Domestic Support and WTO Obligations in Key Developing Countries

Prepared by DTB Associates, LLP
September 2011

Note:

This paper was prepared for clients of DTB Associates, LLP, in response to specific questions about the level and WTO compatibility of domestic agricultural support in several large developing countries. The analysis is based mainly on information from official government sources.

DTB Associates provides advice and counsel on legal and policy issues related to agricultural trade and domestic agricultural policies. For more information about DTB Associates, contact us at (202) 684-2505 or view our website at www.dtbassociates.com.

Domestic Support and WTO Obligations
In Key Developing Countries

I. Introduction

Agricultural subsidies in developed countries have been for more than three decades a major focus of international trade relations and the major sticking point in trade negotiations. Developing countries, and some developed countries with relatively low rates of subsidization, have pressed for agreements in the WTO that would require substantial reductions in trade-distorting support.

WTO rules and disciplines, both in the Uruguay Round Agreement on Agriculture (URAA) and in the draft Doha Round agreement, were designed to address what was generally considered to be the main problem – subsidies in the European Union (EU) and the United States. During the Uruguay Round negotiations and the early years of the Doha Round, developing country subsidies were relatively small and were generally considered to have little effect on international markets.

The situation has changed dramatically. Since the end of the Uruguay Round negotiations, the EU has fundamentally reformed its agricultural policies and moved to less trade-distorting forms of support. U.S. subsidies increased sharply in the late 1990's and the early 2000's, but have dropped to very low levels in recent years.

In the meantime, there has been a major increase in subsidization among advanced developing countries. Support in some countries for certain major commodities is now comparable to levels seen previously in the EU and the U.S. The table below shows 2010/11 price support levels in the U.S., the four advanced developing countries covered in this report, and China.

Support Price Levels in Advanced Developing Countries
And the United States

Country	Wheat	Corn	Long-grain Rice	Upland Cotton
U.S.[1/]	$152	$103	$231	$1,562
India	$245	$196	$333	$1,998
Brazil	$288	$153	$253	$1,616
Turkey	$299	$266	$627	
Thailand		$258	$328	
China	$285	$225	$398	$1,886

1/ Target price

Since the countries involved are major producers and consumers of agricultural products, the trade-distorting effects of the subsidies are being felt globally. However, because the run-up in subsidies is a recent development, and because countries have not reported the new programs to the WTO or have failed in their notifications to calculate properly the level of support, the changes have attracted little attention. We believe that when trade officials examine these developments, they will discover clear violations of WTO commitments.

II. Methodology

The purpose of this study is to identify the principal support programs for major commodities in the four countries covered, and to quantify the level of support using the Aggregate Measure of Support (AMS) methodology as prescribed by the URAA. In the course of our research we also collected information on programs involving the use of export subsidies, and we analyzed those programs for WTO-consistency as well. Because of time and resource constraints we have not attempted to do a comprehensive study. Rather, we gathered readily available information from authoritative sources – mainly official government sources and reports prepared by the overseas offices of the Foreign Agricultural Service of the U.S. Department of Agriculture (GAIN reports). We identify our sources in footnotes.

Since the AMS methodology is relatively simple and the data are from authoritative sources, we are confident the calculations are accurate as far as they go. They are also incomplete; a more thorough study would almost certainly uncover more programs and higher levels of support. But despite the restricted scope of the study and the clear need for further work, we believe we can conclude that all of the countries examined are in violation of their WTO commitments.

All WTO member countries have taken on binding obligations regarding level of domestic support. Countries that participated in the Uruguay Round negotiations submitted their AMS calculations at the end of the negotiation, and their level of commitment – their AMS limit – was fixed based on the data submitted. Countries that acceded to the WTO after the conclusion of the Uruguay Round negotiated an AMS limit. Each country is required to calculate annually its level of support, using the AMS methodology contained in Annex 3 of the URAA, and to ensure that their support does not exceed their AMS limit.

AMS disciplines cover types of policies that were considered by Uruguay Round negotiators to be the most trade-distorting – the so-called “amber box” policies. All support programs belong in the amber box unless they are specifically excluded under the agreement. The biggest category of excluded policies is the “green box,” which covers minimally trade-distorting, decoupled programs that meet the criteria listed in Annex 2 of the URAA. Also excluded are programs with production-limiting features – the so-called “blue box” programs – that meet criteria spelled out in Article 6.5 of the URAA. In developing countries, generally available investment subsidies (e.g., subsidized credit) and input subsidies that are generally available to low-income or resource-poor producers are also exempt from discipline under Article 6.2. All of the programs that we included in our AMS calculations in this paper are amber box programs.

For most amber box programs involving direct payments to producers (e.g., input subsidies, acreage payments, coupled direct payments) the AMS methodology is simple. The level of support is measured in terms of government outlays for the program. The method of calculating support from price support programs is a little more complicated:

8. *Market price support: market price support shall be calculated using the gap between a fixed external reference price and the applied administered price multiplied by the quantity of production eligible to receive the applied administered price. Budgetary payments made to maintain the gap, such as buying-in or storage costs, shall not be included in the AMS.*

9. *The fixed external reference price shall be based on the years 1986 to 1988 and shall generally be the average f.o.b. unit value for the basic agricultural product concerned in a net exporting country and average c.i.f. unit value for the basic agricultural product concerned in a net importing country in the base period. The fixed reference price may be adjusted for quality differences as necessary. (URAA, Annex 3)*

In other words, to calculate the level of support from a price support program, a country must determine the gap between the administered price (i.e., the support price) and a fixed external reference price, and then multiply that price gap by the level of eligible production. In the case of deficiency payment schemes, which involve direct payments to producers but which use a support price to determine the level of payment, countries may use either the price gap methodology or budget outlays to determine the level of support.

The rationale behind the price-gap formula is simple. Price support systems provide a benefit to all producers by establishing a price floor. The benefit is roughly equal to the difference between the internal price and the world price. Government outlays –e.g., expenditures for purchasing products at the support level – are not an accurate measure of the benefits to producers. The methodology uses fixed reference prices in order to limit the number of variables and simplify the task of complying with commitments. Barring big swings in level of production, a country can reduce its AMS simply by lowering its support price.

A country is not required to count all amber box support against its AMS limit. If the level of support is less than the *de minimis* threshold – i.e., 5% of the value of production in the case of developed countries and 10% in the case of developing – the support is excluded from the AMS calculation. In the case of product-specific support – i.e., subsidies and price supports that benefit one commodity or a limited number of commodities – the threshold is 5% (10%) of the value of production of the commodity concerned. In the case of non-product-specific support, the threshold is 5% (10%) of the total value of agricultural production. If support exceeds the *de minimis* threshold, all support – not just support above the threshold – must be included in the AMS calculation. The sum total of all amber box support is called the Current Total AMS.

Although the AMS methodology is fairly simple, it is also somewhat controversial. Some countries, including all those covered by this study, have used methods of calculation that do not appear to be consistent with the URAA. Most of the controversy involves the price support methodology, especially the meaning of the term "eligible production" and the determination of the fixed external reference price.

"Eligible Production"

As indicated above, the level of support from price support programs is determined by multiplying the gap between the support price and a fixed external reference price by "eligible production." Many countries, including the U.S. and the EU, use total production in the equation, since the system supports the price of all production. However, some countries have used quantities purchased by government or maximum quantities authorized for purchase rather than total production. Obviously, such an approach can greatly reduce the level of support from the program.

This issue has been examined in WTO dispute settlement. It was one of the key issues in the case *Korea- Measures Affecting Imports of Fresh, Chilled and Frozen Beef (Korea – Beef).* Korea had used government purchases in calculating its level of support for beef. The complaining countries, which included the U.S., argued that the URAA methodology required Korea to use total production. The Panel agreed with the complainants. Below is the key passage from the Panel report:

> 827. It is worth recalling that the quantification of market price support in AMS terms is not based on expenditures by government. Market price support as defined in Annex 3 can exist even where there are no budgetary payments.[1] Market price support gauges the effect of a government policy measure on agricultural producers of a basic product rather than the budgetary cost of that measure borne by government. **In general, with market price support programmes, all producers of the products which are subject to the market price support mechanism enjoy the benefit of an assurance that their products can be marketed *at least* at the support price. Therefore, the minimum price support will be available to all marketable production of the type and quality to which the administered price support programme relates, including where actual market prices are above the administered minimum price level.** There may, of course, be circumstances where eligible production may be less than total marketable production, as for example where the minimum price support is only available to producers in certain disadvantaged regions. Another possible example would be where there is a legislatively predetermined, non-discretionary, limitation on the quantity of marketable production that a governmental intervention agency could take off the market at the administered price in any year. In the latter case, the particular design and operation of the price support mechanism would have to be taken into account in determining eligible production, since **even governmental purchases at a level below the legislatively predetermined quantity limit could, depending on market conditions, suffice to maintain market prices at above the minimum levels for all marketable production. Hence, with these qualifications, eligible production for the purposes of calculating the market price support component of current support should comprise the total marketable production of all producers which is eligible to benefit from the market price support, even though the proportion of production which is**

actually purchased by a governmental agency may be relatively small or even nil.

[1] Paragraph 8 of Annex 3 explicitly notes that "[b]udgetary payments made to maintain this gap [between a fixed external reference price and the applied administered price], such as buying-in or storage costs, shall not be included in the AMS.

. . . .

"Eligible/actual production"

831. The Panel finds that Korea has used an incorrect figure for the level of eligible production in its calculation of market price support. Korea argues that it used the actual production to calculate its market support. The language of paragraph 8 of Annex 3 makes it clear that it is the quantity of production which is "eligible" to receive the benefit of the price support provided through the applied administered price which is relevant. **The actual quantity of purchases is not relevant in the calculation of market price support. Korea, by indicating its intent to purchase specified quantities, made them eligible to receive the applied administered price, and consequently affected and supported the price of all such products.**

832. As mentioned, the fact that not all eligible production was actually purchased by the government is irrelevant. This interpretation of the eligibility of production for price support is confirmed by the language in the last sentence of paragraph 8 of Annex 3 which states that the provision is not concerned with the actual amount of budgetary outlays. It is the market price support provided by the government measure that is the focus of the provision, since it is marketable production as a whole which benefits from this type of support. (WT/DS161/R, emphasis added.)

In other words, the Panel found that, except in certain specific circumstances, all of production, not just the amount of product procured by government, should be used in the calculation of the AMS for a price support program. The Appellate Body upheld the Panel's finding that Korea had erred by using government purchases. However, the Appellate Body found that "eligible production" is the quantity "fit or entitled" to be purchased and indicated that a country could limit eligible production by establishing a maximum purchase quantity.

Most of the erroneous calculations discussed below involve the use of government purchases. In the one case involving a legislatively pre-determined quantity limit (Thai rice), we used total production in our calculation because we determined the quantity in question was sufficiently large to ensure that the market price remained above the support level. In other words, we agree with, and have based this analysis on, the Panel's interpretation of the AMS methodology.

External Reference Prices

We identify in this paper several cases where we believe the countries examined used inappropriate fixed external reference prices in their calculations. Annex 3 of the URAA (quoted above) instructs countries to use as a reference price "the average f.o.b. unit value . . . in a net exporting country and average c.i.f. unit value . . . in a net importing country in the base period [i.e., 1986-88]." Most countries with price support programs included fixed external reference prices in the data they submitted at the end of the Uruguay Round.

The *Korea – Beef* case also dealt with the issue of reference prices. The Panel noted that Korea had not notified an external price in its Uruguay Round documentation and had overestimated its external price in subsequent domestic support notifications, thereby decreasing the level of support resulting from its price support calculation. The Appellate Body agreed with the Panel's finding and recommended the use of an alternative lower external reference price.

