Solidarité's comments on DTB's report on domestic support in key emerging countries
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Domestic Support and WTO Obligations in Key Developing Countries

Prepared by DTB Associates, LLP
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[Comments are in square brackets, justified, arial 11 blue, to the left of margin.]

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.

[DTB's attempts to show that India, Brazil, Turkey and Thailand are using huge trade-distorting agricultural supports, much beyond their WTO commitments and allegedly much above those of the EU and US, have not succeeded, for the following main reasons:
- It has made a false interpretation of 'eligible production', relying on the Korea – beef panel of 31 July 2000 saying that eligible production is always the whole production instead of relying on the Appellate Body statement of 11 December 2000 that "*a government is able to define and to limit "eligible" production*".

- It has used systematically the methodology of URAA Annex 3 paragraph 8 to assess the market price support – related to fake market price supports not implying subsidies – instead of that of paragraph 10, adapted to most cases in these countries where the market price support implies actual subsidies. And it has not understood the small impact that the administered prices would have had without the high tariffs, often deterrent to imports.

- In the case of India it has counted twice the price support on wheat and rice: first with the public procurement of wheat and rice subsidized afterwards for domestic food aid, and notified as such in the green box, and a second time as a market price support in the AMS. But the US has only (under-)notified once, in the green box, its procured US food.

- It has ignored that a large share of cereals in these countries are self-consumed on farms so that they do not get subsidies.

- It has ignored that a large share of farmers in these countries are 'resource-poor' so that their input subsidies are exempted from reductions according to the URAA Article 6.2.

- It has preferred not to mention the much larger subsidies of the developed countries, particularly the EU and US, saying instead that their current agricultural supports have become much less trade-distorting, hiding that their huge alleged green box subsidies have the same dumping and import-substitution effects than outright export and amber subsidies.]

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.

[No they are more trade-distorting as they are hidden in the so-called green box allowing the EU to increase them without limit, although they have the same dumping effect and import-substitution effect as amber box subsidies.]

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.

[To reinforce your arguments against the emerging countries, you should have begun to concentrate on the US and EU which are in huge violation of their commitments[1].]

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

[1] Jacques Berthelot, *Comments on WTO disciplines on agricultural support*, September 15, 2011 (http://www.solidarite.asso.fr/IMG/pdf/WTO_disciplines_on_agricultural_support_J-_Berthelot_comments-3.pdf); *The US cannot cut its agricultural supports in the Doha Round*, August 3, 2009 (http://www.solidarite.asso.fr/anglais/resources/jacques-berthelot-63/article/papers-2009); *The CAP subsidies are incompatible with the WTO Agreement on agriculture*, 31 March 2010 (http://www.solidarite.asso.fr/anglais/resources/jacques-berthelot-63/article/papers-2010?debut_documents_joints=10#pagination_documents_joints).

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.

[A first remark is that it is quite fair that these emerging countries would have higher prices than the US given several basic characteristics of their agricultural economy: lower yields generally and much lower arable area per active agricultural worker, as shown in table 1

Table 1 – Yields and arable land per active agricultural worker: US and emerging countries

	Brazil	China	India	Thailand	Turkey	U.S.
Yields in kg/ha: average of 2007 to 2009						
Cotton seed	3673	3876	1265	1214	4027	2204
Maize	3860	5328	2251	4061	6908	98190
Paddy rice	4154	6520	3301	2947	7419	7902
Wheat	2283	4703	2806	1038	2297	2904
Active agricultural population (AAP) in 1000, arable land in 1000 ha and ha/AAP						
Active agricultural population	11336	502691	266751	19494	8173	2562
Arable land	61200	109999	157923	15300	21351	162751
Arable land per AAP	5.40	0.22	0.59	0.78	2.61	63.5

Source: FAOSTAT

If the US yields are relatively low for cotton and wheat, on the other hand the average size of farms in the agricultural census of 2007 was of 228 ha for cotton (but 55% of farms have more than 405 ha and produce 55.3% of total production), 128 ha for wheat (but 47.5% of farms have more than 405 ha and produce 46% of total production), 100.4 ha for maize and 184 ha for rice.

A second even more powerful reason of these gaps in prices are the huge subsidies received by US farmers for these crops, as shown in tables 2 to 5, where we have grouped together the coupled subsidies consisting essentially of marketing loans benefits and counter-cyclical payments, whereas the decoupled aid is essentially the fixed direct payment[2].

Table 2 – US wheat: coupled aid, insurance aid, decoupled aid and price from 2000 to 2010

$1000 and $/tonne	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production: 1000 t	60,639	53,000	43,704	63803	58,697	57,242	49,216	55,820	68,016	60,314	60,103
Coupled aid	3229	1410	32	98	64	51	-11				
Insurance aid	120,2	239,1	247	311,2	325,3	336,7	264,1	525,4	936,8	1092,4	685,4
Decoupled aid	1335	1077	1045	753	1146	1136	1076	850	1032	1138	1061
Total aids	4684,2	2726,1	1324	1162,2	1535,3	1523,7	1329,1	1375,4	1968,8	2230,4	1746,4
Coupled aid/tonne	53,2	26,6	0,7	1,5	1,1	0,9					
Insurance aid/t	2	4,5	5,7	4,9	5,5	5,9	5,4	9,4	13,8	18,1	11,4
Decoupled aid/t	22	20,3	23,9	11,8	19,5	19,8	21,9	15,2	15,1	18,9	17,7
Total aid/tonne	77,2	51,4	30,3	18,2	26,1	26,6	27,3	24,6	28,9	37	29,1
Price	96,3	102,2	130,9	125	125	125,7	156,6	238,2	249,3	179	221,3
Aid per t/price	80,2%	50,3%	23,1%	14,6%	20,9%	21,2%	17,4%	10,3%	11,6%	20,7%	13,1%

Source: USDA

[2] Jacques Berthelot, *The lessons to draw for the CAP from the huge predominance of contra-cyclical aids in the U.S.*, Solidarité, July 4, 2011, http://www.solidarite.asso.fr/anglais/resources/jacques-berthelot-63/article/papers-2011

Table 3 – US corn: coupled aid, insurance aid, decoupled aid and price from 2000 to 2010

$ million, $/ton	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production:1000t	251852	241375	227765	256227	299874	282261	267501	331175	307142	332536	316154
Coupled aid	7829,1	3454,4	1180,9	23	472,6	4031,2	6844,8	1631,7			
Insurance aid	194,3	492,1	510,6	620,5	793	712,8	871,2	1739,3	2116,4	2038,3	1748,6
Decoupled aid	2348	1897	1835	1408	2115	2101	1394	1591	1950	2110	1938
Total aids	10371,4	5843,5	3526,5	2051,5	3380,6	6845	9110	4962	4066,4	4148,3	3686,6
Coupled aid/t	31,1	14,3	5,2	0,1	1,6	14,3	25,6	4,9			
Insurance aid/t	0,8	2	2,2	2,4	2,6	2,5	3,3	5,6	6,9	6,1	5,5
Decoupled aid/t	9,3	7,9	8,1	5,5	7,1	7,4	5,2	4,8	6,3	6,3	6,1
Total aid/tonne	41,2	24,2	15,5	8	11,3	24,2	34,1	15,3	13,2	12,4	11,6
Price	72,8	77,6	91,3	95,3	81,1	78,7	119,7	165,4	160	139,8	190,2
Aid per t/price	56,6%	31,2%	17%	8,4%	13,9%	30,8%	28,5%	9,3%	8,3%	8,9%	6,1%

Source: USDA

Table 4 – US cotton: coupled aid, insurance aid, decoupled aid and price from 2000 to 2010

$1000 and $/tonne	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production: 1000 t	3898	4604,7	4040,4	4140,2	5273,3	5418,3	4896,2	4356,1	2906,4	2764,6	4105,1
Coupled aid	4099	3184	4673	3114	1149	5300	4712	3343	1653	1618	1079
Insurance aid	161,7	266,9	197,2	217,3	257,6	212	280,5	198,9	253,5	213,2	319,4
Decoupled aid	1335	1077	1045	753	1146	1136	1076	850	1032	1138	1061
Total aids	4832,7	3925,9	5322,2	3808,3	2028,6	6120	5567,5	3995,9	2480,5	2428,2	1987,4
Coupled aid/tonne	1052	692	1157	752	218	978	962	767	569	585	263
Insurance aid/tonne	41,5	58	48,8	52,5	48,8	39,1	57,3	45,7	87,2	77,1	77,8
Decoupled aid/tonne	146,7	103,2	111,9	115,2	118	112,2	117,4	104,2	197,5	215,9	143,5
Total aids/tonne	1239,8	852,7	1317,3	919,5	384,7	1129,5	1137,1	917,3	853,4	878,3	484,1
Price	1098	657	981	1363	917	1052	1025	1307	1049	1387	1797
Aid per tonne/price	112,9%	129,8%	134,4%	67,5%	42%	107,4%	110,9%	70,2%	81,4%	63,3%	26,9%

Table 5 – US rice: coupled aid, insurance aid, decoupled aid and price from 2000 to 2010

