultry served in school lunches. Although exhaustive examination of possible causes of the abnormalities produced no concrete conclusions, a public furor arose over the use of hormones in livestock production. The second incident occurred three years later, again in Italy, when numerous samples of veal-based baby food were found to contain residues of the illegal hormonal drug diethylstilbestrol (DES), further alarming European consumers. Consumer organizations called for a boycott of veal that had a significant adverse effect on the market and incidentally on the administration of the agricultural market policy which at that time supported veal as well as beef prices.

The US took the issue of the EC hormone ban to the GATT in March 1987, alleging that there was no legitimate basis for the ban under the Tokyo Round Standards Code. When bilateral consultations between the EC and the US failed to resolve the matter, the US requested that a technical expert group be convened pursuant to Article 14.5 of the Code to examine the issue of scientific support for the EC's measure. Under the GATT rules, the EC blocked formation of the group, arguing that its ban was related to a processing standard (know as a PPM, for production and processing method) rather than a product

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³⁰ The discussion in this section draws heavily from Josling, Roberts and Orden, 2005.

³¹ Naturally-occurring hormones in both cattle and humans can be added to feed or otherwise applied to increase the rate of animal growth (growth promotion purposes); to synchronize the estrus cycles of dairy cattle to lower production costs (zootechnical purposes); or to correct certain endocrine dysfunctions (therapeutic purposes). "Synthetic" hormones, which mimic the action of natural hormones, are only used for growth promotion.

³² DES is a synthetic estrogen that had been widely used since the late 1930s for both human and animal health purposes until epidemiological evidence linked the use of DES by pregnant women to the development of cervical cancer in their daughters. Medical and livestock uses of DES were eventually banned in both the United States (in 1979) and in Europe (in 1981).

standard (PS) that was not covered. The EC had argued that its sole obligation under the Standards Code was to abstain from the *intentional* circumvention of the disciplines by formulating its measures as PPMs rather than product standards.

As this dispute escalated, both sides publicly considered trade restrictions against the other.³³ When the ban went into effect, the US retaliated with 100 per cent *ad valorem* duties on a range of products imported from Europe. The EC requested a panel to examine the legitimacy of the retaliation, but this request was blocked by the US. Later in 1989, a joint US-EC Task Force agreed to a limited compromise to allow imports of some US beef products that were certified to be "hormone free" (the ban previously applied to all US beef, as hormones are widely used in the US cattle sector) as well as other beef products destined for pet food. The US, in response, withdrew some products from its retaliation list.

Further compromise, however, was precluded by the increasing polarization of domestic political forces on both sides of the Atlantic. The US beef industry was convinced that the ban was a protectionist device aimed at restricting trade. The US government worried that in addition to the technical criteria of effectiveness, safety and reliability, a "fourth criterion" of the economic and social impact of the adoption of a particular technology was being endorsed by the EC in its standard for veterinary and other substances, and would become established as an excuse for protecting other agricultural markets. The European producer was determined that US beef should not escape the hormone ban, and the Parliament appeared desirous of hanging onto a popular cause even at the expense of some embarrassment for the Commission. The legal stalemate and ensuing exchange of tit-for-tat measures was widely viewed as one of the more visible failures of the GATT dispute settlement mechanisms. It was the hormones dispute, more than any other case, that motivated negotiation of stronger disciplines on technical regulations in the GATT Uruguay Round. Yet even knowing that the hormones issue was going to re-emerge under these stronger rules, the EC did not thwart the adoption of the SPS Agreement.

With new Uruguay Round rules for SPS measures and dispute settlement procedures in place, the United States renewed its complaint against the beef import ban. In January 1996 the US requested formal consultations with the EC, which were joined by Australia, Canada, and New Zealand. The US charged that the EC ban violated not only the basic GATT provisions, but the TBT and SPS agreements as well. The central claim was that the ban was not based on science. The EC responded that the ban was the only feasible option for meeting its very high public health goals. The parties met in March, but a mutually satisfactory solution could not be found. The following month, the US requested that the WTO establish a panel to hear the dispute. The EC countered by requesting a panel to review the legitimacy of the US retaliatory tariffs, whereupon the US unilaterally rescinded them in July 1996. The first meeting of the panel to hear the complaint by the US (later joined by Canada) against the EC hormone ban was set for October 1996. As

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³³ For example, in 1988, the US Food Safety and Inspection Service (FSIS) began to request certification from EC authorities that meat produced in EC countries met US safety requirements for hormone residues and that conformity assessment procedures were equivalent to US standards. The EC responded with the announcement of a counter-retaliation valued at \$360 million (that it never implemented) that targeted products such as California walnuts (Kramer, 1989).

long anticipated, the *Hormones* dispute became the bellwether test of the new disciplines in the SPS Agreement.

The outcome of the Hormones case was favorable to the US and Canada. In its report issued on August 18, 1997, the WTO dispute settlement panel concurred with the complainants that the EC ban on beef treated with hormones for growth-promotion purposes was inconsistent with its obligations under the SPS Agreement. In support of these findings, the panel noted that the scientific evidence that the EC had reported as informing its regulatory decision fell into two categories. Those studies which had specifically evaluated the potential toxic effects of hormones used to promote growth in cattle concurred that, at present, there was no indication that these substances posed public health risks when properly used. Other research, which the EC argued raised serious questions about the methodology or conclusions of these studies, examined the carcinogenic or genotoxic potential of entire *categories* of hormones or the hormones at issue in general. As such, the panel stated, these latter studies did not qualify as a risk assessment—in this case, an evaluation of the consequences of consuming beef from cattle treated with growth hormones—as defined in the SPS Agreement.³⁴

It was anticipated that, whatever the outcome, the Appellate Body would be asked to review the panel's decision, and indeed, all three parties to the dispute requested a review of both procedural and substantive findings in the panel's report. The Appellate Body released its report in January 1998, ruling on fourteen issues. The Appellate Body overruled the panel on several points, but concurred with the panel that the EC measure was not in conformity with all of the SPS Agreement disciplines.³⁵ Following the appeal, the EC said that it required four more years to conduct additional risk assessments before policy changes could be considered. The US and Canada countered that this did not constitute implementation, so the matter went to arbitration in Geneva. The arbitrator concluded that 15 months was a reasonable time to comply. ³⁶ The arbitrator also noted that requests for additional time to conduct new studies or consult experts to demonstrate consistency of a measure was not consistent with the requirement for prompt compliance.