These findings set a precedent that is important for this study. Countries are not free to set their reference prices unilaterally. If a country selects a price that is inconsistent with the URAA methodology, that price is subject to challenge. In such cases, we used both the country's notified external prices and an alternative reference price that we have calculated using Global Trade Atlas or other reliable data.

III. Country Analyses and Findings

SUMMARY OF RESULTS

Country	AMS Limit	Estimated AMS[1/]
India	zero	$37.3 b to $91.5 b
Brazil	$912 m	$3.9 b
Turkey	zero	13.376 b TL ($7.397 b)
Thailand	19.028 b baht ($634 m)	471 b - 538 b baht ($15.3 b - $17.1 b)

1/ Estimate is only for the programs and products examined in the study and is based on best available information.

India

India has increased support to the agricultural sector sharply over the past several years. Support prices for wheat and rice increased by 72% and 75% respectively between 2005/06 and 2010/11. They are now well above the U.S. target prices for both commodities. Subsidies for inputs – fertilizer, electricity, irrigation and seeds – rose over the same period by 214% to nearly $30 billion. In the light of such increases, it is not surprising that India would have difficulty respecting its WTO commitments. India's AMS limit is bound at zero.

However, the WTO violations have gone unnoticed, in part because of India's failure to submit the required WTO notifications and in part because of the methodology India uses to calculate its AMS. Until recently, India had submitted only two notifications concerning domestic support commitments, one in 1998 covering marketing year 1995/96 and one in 2002 covering the 1996/97 and 1997/98 marketing years. On June 9, 2011, it submitted another notification covering the marketing years 1998/99 through 2003/04. The dramatic changes in Indian agricultural policy were only beginning to take place in the period covered by the most recent notification.

Moreover, India made some significant changes in policy classification and AMS calculation methodology in its notifications. It is unclear what motivated the changes, but their effect was to hide potential violations of WTO rules. Some of the more significant changes are listed below.

- Fixed external reference prices: In calculating its AMS at the end of the Uruguay Round, India used fixed external reference prices denominated in rupees (see G/AG/AGST/IND). At the time the rupee was a non-convertible currency. India began to move toward convertibility in 1991. When it submitted its first domestic support notification in 1998, India converted the support prices to U.S. dollars using an exchange rate of Rs. 13.4 = $1, which is identified in the notifications as the average official exchange rate during the 1986/88 base period (see G/AG/N/IND/1). The result was fixed external reference prices that were in many cases more than twice as high as prices used by other countries. (The current exchange rate is about Rs. 45 = $1. We use that rate throughout this section of the paper. The rate in 1995, the period covered by the first notification, was Rs. 32 = $1.)

  The URAA requires Members to calculate their AMS "taking into account the constituent data and methodology used in the tables of supporting material" submitted at the end of the Uruguay Round. Nothing in the agreement gives India the right to convert its external reference prices to dollars using an exchange rate that was seriously distorted by government controls.

  In our calculations we used two external reference prices: 1) the rupee price notified by India in its original documentation; and 2) an alternative price from another WTO Member.

We provide the second calculation for comparison purposes only. We list the dollar-denominated prices India used in its WTO notifications in the footnotes to each table.[1]

- Eligible production: In the documents it submitted at the end of the Uruguay Round and in its first domestic support notification India used total production in its AMS equation to measure support from its price support programs. As noted above, this is the correct methodology for price support programs such as India's, which establish a price floor for the domestic market. However, in the second and third notifications India used only government purchases rather than total production in the equation. It is worth noting that the notification containing that change in methodology was submitted in 2002, just as India was beginning to increase support prices significantly. We used total production figures in our calculations below.

- Input subsidies: Article 6.2 of the URAA exempts from reduction commitments (i.e., from the amber box) "input subsidies which are generally available to low-income or resource-poor producers in developing country Members." In its Uruguay Round documentation, India reported no expenditures that would qualify for the Article 6.2 exemption but included the following note: "If land holders with less than 10 hectares of land are taken as low income or resource poor, the input subsidies given to 79.5% of the total land holdings will qualify under this exemption" (see G/AG/AGST/IND). India listed all input subsidies as non-product-specific amber box programs, presumably because the subsidies were available to all producers regardless of level of income or resource endowment. In its first domestic support notification, India followed a similar approach, reporting 97% of expenditures under the amber box and 3% under Article 6.2.

  However, in its second notification India allocated about 80% of input subsidies to Article 6.2 and about 20% to the amber box. It is unclear how India did the allocation in its third notification, since it neglected to include Supporting Table DS:9, but it appears that the large majority of spending was reported under Article 6.2. We are not aware of any modification to India's input subsidy policy that would justify this change in reporting. Our understanding is that the subsidies were in 1996/97 through 2004/04, and are still, available to all producers. We are not aware of any eligibility criteria, then or now, related to level of income level or resource endowment. Expenditures under the program should therefore be classified as amber box subsidies. We assume that Indian officials simply decided in preparing the notification in 2002 to follow the methodology foreshadowed in the AGST document by classifying all payments to producers with less than 10 hectares of land as exempt under URAA Article 6.2.

  The change makes a significant difference. If the programs are classified as amber box, the recent run-up in expenditures would put India well over the *de minimis* threshold for non-product-specific amber box subsidies. Below we calculate India's AMS using both methodologies.

[1] We would note that India would be in violation of its AMS commitments even if we had used the inflated reference prices from the footnotes. India's combined AMS for rice and soybeans would be $7.5 b.

We have not attempted to do a comprehensive study of Indian subsidies. In addition to the programs mentioned below, India has price support programs for peanuts, sunflower seed, sesame seed, safflower seed, nigerseed, barley, gram, lentils, toria, copra, coconut, jute, tobacco, jowar, bajra, ragi, arhar, moong and urad. Support prices for nearly all of these commodities have increased significantly in recent years. In addition, India has a credit subsidy scheme that it has notified as a non-product-specific amber box program in the past. Thus the AMS calculation at the end of this section represents only a partial estimate. We estimate India's AMS for the programs we examined to be between $37 billion and $92 billion.

Wheat and Rice

The Indian government establishes annually minimum support prices (MSP) for wheat and rice. The MSPs are effectively price floors for purchasers of wheat and rice on the domestic market and the incentive prices for Indian producers. The government maintains internal market prices by purchasing wheat and rice at the MSP. Over the past three marketing years government purchases have amounted on average to about 30% of total wheat production and 34% of total rice production. The government then sells most of what it purchases to poor consumers at highly subsidized prices. Below are our calculations of India's AMS for wheat and rice.

Wheat

1) Administered Price[1/]	***2) Fixed External Reference Price***[2/]	***3/ Alternative Fixed External Reference Price***[3/]	***4) Production***[1/]	***5) AMS (1-2) X 4***	***6) AMS (1-3) X 4***
Rs. 11,000/MT ($244.58)	Rs. 3,540/MT ($78.71)	$98.50/MT	80.8m MT	**Rs. 602.8 b ($13.4 b)**	**$11.8 b**
				De minimis threshold: **$2.3 b**[4/]	

Exchange rate: 1 RS = $0.0222 (used throughout section)
1/ USDA/FAS GAIN Report Number IN1117
2/ G/AG/AGST/IND. India used an external reference price of $264/MT in its WTO notifications (see G/AG/N/IND/1).
3/ Turkish WTO notification G/AG/N/TUR/14
4/ Calculation of *de minimis* threshold: Value of production: $290/MT[1/] X 80.8 m MT = $23.4 b
De Miminis threshold: $23.4b X 0.10 = $2.3 b

Rice

1) Administered Price[1/]	2) Fixed External Reference Price[2/]	3) Alternative Fixed External Reference Price[3/]	4) Production[1/]	5) AMS (1-2) X 4	6) AMS (1-3) X 4
Rs. 15,000/MT ($333.22)	Rs. 3,520/MT ($78.20)	$202.44/MT	94.0 m MT	**Rs. 1,079.1 b ($24.0 b)**	**$12.3 b**
				De minimis threshold: **$3.5 b[4/]**	

1/ USDA/FAS GAIN Report Number IN1117. Note that the MSP for common varieties of paddy rice is RS 10,000/MT. India's fixed external reference price is also for common paddy rice, but India used a coefficient of 1.5 to convert it to a milled rice price. We have used the same coefficient to convert the MSP in order to make it comparable to the external reference price.
2/ G/AG/AGST/IND. India used an external reference price of $262.51/MT in its WTO notifications (see G/AG/N/IND/1). Using this reference price, India AMS for rice would be $6.6 b.
3/ EU WTO notification G/AG/N/EEC/30
4/ Calculation of *de minimis* threshold: Value of production: $377/MT[1/] X 94 m MT = $35.4 b
De Miminis threshold: $35.4 b X 0.10 = $3.5 b

Corn, Soybeans and Rapeseed

India's price support programs for corn, soybeans and rapeseed are similar to its programs for wheat and rice. The government establishes an MSP and makes purchases at the MSP to support prices. The programs do appear to establish price floors for the domestic market. However, the quantity of government purchases is normally much smaller than for wheat or rice, and India does not subsidize sales to poor consumers.

Corn

1) Administered Price[1/]	2) Fixed External Reference Price[2/]	3) Alternative Fixed External Reference Price[3/]	4) Production[4/]	5) AMS (1-2) X 4	6) AMS (1-3) X 4
Rs. 8,800/MT ($195.82)	Rs. 3,121/MT ($69.51)	$107.50/MT	21 m MT	**Rs. 119.3 b ($2.7 b)**	**$1.9 b**
				De minimis threshold: **$0.44 b[5/]**	

1/ Ministry of Agriculture, Directorate of Economic Statistics, http://dacnet.nic.in/eands/latest_2006.htm
2/ G/AG/AGST/IND. India used an external reference price of $238.57/MT in its WTO notifications (see G/AG/N/IND/1).
3/ Turkish WTO notification G/AG/N/TUR/14
4/ USDA/FAS GAIN Report Number IN1117
5/ Calculation of *de minimis* threshold: Value of production: $210/MT[1/] X 21 m MT = $4.4 b
De Miminis threshold: $23.4b X 0.10 = $0.44 b

Soybeans

1) Administered Price1/	2) Fixed External Reference Price2/	3) Alternative Fixed External Reference Price3/	4) Production1/	5) AMS (1-2) X 4	6) AMS (1-3) X 4
Rs. 14,400/MT ($320.11)	Rs. 3,081/MT ($68.47)	$234/MT	9.6 m MT	**Rs. 108.7 b ($2.4 b)**	**$0.8 b**
				De minimis threshold: **$0.45 b**4/	

1/ USDA/FAS GAIN Report Number IN1133 Support price for yellow soybeans. The support price for black soybeans is RS 14,000/MT.
2/ G/AG/AGST/IND. India used a external reference price of $229.77/MT in its WTO notifications (see G/AG/N/IND/1). Using this reference price, India's AMS for soybeans would be $0.9 b.
3/ 1986/88 average CIF Hamburg price, from USDA/FAS Oilseeds Circular, http://www.fas.usda.gov/oilseeds/circular/1997/97-03/mar97opd2.html
4/ Calculation of *de minimis* threshold: Value of production: $474/MT1/ X 9.6 m MT = $4.5 b
De Miminis threshold: $4.5 b X 0.10 = $0.45 b

Rapeseed

1) Administered Price1/	2) Fixed External Reference Price2/	3) Alternative Fixed External Reference Price3/	4) Production1/	5) AMS (1-2) X 4	6) AMS (1-3) X 4
Rs. 18,300/MT ($407.57)	Rs. 6,884/MT ($153.32)	$213.67/MT	7.0M MT	**Rs. 79.9 b ($1.8 b)**	**$1.4 b**
				De minimis threshold: **$0.39 b**4/	

1/ USDA/FAS GAIN Report Number IN1133 Support price for yellow soybeans. The support price for black soybeans is RS 14,000/MT.
2/ G/AG/AGST/IND. India used an external reference price of $513.37/MT in its WTO notifications (see G/AG/N/IND/1).
3/ 1986/88 average CIF Hamburg price for rapeseed, from USDA/FAS Oilseeds Circular, http://www.fas.usda.gov/oilseeds/circular/1997/97-03/mar97opd2.html
4/ Calculation of *de minimis* threshold: Value of production: $551/MT1/ X 7 m MT = $3.9 b
De Miminis threshold: $3.9 b X 0.10 = $0.39 b

Cotton

India also establishes an MSP for cotton, and the program works in much the same way as it does for other commodities. Market prices are normally well above the MSP. In cases where market prices weaken, the government purchases seed cotton at the MSP and then sells the processed cotton at market prices. Losses incurred are borne by the government.[2] Thus the MSP remains the price floor for cotton farmers.