$1000 and $/tonne	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production: 1000 t	5941	6764	6457	6419	7463	7103	6267	6344	6514	7133	7554
Coupled aid	1401	1043	698	1065	400	151	189	54			
Insurance aid	9,1	13,4	12,5	11,5	14,2	13,9	14,7	17,2	22,8	41,6	50,1
Decoupled aid	431	353	343	311	427	424	402	318	402	417	418
Total aids	1841,1	1409,4	1053,5	1387,5	841,2	588,9	605,7	389,2	424,8	458,6	468,1
Coupled aid/tonne	235,8	154,2	108,1	165,9	53,6	212,6	30,2	8,5			
Insurance aid/tonne	1,5	2	1,9	1,8	1,9	2	2,3	2,7	3,5	5,8	6,6
Decoupled aid/tonne	72,5	52,2	53,1	48,5	57,2	59,7	64,1	50,1	61,7	58,5	55,3
Total aids/tonne	309,8	208,4	163,1	216,2	112,7	274,3	96,6	61,3	65,2	64,3	61,9
Price	123,7	93,7	99	178,1	161,6	168,7	219,6	282,2	370,4	312	275,6
Aid per tonne/price	250,4%	222,4%	164,7%	121,4%	69,7%	162,6%	44%	21,7%	17,6%	20,6%	22,5%

Source: USDA

The above data are largely under-estimated as we have only considered the subsidies to the products themselves and not the input subsidies: agricultural loan subsidies, irrigation subsidies – quite huge for rice (100% acreage irrigated in 2008), corn (72%), cotton (65%), soybean (57%) and even wheat (36%) –, agricultural fuel subsidies, and a large share of the insurance subsidies: reimbursements of the private companies for the delivery of the policies and payments of their underwriting gains, and the administrative expenses of the Risk Management Agency. Furthermore we have not taken into account that US farmers growing corn, and even wheat, have been indirectly hugely subsidized by the spikes in their prices due to the corn ethanol policy and the VEETC (volumetric ethanol excise tax credit).

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.
[Not at all! All trade economists, including of OECD and the World Bank, are aware that this methodology is meaningless, at least for the market price support component of the AMS linked to administered prices (more below)].
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.

[Indeed, according to URAA Annex III paragraph 10: "*10. Non-exempt direct payments: non-exempt direct payments which are dependent on a price gap shall be calculated either using the gap between the fixed reference price and the applied administered price multiplied by the quantity of production eligible to receive the administered price, or using budgetary outlays*". It is this methodology that DTB should have used for India, Brazil, Turkey and Thailand because their price support implied actual subsidies and not fake market price supports implying no subsidy.]

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.

[Not at all because this fixed reference price is that of 1986-88 and not the current world reference price! As many trade experts have stressed[3], the market price support (MPS) calculation based on the gap between the fixed reference price of 1986-88 and the current administered price times the benefitting production level is meaningless, first because it would be impossible to maintain a current intervention price supporting the domestic market price unless there are at the same time other most powerful mechanisms maintaining a high level of domestic price, beginning by a high import protection or/and large export subsidies. They are indeed the very high tariffs on US and EU dairy products, together with large export subsidies in the EU, which explain why the US administered price for milk has always be lower than the domestic market price. In the EU also, beyond deterrent dairy tariffs, huge export subsidies and production quota since 1984 have played a major role to keep the domestic prices of milk above the milk-equivalent intervention prices of butter and SMP, at least until 2004 when their reduction decided by the CAP reform of 1999 was compensated by dairy premium, then transferred to the SPS (single payment scheme) in 2007.

More generally, as world agricultural prices are dumping prices for most products, at least for those exported by the EU and US, to consider the gap between domestic and world prices as a support to agriculture, and what is more, as a 'public transfer' to producers, is quite bold. Economists consider generally that public transfers are subsidies but OECD assimilates this gap between domestic and world prices – in other words import protection – as a 'subsidy of consumers to producers', the first ones enduring a 'negative consumers' surplus' since they are deprived of their 'entitlement' to pay their food at world prices ! From this to say that it is a 'public transfer', we can't make head nor tail of it. The more so as those 'consumers' to whom the farmers are selling their products are not households but, as OECD recognizes it, they are 'the first *consumers* (measured at the farm gate)', i.e. traders and agri-food industries. As world prices are highly dumped prices, import protection is quite justified.]

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[3] Harry de Gorter and Merlinda Ingco, *The AMS and Domestic Support in the WTO Trade Negotiations on Agriculture: Issues and Suggestions for New Rules*, 25 September 2002, http://siteresources.worldbank.org/INTARD/825826-1111044795683/20424518/AMSandDomesticSupportintheWTOTradeNegotiations.pdf; William R. Cline, *The Doha Round, Agriculture, and the Developing Countries*, USDA, 2007 Agriculture Outlook Forum, USDA 01-02/03/07; Harry de Gorter et J. Daniel Cook, *Domestic Support in Agriculture: The Struggle for Meaningful Disciplines*, 2005, http://siteresources.worldbank.org/INTRANETTRADE/Resources/239054-1126812419270/7.DomesticSupport_updated_on12Dec05.pdf; Jacques Berthelot, *Agriculture: Doha talks, market price support and Enron accounting*, Third World Network, South-North Development Monitor, SUNS #6535 - 11 August 2008, http://www.twnside.org.sg/title2/wto.info/twninfo20080813.htm;
David Orden, David Blandford and Tim Josling, *WTO disciplines on agricultural support*, Cambridge University Press, 2011; see also on this book: *Comments of Jacques Berthelot on WTO conference*, September 2011, 15th, http://www.solidarite.asso.fr/IMG/pdf/WTO_disciplines_on_agricultural_support_J-_Berthelot_comments-3.pdf

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.

[Thanks at least to have underscored this essential difference between developed countries and developing countries, a difference that the WTO Revised Draft on agricultural modalities of 6 December 2008 and the previous Drafts have eliminated, in contradiction with the URAA article 6.4, so as to favor the developed countries.[4]]

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.

[This is not true: for milk the EU uses only the production of butter and non-fat dried milk (NFDM) as its support ('intervention') prices are on butter and NFDM. And the US, which had notified the market price support (MPS) for the whole milk production up to 2007, has changed the MPS of milk in the 2008 Farm Bill and has thus notified only the support for the production of butter, NFDM and Cheddar cheese in its notifications for 2008 and 2009.

This new way to notify the dairy MPS has been hailed unanimously by the US official institutions as by most researchers as it has allowed to reduce the notified milk AMS from $4.880 billion in 2006 and $5.011 billion in 2007 to $2.925 billion in 2008 and $2.827 billion in 2009[5]. However, despite the unanimity of US experts, this calculus does not comply with the Agreement on Agriculture (URAA) rules: if you change the rule to compute the dairy AMS as being the sum of the MPS for butter, cheddar cheese and nonfat dry milk (NFDM), you have to apply the same calculus for the base period 1986-88. Indeed Article 1 of the URAA states that "*Support provided during any year of the implementation period and thereafter*" must be "*calculated in accordance with the provisions of Annex 3 of this Agreement and taking into*

[4] Jacques Berthelot, *Comments on the December 2008 Revised draft modalities on agriculture*, December 11, 2008.]

[5] Randy Schnepf and Charles Hanrahan, *WTO Doha Round: Implications for U.S. Agriculture*, Congressional Research Service, July 24, 2008; David Blandford, David Laborde and Will Martin (http://ictsd.net/downloads/2008/07/124.pdf); FAPRI (http://www.fapri.missouri.edu/outreach/publications/2008/FAPRI_MU_Report_08_08.pd); Christopher Wolf (https://www.msu.edu/~mdr/vol13no3/wolf.html).

account the constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the Member's Schedule" (see the reference in the next comments). Precisely Annex 3 of the URAA states: "*5. The AMS calculated as outlined below for the base period shall constitute the base level for the implementation of the reduction commitment on domestic support*". Therefore, as the US has changed the methodology to compute its dairy AMS from 2008 on, it cannot use a dairy MPS calculated on the basis of another methodology. The more so as the US commitments stated that "*Eligible production is total production*".

This is acknowledged by Ivan Roberts and Neil Andrews: "*If the change to a processed product basis requires a change in base prices and in the coverage of commodities from milk to dairy products, what are the implications for the base levels of support for dairy and for US agriculture as a whole, and should any changes be reflected in overall US committed AMS limits for agriculture as a whole?*"[6]. Besides, they argue: "*The change from milk-based to dairy-product-based support prices could… mean that milk used for direct human consumption and for dairy products, other than cheddar cheese, butter and non-fat dry milk, might no longer be considered to be supported for the purposes of calculating the US AMS*".

Therefore, given the levels of support prices and production in the base period 1986-88, the total dairy AMS for the sum of butter, non-fat dry milk and Cheddar cheese was $2.314 billion instead of the notified $5.409 billion for 1986-88. Consequently the total applied AMS for 1986-88 was not $23.879 billion but $20.784 billion and the final bound total AMS (FBTAMS) in 2000 was not $19.103 billion (80% of 23.879) but only $16.627 billion (80% of 20.784). And the allowed FBTAMS at the end of the Doha Round implementation period, once cut by 60%, will bring it from $7.641 billion to $6.651 billion.]