The EC then announced that it would proceed with scientific studies regardless of the arbitrator's decision. In the interim, U.S. and Canada discussed potential compensation schemes or trade concessions that the EC could offer to compensate the beef producers for loss of the market access due to the hormone ban. Among the options discussed was

scientific conclusions that had been reached by the first group of studies.

³⁴ Moreover, the panel noted, the scientific experts that it had consulted during its proceedings (under the terms of Article 13 of the DSU) had concurred that this evidence did not invalidate or contradict the

³⁵ The Appellate Body held that the statement in the SPS Agreement that a measure shall be *based on* an international standard where one exists (except as otherwise provided for in the agreement) does not imply that measures need to *conform to* international standards. If this were so, contended the judges, the SPS Agreement would vest international standards (that are recommendations under the terms of the Codex) with obligatory force and effect. To sustain such an assumption, the Appellate Body argued, language far more specific and compelling than that found in Article 3 of the SPS Agreement would be necessary.

³⁶ The arbitrator that established a May, 1999 deadline for compliance had noted that, "It would not be in keeping with the requirement of prompt compliance to include in the reasonable period of time, time to conduct studies or to consult experts to demonstrate the *consistency* of a measure already judged to be inconsistent." (WTO, 1998).

labeling. The US agreed that it could label hormone-treated beef as "a product of the USA." It could not agree to a label that would indicate that the level of hormones in the beef was higher than a comparable product from the EC, arguing that it is unclear that the level would be higher and such a label would be potentially misleading to consumers.

With no compensation scheme in place, the WTO offered retaliation to the United States and Canada in the form of increased tariffs on EC exports totaling about \$128 million. In the meantime, the EC has proceeded with its scientific evaluation of the six hormones through the Scientific Committee on veterinary measures for public health. The Committee opined that it could establish no acceptable daily intake for the hormones. On the basis of this opinion, the EC proposed a permanent ban on estradiol, and a provisional ban on the other five hormones until another committee could review the evidence again to determine if these five hormones might be safely used for therapeutic and technical purposes. The matter was then put before the European Council, but it has not been acted on to date.

The effect that the legal resolution of this landmark dispute would have on the issue of the regulation of hormone use and other food safety cases, remains uncertain. But it has defined the scope of the SPS Agreement and made more public the dilemma that regulations face in balancing consumer safety based on science with consumer sentiment based on perception.³⁷ The beef-hormone case has dramatically demonstrated the limits of the DSU in imposing politically-unacceptable solutions on powerful countries. It has also shown that not all legally-sanctioned results of SPS dispute settlement cases give desirable trade outcomes. This landmark case has thus (for the moment at least) resulted in less rather than more international trade. Trade sanctions are by far the least preferable of the possible outcomes of the WTO dispute settlement process. But the granting of authorized retaliation under the rule of law may still be superior to undisciplined unilateral tit-for-tat measures, such as those that occurred between the US and EC in the 1980s, which can be described as the equivalent of "vigilante justice" in trade. Sanctions are tolerated by the EC, as they are small in cost and diffuse in impact. Short of a change of heart by the US beef industry, which might eventually accept compensating market access for additional hormone-free beef into the EC, it is not easy to see a resolution to this conflict.

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³⁷ The WTO dispute over EC measures regulating biotech products raised some of the same legal issues as the hormones case. Argentina, Canada and the United States argued that the EC Commission's failure to complete the process set out in its own directives and regulations for the pre-marketing review of 27 biotech products between October, 1998 and August, 2003 constituted a *de facto* ban on these products which was not based on a risk assessment. The complainants also argued that nine specific prohibitions by EC member states on biotech products that had been formally approved by the EC were likewise not based on a risk assessment. The EC argued that there have been no undue delays in its scientific approval processes, that was "premised on the application of a prudent and precautionary approach". The WTO panel issued its report in this highly visible dispute in September, 2006, concurring with the complainants that the EC had maintained a *de facto* ban on biotech products that violated its obligations under the SPS Agreement. Specifically, the panel noted that "it is clear that application of a prudent and precautionary approach is, and must be, subject to reasonable limits, lest the precautionary approach swallow the discipline" imposed by the SPS Agreement. The panel likewise agreed with the complainants that the prohibitions maintained by EC member states were not based on a risk assessment.

EC-GIs

Trade disputes in agriculture in the area of intellectual property have been almost absent. But, as with other sectors of the economy, the establishment of intellectual property rights has become an important aspect of trade and global commerce. The TRIPS agreement addresses agricultural and food products directly, in the provisions (in Article 22 and 23) that define a members' obligation to protect "Geographical Indications" (GIs) within their markets. The TRIPS provisions on GIs have been the subject of a trade dispute that led to the setting up of a WTO Dispute Settlement Panel. This has given the opportunity to clarify some key issues. The challenge was initiated by the US in June 1999, when the US requested consultations with the EC on the alleged lack of protection for US trademarks and GIs in the EC. Specifically, the US contended that the EC did not accord as much protection to US GIs or similar trademarks as it did to EC producers. Such a situation would be a violation of the WTO principle of "national treatment," that holds that foreign and domestic products should be subject to the same rules. It would also violate several provisions of the TRIPS Agreement, which reasserts the right of national treatment in the case of intellectual property protection.

Initially, the US objected to the Regulation 2081/92 governing GIs (except in the wine sector), as amended. This led to inconclusive talks but neither a resolution nor the selection of a panel. But the revision of the legislation in the EC in April 2003 raised more concerns in the US, and this time the US was joined by Australia in the complaint. A panel was requested by the US and Australia in August 2003, and agreed in October of that year. The panel ruled in April 2005 that the EC has indeed failed to give the US trademark holders adequate protection, as required. The main points of the Panel decision, as confirmed by the Appellate Body, are summarized in Table 4.