India's MSP is for seed cotton. However, India's fixed external reference price is on a cotton lint basis (HS 5201, see G/AG/AGST/IND). India also used – in its Uruguay Round AGST calculations

[2] See USDA/FAS GAIN Report No. IN1131

and its notifications – production figures for lint. Therefore, India's AMS calculations significantly understate cotton support. In our calculations below we converted the MSP for seed cotton to a lint basis using a factor of three (three tons of seed cotton yield one ton of lint). This conversion factor is extremely conservative. It does not take into account ginning costs or the fact that Indian farmers receive the MSP not just for lint, but also for the other two-thirds of seed cotton tonnage – i.e., cottonseed, linters, waste. Thus the AMS calculation below still understates the level of support.

1) Administered Price[1/]	***2) Fixed External Reference Price[2/]***	***3) Alternative Fixed External Reference Price[3/]***	***4) Production[4/]***	***5) AMS (1-2) X 4***	***6) AMS (1-3) X 4***
Rs. 90,000/MT ($1,998)	Rs. 17,333/MT ($386.25)	$1,255/MT	5.4M MT	**Rs. 392.4 b ($8.69 b)**	**$4.01 b**
				De minimis threshold: **$1.5 b[4/]**	

1/ Support price for H-4 variety long-staple cotton, the variety used in India's original AMS calculation (see G/AG/AGST/IND). Source: Ministry of Textiles, Order No. 1/20/2010-11/Cotton/ MSP/155-180, http://www.txcindia.com/html/MSP%20Order%202010-11.pdf
2/ G/AG/AGST/IND. India used an external reference price of $1292.64/MT in its WTO notifications (see G/AG/N/IND/1).
3/ Brazilian WTO Notification G/AG/N/BRA/26
4/ USDA/FAS GAIN Report Number IN1131
4/ Calculation of *de minimis* threshold: Value of production: $2,781/MT[1/] X 5.4 m MT = $15 b
De Miminis threshold: $15 b X 0.10 = $1.5 b

Sugarcane

The Indian government establishes an MSP for sugarcane. In addition, certain state governments establish state advised prices (SAPs) at a level above the MSP.[3] Sugar mills are required to pay sugarcane growers the higher of the MSP or the SAP regardless of the market price of sugar. Since we did not have sufficient data regarding the SAPs, the AMS calculation below is based solely on the MSP. Therefore, it understates the level of support.

1) Administered Price[1/]	***2) Fixed External Reference Price[2/]***	***3) Alternative Fixed External Reference Price[3/]***	***4) Production[1/]***	***5) AMS (1-2) X 4***	***6) AMS (1-3) X 4***
Rs. 1,391.4/MT[1/] ($30.96)	Rs. 156.16/MT[2/] ($3.47)	$15.48	328.0 m MT[1/]	**Rs. 405.2 b ($9.0 b)**	**$5.1 b**
				De minimis threshold: **$1.0 b[4/]**	

1/ Ministry of Agriculture, Directorate of Economic Statistics, http://dacnet.nic.in/eands/latest_2006.htm
2/ G/AG/AGST/IND. India used an external reference price of $11.64/MT in its WTO notifications (see G/AG/N/IND/1).
3/ Thai FOB price provided by U.S. Embassy/Bangkok.
4/ Calculation of *de minimis* threshold: Value of production: $31/MT[1/] X 328 m MT = $10.2 b
De Miminis threshold: $10.2 b X 0.10 = $1.0 b

[3] In Uttar Pradesh, an area which accounts for about a quarter of total Indian production of sugar, the SAP is 20% higher than the MSP.

Input subsidies

As indicated in the introduction to this section, India initially classified all of its input subsidy programs as amber box, but then changed its methodology in its second WTO notification and classified only 20% expenditures as amber. Based on the information available to us, we believe the programs are amber box subsidies and that the expenditures should be counted in full in India's AMS calculation. Below we show the figures for the 2008/09 marketing year – the last year for which data are available – using both methodologies.

100% Non-Product Specific Amber Box (original methodology)[1/]	*20% Non-Product-Specific Amber Box (methodology of second notification)*
$29.5 b	**$5.9 b**
De minimis threshold: **$17.0 b**[2/]	

1/ Subsidies for fertilizer, irrigation and seeds from *Agricultural Statistics at a Glance,* Table 12.1, Ministry of Agriculture, Directorate of Economics and Statistics, http://dacnet.nic.in/eands/latest_2006.htm
2/ Calculation of *de minimis* threshold: $170 b X 0.10 = $16.1
Value of production from *Agricultural Statistics at a Glance,* Table 2.6(B)

Current Total AMS

Below is our calculation of India's Current Total AMS for the programs we examined. As we indicated in the introduction to this section, India has support prices for a number of other products as well as other amber box programs – e.g., credit subsidies. Therefore, the figures below almost certainly understate the level of support in India.

India's AMS limit is bound in WTO at zero, so any support above the *de minimis* level violates India's WTO commitments.

Program	*Using original rupee-denominated reference price*	*Using alternative reference price*
Wheat price support	$13.4 b	$11.8 b
Rice price support	$24.0 b	$12.3 b
Corn price support	$2.7 b	$1.9 b
Soybean price support	$2.4 b	$0.8 b
Rapeseed price support	$1.8 b	$1.4 b
Cotton price support	$8.7 b	$4.0 b
Sugar price support	$9.0 b	$5.1 b
Input subsidies	$29.5 b	$29.5 b
TOTAL	**$91.5 b**	**$66.8 b**
TOTAL without input subsidies	**$62.0 b**	**$37.3 b**
India's AMS limit	**zero**	

Brazil

Overall government support for Brazilian agriculture has mushroomed over the past decade. The government has raised support prices for a range of commodities and increased funding for other programs as well.

AMS calculations for Brazilian support programs

The level of agricultural subsidization in Brazil and the extent to which it exceeds Brazil's WTO limit have gone unrecognized due in part to the complexity and in some cases overlapping nature of the programs, and in part to the fact that Brazil's most recent domestic support notification to the WTO was for the 2005/2006 marketing year.

Furthermore, in that notification and previous notifications to the WTO, Brazil understated the level of support provided to individual commodities under its price support programs. The Brazilian government uses four different programs to provide price support to producers of major commodities: the Federal Government Acquisition program (AGF)[4], the Acquisition from Public Option Contracts program,[5] the Premium for Product Outflow (PEP) program[6], and the Private Option Risk Premium (PROP)[7] program.[8] (The four programs are described in more detail in the next section.) Under the first two programs, the Brazilian government purchases commodities to maintain domestic prices at the level of the minimum guaranteed price. Under PEP and PROP, processors receive a government payment in return for purchasing commodities from growers at the minimum guaranteed price. The programs are used in various combinations for different crops, but the cumulative effect is to ensure that growers receive no less than the government-mandated support price for their products.

In its WTO submissions, Brazil calculated the level of support provided by the AGF and the Acquisition from Public Option Contracts programs on the basis of the quantities procured by the government rather than on total production. Because government purchases have been relatively small, Brazil has been able to notify low levels of support through price supports. Brazil did not take into account PEP or PROP in its market price support calculation, but instead, notified the budgetary outlays for those programs under "Other Product-Specific Support." The effect of this approach is to greatly understate the level of support offered by the four programs.

In our analysis below for wheat, corn and rice, we treat the four programs as part of an integrated system that supports the price for all Brazilian production of the products covered. We have calculated the level of support provided by the four programs using the proper URAA methodology – i.e., we take the difference between the support price and fixed external reference price (notified by Brazil to the WTO at the end of the Uruguay Round) and multiply the

[4] *Aquisição do Governo Federal,* referred to in Brazil's WTO notifications as *Minimum Support Price*
[5] *Contrato Governamental de Opção de Venda*
[6] *Prêmio para Escoamento do Produto*
[7] *Prêmio de Risco para Aquisição de Produto Agrícola oriundo de Contrato Privado de Opção de Venda*
[8] Brazil has notified to the WTO its budgetary outlays under the equalization programs.

difference by total production for each product, rather than government purchases. In keeping with the URAA methodology,[9] we do not count the cost of government purchases or expenditures under the PEP or PROP programs as a part of the AMS.

Brazil also uses a fifth program, the Agricultural Products' Sale Option Private Premium (PEPRO)[10] program, which operates much like a deficiency payment system. The program is currently used principally for cotton. It, too, operates off of the minimum guaranteed price. However, under PEPRO market prices are allowed to fall below the level of the minimum guaranteed price. The government gives cotton growers a payment to cover the difference between the market price and the support price. The URAA allows countries to calculate the level of support for such programs by using the same methodology as they use for price support programs, or by using budget outlays. We use budget outlays in our calculation of the level of support for cotton below.

For each of the four commodities examined, Brazil's level of support exceeds its product-specific *de minimis* threshold. This means that the total level of support must be applied to Brazil's total Aggregate Measurement of Support. When this is done for just these four products, Brazil is substantially above its AMS limit.

The results of those calculations and the comparison with Brazil's product-specific *de minimis* thresholds for each commodity are provided in the section "Calculations of Support Levels," below.

Description of Support Programs[11]

Brazil provides price support to key commodities through a number of mechanisms. Some are more heavily used than others, but together they support the total production of each commodity.

Federal Government Acquisition Program (AGF) or "Minimum Support Price"

This program involves direct purchases from producers and co-operatives by the National Food Supply Agency (CONAB) at the minimum support price, or minimum guaranteed price. That price is set prior to the growing season and varies among the major growing regions. The program establishes minimum prices for twelve products, including the four that are covered in this report (wheat, corn, rice and cotton). The value of the commodity acquired by CONAB is equal to the weight of the product times the minimum price plus the value of any packing material used. A producer's entire crop is eligible for the program. The role of the AGF in maintaining the minimum price to farmers has declined in recent years as other programs, the PEP in particular, have become more popular.

---

[9] *"Budgetary payments made to maintain this gap [between the domestic price and the world price], such as buying-in or storage costs, shall not be included in the AMS." (URAA, Annex 3, paragraph 8)*

[10] *Prêmio Equalizador Pago ao Produtor*

[11] Program descriptions based in part on OECD Report: "Agricultural Policies in Emerging Economies, 2009"

Acquisition from Public Option Contracts Program

This program guarantees the producer or agricultural co-operative a future sale at a fixed "execution" price. Before the start of each season, CONAB announces the products for which sell option contracts will be offered, the quantity and the fixed "execution price" (which is the minimum price for the commodity plus storage and financial costs). Options are purchased through auction. CONAB is responsible for purchasing the product once the option holder decides to execute the contract. It may also repurchase an option contract if it decides not to purchase the product, in which case it pays the option holder the difference between the execution price and the market price. Also, CONAB may transfer the option to a third party, which would then be obliged to purchase the produce and which would be provided the difference between the two prices. Since its inception in 1996/97, public option contracts have been issued on a regular basis for corn, and on an ad-hoc basis for wheat, rice, sorghum, cotton and coffee. The program was suspended in 2005/06 but reintroduced in 2006/07 for rice.