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

[6] Ivan Roberts and Neil Andrews, *Major US farm support policies and their links to WTO domestic support Commitments*, ABARE research report 09.1 January 2009, http://adl.brs.gov.au/data/warehouse/pe_abarebrs99001596/rr09.01_us_farm_policies_report.pdf

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**

[This would be impossible without the simultaneous presence of high tariffs and/or export subsidies].

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.

[DTB interpretation of the Korea-beef panel is questionable because too selective. It should have quoted also the Appellate Body report in the same case, on which Lars Brink makes the following comments: "*The quantity that the government has announced is eligible to purchase constitutes the eligible production in this case, even if it then actually purchases only a smaller quantity*"[7]. Indeed the Appellate Body stated: "*In establishing its program for future market price support, a government is able to define and to limit "eligible" production… In the present case, Korea, in effect, declared the quantity of "eligible production" when it announced in January, 1997, that it would purchase 500 head per day of Hanwoo cattle above 500 kg within the 27 January to 31 December 1997 period, which would be 170,000 head of cattle for the 1997 calendar year. That figure, under paragraph 8 of Annex 3, accordingly constitutes the quantity of "eligible production*"[8]. Now, according to an Australian report of 2004, the number of Hanwoo cattle heads slaughtered was of 887,400 in 1997 and 1023,200 in 1998 and the average weight of the slaughtered cattle was 551 kg in 1997 and 559 kg in 1998[9]. Which implies that the eligible production for 1997 has represented only 19.2% of the actual production, so that the argument that eligible production should be total production does not hold.

In an analysis of India's agricultural support, Munisamy Gopinath confirms: "*With regard to product-specific AMS, the 1997 methodology for market price support appears to be a direct product of the price difference (administered minus external reference price) and procured quantities taken as the eligible production… This is consistent with the WTO rules which are ambiguous about what constitutes the eligible volume… Other developing countries, including Brazil, China and the Philippines, also report procured quantities as eligible production*" [10].

DTB should also read FAO's comments on this issue: "*There is insufficient clarity in the agreement whether the quantity eligible to receive the administered price is total production, or only the marketed surplus which is actually sold in the market, or the quantity which is actually procured by the government through the price support mechanisms. Some member countries such as Pakistan have used quantity procured, whereas other countries have used total production. The logic of using total production in these computations is that the government-designated agency is bound to buy whatever is brought to the market at the pre-announced support price. However, there is a limit on this because the quantity brought to the market will not be more than the marketable surplus given that self-consumption accounts for a very large share of the output of basic foodstuffs in a country like India.*"[11].

In another report explaining the URAA rules, FAO takes a more explicit position: "*Market price support for a product = (administered price at the farm gate - fixed external reference price) x eligible production, where:*
fixed external reference price = c.i.f. unit value for 1986-88

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[7] Lars Brink, *The WTO disciplines on domestic support*, pp. 23-58 in David Orden, David Blandford and Tim Josling, *WTO disciplines on agricultural support*, Cambridge University Press, 2011.
[8] *Korea – Measures affecting imports of fresh, chilled and frozen beef*, Report of the Appellate Body, WT/DS169/AB/R, 11 December 2000, http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds161_e.htm.
[9] Jeong, M-K., Sheales, T., Gleeson, T. and McDonald, D., *Korean and Australian Beef: Markets and Prospects for Trade*, ABARE *e*Report 04.22.2004, http://adl.brs.gov.au/data/warehouse/pe_abarebrs99001130/PC12872.pdf
[10] Munisamy Gopinath, *India*, pp. 277-309 in David Orden, David Blandford and Tim Josling, *WTO disciplines on agricultural support*, Cambridge University Press, 2011.
[11] http://www.fao.org/DOCREP/005/Y4632E/y4632e0j.htm

eligible production = quantity of production receiving the administered price."[12]

The fact that the EU and US have declared in their Supporting tables on their agricultural support commitments that their eligible production was total production – except for dairy products as discussed above for the EU and from 2008 for the US – should not impose to other WTO Members a questionable interpretation of the URAA provisions.

As already argued above, a more fundamental objection to DTB and the panel analysis is the fact to focus only on the domestic MPS, forgetting the border measures (tariffs and export subsidies) which are the main cause of high domestic prices. Without these border measures, no domestic administered price could maintain domestic prices above the world price.]

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.

[No, here DTB has totally misinterpreted, or not read, the Appellate Body's statement on the panel: "123. *Having reached the conclusion that Korea had miscalculated its market price support in 1997 and 1998, the Panel attempted to evaluate correctly Korea's Current AMS for beef. In doing so, the Panel stated that "[f]or reasons of clarity and simplicity", it would rely on market price support calculations submitted by New Zealand for Korea's Current AMS for beef. Based on these calculations, the Panel found that Korea's AMS for beef had exceeded the 10 per cent de minimis threshold referred to in Article 6.4(b) of the Agreement on Agriculture in 1997 and 1998… 125. There is, however, no indication in the Panel Report of the level of the external reference price for the years 1986-1988. Furthermore, neither the Panel Report nor the Panel record contain any elements which might allow us to determine the level of such an external reference price.126. We, therefore, must reverse the Panel's finding that Korea exceeded the 10 per cent de minimis threshold of Current AMS for beef in 1997 and 1998, and the consequent finding that the failure to include Current AMS for beef in Current Total AMS in these years is inconsistent with Articles 6 and 7.2(a) of the Agreement on Agriculture*". Therefore the Appellate Body did not at all endorse the view that we could refer to an alternative external reference price. The more so as it would not have been difficult to find, in the Faostat data and in the Korean statistics, the CIF prices of Korean imports of beef in 1986-88.

Precisely, the US has cheated in using world reference prices of milk of 1986-1988 much higher than the minimum export prices established by the International Dairy Arrangement

[12] N. Hag Elamin, *Domestic support measures*, http://www.fao.org/docrep/003/x7353e/x7353e01.htm

(IDA) – themselves derived from the New Zealand FOB prices – that the WTO Committee on Agriculture decided to use for the notifications and that the EU and Canada have used in their notifications to the WTO: see page 10 of the EU (EEC) "Supporting tables relating to commitments on agricultural products in Part IV of the schedules"[13] and in page 7 of Canada's supporting tables[14], which has converted this price in the milk-equivalent reference prices of butter – 1034 US $ per tonne – and NFDM: 751 US$ per tonne[15], and the EU has done the same.

Indeed the supporting table DS:5 of the US notification to the WTO of 28 June 1999 on domestic support for 1997 (G/AG/N/USA/27, page 15), based on the US supporting table for dairy, in pages 25 and 26 of its "Supporting tables relating to commitments on agricultural products in Part IV of the schedules"[16], has used an average external reference price of $159.826 per tonne of milk during the 1986-88 marketing years (the annual prices being of $ 98.6069 for 1986, $ 156.439 for 1987 and $ 224.432 for 1988), which was presented as the "*estimated CIF price derived from FAS/USDA reported prices for butter and nonfat milk, FOB Northern European and other world port*". Apart from the fact that the US has not used the minimum prices of the IDA, we wonder why it has used CIF prices in European ports when, as a net exporter of dairy, it should have used at least US FOB prices. But the major objection is that, for the same period the international milk prices used by to OECD for the US dairy support (in table 2.6. MILK: Market Price Support and Consumer Support Estimate) were much lower: on average $ 113.522 per tonne of milk at the farm gate ($ 76 for 1986, $ 111 for 1987 and $ 153 for 1988), and these OECD reference prices were based on the FOB New Zealand 1986-88 average FOB price for milk of $/t 108.000 plus the transport cost (milk equivalent) of $ 18.333 plus the fat content differential of 0.9% (4.6% in NZ – 3.7% in the US) for 1986 and 1987 and 1% (4.7% - 3.7%) for 1988. And indeed the international milk prices declared by OECD in its EU support data were practically the same as those used for the US: the average NZ price + transport cost (milk equivalent) + adjustment for fat content differential (1%: 5% NZ - 4% EU), which gave a farm gate price in the EU of $ 113/tonne.

But the story does not end here because OECD, maybe under the US pressure, has changed, in its data base on agricultural support, the world reference prices of milk for 1986 to 1988: instead of the average reference price of $ 113.522 per tonne of milk ($ 76 for 1986, $ 111 for 1987 and $ 153 for 1988) published in its data table for 1999, in its 2002 data tables these prices had become $141.3 on average (of which $119 for 1986, $141 for 1987 and $164 for 1988); then they have risen at $171.33 on average in the OECD report of 2004 (of which $167 for 1986, $173 for 1987 and $174 for 1988) and, in 2008 as in 2011, the same reference prices had become on average $176.09 per tonne (of which $172.71 for 1986, $177.46 for 1987 and 178.12 for 1988)!

What is even stranger is that OECD is still considering in 2011 that the world reference prices of milk for 1986 to 1988 were on average of $73/tonne (of which $56.60 for 1986, $49,30 for 1987 and $114,32 for 1988), with figures being converted from ECU to dollars!]