The outcome of the WTO case managed to give comfort to both sides to the dispute. The EC was able to claim that its GI protection program was not WTO-incompatible as such and the US could point to the fact that the EC was found to have violated WTO articles in the way in which it implemented that policy. The EC would have to change its policy regarding the registration of foreign products in the EC market considerably. Its own GI regime will in essence have to be opened to all countries selling GI goods into the EC market. This could over time undermine the strategy of encouraging quality improvements through regional product protection. Having other countries protect EC GIs in their markets, as they are requesting in the current WTO negotiations, would restore some measure of balance in this respect.

The regulations at issue in the WTO case did not apply to wines and spirits. But some aspects of the ruling do relate to this area of trade. The panel report clarified one aspect of the complications of having GI and trademark systems intersect, by considering the issue of the rights to the names Bud and Budweiser. This contentious issue, involving one of the world's largest food-and-drink firms, had been simmering for a century, ever since Adolphus Busch emigrated from Germany to the US and choose a German-sounding name (actually the German translation of a Czech town name Budjovice) to the dismay of the brewers in that town who had several centuries of experience. When the Czech

³⁸ Subsequently the EC has simplified its registration requirements for foreign GIs.

Republic emerged from the blanket of central planning and tried out the competitive marketplace they persuaded four countries to grant GI status to Budweiser as well as its Czech language equivalent. The EC took over this protection when the Czech Republic joined the EC, and hence had to defend its actions when the US challenged the EC Regulation.³⁹

Though the complaint against the EC has been settled, Anheuser-Busch still has outstanding complaints against Budejovicky Budvar, the current Czech brewer of the beer in question. The UK courts have allowed both brewers to use Bud and Budweiser as trademarks in that markets, and a similar ruling in Japan allows both to use the term Budweiser (O'Connor, 2004, p226). Resolution to this issue is still pending in other large markets such as Russia. Co-existence could be a reasonable outcome to this dispute if no consumer confusion is demonstrated.

Table 4: Summary of WTO Panel ruling on GIs

Issue	Ruling
Violation of Article III: discrimination against non-EC firms and producer groups	EC GI regulation discriminates against non-EC persons and products. EC cannot deny protection on the grounds that the foreign government does not grant "equivalent protection" nor can the EC make protection conditional on "reciprocal" protection in another country
Violation of Article III: interpretation of process of challenge of GIs by foreign firms.	Non-EC firms should be able to register and challenge GIs directly without requiring intervention by their governments. Private rights holders should receive protection under domestic law without needing the intervention of their own government.
Violation of Article 16.1 of TRIPS dealing with potential conflicts between trademarks and GIs	EC regulations should allow holders of pre-existing trademarks to prevent confusing use of geographical indication. The EC argument that TRIPS allows for co-existence of GIs and pre-existing trademarks but limits trademark holders' rights was rejected by the panel. The EC should take steps to avoid registering GIs where there is a "relatively high" likelihood of confusion with a trademarked product. This protection against confusion was specifically extended to the registration of GIs that used a translation of a trademarked term.
Source: Author, based on WTO panel report	Note: Complain dealt with GIs for products other than wines and spirits, which are covered by different EC regulations.

³⁹ Under the TRIPS Agreement, trademarks that overlap with GIs are granted protection. The EC was thus, in the view of the US, delinquent in not protecting the Bud and Budweiser names. They could register the Czech name as a GI but not its German translation.

Agricultural Subsidy Cases

Though the cases that actually involve subsidies (domestic and export) are a minority of the total agricultural conflicts, they have the most significance for rule changes through negotiations. Four such subsidy cases are discussed in this section: the Canada-Dairy case, US-Cotton and EC-Sugar, and the Canadian and Brazilian cases against the US notification of its trade-distorting support – the Total AMS (US-TAMS). It is these four disputes that are redefining the concept of a subsidy and the usefulness of the "boxes" of the URAA. A brief account of each of these cases is given below.

The Canadian Dairy Case

In the aftermath of the Uruguay Round, the Government of Canada instituted a new policy designed to assist exporters of dairy products (mainly cheese) made with expensive domestic milk. A separate "export" class of milk was defined which could be sold at a price lower than that for domestic use. ⁴⁰ The architects of the policy no doubt assumed that, as no government funds were involved, such a scheme would not be seen by trading partners as an export subsidy.

New Zealand, supported by the US, took issue with the policy and, after the requisite consultations, it became the subject of a WTO dispute.⁴¹ The panel ruled that the program did indeed constitute a subsidy to exports as it resulted from government action even though no funds were involved. The Canadian policy was changed to reduce the role of the government, leaving it up to the private sector to negotiate sales of the milk for processing and sale to export destinations.⁴² New Zealand and the US were not convinced that this had solved the problem. The panel was asked to rule on the new policy, and again found it to be in violation of Canada's export subsidy commitments on the grounds that the price of domestic milk was controlled by the government and that this in itself could be enough to subsidize exports.⁴³ Importantly, the Appellate Body in ruling on the second case directed the panel to use the test of whether the cost of the milk to the export processors was less than the cost of production incurred by the farmers. The panel reconvened and decided that as most farmers produced for both the domestic and the

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⁴⁰ Prior to 1995, the Canadian Dairy Commission, the Federal body charged with the management of the dairy market and the co-ordination of the Provincial Milk Marketing Boards through the National Milk Marketing Plan, assisted exports through levies paid by dairy farmers. The new regulation at issue established five Special Milk Classes (Classes 5(a) through 5(e)) for milk and dairy products not exclusively for the domestic market. This Class 5 milk is sold at negotiated prices or set by formula based on US industrial milk. The Special Milk Classes 5(d) and (e) were the focus of the dispute, and covered exports of cheese and dried milk mainly to the US and the UK, as well as surplus milk from the domestic market.

⁴¹ The dispute also included a complaint about the administration of Canadian dairy import regulations, but that raised different issues and will not be discussed here.

⁴² Canada abolished the Special Milk Class 9(e) and restricted sales under Class 5(d) to conform to its export subsidy commitments. A new milk category of Commercial Export Milk (CEM) was established.

⁴³ The challenge to Canadian dairy policy was not covered by the Peace Clause as it charged that the export subsidy commitments had been violated.

foreign market that they in effect sold the milk surplus to their domestic allotment at a "subsidized" price.