Premium for Product Outflow (PEP)

The PEP pays commercial buyers the difference between the minimum guaranteed price and the price the buyer is willing to pay as determined by regional auctions organized by CONAB. In order to receive the payment, the buyer must pay the grower the minimum guaranteed price. Transportation costs to the final destination have to be absorbed by the buyer. PEP is also designed to shift supply of products across regions to avoid deficits and prevent buildup of stocks. Although it was suspended in 2002/03, the program was reactivated in 2003/04. It now covers wheat, corn, cotton, beans, rice and soybeans.

Private Option Risk Premium (PROP)

PROP operates in much the same manner as the Acquisition from Public Option Contracts Program except that private agents take the role of CONAB and the government pays these agents a "risk premium" if the market price falls below the "execution" price. It was introduced in 2004/2005.

Agricultural Products' Sale Option Private Premium (PEPRO)

A relatively new scheme is the PEPRO program, introduced in 2005/06. It operates like a deficiency payment. The Brazilian government pays the seller – e.g., a producer or an agricultural co-operative – the difference between the minimum guaranteed price and the price received at auction. PEPRO is now primarily used to support cotton producers.

Credit Programs

Brazil also provides support through other programs, the most important by far being subsidized agricultural credits. Brazil operates a range of these non-product-specific programs and their operation is very complex and non-transparent.

According to a July 2010 report from the Agricultural Counselor at the U.S. Embassy in Brasilia, the Brazilian government will make available Real 75.6 billion (about $64 billion) in subsidized or mandated agricultural credits in the 2010/11 crop year. This compares with just R17.9 in 2001 (about $7.5 billion at the 2001 exchange rate). The report also indicated that the Brazilian Congress was considering legislation to provide $14 billion in direct supports to its agricultural producers and to allow rescheduling of $50 billion in farm debts.

Brazil has notified its credit subsidies under several URAA provisions. It notifies some under Article 6.2 of the URAA, which exempts certain credit programs from inclusion in the amber box for developing countries.[12] In its submission for 2005/2006, it notified $764.7 million in this category, including both the subsidy element of the programs and debt rescheduling that was provided that year.

Brazil notifies other credit programs as non-product specific amber box. As a developing country, Brazil's non-product-specific threshold is 10 percent of the value of total agricultural production. Brazil notified its value of production in 2005/2006 at $57.9 billion, providing for a threshold of $5.79 billion. Brazil is not required under the AMS methodology to count non-product-specific subsidies below this level against its AMS limit. Brazil notified the subsidy element of these credit programs plus debt rescheduling in 2005/2006 at about $1.3 billion, well below its threshold at that time.

Brazil's use of credit programs and debt rescheduling has increased substantially since 2005/2006. However, without more information from Brazil on precisely how the programs operate and how it calculates the subsidy elements of each program, it is impossible to determine how the programs should be categorized and how much support should be counted against Brazil's AMS limit in more recent years. USDA estimates that the credit programs notified under the non-product-specific category have almost doubled in size since 2004/2005. If the subsidy element increased at the same pace and the same programs are in use, and if Brazil has properly categorized expenditures under each program for WTO purposes, Brazil would still be below its *de minimis* threshold, especially given the fact that the threshold itself will have increased along with the value of total production in Brazil over that period.

Therefore, our initial assessment of Brazil's credit schemes is that they do not appear to reach the level that would require them to be included in its AMS. However, we cannot make a definitive judgment without more information from Brazil and significant additional research.

[12] URAA Article 6, paragraph 2: *In accordance with the Mid-Term Review Agreement that government measures of assistance, whether direct or indirect, to encourage agricultural and rural development are an integral part of the development programmes of developing countries, investment subsidies which are generally available to agriculture in developing country Members and agricultural input subsidies generally available to low-income or resource-poor producers in developing country Members shall be exempt from domestic support reduction commitments that would otherwise be applicable to such measures, as shall domestic support to producers in developing country Members to encourage diversification from growing illicit narcotic crops. Domestic support meeting the criteria of this paragraph shall not be required to be included in a Member's calculation of its Current Total AMS.*

Tax Policy

Although this paper focuses on domestic support programs and Brazil's WTO obligations pertaining to them, it is worth noting that Brazil operates a wide range of tax measures, some of which may have the effect of an export subsidy. For example, Brazil's PIS and COFINS taxes are federal social security and social welfare taxes payable by industries in the form of a value added tax (VAT). All export sales are exempt from PIS/COFINS taxes.

Annex I of the WTO Agreement on Export Subsidies and Countervailing Measures provides an Illustrative List of Export Subsidies. The list includes the following: "The full or partial exemption remission, or deferral specifically related to exports, of direct taxes or social welfare charges paid or payable by industries or commercial enterprises" (emphasis added). Although the remission of VAT charges on exports is permitted under WTO rules, this language appears to prohibit explicitly the remission of social welfare taxes, even if collected through a VAT-type system.[13]

Under the URAA, Brazil undertook export subsidy commitments in both quantity and value terms by commodity sector. Below are the commitments for the commodities covered in this report. In all recent of its recent WTO submissions (2002 to 2007), Brazil has notified zero export subsidies for all products.

Brazilian Export Subsidy Commitments: Commodity	***Value Limit $1,000***	***Quantity Limit 1,000 MT***
Wheat	0	0
Coarse Grains	$48.4	15.2
Rice	0	0
Cotton	$163.4	3.2

Calculations of Support Levels

Wheat, Corn and Rice

As described above, Brazil maintains a price support regime for wheat, corn and rice that is underpinned by several programs. Price supports for these commodities have existed for many years. Support levels are substantially above the fixed external reference prices notified by Brazil at the end of the Uruguay Round. As mentioned previously, under the methodology of the URAA, the level of support provided by a price-support scheme is measured by taking the difference between the support price and fixed external reference price and multiplying the difference by volume of eligible production. The result of that calculation is shown in column 4

[13] In October 2010, the Department of Commerce determined that the PIS/COFINS tax operated as a value added tax and that it did not confer countervailable benefits under the meaning of 19 CFR 351.518. Federal Register: October 20, 2010 (Volume 75, Number 202). The question of whether a program is countervailable under U.S. law is distinct from the question of whether it is compatible with WTO rules, however.

in the table below. If the resulting level of support exceeds the country's product-specific *de minimis* threshold, all of the support must be counted against the country's AMS limit.

Wheat

1) Administered Price, 2010[1/]	***2) Fixed External Reference Price[2/]***	***3) Production (2010/11)[1/]***	***4) Level of support (1-2) X 3***
R530/MT ($288)	$130.93/MT	5 million MT	**$785 m**
***De minimis* threshold[3/]**			**$144 m**

Exchange rate: $1 = R$1.84 (used throughout this section)
1/ Source: USDA GAIN Report BR0605.
2/ WTO Notification G/AG/N/BRA/26
3/ Calculation of *de minimis* threshold: Value of production: $288/MT X 5 million MT = $1.44 billion
De miminis threshold: $1.44b X 0.10 = $144 million

Since Brazil's AMS for wheat for 2010 is above the *de minimis* threshold, all $785 million must be counted against Brazil's AMS limit.

Corn

1) Administered Price [1/]	***2) Region***	***3) Fixed External Reference Price[2/]***	***4) Production (2009/10) [3/]***	***5) AMS (1-3) X 4***
R16.50/60kg ($152.83/MT)	South, Southeast, Center	$131.95/MT	39.3 m MT	$844 m
R13.20/60kg ($122.11/MT)	Matto Grasso, Rodonia		6.3 m MT	$0
R19.00/60kg ($175.92/MT)	North/Northeast		5.6 m MT	$246 m
Total Price Support AMS				**$1.09 b**
***De minimis* threshold[4/]**				**$942 m**

1/ Source: GAIN Report BR 0605;
2/ WTO Notification G/AG/N/BRA/26
3/ Acompanhamento de Safra Brasileira de Graos, 2009/10
4/ Calculation of *de minimis* threshold: Value of production (2009): $174/MT X 54.18 million MT = $9.42 billion
De minimis threshold: $9.42b X 0.10 = $942 million

Since Brazil's AMS for corn for 2010 is above the *de minimis* threshold, all $1.2 billion must be counted against Brazil's AMS limit.

Rice

1) Administered Price[1/]	2) Fixed External Reference Price[2/]	3) Production (2009/10)	4) AMS (1-2) X 3
$253	$174.13	11.5 m MT	**$908.5 m**
***De minimis* threshold[3/]**			**$418.0 m**

1/ Long Grain Fine Paddy, Average Support Price; Source: GAIN Report BR 0605
2/ WTO Notification G/AG/N/BRA/26
3/ Calculation of *de minimis* threshold: Value of production (2009): $364/MT X 11.5 million MT = $4.18 billion
De minimis threshold: $4.18b X 0.10 = $418 million (Note: Brazil declared a *de minimis* threshold for rice of $205 million in its 2005/06 WTO domestic support notification.)

Since Brazil's AMS for rice for 2010 is above the *de minimis* threshold, all $908.5 million must be counted against Brazil's Total AMS limit.

Note that the price support AMS calculation is an approximation based on average support prices for long grain fine paddy. The average price support is not production weighted.[14] We also did not include $333 million in guarantees for the commercialization of rice that the government announced in 2010 and which was reported in the FAS GAIN Report BR 0605. We do not have sufficient information to judge whether these funds should be notified as amber box and count against Brazil's product-specific *de minimis* threshold. Based on the description in the report, it would appear to be an amber box program:

> The Government of Brazil (GOB) announced R$600 (US$333) million in guarantees for the commercialization of rice. This funding will preserve rice market prices affected by excessive rain and a potential reduction in international prices. Another R$600 (US$333) million could still be made available if producer prices fall below R$23 (US$12.78) per sack.

Cotton

As indicated above, the principal support program for cotton producers in Brazil is the PEPRO program, which provides payments to producers when the market price falls below the minimum guaranteed price. Under the URAA methodology, payments under the PEPRO programs must be counted against Brazil's AMS limit.

[14] FAS GAIN Report BR0605

Program	*Total Outlays, 2009*[1/]
PEPRO	$276 m
***De* Minimis threshold**[2/]	**$176 m**

1/ U.S. Embassy Brasilia
2/ Calculation of *de minimis* threshold: Value of production (2009): $1383.62/MT X 1.274 million MT = $1.762 billion *De minimis* threshold: $1.762b X 0.10 = $176 million (Note: In its most recent WTO submission, Brazil notified the *de minimis* level for cotton for 2005/06 (G/AG/N/BRA/26) at $130 million.)

Supports to individual commodities that exceed the threshold are counted in full against the overall AMS. Brazil's support for cotton exceeds the product-specific *de minimis* threshold for cotton of $176 million. Therefore, all PEPRO expenditures must be applied to Brazil's aggregate measure of support for the purpose of determining whether Brazil exceeds its amber box limit.