[13] WTO G/AG/AGST/EEC, http://www.wto.org/english/tratop_e/agric_e/schedule_e/eec.pdf
[14] WTO G/AG/AGST/CAN, http://www.wto.org/english/tratop_e/agric_e/schedule_e/can.pdf
[15] Canada notifications of 21 March 2000 for 1996: G/AG/N/CAN/35
[16] WTO G/AG/AGST/USA, http://www.wto.org/english/tratop_e/agric_e/schedule_e/usa.pdf

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.

[We will show that these results are totally unfounded so that, based on the products considered by DTB:
- India current AMS could have been negative for 2010-11 by -7.56 b [- 0.9 b (wheat) - 4.1 b (rice) - 3.56 (cotton) + 1 (rapeseed)] but it has been in fact of $1 b as the WTO does not recognize negative AMS which are assimilated to nil.
- Brazil current AMS was of $239 million for 2010-11.
- Turkey current AMS has been of $2.031 billion of which $1,697 billion of fake market price support and only $334 million of premium subsidies.
- Thailand current AMS for 2010 has been limited to $1.72 billion in actual subsidies.

Which means that the total AMS for the 4 countries has been limited to $4.990 billion instead of the alleged $63.9 to $119.9 billion according to DTB, or 12.8 to 24 times less!]

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.

[But look at the gaps between yields and agricultural area per farm and per agricultural worker in India and the US! And look even more at the huge subsidies the US rice farmer is getting!]

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.

[Even if these figures were true, India enjoys the benefit of URAA Article 6.2 exemption for "*low-income or resource-poor producers*" plus the product-specific *de minimis* of 10% of the production value of the specific products plus the non-product-specific *de minimis* of 10% of its whole agricultural production value].

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.)

[But India's choice of exchange rates was correct: according to a Canadian exchange rates website[17] the Indian rupee rates were 12.6117 for 1 US $ in 1986, 12.9590 rupees in 1987, 13.8760 rupees in 1988, implying an average rate of 13.1489 rupees for 1986-88. Furthermore the USDA report on Indian support to rice and wheat underlines that "*Market price support was often negative for wheat and, particularly, rice during the 1980s and early 1990s, meaning that domestic farm prices were often below world prices (adjusted for transport and marketing costs)*"[18]. The report observes also that "*Since 2001, following the accumulation of large surplus stocks, there have been relatively small nominal annual increases in wheat and rice MSPs. In real terms, wheat and rice MSPs have declined by 14 percent and 11 percent, although, because of appreciation of the rupee against the dollar, MSPs have continued to rise in dollar terms*". DTB should cease to think in terms of world prices and more in terms of national currencies if it wants to assess correctly the impact of trade policies on national farmers.]

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.

[But you are confusing two things: if India has indeed denominated the external reference prices in Rs. in its Schedule of commitments, it has done this probably to be understood by the Indian citizens but these Rs. 3,520 corresponded perfectly to the CIF prices of its imports with the actual exchange rate. In other words, instead of "*converting its external reference prices to dollars using an exchange rate that was seriously distorted by government controls*" as you write, it has done the reverse, converting its CIF prices in Rs. at the official exchange rate, a rate recognized by the IMF and all traders. And, in its further notifications to the WTO from 1998, the reference prices were denominated in dollars, not in rupees. Besides you seem to ignore that all countries, the US the first, are using their monetary policy as an arm to maintain their competitiveness, one of the most used beggar-thy-neighbor policies. Remember the slogan of Connally, the Secretary Treasury of R. Reagan in 1971 who told a delegation of Europeans worried about exchange rate fluctuations that "*the American dollar is our currency, but your problem*." Nothing has changed to-day.]

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

[17] http://fx.sauder.ubc.ca/etc/USDpages.pdf

[18] Jha, Shikha, *Indian wheat and rice sector policies and the implications of reform* http://www.ers.usda.gov/publications/err41/err41.pdf

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.

[Indeed India has erred in notifying total production at the end of the UR and in its first notification for 1995-06 because it was contradictory with the fact that its market price support (MPS) was not the fake MPS implying no subsidy based on the URAA methodology of Annex 3 paragraph 8 but was based on actual subsidies linked to governmental purchases, for which it is the paragraph 10 methodology (non-exempt direct payments) which applies.

We add Munisamy Gopinath's additional argument that "*The concern on the use of procurements versus total production as eligible production is moot so long as the price gap India would notify remains negative… In the Indian context, an additional issue to deal with is marketable production because many small and poor farmers do not participate in output markets*".

The USDA's report on Indian support to wheat and rice confirms also that, "*During the late 1990s… MSPs strengthened relative to both world and domestic prices and moved above domestic market clearing levels. This trend benefited the relatively small share of producers in surplus areas who received the MSPs*".]

- 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.

[No, you are missing several arguments.
First, Munisamy Gopinath explains that "*The chosen percentage (80) for the allocation of subsidies to resource-poor farmers is from a survey by the Government of India published in the 2000 issue of Agricultural Statistics at a Glance. It showed that nearly 80 percent of farm holdings are less than 2 hectares*". In fact the Agricultural census of 2005-06 shows that 88.2% of the 158.3 million ha of agricultural land was in farms of less than 10 ha which accounted for 99.2% of the 129.222 million of farms. So that there is a case to consider that all these farmers, and their corresponding agricultural land, are 'resource poor farmers'.

As most Indian farmers are very poor, they cannot afford to use fertilizers, despite they are subsidized: "*65% of the country's cropped area is "organic by default," according to a study by Rabo India. By this somewhat degrading term they mean that small farmers, located mostly in the Eastern and North-Eastern regions of the country, have no choice except to*

farm without chemical fertilizers or pesticides. Though this is true in many cases, it is also true that a significant number of them have chosen to farm organically, as their forefathers have done for thousands of years."[19]. However a research paper disagrees with this view. If it shows that "*fertiliser subsidy is concentrated in a few states, namely, Uttar Pradesh, Andhra Pradesh, Maharashtra, Madhya Pradesh, and Punjab… Rice, wheat, sugar cane and cotton account for about two-thirds of the total fertiliser subsidy*", nevertheless it adds: "*However, we found that the fertiliser subsidy is more equitably distributed among farm sizes… In 2001-02, small and marginal farmers accounted for 42.6% of area operated but showed grounds for 52% of total fertiliser consumption in the country*"[20].

For R. Ramakumar "*On the other hand, all of the input subsidies in India do not reflect a transfer of income to farmers. For fertilisers, a large share of the subsidy is a transfer to the fertiliser producers, who presently have no incentive to improve efficiency in production. Similarly, in the case of power subsidies, a large share of the subsidy is a transfer to the electricity boards, which are plagued with problems like inefficiency in power generation, high transmission and distribution losses and non-recovery of bills*"[21].

The USDA report confirms that "*the power subsidies tend to mostly benefit larger farmers, who own more pump sets (Gulati and Narayanan, 2003)*", knowing that "*The cost of providing free or subsidized (depending on the State) electricity for agriculture accounts for more than two-thirds of total input subsidies, as well as most of the growth since 1990*".

Munisamy Gopinath concludes on fertilizer, electricity and irrigation subsidies: "*The sum of these three subsidies declined from $3,956 million in 1998 to $3,050 million in 2001 before increasing to $4,467 million in 2005. The total support under Article 6.2… increased from 5 percent of the value of production in 1998 to 7.8 percent in 2005. The projection for 2008 is $11.8 billion, of which $7.1 billion is attributable to investment subsidies and the rest to input subsidies*". And the author adds that these notifications and shadow notifications have attributed 80% of the input subsidies to Article 6.2 whereas the remaining 20% have been notified in the non-product specific AMS and correspond to the subsidies accruing to larger farmers.

A report for the Planning Commission of India written in 2007 by Jyoti Parikh and Chandrashekhar Singh finds that "*Procurement of food grains at MSP is carried out by Food Corporation of India (FCI). FCI operates however, in only selected states and selected districts which had surplus of food grains initially. In the current situation several other states which have had deficit have started getting surplus. Farmers in these states are deprived of the benefit of MSP. Market prices in some mandies fall below MSP. Thus, there is a need to extend effective procurement operations in other states to ensure MSP to farmers… The provision of minimum support prices was found to have served only a small number of crops in a particular region; most of the crops and states could not benefit from them (Chand, 2003). It was also noted that the price policy favored the selected crops that resulted in substantial decrease in area and production of some coarse cereal, which were preferred by poor across the region. Cropping pattern is largely influenced by market price and MSP plays a role only when MSP is either equal or above the market price*"[22].

In view of all this evidence it is clear that DTB cannot write 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

[19] http://www.ecoworld.com/atmosphere/effects/organic-farming-in-india.html
[20] Paul Sharma, Hrima Thaker, *Fertiliser Subsidy in India: Who Are the Beneficiaries?*, March 20, 2010, http://www.iimahd.ernet.in/assets/upload/faculty/vijaypdf1.pdf
[21] http://www.ideaswebsite.org/ideasact/jan09/PDF/Ramakumar.pdf
[22] http://planningcommission.nic.in/reports/sereport/ser/ser_msp.pdf

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.