The case was settled when the Canadian provinces abolished their CEM programs. Changes in the Federal programs are ongoing. New Zealand and the US have withdrawn their request for sanctions, and argued that the outcome vindicated the working of the dispute settlement machinery. But the significance of the outcome of the challenge by New Zealand and the United States to the Canadian dairy policy was soon obvious to export interests in other countries. If selling farm products for exporting (or processing for export) at a price less than the cost of production was indeed regarded as an export subsidy then any situation where high, administered domestic prices coexisted with exports might be shown to be contrary to the WTO – or at least would need to be counted against the export subsidy commitments. Sugar policies in the EC were an obvious target but other cases could subsequently emerge.

In the present context this outcome has another implication. The WTO rules and commitments are based on the notional separation of domestic support from market access and export competition. These aspects are clearly linked economically and politically, but it was assumed that they were at least possible to separate in administrative terms. But if an administered price can grant a subsidy on exports then the link between domestic support and export competition is exposed. In other words, the legal avenue has made obvious what the pillars of the URAA had attempted to conceal: that the root cause of trade problems is high domestic prices set by farm policy and that these have not been effectively reduced by the constraints imposed on the "at the border" instruments or on domestic subsidies.

The US Cotton Case

The case against US Cotton subsidies appears also to question the distinction between amber and green boxes. ⁴⁴ The rulings of the panel are best summarized by considering the nine elements of the US programs that were the subject of the challenge by Brazil. Five of these elements (direct payments, production flexibility contract payments, market loss assistance payments, counter-cyclical payments and marketing loan payments) relate to the major instruments of farm policy adopted for the "program crops" in the Farm Bills that cover the period 1999-2003. ⁴⁵ Two more are specific to cotton (Step 2 subsidies and cottonseed payments), and the other two are of more general application (crop insurance and export credit guarantees). The panel ruled basically on two issues: whether these

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⁴⁴ Brazil requested consultations with the United States on September 27, 2002. After three abortive discussions, a panel was established on May 19, 2003 and issued a report on June 18, 2004. This ruling was appealed by the United States, and the Appellate Body issued its report on March 3, 2005. The report as amended was adopted on March 21, 2005.

⁴⁵ The two Farm Bills in question are the 1996 FAIR Act and 2002 FSRI Act. Production flexibility contract payments were authorized under the FAIR Act, and marketing loss assistance payments were added as emergency measures in 1998-2001. The FSRI Act replaced these with direct payments and counter-cyclical payments. Marketing loans for cotton have been in place since 1986 and Step 2 subsidies since 1990. The cottonseed payments are emergency payments authorized by the ARP Act in 2000. Crop insurance is authorized by separate legislation, the Federal Crop Insurance Act.

subsidies were allowed or prohibited and whether they caused "serious prejudice" (even if allowed) to Brazil.

The two subsidies that were not price-related (and which had therefore been notified by the US as being in the green box) were found not to be the cause of "price suppression" in world markets. They were, however, found to contain provisions that made them ineligible for the green box: specifically the restrictions on the alternative crops that farmers could grow on cotton land. These, the panel decided, could keep more acres in that crop than would totally "decoupled" payments have done. The three subsidies that were price-related were found to have caused price suppression through their impact on keeping cotton production high in the US at a time of low world prices. ⁴⁶

The panel ruled that the Step 2 subsidies paid to domestic users were prohibited under the Subsidies and Countervailing Measures Agreement (SCM) and the Step 2 subsidies available to export users were prohibited because they were not included in the US schedule of subsidies. Moreover, the Step 2 subsidies also caused significant price suppression in world markets. Cottonseed subsidies and crop insurance payments were deemed not to have caused price suppression, and were not prohibited subsidies.

The final aspect of the US programs on which the panel ruled was the set of export credit guarantees that are available to US firms when they sell into overseas markets where credit risks are a factor. The finding in this case was that the export credit guarantees given to cotton producers constituted an export subsidy, and since no such subsidy had been included in the US schedule it was in effect prohibited.⁴⁷

The panel ruling required the US to end the prohibited subsidies within six months of the adoption of the report or by July 1, 2005 at the latest. This ruling applied to the Step 2 payments, to both domestic and export users, and to the export credit guarantees for cotton. The US decided that it could make these changes in legislation without having to await the next Farm Bill at that time expected in 2007. The Administration urged Congress to scrap the Step 2 payments, and these will cease at the end of the crop year, in August 2006. The USDA has also proposed changes to the export credit arrangements by eliminating the 1 percent cap on the fees that are charged for borrowing through the GSM-102 program, and by terminating the GSM-103 program that provides for longer repayment periods.

More problematic for the US is how to adjust the programs that the panel found to cause significant price suppression. Withdrawing the marketing loan and counter-cyclical payments would require major changes in the US legislation and could not easily be done outside the context of the next Farm Bill. Taking other steps to remove the adverse impacts on Brazil might seem easier to achieve, but any attempt to restrict US cotton exports could prove difficult. Compensation to Brazil for lost exports would also seem

⁴⁶ The panel rejected the US argument that the low world prices were from other causes and that the high US exports were an exception rather than the rule.

⁴⁷ The ruling also declared the export credit guarantees for rice exceeded its allowed export subsidy limit, but did not find fault with other aspects of the program

⁴⁸ The Farm Bill was eventually passed in early 2008.

politically implausible, and a deal to boost Brazilian exports of other commodities would be similarly unpopular. So the prospect is for no change in these aspects of US policy at least until the 2007 Farm Bill, at which time the policies may in any case need to be modified as a result of the Doha Round.