Current Total AMS

Program	*Using alternative reference price*
Wheat price support	$785 m
Corn price support	$1.09 b
Rice price support	$908 m
Cotton price payments	$276 m
TOTAL	**$3.059 b**
Brazil's AMS limit	**$912 m**

Turkey

Turkey provides a high level of support to grains through price support schemes. Under these schemes, Turkey's state operated grain board, Topraki Mahsulleri Ofisi (TMO), purchases grain at pre-established support prices. TMO purchases of wheat, barley and corn under these programs have been significant. Although TMO has not purchased rice since 2008, it made substantial purchases in previous years. Turkey's sugar industry is also highly regulated and government controlled. Programs for sugar include a price support scheme.

The table below shows quantities purchased by TMO since 2000.

TMO GRAIN PROCUREMENT
(MT)

year	wheat	barley	corn	paddy rice
2000	2,959,105	508,715	28,509	40,745
2001	1,459,434	951,837	9	19,080
2002	332,811	379,655	78,596	59,231
2003	544,508	27,345	381,193	130,619
2004	2,023,401	3,423	474,302	14,854
2005	4,171,303	796,027	660,985	11,901
2006	1,456,571	724,586	0	87,224
2007	121,920	2,740	0	33,439
2008	62,934	153	832,378	501
2009	3,771,343	1,293,487	183,467	0
2010	978,390	916,325	83,491	0

Source: USDA/FAS Ankara

In addition, Turkey provides direct subsidies and other forms of subsidies to its grain, rice, cotton and oilseed and livestock producers. The table below shows levels of support provided to Turkish farmers under various payment programs over the last nine years. (Note that the figures do not take into account support provided by price support programs.)

Turkey: Agriculture support million TL Selected Subsidy Programs									
Type of supports	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Area based support	1,558	2,253	2,443	2,352	2,661	2,461	1,953	1,078	1,858
Premium supports	186	268	350	928	1,290	1,782	1,646	2,002	2,071
Agriculture loan support (agriculture bank)	0	0	2	36	147	223	404	475	532
TMO procurements	550	296	190	152	186	232	437	418	1,369
Agriculture export support	136	126	89	113	144	178	165	250	302
Agriculture loan support to co-operatives	16	18	77	90	95	79	94	132	139
Capital supports to governments agriculture enterprises	107	191	109	45	67	65	120	111	192
GAP AND DAP livestock support	0	0	0	0	0	0	0	85	108
Livestock support	83	106	161	293	650	701	1,308	867	1,192
Agriculture insurance support	0	0	0	0	1	31	55	59	80

Source: USDA/FAS Ankara

Turkey last provided a notification to the WTO on its agricultural domestic support spending in May 2002 (G/AG/N/TUR/14). Even though the notification is dated, it does provide valuable information on Turkey's external reference prices for a number of commodities. (Turkey did not provide reference prices in the AGST documentation it submitted at the end of the Uruguay Round.) These external prices are used in this report for the calculation of price support AMS figures.

At the conclusion of the Uruguay Round Turkey notified agricultural domestic support from both product-specific and non-product-specific programs, but calculated that support as being below the *de minimis* level. Turkey's AMS limit is therefore zero. Turkey may provide amber box support up to the *de minimis* level – i.e., 10% of the value of production for each commodity in the case of product-specific programs, or 10% of the total value of agricultural production in the case of non-product-specific programs. If support rises above that level, all support in that category must be added to Turkey's total AMS.

We estimate Turkey's total AMS for the products and programs examined to be 13.3 billion Turkish lira, or $7.3 billion. If these estimates are correct, Turkey is in clear violation of its WTO agricultural domestic support commitments.

It also appears likely that Turkey provides subsidies on the export of various products and is exceeding WTO export subsidy limitations for some grain products as well as for sugar.

Wheat

Price support Program

Turkey maintains a price support program under which farmers can sell their wheat to TMO at pre-established intervention prices. For the 2010/11 marketing year, Turkey established a milling wheat price support of 550 TL MT, and 575 TL MT for durum wheat (see FAS GAIN report, Grain and Feed Annual, April 2011).

We have used the price support for milling quality wheat in the price support calculation below.

1) Administered Price, 2009/10[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)[3/]	4) Level of support (1-2) X 3
550 TL/MT ($299.76)	181.04 TL/MT ($98.50)	17 m MT	6.273 b TL ($3.42 b)

Exchange rate: $1 = 1.83 TL
1/ FAS GAIN Annual Reports
2/ From Turkey's last WTO Notification, G/AG/N/TUR/14, May 30, 2002
3/ FAS GAIN Annual Reports

In MY 2010, TMO purchased 338,000 MT of durum and 639,000 MT of milling wheat under the price support program. Total TMO wheat stocks were 1.9 million MT at the end of 2010. (FAS GAIN Report, Turkey Grain and Feed Update, December 2011)

Other Amber Box programs

Turkey operates a number of additional subsidy programs for wheat growers. These include a direct premium to producers, a seed subsidy, soil analysis subsidies, fuel subsidies, and fertilizer subsidies.

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010* TL	Estimated Total Outlays MY 2010 $
Wheat Premium	50 TL/MT	0.85 b TL	$0.463 b
Seed Subsidy	60 TL/hectare	0.48 b TL	$0.261 b
Soil Analysis Subsidy	25 TL/hectare	0.20 b TL	$0.108 b
Fuel Subsidy	32.5 TL/hectare	0.26 b TL	$0.141 b
Fertilizer Subsidy	42.7 TL/hectare	0.34 b TL	$0.185 b

Source: FAS GAIN Report Turkey 2010 Grain and Feed Annual Report.
* Based on production of 17 million MT and on 8 million hectares.

According to the description of the programs in the USDA/FAS GAIN reports, the wheat premium payment is specific to wheat growers, and is available to all farmers based on quantity produced. As such, it is an amber box subsidy that should be included in Turkey's AMS calculation. We were unable to obtain a total expenditure amount for this program, and therefore use as an estimate the subsidy amount available per metric ton, multiplied by total Turkish wheat production. (Note: This is the same approach we took with respect to other commodities receiving premium payments.)

The seed, soil analysis, fuel and fertilizer subsidies would also appear to be product-specific amber box programs. They are paid to producers of a limited number of commodities and paid on a per-hectare basis. The payments are available to all producers of the eligible commodities, regardless of income level or resource endowment, and would therefore not qualify for the Article 6.2 exemption described above. We calculated subsidy levels for these programs by multiplying the subsidy per hectare by total hectares planted for the commodity. (Note: We will use the same methodology with respect to other commodities receiving premium payments.)

Aggregate Measure of Support (AMS)

Below is a calculation of Turkey's AMS for wheat taking into account the price support program and other amber box subsidies.

Turkey's AMS for Wheat

Program MY 2010	AMS TL	AMS $
1) Price support (MY 2009/2010)	6.27 b	$3.42 b
2) Wheat Premium (MY 2010/11)	0.85 b	$0.463 b
3) Seed Subsidy (MY 2010/11)	0.48 b	$0.261 b
4) Soil Analysis Subsidy (MY 2010/11)	0.20 b	$0.108 b
5) Fuel Subsidy (MY 2010/11)	0.26 b	$0.141 b
6) Fertilizer Subsidy	0.34 b	$0.185 b
TOTAL AMS	**8.40 b**	**$4.578 b**
DE MINIMIS THRESHOLD[1/]	**0.810b**	**$0.441 b**

1/ Calculation *de minimis* threshold: Value of production: 17 m MT x $259.45* = $4.41 b
De minimis threshold: $4.41 b x 0.10 = **$441 m**
* FAS Ankara GAIN Annual Grain and Feed Report, 2010. Average price for Anatolia white wheat in CY 2010.

Turkey's AMS spending for wheat is far above *de minimis* levels, and must therefore be included in Turkey's Current Total AMS. Since Turkey's AMS spending threshold is zero, Turkey's subsidies for wheat, by themselves, exceed its AMS spending limit.

Export Subsidies

Each year the Turkish government gives TMO the authorization to export a specified amount of wheat. TMO holds tenders at various times during the year for the export of wheat from its stocks. In MY 2009, TMO tendered for the export of 680,000 MT of milling wheat and 150,000

MT of durum wheat.[15] While TMO procures the wheat at the support price, it sells it to exporters under tenders at much lower world market rates. The difference between the procurement price and the sales price constitutes an export subsidy under WTO rules. Turkey's WTO-bound limits for wheat export subsidies are 493,812 MT of wheat and $27 million. Given that total TMO wheat exports were 830,000 MT in MY 2009, it appears that Turkey may be exceeding its export subsidy limitation for wheat.

Turkey is also a major wheat flour exporter. In MY 2010, Turkey was expected to export 818,000 MT of wheat flour. According to FAS GAIN reports, TMO sells wheat stocks to flour mills for export at world market prices. Turkey's practices in this regard should be further examined. Turkey's export subsidy limitations for wheat flour are 56,178 MT and $1.4 million, so it appears it may be exceeding its commitments for this product as well.

Corn

Turkey also maintains a price support program under which farmers can sell their corn to TMO at pre-established intervention prices. For the 2010/11 marketing year, Turkey set the price support for corn at 490 TL MT.[16]

Price Support for Corn

1) Administered Price, 2010/11[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)[3/]	4) Level of support (1-2) X 3
490 TL/MT ($266.63)	197.57 TL/MT ($107.50)	3.6 m MT	1.05 b TL ($0.57 b)

1/ FAS GAIN Report Turkey Grain and Feed Annual Report, April 2011
2/ From Turkey's last WTO Notification, G/AG/N/TUR/14, May 30, 2002
3/ FAS GAIN Annual Reports

TMO procured 83,000 MT of corn during the period May 2010 to March 2011.

Other Amber Box Programs

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Corn Premium	40 TL/MT	0.144 b	$0.078 b
Fuel Subsidy(2009)	32.5 TL/hectare	0.016 b	$0.008 b
Fertilizer Subsidy (2009)	42.5 TL/hectare	0.021 b	$0.011 b
Soil Analysis Subsidy	25 TL/hectare	0.012 b	$0.006 b

* Based on production of 3.6 MMT and area of 500,000 hectares.

15 FAS GAIN Grain and Feed Annual, March 2010.
16 FAS GAIN Grain and Feed Annual Report, April 2011.

For the same reasons cited with regard to wheat, we have treated all of these subsidies as Amber Box payments.

AMS for Corn

Program	AMS TL	AMS $
1) Price support	1.05 b	$0.570 b
2) Corn Premium	0.114 b	$0.078 b
3) Fuel Subsidy	0.016 b	$0.008 b
4) Fertilizer subsidy	0.021 b	$0.011 b
5) Soil Analysis Subsidy	0.012 b	$0.006 b
Total AMS	**1.213 b**	**$0.673 b**
DE MINIMIS[1/]	0.132 b	$0.072 b

1/ Calculation of *de minimis* threshold: Value of production ($): 3.6 m MT x $200.50* = $721 m
De minimis threshold: $721 m X 0.10 = **$72 million**
* FAS Ankara GAIN Annual Grain and Feed Report, 2010. Average price for Turkish corn in CY 2010.

As with wheat, the price support for corn exceeds the *de minimis* level by a considerable margin and therefore would be added to Turkey's Current Total AMS.

Barley

Price Support

Barley is the second most important grain in Turkey, after wheat. The price support was set at 375 TL MT at the beginning of MY 2009/10. TMO procured 932,000 MT of barley in MY 2010 and as of April 2011 held 844,000 MT of barley stocks.