[But the so-called Indian "large" farms – which are those above 10 ha, with an average acreage of 17.08 ha in the agricultural census of 2005-06 – were 1.096 million, i.e. 0.85% of the 129.222 million farms, and occupy 18.715 million ha, i.e. 11.8% of the total agricultural area of 158.2 million ha[23]. So that at least 88% of the input subsidies to Indian agricultural area should be exempted from inclusion in the amber box on account of URAA Article 6.2. and the rest should be notified in the non-product specific AMS where they would be well below the *de minimis* exemption level.]

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.

[A GAIN report of 28 November 2011 states that "*Typically, pulse market prices, including chickpeas and lentils, are well above the MSP for most of the marketing year and the government rarely undertakes procurement operations at MSP*."[24]]

In addition, India has a credit subsidy scheme that it has notified as a non-product-specific amber box program in the past.

[But the USDA report states that "*Available evidence suggests that a large share of farmers, particularly smaller farmers, remain dependent on non-institutional credit supplied by moneylenders, landlords, and traders at high interest rates relative to institutional credit*".]

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.

[Not at all ! Munisamy Gopinath, beyond his quoted assertions above and further below that India has remained well beyond its allowed AMS, concludes for the future: "*Looking at projections for 2015; the total value of Indian agricultural production is expected to be about $177 billion. So, the de minimis exemptions allow up to $35.4 billion in farm support, about $17.7 billion each for the sum of the product-specific and the non-product-specific AMS. Under a Doha Agreement along the 2008 lines, India could also face the constraint of a base OTDS of $25.6 billion. Any of these constraints give India ample flexibility in setting and implementing domestic support policies, including trade-distorting support measures*".

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.

[23] http://www.iasri.res.in/agridata/11data/HOME_11.HTML

[24] http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Update_New%20Delhi_India_10-28-2011.pdf

[No, these purchases contribute only partially to maintain the level of domestic prices, the main reason being the import protection and export restrictions. Which is confirmed by the GAIN report that DTB quotes: "*The domestic market is largely insulated from the global price movement as exports of wheat have been banned since 2007… Like wheat, domestic market prices are largely insulated from the global price movements as exports of non-basmati rice exports continue to remain banned*". It is also confirmed by the USDA report: "*In the mid-1990s, trade policies were changed when quantitative restrictions on imports were lifted and replaced by tariffs. The wheat tariff was initially set at zero, but was raised to 50 percent in 1999 to curb imports into southern India at a time when surpluses were growing in the north. The rice tariff has remained at 70 percent, a level that prohibits trade from occurring*".]

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.

[Yes but, as underlined in the USDA report of 2007, "*Price policy for wheat and rice is implemented through minimum support prices (MSPs) for fair-to-average quality (FAQ) grain that are revised annually and defended by Indian Government purchases in surplus areas during harvest.*". So that you cannot extend your calculation as if the whole production could be purchased at these government support prices. And the USDA report adds: "*Market price support was often negative for wheat and, particularly, rice during the 1980s and early 1990s, meaning that domestic farm prices were often below world prices (adjusted for transport and marketing costs)*". This remains largely true today.]

The government then sells most of what it purchases to poor consumers at highly subsidized prices.

[Yes, just as the US is doing on a much higher scale for its domestic food aid although these food aid subsidies cannot be counted as agricultural subsidies, even if they are put in the US green box: they should rather be put in the budget of the Department of social affairs.]

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

[If India has indeed denominated its external reference prices (ERP) in Rs. in its Schedule of commitments, it was to be understood by Indian citizens, but this ERP of Rs. 3,520 had a footnote saying that "*ERP is CIF average unit price… derived from monthly trade statistics of Foreign trade to India*". Indeed, on average from 1986 to 1988, India has remained a net importer of wheat. This way to fix the ERP is in line with the URAA Annex 3 paragraph 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 the average c.i.f. unit value for the basic agricultural product concerned in a net importing country in the base period* ".

Incidentally we take this opportunity to raise a legal point of interpretation of this paragraph 9: should the external reference price (ERP) be calculated year by year differently when the WTO Member is a net exporter in at least one year – in which case it is the FOB price which

would apply – and a net importer in at least one year – in which case it is the CIF price which would apply – or should we take the CIF price for the 3 years if, in the 'base period' 1986-88, the Member has been a net importer, even if it has been a net exporter in at least one year? This is the case here of India which has been a clear net importer in the base period 1986-88 even if it has been a net exporter in 1987. We lean for the second interpretation given that the language speaks of "*a net importing country in the base period*" this period being "*based on the years 1986 to 1988*". And in fact India has notified the same CIF price for each of the three years 1986-88, even when it was a net exporter in 1988. But Brazil has notified different CIF prices for the 3 years in which it has remained a net importer.

Table 7 – Indian imports and CIF prices of wheat from 1986 to 1988

1000 tonnes	1986	1987	1988	Average
Import quantity	148150	21465	1792400	654005
Import value	41128	6926	298828	11563
CIF price	277.61	322.66	166.72	255.66
OECD reference price (for EU)	77	107	155	113.00
Export quantity	137879	253662	15800	135780
Export value	16808	27247	2063	1537
FOB price	121.90	107.41	130.57	119.96

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)

Admittedly it was clumsy and confusing to have written in its notifications to the WTO that "*ERPs are at the average exchange rate prevalent in the base period (1986-89).* But, in its notifications to the WTO from 1998, the ERP has always been denominated in dollars – at $264/MT –, not in rupees.

Arguably the weighted average CIF price has been of 176.80 $/MT but India has calculated the average CIF price on an unweighted basis, according the URAA methodology of Annex 3 paragraph 9 and as the EU and US have also done for all their notified AMSs. Precisely this arithmetical average CIF price has been of $255.66/MT, very close to the $264 notified or the $269 in India's Supporting tables. Besides, if the Indian CIF prices have been so much higher than the reference price of other countries, such as the 113.00 $/MT calculated by OECD for the EU in that period (after conversion from ECU to dollars) it is likely because India has been importing high quality wheat, so much so that it has been exporting at the same time common wheat at a FOB price close to the OECD reference price. In doing so India was perfectly abiding by the URAA rule, the last sentence of the same paragraph stating: "*The fixed reference price may be adjusted for quality differences as necessary.*"

In any case the DTB erred, so much so as it is mixing up four different concepts: 1) the WTO rule to notify the market price support (MPS) linked to administered prices – which is a fake MPS as we have shown previously –; 2) the actual MPS such as defined by OECD as the gap between the current CIF and domestic prices; 3) the actual MSP (minimum support price) of government purchases. The most surprising is that DTB contradicts its own statement above in paragraph 831 that "*The actual quantity of purchases is not relevant in the calculation of market price support*"; 4) as the wheat (and rice) procured is eventually distributed as domestic food aid, the corresponding purchases have already been notified in the green box under the title of "Buffer stock operations (food grain)" and they should not be notified a second time in the AMS.

The conclusion of all this is that:
1) Concerning the future AMS notification relative to the present production, the present MSP of $244.58 remains below the 1986-88 reference price of $255.66 so that the AMS is negative of $11.08/MT, or at least nil as the URAA does not recognize negative AMSs as it should. Let us add that, during the meeting of the WTO Committee on agriculture of 25-26 June 1998 (G/AG/R/15), India made a point on negative AMS: "*With regard to the issue of negative support in the calculation of the AMS (paragraph 2 of G/AG/W/34), the*

representative of India noted that there was no specific provision in the Agreement which stipulated that in circumstances where the administered price was lower than the external reference price, the domestic support should be deemed to be zero. The AMS was, by definition, the aggregate measurement of support and hence the sum of all subsidies and taxes. In the view of India, a negative AMS indicating an implicit tax on farmers should therefore be reflected as such"[25].

2) Munisamy Gopinath has also found that "*For 1998-2005, rice and wheat MPS values were negative in all years with mixed trends… Since 1998, the reason for negative product-specific AMS values of commodities has been the higher ERP [external reference price] relative to MSP in all commodities except sugar*". Nevertheless he adds: "*However, with price increases in the range of 10 to 25 percent between 2006 and 2008, and a one-time bonus paid to farmers, this nominal gap became positive for rice in 2007 and 2008 in my estimation. Hence, positive product-specific AMS for rice is reported in Table 8.6 of $395 million and $794 million, respectively*".

3) Concerning the actual MPS in 2010-11 and anticipated for 2011-12, it is still close to zero as acknowledged by the quoted GAIN report of February 2011: "*With the expectation of a record crop, current wheat prices are approximately at Rs. 12,500-13,500 ($280-300) per metric ton… Higher than anticipated government procurement and inadequate availability of storage space in the major surplus states of Punjab and Haryana could force the government to export wheat, if global wheat prices remain strong*". And, to the question "*Have wheat prices fallen below the minimum support price (MSP)?*", Ashok Gulati, chairman of the Indian Commission for Agricultural Costs and Prices (CACP), has responded the 15 May 2011: "*Yes. I am getting daily reports. In Gujarat, my team visited four mandis (wholesale markets) and they interviewed farmers. Eighty per cent said they have sold below MSP. The rates range between Rs. 1,000 and Rs. 1,050 a quintal, way below the MSP of Rs 1,170. Food Corporation of India (FCI) procurement centres are there, but for some reason, they are not buying. As a result, you have the prices crashing*"[26]. Already on 17 March 2011 he stated: "*In many places, FCI doesn't procure. In UP, paddy prices fall below the MSP when output rises—it was R 865 per quintal in October in Shahjahanpur and this rose to R975 in January, though the MSP was R1,000. In Sambalpur in Orissa, prices were around R900*"[27].