Table 5: US Cotton Programs and main elements in the Cotton Panel Ruling

Program	Panel Ruling
Direct Payments (DP)	Not eligible for green box because of restrictions on use of land
	Do not cause significant price suppression on world markets
Production Flexibility	Not eligible for green box because of restrictions on use of land
Contract payments (PFC)	Do not cause significant price suppression on world markets
Market Loss Assistance payments (MLA)	Caused significant price suppression on world market
Counter-Cyclical Payments (CCP)	Caused significant price suppression on world market
Marketing Loan payments (ML)	Caused significant price suppression on world market
Step 2 payments	Caused significant price suppression on world market
	For domestic users, payments were import substitution subsidy
	For export users, payments were export subsidies not included in US schedule
Cottonseed payments	Do not cause significant price suppression on world markets
Crop Insurance	Do not cause significant price suppression on world markets
Export Credit guarantees	Credit guarantees for cotton (and several other products) were export subsidies and were not included in US schedule. (Rice export subsidy exceeded its scheduled level)

Source: Author, based on WTO Panel Report

An interesting side issue raised by the panel report is the conclusion that the direct payments and production flexibility contract payments are not eligible for the green box. This would seem to indicate that countries might ask the US to resubmit notifications of domestic support for the years in question. This would almost certainly put the US in excess of its amber box limits, and raise serious problems with trading partners. Were this to be resolved by litigation (an easier task since no serious prejudice issues would be relevant) then the US would have to make major changes to its farm policy. But again, the chances are that these issues will be resolved in the context of the Doha Round.

The signal importance of the cotton case for WTO jurisprudence is that it clarifies several aspects of the application of WTO rules to agricultural subsidies. The Peace Clause

effectively dissuaded members from challenging agricultural subsidies under the SCM before 2004. Though the panel ruled that the Peace Clause did not provide shelter for the US subsidies in question, the case is best considered as the first "post-Peace Clause" challenge to farm subsidies. The consistency of agricultural subsidies with the provisions of the SCM is a fertile ground for speculation. But the panel indicates that, at least in this case, these restrictions are both onerous and comprehensive. Though the ruling on serious prejudice was based on the impact of US subsidies on world cotton prices, the same provision of the SCM also includes the effect of subsidies in impeding exporters in domestic and third country markets as well as the impact on market shares. Moreover, though it was not found germane to this case, the SCM has provisions for cases where the "threat" of serious prejudice exists.

The case may or may not usher in a flurry of similar litigation: much depends on the success of the Doha Round in reducing subsidies. But the panel report certainly gives encouragement to countries that have refrained from making challenges because they felt that panels would have difficulties in finding evidence of serious prejudice. In markets where there are many factors contributing to the export performance of particular countries, establishing causal relationships is problematic. But the panel seemed to be unphased by the conflicting opinions of expert witnesses on the magnitude and direction of the impact of US subsidies on world cotton prices. They made their ruling on the basis of a preponderance of evidence from economic studies, that production of cotton in the US has a significant impact on the world market price. Though they avoided linking their decision to any particular study, they certainly paid more attention to such evidence than many previous panels. So the cotton panel continues the trend toward rulings based on economic reasoning and quantification as a way of bringing precision to terms such as "substantial" and "significant" that pepper the rules on the trade impacts of subsidies. The cotton case is likely to be cited in many panel reports in future years.

The EC Sugar Case

The impact of the Canadian dairy case on the approach taken by exporters toward farm policies in other countries can be seen in the challenge brought by Brazil, Australia and Thailand against the EC sugar subsidies. ⁴⁹ Complaints about EC sugar policy are not new. Australia had challenged the EC sugar regime in 1979 in the GATT and Brazil followed in 1980, but these were complicated by the fact that there was an International Sugar Agreement (to which the EC was not a signatory) that restricted exports. Under such circumstances the panels were unable to determine the extent of injury that the plaintiffs had suffered and the policies continued unchecked (Tangermann and Josling, 2003). The US also challenged the CAP sugar policy in the GATT in 1982, but no panel was established. The EC indicated its willingness to join the ISA, and proceeded in turn to challenge the US sugar regime.

⁴⁹ The Australian and Brazilian challenges were initiated in September 2002 and Thailand joined the complaint in March 2003. The dispute numbers are DS265, DS266 and DS283, respectively. The panel report was presented on October 15, 2004 and was appealed. The Appellate Body gave their opinion on April 28, 2005 and the DSB accepted the report as modified.

One of the contentions of these sugar exporters in the recent WTO case was that the EC grants *de facto* export subsidies by means of the high price paid for sugar used on the domestic market. The domestic market price is maintained for sugar produced under two quotas (the "A" and "B" quotas): production over those quotas (usually called "C" sugar) cannot be sold on the domestic market and receives no direct subsidy. At issue is whether the "C" sugar benefits indirectly as farmers can cover their fixed costs from returns from the high-price quotas. The analogy with the exported milk products from Canada is close if not exact. The complainants maintain that if such subsides were included, the EC would be in breach of its export subsidy commitments under the URAA.

A second contention was that the EC exports the equivalent of the 1.4 million tons of sugar that is imported under preferential agreements enshrined in the Cotonou Agreement with former colonies. This sugar is sold to the EC at the internal price but re-exported at the world price. This was not notified as a part of the EC's schedule of exports that benefit from subsidies: it was explicitly excluded in a footnote.

The panel found, and the Appellate Body agreed, that the EC was in breech in both respects. The exports of C sugar did benefit from the high price of A and B quotas awarded to the same farms. As the C sugar was solely destined for exports, the effect was to cross-subsidize. By implication, if C sugar were sold on the internal market to any extent, the argument would have required a further stage of showing that the exports were harming other exporters. But as the implicit financial benefits to producers of C sugar were not notified as export subsidies they were *de facto* prohibited regardless of their market impact. Similarly, the panel found that the re-export of the ACP (and Indian) sugar was prohibited as it did not appear in the EC schedule. Thus the EC-sugar case differs from that of US cotton in that is centers primarily on the notification of export subsidies. The fact that these notifications were not challenged at the time raises questions about how the activities of the Agriculture Committee might be linked more usefully to the issue of the nature of these policies.

The sugar case is complicated by an additional element. If the EC cannot either re-export the ACP imports or sell C sugar on the world market, then the domestic price has to be reduced and/or the quotas have to be reduced. The EC Commission realized this link with reform of the EC sugar regime, and used the argument effectively to persuade member states of the need for policy change. The political decision was made by the EC's Council of Ministers on November 22, 2005, to undertake a reform that cut the sugar price support level by 36 percent and compensated farmers with "decoupled" payments. Though the support price will stay significantly above the world price level, the incentive to produce for export (over and above the quota volume) will be significantly reduced. If the output falls as expected, the EC will come into compliance with the Panel ruling: cross subsidized production will not find its way into export markets, and the ACP sugar will be absorbed largely in the domestic market.