1) Administered Price, 2009/10[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)3/	4) Level of support (1-2) X 3
375 TL/MT ($204.00)	192.13 TL/MT ($104.50)	5.9 m MT	1.07 b TL $0.587 b

1/ FAS GAIN Report Turkey Grain and Feed Annual Report, March 2010
2/ From Turkey's last WTO Notification, G/AG/N/TUR/14, May 30, 2002
3/ FAS GAIN Annual Reports

Other Amber Box Programs

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Esimated Total Outlays MY 2010 $
Barley Premium	40 TL MT	0.236 b	$0.128 billion
Fuel Subsidy (2009)	32.5 TL/hectare	0.113 b	$0.061 billion
Fertilizer Subsidy (2009)	42.5 TL/hectare	0.148 b	$0.080 billion
Soil Analysis Subsidy	25 TL per hectare	0.087 b	$0.047 billion

* Based on production of 5.9 MMT and area of 3.5 million hectares.

Barley AMS Calculation

Program	AMS TL	AMS $
1) Price support	1.07 b	$0.587 b
2) Barley Premium	0.236 b	$0.128 b
3) Fuel Subsidy	0.113 b	$0.061 b
4) Fertilizer subsidy	0.148 b	$0.080 b
5) Soil Analysis Subsidy	0.087 b	$0.047 b
Total AMS	**1.654 b**	**$.903 b**
DE MINIMIS THRESHOLD[1/]	0.181 b	$0.099 b

1/ Calculation of *de minimis* threshold: Value of production ($): 5.9 million MT x $169* = $997 million billion
$997 million x .10 = **$99 million= *De Minimis***
* FAS Ankara GAIN Annual Grain and Feed Report, 2010. Average price for Turkish barley in CY 2010.

Turkey's AMS for barley exceeds the *de minimis* threshold, and therefore would be added to Turkey's Current Total AMS.

Oats

Price Support

Turkey also operates a price support scheme for oats.

1) Administered Price, 2009/10[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)[3/]	4) Level of support (1-2) X 3
375 TL/MT ($204.00)	203.77 TL/MT ($110.00)	210,000 MT	0.035 b TL ($0.019 b)

1/ FAS GAIN Report Turkey Grain and Feed Annual Report, March 2010
2/ From Turkey's last WTO Notification, G/AG/N/TUR/14, May 30, 2002
3/ FAS GAIN Annual Reports

Other Amber Box Programs

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Oat Premium	40 TL/MT	0.008 b	$0.004 b
Fuel Subsidy (2009)	32.5 TL/hectare	0.003 b	$0.001 b
Fertilizer Subsidy (2009)	42.5 TL/hectare	0.004 b	$0.002 b
Soil Analysis Subsidy	25 TL/hectare	0.002 b	$0.001 b

* Based on production of 210,000 MT and 95,000 hectares.

Oats AMS Calculation

Program	AMS TL	AMS $
1) Price support	0.035 b	$0.019 b
2) Oat Premium	0.008 b	$0.004 b
3) Fuel Subsidy	0.003 b	$0.001 b
4) Fertilizer subsidy	0.004 b	$0.002 b
5) Soil Analysis Subsidy	0.002 b	$0.001 b
Total AMS	**0.052 b**	**0.027 b**
DE MINIMIS THESHOLD	0.0082 b	$0.0045 billion

1/ Calculation of *de minimis* threshold: Value of production: 210,000 MT x $216* = $45.3 million
De minimis threshold: $45.3 million x .10 = **$4.5 million**
* Market price not available. Based on TMO minimum price for 2009/10.

Turkey's AMS for oats exceeds the *de minimis* threshold, and therefore would be added to Turkey's Current Total AMS.

Rye

Price Support

1) Administered Price, 2009/10[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)3/	4) Level of support (1-2) X 3
375 TL/MT ($204.00)	**203.77.44 TL MT ($110)**	**270,000 MT**	**0.046 b TL $0.025 b**

1/ FAS GAIN Report Turkey Grain and Feed Annual Report, March 2010
2/ From Turkey's last WTO Notification, G/AG/N/TUR/14, May 30, 2002
3/ FAS GAIN Annual Reports

Other Amber Box Programs

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Rye Premium	40 TL/MT	0.010 b	$0.005 b
Fuel Subsidy (2009)	32.5 TL/hectare	0.004 b	$0.002 b
Fertilizer Subsidy (2009)	42.5 TL/hectare	0.005 b	$0.003 b
Soil Analysis Subsidy	25 TL/hectare	0.004 b	$0.002 b

***** Based on production of 270,000 MT and 130,000 hectares.

Rye AMS Calculation

Program	AMS/Lira	AMS/$
1) Price support	0.046 billion TL	$0.025 b
2) Rye Premium	0.010 billion TL	$0.005 b
3) Fuel Subsidy	0.004 billion TL	$0.002 b
4) Fertilizer subsidy	0.005 billion TL	$0.003 b
5) Soil Analysis Subsidy	0.003 billion TL	$0.002 b
Total AMS	**0.068 billion TL**	**$0.037 b**
DE MINIMIS THRESHOLD	0.010 billion TL	$0.0058 b

1/ Calculation of *de minimis* threshold: Value of production: 270,000 MT x $216* = $58.3 million
De minimis threshold: $58.3 million x .10 = **$5.8 million**
* Market price not available. Based on TMO minimum price for 2009/10.

Turkey's AMS spending for rye is above the *de minimis* threshold, and therefore would be added to Turkey's Current Total AMS.

Rice

Although Turkey maintains a price support program for rice, TMO has not made purchases under the program for several years due to high domestic prices. In years when it is apparent that TMO will not procure rice, it does not announce a price support level. We have therefore used as an administered price the price support in MY 2008/09, the last year TMO announced price supports for rice. The price support for Baldo rice was 960 TL per MT, for Osmancik 870 TL per MT. We use the lower of these two administered prices in the calculation below.

Also, since Turkey did not notify an external price for rice in its WTO notifications, we make use of the EU external price as a proxy.

1) Administered Price, 2008/09[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)3/	4) Level of support (1-2) X 3
870 TL/MT ($627[4/])	322.08 TL/MT ($202.44)	750,000 MT	411 m TL ($318 m)

1/ FAS GAIN Report TU9009, Grain and Feed Annual
2/ EU External Price (G/AG/N/EEC/30, March 22, 2001)
3/ FAS GAIN Report, Grain and Feed Annual, April 2011
4/ Based on 2008 $/YTL exchange rate.

Turkey also pays premiums to rice producers.

Program MY 20101/	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Rice Premium	100 TL/MT	0.075 b	$0.040 b

1/ FAS GAIN Report, Grain and Feed Annual 3/23/2010
* Based on MY 2010/11 rice production of 750,000 MT.

Rice AMS Calculation

Program MY 2010	AMS TL	AMS $
Price Support (2008)	0.411 b	$0.318 b
Rice Premium (2010)	0.075 b	$0.040 b
Total AMS	**0.486 b**	**$0.358 b**
DE MINIMIS THRESHOLD[1/]	**0.119 b**	**$0.065 b**

1/ Calculation of *de minimis* threshold in TL: Value of production: 750,000 MT x 1336 TL MT* = 1. billion TL
1.0 billion TL x .10 **= 100 million TL = *De Minimis.*** Calculation of *de minimis* threshold in $: Value of production: 750,000 MT x $878* = $658 million x .10 = **$65 million**
* FAS GAIN Report, Grain and Feed Annual April 2011

AMS spending on rice exceeds the *de minimis* level and therefore would be included in the Current Total AMS calculation.

Sugar

Turkey's sugar industry is highly regulated and government-controlled, with production quotas and a price support established by the government. Under Turkish law, the Turkish Sugar Corporation and the cooperative PANKOBIRLIK set prices for sugar beets and refined sugar.

Turkey's Price Support for Sugar Beets

1) Administered Price, 2010/11[1/]	2) Fixed External Reference Price[2/]	3) Production (2010/11)[3/]	4) Level of support (1-2) X 3
115 TL/MT ($62.53)	36.04 TL ($19.60)	16 million MT	1.26 b TL ($0.686 b)

1/ FAS GAIN Report Sugar Annual, March 2010. Initial Price for Sugar Beets.
2/ G/AG/N/TUR/14, May 30, 2002. Turkey WTO Domestic Support Notification
3/ FAS GAIN Annual Reports

Turkey indicated in its more recent WTO agricultural domestic support notification (G/AG/NTUR/14) that there were no private buyers for sugar, and apparently for that reason did not provide a price support calculation. There is no provision in the URAA exempting purchases by government entities from price support disciplines. Moreover, at present, the Turkish industry now consists of a combination of state-owned industries, private sector entities, and the Turkish sugar cooperative, Pankobirlik. Even though Turkey did not do a price support calculation in its notification, it did provide the external price needed to make a price support calculation (see Column 2 above).

Sugar AMS Calculation

Program MY 2010	AMS TL	AMS $
Sugar Price Support	1.26 b	$0.686 b
Total AMS	**1.26 b**	**$0.686 b**
DE MINIMIS THRESOLD	**0.218 b**	**$0.119 b**

1/ Calculation of *de minimis* threshold: Calculation of *de minimis threshold: Value* of production: 16 million MT x $74.44 MT* = $1.19 billion x .10 = **$119 million**
* Administered price used as proxy for sugar beet price.

The AMS calculation for sugar is above the *de minimis* threshold and therefore would be included in Turkey's Current Total AMS.

Export Subsidies

Turkish sugar production is broken down into A, B and C quotas. "A" quota sugar is sold at the high domestic Turkish sugar price onto the domestic market. Turkish manufacturers can buy "C" quota sugar at world market prices, and then export it onto the world market. "B" quota sugar may also be exported using subsidies. In January 2011, "C" quota sugar was selling for $594 MT, while "A" quota sugar sold at $1,310 MT.[17]

[17] The Sugarbeet Grower Magazine, "Sugarbeets in Turkey," January 5, 2011

Turkish exports of "C" quota sugar were relatively small in MY 2010, but have been large in the past. Turkish exports of both "B" and "C" quota sugar appear to meet the definition of an agricultural export subsidy under Article 9.1 of the URAA. In addition, a WTO dispute settlement panel found that EU C sugar exports under a similar system were illegally subsidized.[18] If Turkey is using export subsidies for sugar, then it would be in violation of its WTO commitments, since it has no allowance for the use of export subsidies on sugar.

Cotton

Turkey provides a premium of 420 TL/MT to cotton producers.

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Cotton Premium	420 TL/MT	0.252 b	$0.137 b

* Based on cotton production of 600,000 MT. Source: FAS GAIN reports.

Cotton AMS Calculation

Program MY 2010	AMS TL	AMS $
Cotton Premium	0.252 b	$0.137 b
Total AMS	**0.252 b**	**$0.137 b**
DE MINIMIS THRESHOLD	**0.533 b**	**$0.290 b**

1/ Calculation of *de minimis* threshold: Value of production: 600,000 MT x $4840 MT* = $2.9 billion
De minimis threshold: $2.9 billion x .10 = **$290 million**
* Turkish market price for cotton. FAS GAIN Annual Cotton Report, April 2011.

Turkish spending on the cotton premium is below *de minimis* threshold, and therefore would not be included in Turkey's Current Total AMS.

Soybeans

Turkish soybean producers receive a premium of 500 TL / MT.

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Soybean Premium	500 TL MT	0.025 b	$0.016 billion

*50,000 MT production. Source: FAS GAIN Annual Oilseeds Report, March 2011.

[18] See *European Communities - Export Subsidies on Sugar - Complaint by Brazil - Report of the Panel* (WT/DS266/R)

Soybean AMS Calculation

Program MY 2010	AMS TL	AMS $
Soybean Premium	0.025 b	$0.013 b
Total AMS	**0.025 b**	**$0.013 b**
DE MINIMIS THRESHOLD	**0.004 b**	**$0.002 b**

1/ Calculation of *de minimis* threshold: Value of production ($): 50,000 MT x $553 MT* = $27.6 million
De minimis threshold: $27.6 million x .10 = **$2.7 million**
* Turkish soybean price not available. EU soybean price used as proxy. Source: EU Commission, International Price Monitoring Letter, April 2011.