4) Concerning the MSP impact on domestic prices, the same GAIN report says that "*The government sales price of wheat under PDS programs has been unchanged since July 2002, while the support price paid to farmers has jumped by over 75 percent in the past seven years which has raised the government's cost price to Rs. 15,500 ($345) per ton in 2010/11… Market prices during MY 2010/11 have eased down (see Table 3) due to additional wheat supplies from the government stocks during the second half of calendar year 2010. With the expectation of a record crop, current wheat prices are approximately at Rs. 12,500-13,500 ($280-300) per metric ton* ". Which explains that DTB takes, in footnote 4, the market price of $290/MT to assess the wheat production value in 2010-11 at $23.4 b ($290/MT X 80.8 m MT) and deducts that the *de minimis* wheat AMS was of $2.3 b. But, as said above, as the unit AMS is negative of $11.08/MT, the total wheat AMS for 2010-11 would be of -$.90 b instead of $13.4 b or $11.8 b claimed by DTB.

Incidentally DTB has made a slight confusion between the Indian reference prices in rupees for wheat and rice: Rs. 3,540 is for rice and Rs. 3,520 for wheat.

5) We cannot count in the eligible production the wheat self-consumed by farmers: "*For self-consumption purposes, the farmers retain around 48% of their production and hence it is not*

[25] www.wto.org/french/tratop_f/agric_f/agric_f.htm
[26] http://www.livemint.com/2011/05/15231659/Ashok-Gulati--Wheat-price-to.html
[27] http://www.financialexpress.com/news/investments-institutions-incentives/763479/0

entered into the total production figures of the country"[28]. Besides the level of wheat procured in 2009-10 has been of 25.380 million tonnes or 31.4% of production[29].

6) The strongest argument is that the expenditures on public procurement of wheat and rice at the MSP should not be put in the AMS because this procurement is eventually distributed at subsidized prices as domestic food aid which, according to paragraphs 3 and 4 of URAA Annex 2, is notified in the green box, which India has indeed done, so that it should not notify it a second time in the AMS. The wheat and rice are purchased at MSP but are resold at highly subsidized prices (the Central Issue Prices) to 65 million of families below poverty line. These prices have not changed since 2004-05 (with a rate of subsidization of 50% at that time), on the basis of 35 kg of cereals (wheat and rice) per family per month. In 2009-10 the population below poverty line has received 27.7 million tonnes of cereals, of which 18.1 million tonnes of rice and 9.6 million tonnes of wheat[30]. The cereals are also sold to the population above poverty line, at a price which covered the full cost in 2004-05 (including of stockholding and transportation, therefore without subsidies) but which has not changed either while the cost has almost doubled The families above poverty line receive from 10 to 35 kg per family per month, according the availability, once the families below poverty lines have been served[31]. In 2009-10 these families have purchased 20 million tonnes of cereals. The cereals are also provided at subsidized prices to several specific welfare schemes. In 2010-11 a total of 47 million tonnes have been distributed. In 2009-10 total subsidies have reached $12.9 billion.

India should learn from the US notifications of domestic food aid which have been put in the green box without notifying a second time in the AMS the US food procured by the Commodity Procurement Division whose dual objectives are unambiguous: "*Agricultural Marketing Service Commodity Procurement Division purchases a variety of food products in support of the National School Lunch program and other food assistance programs. These purchases also help to stabilize prices in agricultural commodity markets by balancing supply and demand*"[32]. Indeed in Fiscal year 2009 the procured US food products reached $1.443 billion, of which $594.3 million of fruits, vegetables and cereal products, $386 million of poultry meat and $463 million of other meats and fish[33]. Furthermore USDA has under-notified these procured foods in the green box: only $948 million in 2009 (against actual $1.443 billion) and only $740 million in 2008 (against actual $1.056 billion).]

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[28] http://www.crnindia.com/commodity/wheat.html
[29] http://pib.nic.in/newsite/erelease.aspx?relid=56467
[30] Ministry of Consumer Affairs, Food and Public Distribution, Government of India, *Annual Report 2009-10*, http://fcamin.nic.in/Annual%20Report/Annual%20Report%202009-10%20.pdf
[31] Ministry of Consumer Affairs, Food and Public Distribution, Government of India, *Annual Report 2010-11*, http://fcamin.nic.in/annual%20report/annual-2010-11.pdf
[32] http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateQ&navID=CommodityPurchasing&leftNav=CommodityPurchasing&page=CommodityPurchasing&acct=AMSPW
[33] For fruits, vegetables and cereals:
2008: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5074554;
2009: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5081598
2010: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5088443
For poultry: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=stelprdc5089497;
For other meats and fish: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5084535

Rice

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

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

[It is not surprising that DTB is repeating the same errors for rice. As India was, and still is, a net rice exporter, it should have taken its FOB price as the external reference price. However, as India is exporting essentially high quality Basmati rice, its average FOB price was of $643.25/MT in the 1986-88 period (Table 8 below). Clearly the FOB price of non-Basmati rice should have been much lower but still higher than the CIF price so that the gap with the administered price (MSP) of 2010-11 would have been small if not negative again. Let us then consider the CIF price. DTB is saying that the true average reference price of rice from 1986 to 1988 was of $78.20 when OECD data show that it had been of $130.00 in the US. DTB is denouncing that India has used an external reference price of $262.51/MT but its actual average CIF price had been of $.286.42, clearly 2.2 times higher than the OECD reference price for the US but conform to the AMS methodology to consider the border price of each Member country.

Table 8 – Indian trade in rice from 1986 to 1988

Tonnes	1986	1987	1988	Average
Import quantity	14368	5068	516772	178736
Import value	3848	1603	142189	49213
CIF price	267.82	316.30	275.15	286.42
OECD reference price (for US)	83	157	150	130.00
Export quantity	252607	387612	349491	329903
Export value	152854	259822	228683	213786
FOB price	605.11	670.31	654.33	643.25

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)

As for the present support, the ban on exports of non-Basmati rice in force since October 2007, in order to secure low prices for Indian citizens, has only been lifted in September 2011 and it is clear that the FOB price is higher than the $377/MT of domestic farm price indicated in footnote 4 by DTB and is consequently higher than the administered price so that the rice AMS would be negative. According to the GAIN report of 28 November 2011, India has procured 34 million tonnes of rice in 2010-11 or 36% of production. If we limit the FOB price at $400/MT, the price gap AMS/MT would be at least, for conservative reasons, of -$43.78 (333.22 – 377.00) and the total AMS of -$1.489 b (-$43.78 x 34 m MT] and not between $12.3 b and $24.0 b as alleged by DTB. In any case, as for wheat, about 25% of rice is self-consumed on the farms[34]. Above all, as this rice has been procured to be

[34] http://articles.timesofindia.indiatimes.com/2011-12-17/edit-page/30525390_1_fci-operations-coarse-grains-wheat-and-rice

eventually granted as domestic food aid and as India has already notified it in the green box, there is no reason to notify it a second time in the AMS.]

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.

[No: an IFPRI report of 2005 states that: "*Although there is a minimum support price for corn, procurement is infrequent*"[35] and another source states: "*FCI also procures about 1.5 million tonnes of coarse grains out of a production of 30 to 33 million tonnes*"[36].]

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

[According to the corn trade data in table 9 below for the 1986-88 period, the CIF price was of $152.51/t (we cannot calculate the average on 3 years given that no import occurred in 1987), significantly lower than the $238.57/t notified for the reference price.

Table 9 – Indian trade in corn from 1986 to 1989

Tonnes	1986	1987	1988	Average
Import quantity	10647	0	181000	63882
Import value	1643	0	28000	9881
CIF price	154.32		154.70	152.51
OECD reference price (for US)	59	76	100	82.00
Export quantity	10	151	20	60.33
Export value	3	45	2	16.67
FOB price	300	298	100	232.67

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)]

However, we can argue that, when the government had sent its commitments in 1994, India had become a net exporter of corn since 1992, without any import since 1990, so that it was justified to use its FOB price rather than its CIF price to not be permanently penalized by this

[35] http://www.ausaid.gov.au/publications/pdf/agriculture_india.pdf
[36] http://articles.timesofindia.indiatimes.com/2011-12-17/edit-page/30525390_1_fci-operations-coarse-grains-wheat-and-rice

exceptional trade deficit of 1986 and 1988. Indeed, from 1986 to 2009, average corn exports have been 21 times larger than imports, according to FAOSTAT: 49,556 tonnes against 2,341 tonnes for imports. Therefore the $232.67/MT average FOB price from 1986 to 1988 was very close to the notified $238.57/t and significantly higher than the administered price (MSP) of $195.82, so that, as for wheat, no positive AMS should be counted. Incidentally, the fixed reference price of $69.51 alleged by DTB was significantly lower than the OECD reference price for the US of $82 from 1986 to 1989 or of $78.3 from 1986 to 1988.