Suppliers of raw sugar to the EC have also been promised compensation. Under the Cotonou Agreement these suppliers benefit from guaranteed access at internal prices, and

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⁵⁰ Investigations of subsidies in non-agricultural markets often explore the possibility of cross-subsidization within firms. The economics of cross-subsidization is not as well accepted as the accounting conventions.

so will lose from the reduction in price levels. Though this preferential access is already under threat from the opening up of tariff and quota free access to the least developed countries under the "Everything but Arms" agreement of the EC, it remains of economic and political importance to a number of countries. On the one hand, they will also benefit from reductions in the sales of "C" sugar on world markets. Thus the link with the trade negotiations is more complex that just the connection with the reform of the EC sugar regime.

Conclusion

The proliferation of agricultural cases in the WTO reflects both the ambivalent nature of the multilateral trade rules in the sector and the sensitive nature of the trade itself. In addition, the perceived vulnerability of the major farm programs of industrial countries to challenge under the URAA and the SCM has led to some recent high profile disputes. The nature of technological changes in food production, particularly the uneven adoption of biotech seeds, has led to other disputes. Countries are still grappling with the trade policy consequences of the search for attributes in production that are desirable to consumers. The dividing line between providing consumers with adequate decisions on which to base decisions and cooperating with domestic producers to restrict imports is often difficult to determine. More of these issues will be tested in the WTO in future years. Indeed it would be risky to predict any sharp decrease in the numbers of agricultural disputes brought before the DSB in the next decade.⁵¹

The UR Agreement on Agriculture (URAA) constituted a negotiated solution to several market access issues in agriculture. The URAA mandated the removal of non-tariff border measures and the binding of most tariffs. It introduced the Special Safeguard for Agriculture (SSG) as new safeguard mechanism and Tariff-rate Quotas (TRQs) to maintain access in cases where non-tariff measures were converted to tariffs. In addition, the URAA helped to clarify the issue of subsidies that had proved to be so difficult to discipline under the GATT. The URAA circumscribed the use of export subsidies, obliging countries to notify all such aids and include schedules for their reduction. New export subsidies were banned. For domestic subsidies the URAA introduced a classification of domestic support instruments that attempted to limit the use of the more trade-distorting subsidies. The URAA also implemented notification procedures to track compliance with the provisions and the schedules of commitments. ⁵² But each of these issues left room for interpretation and were grist for the litigation mill.

Market access issues were the most important in the early days of the WTO, as countries explored through the DSB the practical implementation of the new rules and the agreed schedules. The process of tariffication was fairly smooth, and the introduction of the SSG

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⁵¹ In some areas of trade, complaints can trigger retaliatory filings as an element of trade strategy. This does not seem to be a problem in agriculture at present but it may emerge as more sensitive cases are litigated.

⁵² Commitments on subsidy levels are treaty provisions, and the commitments in a Member's Schedule are "an integral part" of the URAA and other WTO agreements (WT/DS265/R, paragraph 7.128). Conformity with scheduled commitments is a necessary but not a sufficient condition for escaping challenge. Panels have made clear that compliance with a Domestic Support commitment in a Member's Schedule does not in itself preempt or exclude the operation of other WTO obligations (WT/DS267/R, paras. 7.1066-7.1067).

also was without major problems. However, the establishment of TRQs did lead to several conflicts, as one might imagine in cases where government decisions had immediate commercial impact. The success in limiting trade-distorting subsidies has been somewhat more elusive. Export subsidies that were included in the schedules in general caused few disputes, in part because the limits were well above actual levels. But panels examining country policies unearthed several policies that acted as export aids within the terms of the WTO but had not been notified as such. Thus the major challenges to domestic farm programs in the EU and the US came from other exporters complaining that the export subsidy restrictions were being circumvented.

Cases brought against particular types of domestic support have been infrequent. With inconclusive debates in the Committee for Agriculture and without the guidance of panel reports, countries were able largely to decide for themselves whether particular policies were consistent with the definitions of the green and blue boxes, and hence not subject to reductions. So long as countries were way below their limits on domestic support it was not a priority to challenge the notifications themselves. But the jump in funding for the 2002 US Farm Bill caused a re-think of this situation, with the possibility that the limits may have been breached if notifications had been erroneous. The statement of the US-Cotton panel that some of the expenditures that the US had claimed as "green" may have been mis-labeled turned this possibility into a contestable proposition.

The current case brought by Canada and Brazil, challenging the level of US farm subsidies as notified under the categories used by the URAA, illustrates that ambiguity still exists.⁵³ On the one hand, it is a remarkable case, which if it ever went to a panel would clarify the somewhat fuzzy nature of the "boxes". On the other hand, it refers to past notifications that were alleged to wrongly classify certain subsidies. So the remedy in the event of a successful challenge is presumably to oblige a re-notification by the US of its domestic support for several historical years. But the US could well argue that in the current period of high prices, support levels are already well below the limits set in the schedules even with re-notification. So it would not be clear what the US could do to make amends: changing current policies would not be an appropriate remedy, and compensation for past violations is not contemplated in the DSU.

This does not drain the interest away from the case. The reclassification of direct payments in the US away from the green box in a revised notification would indeed be a small prize for competing exporters. But add the possibility of a new set of limits in the Doha Round, and the case becomes critical. If the Doha Round succeeds in reducing allowable trade-distorting subsidies (as calculated by the Aggregate Measure of Support, or AMS), the allocation of subsidies to these boxes becomes sensitive. The prospect exists that the major driver of change in US farm policy could indeed be the WTO dispute settlement process, and the decisions on the classification of subsidies. That could also set up some controversy over the role of WTO rules when they clash with powerful political interests. Agricultural trade will continue to provide vexing issues for the multilateral trade system and its judicial processes.

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⁵³ The two cases brought by Canada and Brazil (DS 357, 365 respectively) have been merged. The complaint is that US exceeded its Total AMS limits in several recent years.