Turkey soybean premium payments exceed *de minimis* threshold and would therefore be included in the Current Total AMS calculation.

Sunflower Seed

Turkish sunflower seed producers receive a premium of 230 TL per MT.

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL*	Estimated Total Outlays MY 2010 $
Sunflower Seed Premium	230 TL/MT	0.218 b	$0.118b

*950,000 MT production. Source: FAS GAIN Annual Oilseeds Report, March 2011.

Sunflower Seed AMS Calculation

Program MY 2010	AMS TL	AMS $
Sunflower Seed Premium	0.218 b	$0.118 b
Total AMS	**0.218 b**	**$0.118 b**
DE MINIMIS THRESHOLD[1/]	**0.121 b**	**$0.066 b**

1/ Calculation of *de minimis* threshold: Value of production: 950,000 MT x $695 MT* = $660 million
De minimis threshold: $660 million x .10 = **$66 million**
* FAS Gain Oilseeds Annual Report, April 2011

Turkey sunflower seed premium payments exceed the *de minimis* threshold and would therefore be included in Turkey's Current Total AMS.

Livestock Subsidies

Aggregated subsidies data at the beginning of this section indicates that the Turkish livestock sector receives significant subsidies. However, information on those subsidies is not available through GAIN reports. Further research would be needed to determine the nature of these subsidies, and whether they should be included under the AMS calculation.

Current Total AMS

At the conclusion of the Uruguay Round Turkey notified support levels below the *de minimis* level. Therefore its AMS limit is zero.

Program	AMS TL	AMS $
Wheat Support	8.40 b	$4.578 b
Corn Support	1.213 b	$0.673 b
Barley Support	1.654 b	$.903 b
Oats Support	0.052 b	$0.027 b
Rye Support	0.068 b	$0.037 b
Rice Support	0.486 b	$0.358 b
Sugar Support	1.26 b	$0.686 b
Soybean Support	0.025 b	$0.013 b
Sunflower Seed Support	0.218 b	$0.118 b
CURRENT TOTAL AMS	**13.376 b**	**$7.393 b**
AMS LIMIT	**0**	**0**

Thailand

Thailand provides subsidies to rice farmers in the form of income payments, referred to in Thailand as the "Farmer's Income Insurance Scheme." Although the income insurance scheme has recently become the primary form of subsidy assistance, Thailand still maintains an active price support system for rice. In addition, Thailand maintains a price support and income insurance scheme for corn and cassava, although market prices for these products are currently above price support levels, and above levels that would generate direct income payments. Thailand also maintains a price support scheme for sugar, described in this report.

Thailand also provides forms of "soft credit" (i.e., low interest loans) to rice producers which it concedes in its most recent WTO domestic support notification are product-specific amber box subsidies, to be included in Thailand's AMS calculation. These credit subsidies are also available to corn, manioc and sugar farmers.

Thailand's overall AMS limit in the WTO is 19 billion baht ($627 m). In its most recent WTO domestic support notification (G/AG/N/THA/72), dated October 27, 2010, Thailand covers Thai subsidies in calendar years 2005-2007. Thailand notified AMS subsidy levels during these years of 17.1 billion baht ($564 m) in 2005, 12.3 billion baht ($406 m) in 2006, and 15.0 billion baht ($495 m) in 2007. All of this notified AMS subsidy spending was for one commodity, rice. In other words, even based on Thailand's own WTO domestic support notifications, which inaccurately calculated price support subsidy amounts for a number of products, Thailand came relatively close to violating its AMS obligations in 2005-2007.

We calculate Thailand's AMS spending in the range of 471 billion baht ($15.2 b) to 538 billion baht ($17.1 b), depending on which of two support programs for rice are used for the calculation. Both of these totals are far above Thailand's AMS spending limit of 19 billion baht.

Rice

Price support Programs

Although Thailand shifted emphasis from price supports to direct payments to rice producers beginning in marketing year 2009/10, it continues to operate price support programs under which rice is purchased to support domestic prices. Until recently the most important of these programs was the **"Paddy Rice Pledging Scheme"**. Although this program still exists, it is currently inactive. There are a range of intervention prices for different kinds of paddy rice under the Pledging Scheme, but one of the lower intervention prices for a commonly grown paddy rice in Thailand (actually referred to in Thailand as "white rice") is 11,000 baht ($363) per metric ton. In MY 2008/09, the last year of major Pledging Scheme operation, the Thai government purchased over 6 million MT of rice, valued at close to $1 billion.

1) Administered Price, 2008/09[1/]	2) Fixed External Reference Price[2/]	3) Production (2008/09)[1/]	4) Level of support (1-2) X 3
10,800 baht / MT ($328)	5,497 baht / MT ($167)	29 m MT	153 b baht ($4.669 b)

Based on 2008 exchange rate 32.9 baht = $1..
1/ White Paddy Rice. Source: USDA FAS reports
2/ USDA/FAS Bangkok

It is worth noting that in Thailand's WTO notification, it does not provide an external price (see Column 2 above), nor does it provide an explanation of its methodology for calculating the price support-related AMS for rice, as required under WTO notification rules. The 5,497 baht/MT estimate of an external price (average FOB price over the 1986-88 period) was drawn from a report by the USDA/FAS office in Bangkok.

Thailand now operates what is referred to as a "**Direct Purchase Program**" for rice, a second price support program that operates in conjunction with the Income Insurance Scheme (see below). In MY 2010/11, the Direct Purchase Program appears to have supplanted the Paddy Rice Pledging Scheme as the primary form of price support for Thai rice. The intervention price under the Direct Purchase scheme is set at the Thai benchmark price, a price established on a weekly basis by the Thai government, and intended to reflect prevailing market prices. In early April 2011, the benchmark price for white paddy rice was 8,900 baht MT. The average benchmark price for white paddy rice in 2010 was about 8,500 baht.

In 2011 the Thai government has authorized the purchase of two million MT of rice under the Direct Purchase Program. In MY 2009/10, 150,000 MT of rice was purchased under the Program, and it is anticipated that a similar amount of rice will actually be purchased under the program in 2011.

Even though purchases under the program are limited to 2 million MT, we use total production as the basis for the calculation. As we mentioned in the introduction to this report, the Panel in the *Korea – Beef* dispute settlement case recognized that "even governmental purchases at a level below the legislatively predetermined quantity limit could, depending on market conditions, suffice to maintain market prices at above the minimum levels for all marketable production."[19] The effect of the Direct Purchase Program is to ensure that the domestic market price remains at or near the benchmark price. The Thai government would not need to purchase more than 2 million MT to accomplish that purpose. Indeed, the U.S. government uses total production in the AMS calculations for its sugar and dairy price support programs even though government purchases are often minimal or non-existent. The price we use in the calculation is the average benchmark price for white paddy rice in 2010.

[19] *Korea - Measures Affecting Imports of Fresh, Chilled and Frozen Beef - Report of the Panel*, p. 194 (WT/DS161/R).

1) Administered Price, 2010[1/]	2) Fixed External Reference Price[2/]	3) Eligible Production (2010/11)[3/]	4) Level of support (1-2) X 3
8,500 baht / MT ($275.12)	5622 baht / MT ($182.06)	30 m MT	86.6 b baht ($2.79 b)

Exchange rate: $1 = 30.8 Thai baht
1/ Approximate average benchmark price for white paddy rice in 2010.
2/ USDA/FAS Bangkok

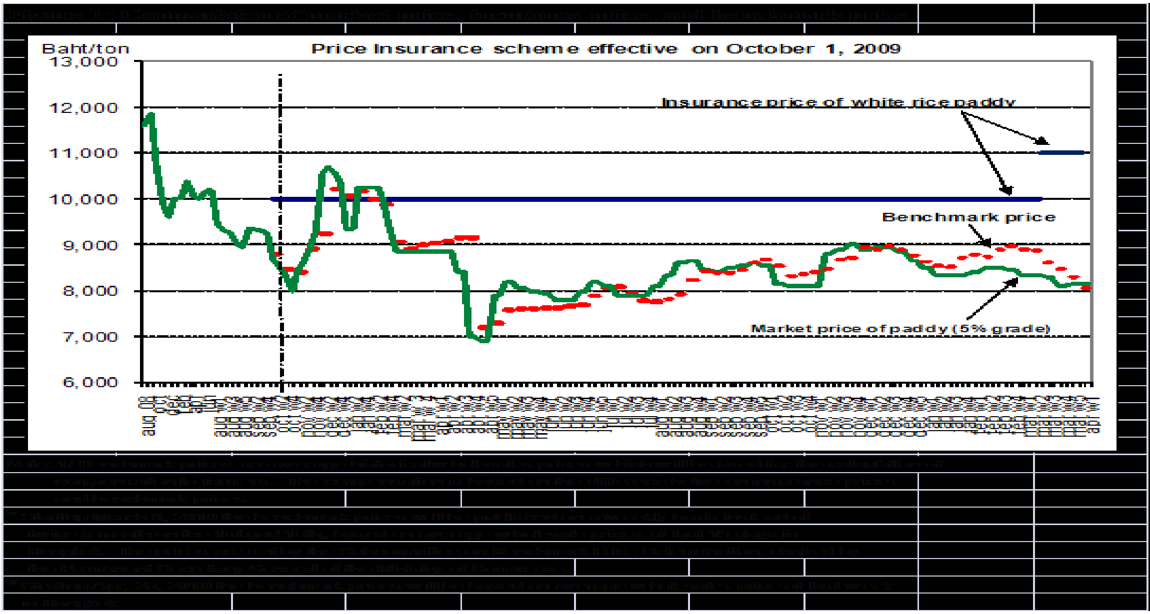
Other Amber Box programs

Beginning in MY 2009/10, Thailand introduced the "**Farmer's Income Insurance Scheme**" (IIS) as a primary means of supporting Thai rice farmers. With the introduction of the income insurance scheme, price support programs are intended to play a secondary role in providing assistance to farmers. The income insurance scheme works like a deficiency payment scheme. The Thai government makes direct payments to farmers based on the difference between a paddy rice target price (in the case of Thailand, the "insurance price") and a "benchmark price" set on a weekly basis, with the benchmark price intended to reflect market prices for paddy rice. The Direct Purchase Program operates to ensure that the benchmark price is essentially the price floor.

A recent FAS GAIN report (TH 1035, March 22, 2011) indicates that "insurance" (i.e. target) prices were increased by 5-10 percent on March 8, 2011. The current insurance price for white paddy rice is 11,000 baht MT ($363 MT) – the same level as the support price under the Paddy Rice Pledging Scheme. (Thus the incentive price to the producer has remained constant despite the change in programs.) The eligible tonnage per farm was also increased, to 30 MT per farm, from 25 MT. The FAS report indicates that the Thai National Rice Policy Committee said the increase was necessary to "guarantee farmers' profit margins at 30 to 40 percent, since production cost is approximately 20 percent higher" than the previous year.

That same GAIN report indicates that the government paid IIS subsidies of about 48 billion baht ($1.6 b) in MY 2009/10.

The graph below illustrates the operation of the IIS. The graph is from late 2009. Since that time, and as noted above, the insurance price for white paddy rice has been increased to 11,000 baht MT.



Source: FAS GAIN Report TH1039, 3/29/2011

A report by the USDA/FAS office in Bangkok indicates that the Thai government eventually hopes to make the income insurance scheme for rice self-financing, through the payments of premiums by farmers. However, at present, farmers pay no premiums.