Soybeans

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. 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/MT[1/] X 9.6 m MT = $4.5 b
De Miminis threshold: $4.5 b X 0.10 = $0.45 b

[Clearly one wonders where DTB has found this average fixed reference price of $68.47/t for soybean from 1986 to 1988 given that the OECD reference price for the US was of $221.67/t – and the US is price maker for soybean –, very close to the Indian notified reference price of $229.77/t, itself close to the Indian FOB price of $228.32 from 1986 to 1988. As for the situation in 2010-11, even if the MSP for soybean is of $320.11, the GAIN report IN1133 of 4/1/2011 states that "*Procurement of oilseeds by government agencies such as the National Agricultural Cooperative Marketing Federation of India (NAFED) is likely to be low as the MY 2010/11 open market prices for most oilseeds were higher than the government"s minimum support price*"[37], a statement confirmed by the $474/MT price at which DTB is valuing Indian production. So that if theoretically the AMS would be of $0.87 b, in fact there was no actual AMS for 2010-11.

Table 9 – Indian trade in soybeans from 1986 to 1989

Tonnes	1986	1987	1988	Average
Import quantity	0	0	0	
Import value	0	0	0	
OECD reference price (for US)	176	216	273	221.67
Export quantity	1818	1726	3904	2482.67
Export value	346	382	1067	598
FOB price	190.32	221.32	273.31	228.32

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)]

37 http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Oilseeds%20and%20Products%20Annual_New%20Delhi_India_4-1-2011.pdf

Rapeseed

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. 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/MT[1/] X 7 m MT = $3.9 b
De Miminis threshold: $3.9 b X 0.10 = $0.39 b

[India has been a net importer of rapeseed from 1986 to 1988, at an average CIF price of $190.27 although it does not make much sense to take into account 1986 where imports have been so low so that the average CIF price was rather the average of 1987 and 1988, i.e. $245.41/MT, which was still much lower than the notified $513.37. The Rotterdam CIF price has been on average of $218.52[38] and we can add 20% for freight and insurance to Indian ports, as India has done in page 20 of G/AG/AGST/IND to get $262.22. Besides the IFPRI report on India finds an average CIF price of $288/MT from 1986 to 1988[39]. But we are still much below the $513.37/MT that India has erroneously notified to the WTO and which is difficult to justify. Thus, formally, the AMS for 2010-11 could be between $0.8 b, $1.0 b and $1.1 b, so let's say $1 b. Besides, IFPRI has underlined that "*a noteworthy feature of India's domestic oilseed policy is that protection is targeted at the small-scale oil crushers rather than oilseed farmers*". By the way the EU (then EEC) average intervention price of rapeseed from 1986 to 1988 has been of $478.61/MT and its target price of $498.92/MT.

Table 10 – Indian trade in rapeseed from 1986 to 1988

Tonnes	1986	1987	1988	Average
Import quantity	25	7124	1410	2853
Import value	2	1809	334	715
CIF price	80	253.93	236.88	190.27
Rotterdam CIF price	253.71	163.00	238.86	218.52
Export quantity	0	0	0	
Export value	0	0	0	

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)]

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

[38] According to EU data given in ECU and then converted in US dollars: http://www.worldtradelaw.net/reports/gattpanels/oilseedsI.pdf
[39] http://www.ifpri.org/publication/agricultural-policies-india

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.

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

[India has notified an average reference price of $1292.64/MT of cotton lint, perfectly in line with its average FOB price of $1294.37/MT, a price significantly lower than its CIF price and than the "A" Index world reference price provided by USDA.

But DTB has made a huge mistake in writing that the support price for H-4 variety long-staple cotton was of RS. 90,000/MT in 2010-11 because the Ministry of textiles' quoted order shows that the support price was of Rs. 28,500/MT, or of $633.33 at the exchange rate of Rs.45.0 to the $. In other words the cotton AMS was in 2010-11 of -$3.560 b.

Table 11 – Indian trade in cotton lint from 1986 to 1988

Tonnes	1986	1987	1988	Average
Import quantity	2296	324	47177	16599
Import value	3834	456	68171	2415
CIF price	1670	1407	1445	1507.33
"A" Index price	1366.62	1593.03	1464.29	1474.65
Export quantity	130258	74135	2672	69022
Export value	115900	78054	5185	66380
FOB price	889.77	1052.86	1940.49	1294.37

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)]

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.

[Not necessarily for many reasons:
1) The USDA-ESR report of April 2010 states that "*The SAP policy also affects the volatility of sugarcane area when it imposes financial losses on sugar mills that prevent them from honoring the SAP. During periods of surplus, SAPs can continue to rise without any specific link to sugar market conditions. These price hikes catch the mills between the fixed SAPs they are required to pay and weakening market prices they receive for their refined sugar. The resulting financial losses lead to deferral or default by mills on payments to growers that undermine incentives and contribute to volatility in sugarcane planting and production. Most recently, during 2006/07 and 2007/08, the large financial arrears to growers on the part of mills in major producing states reportedly led to both increased diversion of sugarcane from mills to production of khandsari and gur, and reduced planting of new sugarcane area in 2008/09.*" [40]

2) The effectiveness of the MSP on the market price paid to producers is limited because the market price depends first from the high protection on sugar imports, with a 60% ad valorem duty. Even if, due to lower production (explained by the cyclical nature of cane production on retune crops), the tariff has been suspended on raw sugar on 17 April 2009 and on white sugar on 31 July 2009 – in a context of very high world prices –, but the tariff has been reestablished the 1 April 2011.

3) Like in the EU, a quota system for sugar mills is in force in India which influences largely the market price, independently of the SMP, as explained also by the USDA-ESR report: "*Mills are now required to sell 10 percent of their production at a fixed, below-market levy price to the Public Distribution System for sale to consumers determined to have incomes below the poverty line. The remaining 90 percent of mill production is sold at market prices, but the amounts that can be sold are determined by quarterly quotas set by the central government. Finally, buffer stocks accumulated by the government during periods of surplus are later released for open-market sale based on monthly quotas.* " Apart from the quotas on the domestic market, the government has also imposed a ban on sugar exports in 2006 to prevent too high domestic prices, which was another factor to minimize the impact of MSP on domestic price.

4) Other policy measures influencing the sugar price, and hence the sugar cane price, are underlined by USDA-ESR: "*The record rise in domestic sugar prices during 2008/09 led to additional regulatory measures aimed at providing short-term relief for consumers. In addition to the release of government-owned buffer stocks beginning in mid-2008, state governments were empowered in March 2009 under provisions of the Essential Commodities Act to prevent "hoarding" of sugar by imposing stockholding limits and stock turnover requirements for privately held stocks with traders and food processors*." And "*In May 2009, the government suspended futures trading in sugar in an effort to control "speculative tendencies" in the market… The suspension of futures trading in sugar was initially intended to last through December 2009 but remained in effect as of March 2010*."
5) The GAIN report of 15 April 2011 adds to your quotation: "*Softening sugar prices coupled with the anticipation of a large cane crop discouraged the sugar mills to pay higher cane prices vis-à-vis last year. However, cane prices received by farmers were higher than the MSP/FRP in most of the growing states*"[41], which implies that the MSP should not be systematically considered as an actual price support to sugarcane producers.

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[40] USDA-ESR, *Indian Sugar Sector Cycles Down, Poised To Rebound*, April 2010, http://www.fas.usda.gov/htp/sugar/ers_sugar.pdf
[41] http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Sugar%20Annual_New%20Delhi_India_4-14-2011.pdf

6) The same report adds: "*The GOI levies a fee of Rs. 240 ($5.4) per ton of sugar produced by mills to fund a Sugarcane Development Fund (SDF), which is used to support research, extension, and technological improvement in the sugar sector*", all actions which are notified in the green box, not in the amber box. Besides the Gain report adds: "*The GOI follows a policy of partial market control and dual pricing for sugar. The local sugar mills are required to supply 10 percent of their production to the government as „levy sugar" at below-market prices, which the government distributes through the Public Distribution System (PDS) to its below-poverty line population at subsidized rates*". Again this domestic food aid is notified in the green box, not in the amber box. Remember that URAA Annex3 paragraph 7 and 4 states: "*Specific agricultural levies or fees paid by producers shall be deducted from the AMS… Measures directed at agricultural processors shall be included to the extent that such measures benefit the producers of the basic agricultural products*". Which means that all these taxes on sugar mills are restricting the benefits of the MSP and lowering the sugar AMS.

7) The USDA-ESR report adds: "*The fall in sugarcane area in 2008/09 was likely also influenced by the unusually large increases in Minimum Support Prices (MSPs) for wheat and rice, which compete with sugarcane for irrigated land, in 2006/07 and 2007/08 (fig. 5). Unlike the SMPs for sugarcane, the MSPs set by the central government for wheat and rice are good indicators of prices received by growers because a large share of the marketed surplus of wheat and rice is purchased at the MSPs*". In other words DTB cannot at the same time consider the SMPs on wheat and rice as administered prices governing all the prices of wheat and rice and the same for the sugarcane SMP.