Annex Table A: WTO Disputes initiated since January 1995 related to agricultural products

<u>Date</u>	<u>DS#</u>	<u>Complainant</u>	Respondent	<u>Commodity</u>	<u>Issue</u>
1995	3	US	Korea	Agric. products	import testing
1995	5	US	Korea	Agric. products	shelf life
1995	9	Canada	EC	Cereals	UR implementation
1995	13	US	EC	Grain	UR implementation
1995	16	Guatemala, etc.	EC	Bananas	import regulations
1995	17	Thailand	EC	Rice	UR implementation
1995	22	Philippines	Brazil	Coconut	CVD
1995	25	Uruguay	EC	Rice	UR implementation
1996	26	US	EC	Meat	SPS
1996	27	Ecuador, etc.	EC	Bananas	import regulations
1996	30	Sri-Lanka	Brazil	coconut milk	CVD
1996	35	Argentina, etc.	Hungary	Agric. products	export subsidies
1996	41	US	Korea	Agric. products	import testing
1996	48	Canada	EC	Meat	SPS
1996	49	Mexico	US	Tomatoes	A/D
1997	66	EC	Japan	Pork	import measures
1997	69	Brazil	EC	Poultry	TRQ
1997	72	New Zealand	EC	Butter	TRQ
1997	74	US	Philippines	Pork, poultry	TRQ
1997	76	US	Japan	Agric. products	quarantine
1997	98	EC	Korea	Dairy	safeguards
1997	100	EC	US	Poultry	SPS
1997	102	US	Philippines	Pork, poultry	TRQ
1997	103	US	Canada	Dairy	export subsidies
1997	104	US	EC	processed cheese	export subsidies

Annex Table A: WTO Disputes initiated since January 1995 related to agricultural products (contd.)

<u>Date</u>	<u>DS #</u>	Complainant	Respondent	Commodity	<u>Issue</u>
1997	105	Panama	EC	Bananas	import regulations
1997	111	Argentina	EC	Groundnuts	TRQ
1997	113	New Zealand	Canada	Dairy	export subsidies
1998	133	Switzerland	Slovakia	Dairy	import restriction
1998	134	India	EC	Rice	import restriction
1998	143	Hungary	Slovak Rep	wheat	import duties
1998	144	Canada	US	cattle, swine, grain	transport restrictions
1998	145	EC	Argentina	wheat gluten	CVD
1998	148	Hungary	Czech Rep	wheat	import regulations
1998	149	EC	India	non-specific	import quotas
1999	154	Brazil	EC	coffee	differential treatment
1999	158	Guatemala, etc.	EC	bananas	import regulations
1999	161	US	Korea	beef	import regulations
1999	166	EC	US	wheat gluten	safeguards
1999	167	Canada	US	cattle	CVD
1999	169	Australia	Korea	beef	import regulations
1999	174	US	EC	Agric. Products	GIs
1999	177	New Zealand	US	Lamb	safeguards
1999	178	Australia	US	Lamb	safeguards
1999	180	Canada	US	Sugar	classification
1999	185	Costa Rica	Trinidad	Pasta	A/D
2000	187	Costa Rica	Trinidad	Pasta	A/D
2000	203	US	Mexico	live swine	A/D
2000	205	Thailand	Egypt	tuna in oil	import regulations
2000	207	Argentina	Chile	agric products	price band

Annex Table A: WTO Disputes initiated since January 1995 related to agricultural products (contd.)

<u>Date</u>	<u>DS #</u>	Complainant	Respondent	Commodity	<u>Issue</u>
2000	210	US	Belgium	Rice	import duties
2001	220	Guatemala	Chile	agric products	price band
2001	223	US	EC	corn gluten	TRQ
2001	226	Argentina	Chile	edible oils	safeguards
2001	228	Colombia	Chile	Sugar	safeguards
2001	230	Colombia	Chile	Sugar	safeguards
2001	235	Poland	Slovakia	Sugar	safeguards
2001	237	Ecuador	Turkey	Bananas	import regulations
2001	238	Chile	Argentina	peaches, preserved	safeguards
2001	240	Hungary	Romania	wheat / flour	import prohibition
2001	241	Brazil	Argentina	Poultry	A/D
2002	245	US	Japan	Apples	SPS
2002	250	Brazil	US	citrus products	Florida excise tax
2002	256	Hungary	Turkey	Pet food	SPS
2002	263	Argentina	EC	Wine	import regulations
2002	265	Australia	EC	Sugar	export subsidies
2002	266	Brazil	EC	Sugar	export subsidies
2002	267	Brazil	US	Cotton	domestic support
2002	269	Brazil	EC	Poultry	classification
2002	270	Philippines	Australia	fruit and vegetables	quarantine
2002	271	Philippines	Australia	Pineapple	quarantine
2002	275	US	Venezuela	Agric. Products	import licensing
2002	276	US	Canada	Wheat	import restrictions, STE
2003	283	Thailand	EC	Sugar	export subsidies
2003	284	Nicaragua	Mexico	black beans	SPS

Annex Table A: WTO Disputes initiated since January 1995 related to agricultural products (concluded)

Date	<u>DS #</u>	Complainant	Respondent	Commodity	<u>Issue</u>
2003	286	Thailand	EC	Poultry	classification
2003	289	Poland	Czech Rep	Pigmeat	import duties
2003	290	Australia	EC	Agric. Products	GIs
2003	291	US	EC	Biotech products	import regulations
2003	292	Canada	EC	Biotech products	import regulations
2003	293	Argentina	EC	Biotech products	import regulations
2003	295	US	Mexico	beef, rice	A/D
2003	297	Hungary	Croatia	Meat	SPS
2004	310	Canada	US	hard wheat	A/D
2004	314	EC	Mexico	olive oil	CVD
2004	320	EC	US	Beef	continued suspension
2004	321	EC	Canada	Beef	continued suspension
2005	329	Mexico	Panama	milk products	classification
2005	330	EC	Argentina	olive oil, etc.	CVD
2005	334	US	Turkey	Rice	TRQ
2005	338	US	Canada	Corn	CVD, A/D
2006	341	EC	Mexico	olive oil	CVD
2006	349	Argentina	EC	garlic	TRQ
2006	351	Argentina	Chile	Milk products	Prov. Safeguards
2006	356	Argentina	Chile	Milk products	Def. Safeguards
2007	357	Canada	US	Agric. products	domestic support
2007	361	Colombia	EC	Bananas	import duties
2007	364	Panama	EC	Bananas	differential treatment
2007	365	Brazil	US	Agric. products	domestic support
2007	367	New Zealand	Australia	Apples	quarantine