The IIS involves a direct payment to all rice producers that is based on price and amount produced. It therefore does not qualify for the Article 6.2 exemption and should unquestionably be classified as a product-specific amber box payment.

Program	Total Outlays, 2009/10 [1/]
Income Insurance Scheme (2009/10)	48 b baht ($1.55b)

Exchange rate: $1 = 30.2 Thai baht

1/ FAS GAIN Report TH1035, "Thailand Grain and Feed Circular", dated March 22, 2011.

In addition, in its recent WTO notification on agricultural domestic support, Thailand listed for calendar year 2007 a "**soft loan**" (i.e., low interest loan) program operated by Thailand's Bank for Agriculture and Agricultural Cooperatives (BAAC).[20] Thailand notified this program as a product-specific amber box subsidy for rice, in the amount of 11.9 billion baht. Funding amounts subsequent to CY 2007 are not made clear in BAAC documents that we examined. We have therefore used 2007 spending in our calculations

[20] Thailand's Domestic Support Notification, G/AG/N/THA/72, dated October 27, 2010

Program	Total Outlays, CY 2007[1/]
Soft Loan Program 2007	11.9 b baht ($385 m)

Exchange rate: $1 = 30.2 Thai baht
1/ Thailand's Domestic Support Notification, G/AG/N/THA/72, dated October 27, 2010

Thailand's AMS for rice equals the level of support from the price support programs plus expenditures for other Amber Box programs.

Presented below are two alternative methods of calculating Thailand's AMS for rice. The first one includes the Paddy Pledging Scheme and includes all Thai rice production. The other, a more conservative method, is based on the Direct Purchase Program and assumes that only 2 million MT of rice is eligible for procurement.

AMS for Rice Using Paddy Pledging Scheme

Program	AMS Baht	AMS $
1) Price support (2010)	153 b	$4.669 b
2) Income Insurance Scheme (2009/10)	48 b	$1.55b
3) Soft Loan Program (2007)	11.9 b	$0.385 b
TOTAL AMS	**212.9 b**	**$6.604 b**
DE MINIMIS THRESHOLD[1/]	**26.8 b**	**$868 m**

1/ Calculation of *de minimis* threshold: Value of production: 30.8 m MT x $281.84* = $8.68 b
De minimis threshold: $8.68 b x 0.10 = **$868 m**
* Average price for white paddy in 2010.

AMS for Rice Using Direct Purchase Program

Program	AMS Baht	AMS $
1) Price support (2010)	86.6 b	$ 2.790 b
2) Income Insurance Scheme (2009/10)	48.0 b	$1.55 b
3) Soft Loan Program (2007)	11.9 b	$0.385 b
TOTAL AMS	**146.5 b**	**$4.725 b**
DE MINIMIS THRESHOLD	**26.8 b**	**$868 m**

Export Subsidies

There is strong evidence to indicate that Thailand is subsidizing the export of rice by selling rice out of intervention stocks at prices substantially lower than the price at which they were acquired. The Thai government maintains significant stocks of rice accumulated both through the Rice Pledging Scheme and the Direct Purchase scheme. A USDA/FAS GAIN report describes the sale of intervention stock rice for export at "current market prices, which are approximately 30 percent below acquisition prices paid a year ago, which would generate losses of around 7,000 baht per MT."[21] According USDA/FAS Bangkok, rice out of government intervention stocks is solely for export, and is sold at prices significantly below the acquisition price.

Thailand bound its export subsidy limit for rice at zero in the Uruguay Round. The use of export subsidies for rice would thus violate Thailand's WTO commitments. In its most recent notification to the WTO on export subsidies (G/AG/N/THA/69), Thailand indicated that it exported 102 million MT of rice in calendar year 2008, but did not make use of any export subsidies for the product.

Corn

Thailand also maintains a price support program for corn. During a dip in corn prices in the 2008/09 marketing year, the Thai government support domestic prices by purchasing close to one million MT of corn from Thai farmers. The intervention price is the Insurance Price, set at 8500 baht MT in 2008/09. In recent months there has been no procurement under the price support program because market prices have been well above intervention price levels.

The support price calculation for corn in the table below is based on the 2008/09 marketing year, since recent FAS GAIN reports have not provided support prices for the last two marketing years.

Price Support Program for Corn

1) Administered Price, 2008[1/]	2) Fixed External Reference Price[2/]	3) Production (2008/09)[1/]	4) Level of support (1-2) X 3
8500 baht / MT ($258)	4615 baht / MT ($140.27)	4.5 m MT	17.4 b baht ($531 m)

1/ From FAS GAIN Report TH 9044.
2/ Thailand external reference price not available. We used the external reference price for Brazil, another net corn exporter, for this calculation.
2008 exchange rate conversion 32.9 bhat = $1

[21] FAS GAIN Report No. TH9063, "Intervention Stocks Sell Off Likely" April 27, 2009.

Other Amber Box Programs

As with rice, corn is eligible for the **Income Insurance Scheme** (IIS). The annual report of Thailand's Bank for Agriculture and Agricultural Cooperatives (BAAC) indicates government spending of 5.571 billion baht on IIS subsidies for corn farmers in FY 2009. However, corn prices are currently above the Insurance Price, so no payments under the IIS program are expected to be made in the current marketing year.

As noted in the discussion on IIS subsidies for Thai rice farmers, these subsidies are unquestionably amber box subsidies that should be included in the product-specific calculation.

Program	Total Outlays, 2009/10 [1/]
Income Insurance Scheme 2009	5.5 b baht ($177 m)

1/ Source: Bank for Agriculture and Agricultural Cooperatives, Annual Report 2009.

2008/09 AMS for Corn

Program	AMS Baht	AMS $
1) Price support (2008)	17.4 b	$531 m[1/]
2) Income Insurance Scheme (2009)	5.5 b	$177 m
<u>Total AMS</u>	**<u>22.9 b</u>**	**<u>$676 m</u>**
DE MINIMIS THRESHOLD (2010)[2/]	**2.8 b**	**$90.7 m**

1/ Based on 2008 exchange rate.
2/ <u>Calculation of *de minimis* threshold</u>: Value of production: 30.8 m MT x $281.84*/MT = $8.68 b
De minimis threshold: $8.68 b x 0.10 = **$868 m**
* Average price for white paddy in 2010.

2010 AMS for Corn

Program	AMS Baht	AMS $
1) Price support[1/]	17.4 b	$531 m
2) Income Insurance Scheme	0	$0
Total AMS	**<u>17.4 b</u>**	**<u>$499 m</u>**
DE MINIMIS THRESHOLD	**2.15 b**	**$69.8 m**

1/ Based on 2008/09 price support and production levels.

Thailand's AMS for corn in 2010, significantly exceeds the *de minimis* level.

<u>Cassava (manioc)</u>

Price Support

Thailand also operates a price support program for cassava, also referred to as manioc. According to press reports, the intervention price for cassava was set at 1,700 baht ($56.53) per MT for MY 2009/10. Since Thailand has not notified an external reference price for manioc, and no other WTO member has notified an external price that we are aware, it is impossible to calculate whether the Thai support price for cassava generated an AMS. However, as late as MY 2009, the Thai government was active in buying cassava under the price support program.

Other Amber Box Programs

As with rice and corn, the Thai government has provided subsidies to Thai cassava farmers through the **Income Insurance Scheme**. The BAAC annual report for FY 2009 indicates that the Thai government spent 2.035 billion baht on IIS subsidies for cassava farmers in FY 2009. According to USDA/FAS Bangkok, no payments are expected in the current marketing year, since market prices are well above the insurance price level.

As noted above, the IIS is unquestionably an amber box program that should be included in the product-specific AMS calculation.

Program	Total Outlays, 2009/10 [1/]
Income Insurance Scheme 2009	2.035 b baht ($65.8 m)

1/ FAS GAIN Reports

Program	Total Outlays, 2010/11 [1/]
Income Insurance Scheme 2010/11	0

1/ FAS GAIN Reports

Calculation of *De Minimis* Threshold:

Thailand notified a *de minimis* threshold for cassava (manioc) at 3.17 billion baht ($105 million) in its most recent WTO domestic support notification. Income insurance expenditures in 2009 do not by themselves exceed that level. However, a proper calculation of the support provided by the price support system would almost certainly put Thailand over the threshold for cassava.

AMS Calculation

2009/10

Program	AMS Baht	AMS $
Price Support Scheme	Unknown	Unknown
Income Insurance Scheme 2009	2.035 b	$65.8m
Total AMS	**2.035 b**	**$65.8 m**
De minimis threshold	**3.170 b**	**$105 m**

Sugar

The Thai sugar industry is highly regulated and government controlled. Sugar production and trade is overseen by the Thai Cane and Sugar Corporation, which consists of government, sugar mill and sugar producer representatives. The Thai government mandates that sugar mills buy sugarcane from producers at a specified support price and compensates mills owners if market prices for refined sugar fall below the support price a specified level. For MY 2010/11, the sugarcane price support is set at 900 baht ($29.97) per MT.

1) Administered Price, Sugarcane 2010[1/]	2) Fixed External Reference Price Sugarcane[2/]	3) Production (2010/11)3[3/]	4) Level of support (1-2) X 3
900 baht/MT ($29.12)	**465 baht/MT ($15.06)**	71 m MT	308 b baht ($9.98 b)

1/FAS GAIN Report TH0066, Thailand Sugar Annual, 2010.
2/ FAS GAIN Report TH0066, Thailand Sugar Annual, 2010. Thailand Average Domestic cane price, 1986-1988
3/ FAS GAIN Report TH0066

The Thai system for marketing sugar is similar to the Turkish sugar program described above – and to the system which the EU had to abandon in response to an adverse dispute settlement ruling. Production is divided up between three separate quotas (A, B and C), one for domestic consumption and two for export. Each sugar mill sells a specified amount of refined sugar (the A quota) onto the market at a designated price. The rest is exported.

In addition, the Thai government has in the past provided "soft loans" to sugar producers. Soft loan subsidies to Thai producers may cover a range of production activities. We were unable to obtain soft loan expenditure amounts for sugar in recent years.

AMS Calculation for Sugar

Program	AMS Baht	AMS $
Price Support Scheme (2010)	308 b	$9.98 b
Soft Loans	unknown	unknown
Total AMS	**308 b**	**$9.98 b**
De minimis threshold[1/]	**86.4 b**	**$2.8 b**

1/ Calculation of *de minimis* threshold: Value of production: 71 m MT x $39.57/MT = $28 b
De minimis threshold: $28 b x 0.10 = **$2.8 b**

Current Total AMS

Thailand's WTO limit on trade distorting subsidies under the Uruguay Round Agricultural Agreement (i.e., its "Base Total AMS") is 19.028 billion baht.

Note that in the calculations below, income insurance payments are not included for corn or cassava, because in the current marketing year market prices are above the price insurance level, and no payments are therefore expected.

Program	AMS Baht	AMS $
RICE **1) Price support (2010)**	86.6 b	$2.79 b
2) Income Insurance Scheme (2009/10)	48 b	$1.55 b
3) Soft Loan Program (2007)	11.9 b	$385 m
CORN **Price Support (2008)**	17.4 b	$531 m
SUGAR **Price Support (2010)**	308 b	$9.98 b
TOTAL AMS	**471.9b**	**$15.236 b**
AMS LIMIT	**19.028 b**	**$634 m**

Thailand's estimated AMS exceeds its AMS limit. It is worth noting that Income Insurance Scheme payments for rice alone exceed the AMS threshold by a considerable margin. Due to inadequate data, these AMS calculations do not include the price support program for cassava.