Source: WTO website

References

Barichello, Rick, Tim Josling and Dan Sumner, 2005. *Agricultural Trade Disputes Between Canada and the United States: Costly but Diminishing*, Commentary, No. 224, December, CD Howe Institute, Toronto

Barton, John H., Judith Goldstein, Tim Josling and Richard H. Steinberg, 2006. *The Evolution of the Trade Regime: Politics, Law and Economics of the GATT and WTO*, Princeton University Press

Devereaux, Charan, Robert Z. Lawrence, and Michael D. Watkins, 2006. *Case Studies in US Trade Negotiation, Volume 2: Resolving Disputes*, Institute for International Economics, Washington, D.C.

Hudec, R. E., 1997. "Does the Agreement on Agriculture Work? Agricultural Disputes after the Uruguay Round." Paper presented at the Theme Day of the International Agricultural Trade Research Consortium (IATRC), San Diego, 14 December

Josling, Tim, 2003. "Bananas and the WTO: Testing the New Dispute Settlement Process," in Timothy E. Josling and Timothy G. Taylor, *Banana Wars: The Anatomy of a Trade Dispute*, Wallingford: CABI Publishing, pp. 169-194.

Josling, Tim, 2005. "Unraveling the Cotton Case," Bridges, April-May

Josling, Tim, 2006. "The War on *Terroir*: Geographical Indications as a Transatlantic Trade Conflict," *Journal of Agricultural Economics*, Volume 57, Number 3, pp. 337-366.

Josling, Tim, Stefan Tangermann, T.K. Warley, 1996. *Agriculture in the GATT*. Houndmills, London, and New York.

Josling, Tim and Stefan Tangermann, 2003. "Production and Export Subsidies in Agriculture: Lessons from GATT and WTO Disputes Involving the US and the EC," in Ernst-Ulrich Petersmann and Mark Pollack (eds.) *Transatlantic Economic Disputes*, Oxford University Press

Josling, Timothy E. and Timothy G. Taylor, 2003. *Banana Wars: The Anatomy of a Trade Dispute*, Wallingford: CABI Publishing.

Josling, Timothy, Donna Roberts, and David Orden, 2004. *Food Regulation and Trade: Toward a Safe and Open Global System*. Washington, D.C.: Institute for International Economics.

Josling, Tim, Longyue Zhao, Jeronimo Carcelen and Kaush Arha, 2006. "Implications of WTO Litigation for the WTO Agricultural Negotiations", IPC Policy Brief

Kramer, Carol S., 1989. "Food Safety and International Trade: The US-EC Meat and Hormone Controversies," in Carol S. Kramer (ed.), *The Political Economy of US Agriculture*, National Center for Food and Agricultural Policy, Resources for the Future, Washington, DC. pp. 210-211.

O'Connor, Bernard, 2004. *The Law of Geographical Indications*, Cameron May, London Steinberg, Richard H. and Timothy E. Josling, 2003. "When the Peace Ends: The Vulnerability of EC and U.S. Agricultural Subsidies to WTO Legal Challenge," Journal of International Economic Law, Vol. 6(2), pp. 369-417.

Tangermann, Stefan, 2001. "Has the Uruguay Round Agreement on Agriculture Worked Well?" Paper prepared for the Theme Day of the International Agricultural Trade Research Consortium (IATRC), Washington, DC, May 18

World Trade Organization, 1997. "European Communities - Regime for the Importation, Sale and Distribution of Bananas", Complaint by the United Sates, Report of the Panel, WT/DS27/R/USA, 22 May 1997

World Trade Organization, 1997. "European Communities - Regime for the Importation, Sale and Distribution of Bananas", Complaint by Ecuador, Report of the Panel WT/DS27/R/ECU, 22 May

World Trade Organization, 1997. "European Communities - Regime for the Importation, Sale and Distribution of Bananas", Complaint by Guatemala and Honduras, Report of the Panel, WT/DS27/R/GTM, 22 May

World Trade Organization, 1997. "European Communities - Regime for the Importation, Sale and Distribution of Bananas", Complaint by Mexico, Report of the Panel, WT/DS27/R/MEX, 22 May

World Trade Organization, 1997. "European Communities - Regime for the Importation, Sale and Distribution of Bananas", Report of the Appellate Body, WT/DS27/AB/R, 9 September

World Trade Organization, 1995. The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts, WTO, Geneva

World Trade Organization, 1998. EC – Measures Concerning Meat and Meat Products (Hormones), WTO/DS26 & 48/AB/R (Feb. 13).

World Trade Organization, 1999. Canada – Measures Affecting the Importation of Milk and the Exportation of Dairy Products, WT/DS103/R and WT/DS113/R.

World Trade Organization, 2001. Canada—Measures Affecting the Importation of Milk and the Exportation of Dairy Products, Report of the Appellate Body, WT/DS103&113/AB/RW.

World Trade Organization, 2004. European Communities – Export Subsidies on Sugar, Reports of the Panels, WT/DS265/R, WT/DS266/R, & WT/DS283/R

World Trade Organization, 2004. United States – Subsidies on Upland Cotton, Report of the Panel, WT/DS267/R

World Trade Organization, 2005. European Communities – Export Subsidies on Sugar, Report of the Appellate Body, WT/DS265/AB/R, WT/DS266/AD/R, & WT/DS283/AB/R.

World Trade Organization, 2005. United States—Subsidies on Upland Cotton, Reports of the Appellate Body, WT/DS265/AB/R, WT/DS266/AB/R, & WT/DS267/AB/R.

World Trade Organization, 2006. European Communities – Measures Affecting the Approval and Marketing of Biotech Products: Reports of the Panel. WT/DS/291R/292R/293R, September 29.