8) A report of the National Bank for Agriculture and Rural Development of 2010 on "Economics of sugarcane production and processing" of 2010 acknowledges that "*The study in Uttar Pradesh revealed that the average price per quintal realized for sugarcane by the large farmers was higher…over the price realized by small farmers… (which) could be attributed to irregularities in the distribution of cutting orders of sugarcane at the sugarcane society and also at the sugar mill level whereby the large and influential farmers got preference over small farmers. This forced the small farmers to sell their crops to khansari/gur units at a lower price*"[42].]

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

[DTB did not realize that India has not notified any sugarcane AMS from 1996-97 on. This might be explained by the fact that India had realized that its "calculation details for estimating AMS for sugarcane" in its Schedule of commitments (G/AG/AGST/IND page 29) were too complex and erroneous as it would have sufficed to divide the average CIF price of sugarcane by the recovery rate of 8.5 to find the reference price equivalent of sugarcane which would have been of $28.12/MT according to FAOSTAT data on India trade in sugar (table 12) or of $28.44 according to the sugar CIF price taken in the Schedule of

[42] http://www.nabard.org/fileupload/DataBank/OccasionalPapers/OP-54-Economics%20of%20Sugarcane.pdf

commitments ($241.76/8.5). In this Schedule India has deducted the conversion cost of sugarcane to sugar to estimate the external reference price of sugarcane, which was not necessary. Indeed, when the EU, and the US since 2008, have notified their dairy AMS, they have not deducted the conversion cost of milk to butter, NFDM and cheddar cheese but applied only the technical coefficients of conversion of milk to butter, NFDM and cheddar cheese.

So that, with a sugar recovery rate of 10.3% for 2010-11 (GAIN report) the 328 MT of sugarcane production in 2010-11 are equivalent to 31.24 MT of sugar and the sugar AMS was of $78.98 million [$2.52/MT (30.96 – 28.44) times 31.34 MT], much below the *de minimis* threshold of $1.0 b.

Table 12 – Indian trade in sugar from 1986 to 1988

	1986	1987	1988	Average
Import quantity	930690	513419	319	481476
Import value	194413	120871	87	10512
CIF price	208.89	235.42	272.73	239.01
OECD reference price (for US)	166,45	181,00	257,28	201.58
Export quantity	7597	18465	3300	9787
Export value	1968	8909	1005	3961
FOB price	259.05	482.48	304.55	348.69

Source: FAOSTAT, OECD and India Supporting tables on agricultural commitments (G/AG/AGST/IND)]

[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)

[Many objections have already been made above why these input subsidies are far from reaching the majority of farmers and why at least 88% of input subsidies or $25.96 b should be exempted from inclusion in the amber box according to URAA Article 6.2. and the remaining $2.3 b should be notified in the non-product specific AMS where they would be well below the *de minimis* exemption level.].

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**

[Conclusion: according to our comments the actual AMS for 2010-11 without input subsidies was negative at -5.78 b: -0.9 b (wheat) – 4.1 b (rice) – 3.56 (cotton) + 1 (rapeseed). At most, given that WTO does not agree on negative product-specific AMS, the current AMS was of $1 b. Total AMS does not change since the input subsidies remain well below the non-product specific *de minimis*.

Incidentally let us add that the WTO Draft agricultural modalities of 6 December 2008 has proposed, in paragraph I.A.1.b, – for assessing the base level of OTDS (Overall Trade-Distorting Domestic Support)[43] that the WTO Members will have to reduce during the Doha Round implementation period if it is eventually concluded – to assimilate the product-specific *de minimis* level to that of the non-product-specific *de minimis* level, in contradiction with the URAA rule of Article 6.4.: "*For developed country Members, 10 per cent of the average total value of agricultural production in the 1995-2000 base period (this being composed of 5 per cent of the average total value of production for product-specific and non-product-specific AMS respectively)*" and, in I.A.2: "*For developing country Members, item (b) of paragraph 1 above shall be 20 per cent of the average total value of agricultural production in the 1995-2000 or 1995-2004 period as may be selected by the Member concerned*". This proposal would increase considerably the level of the allowed OTDS from which WTO Members, particularly the developed countries, would have to reduce their applied OTDS at the end of the Doha Round implementation period, namely by 80% for the EU, 70% for the US and 55% for developing Members having a Final Bound Total AMS (FBTAMS). However, for developing Members with no Final Bound Total AMS – which is the case of India – no reduction would be required of its base OTDS. However, besides the reduction of the base OTDS, specific reductions will have to be made on each of its four components: FBTAMS, the two *de minimis* and blue box. And, what is contradictory with the new definition of the product-specific *de minimis* proposed in the base OTDS, the reduction of the two applied *de minimis* (product-specific and non-product-specific) will be made according to the URAA Article 6.4 rule – "*5 per cent of a Member's total value of production of a basic agricultural product in the case of product-specific de minimis and 5 per cent of the value of a Member's*

[43] Let us remind the reader that the base OTDS is the sum of the Final Bound Total AMS (FBTAMS) !– equal to the current AMS of 31 December 2000 or 30 June 2001 – plus the average level, in the 1995-2000 period for developed countries or the 1995-2004 period for developing countries, of the sum of the allowed product-specific *de minimis*, non-product specific *de minimis* and blue box (itself fixed at 5% of the whole agricultural production value for all Members).

total agricultural production in the case of non-product-specific de minimis" – and will be of 50% the first day of the implementation period for the developed countries and of 2/3 of that rate, i.e. 33.33%, for developing countries, implying that the two *de minimis* will become 2.5% of the production-value in the developed Members and 6.67% in the developing members. Incidentally that means that the absolute reduction will be of 2.5% for the developed Members and of 3.33% for the developing Members, which is not fair. However "*Developing country Members with no Final Bound Total AMS commitments; or with such AMS commitments, but that either allocate almost all that support for subsistence and resource-poor producer*" shall continue to maintain their *de minimis* at 10% without change, which is the case of India.

However we would not recommend that developing countries would agree on these proposed rules of an enlarged definition of the product-specific *de minimis* in the base OTDS and of the rate of reductions for the two *de minimis* because these proposals have been devised by the developed countries, and would benefit much more to them.]

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.

[That is not true and you did not show any evidence. For André Nassar, Director General of the Brazilian Institute for International Trade Negotiations (ICONE), "*Brazilian support is relatively low in relation to total agricultural output or on a product-specific basis for those crops targeted for support. We show that Brazil is in a comfortable position to accept the tighter disciplines on domestic support it would face under the proposed Doha modalities*"[44].]

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

[44] André Nassar, *Brazil*, pp. 223-276 in David Orden, David Blandford and Tim Josling, *WTO disciplines on agricultural support*, Cambridge University Press, 2011.

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.

[No, André Nassar justifies the difference in the two types of price supports: "*The first are programs with instruments under which the supported crop ends up in government stocks (Federal Government Acquisitions (AGF) and Contract Options Acquisitions (COA)). The second are programs… providing support based on price equalization premiums, without the government acquiring stocks (premium to Commercial Buyers (PEP), premium to Commercial Buyers Under a Private Sell Option Contract (PROP), and Equalization Premium to Farmers (PEPRO)). The price equalization programs are notified as product-specific AMS budgetary outlays*".

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.

[This is not true. André Nassar writes: "*Federal government purchases as a mechanism to sustain prices for producers are still utilized for certain crops in some years under the COA programs*" even if he admits that "*When the AGF and COA programs lead to the government withdrawing production from the market, they potentially shift prices upward and subsidize the whole stored production*", which is not the same as the whole production. As for the support programs based on price equalization premiums, "*The government sets the amount of product for which the premiums will be available in the auction. This means that the equalization premium programs are not generally available for the whole of production*", which corresponds to the eligible production as defined by the WTO Appellate Body in the Korean beef case. André Nassar adds that these last programs "*are usually targeted to least-developed regions, where the price at the farm level tends to be lower as it is disadvantaged by transportation costs*"".

Furthermore "*The amount of production benefitting from support varies according to the crop season. There is no predefined rule for the decision of the government in terms of implementing the support instruments or setting their parameters such as reference price or equalization premiums. These decisions are made by the government based on the situation of prices during each marketing period (March to December)*".]

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.

[But you seem to forget that the URAA Annex III paragraph 10 permits to use non-exempt direct payments to measure a price support: "*10. Non-exempt direct payments: non-exempt direct payments which are dependent on a price gap shall be calculated either using the gap between the fixed reference price and the applied administered price multiplied by the quantity of production eligible to receive the administered price, or using budgetary outlays*".

Furthermore you should at least have deducted the share of production self-consumed by the farmer's family, not to speak of feed, since all support programs are only related to sales. Indeed many reports have underscored the importance of self-consumption in the

family agriculture sector[45]. A report in the region of high Uruguay shows that about 18% of the production value is self-consumed[46]. This share is higher in the North-East region where most family farms are very poor.[47]]

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.

[But André Nassar puts the PEPRO support in the same category as the PEP and PROP supports, which justifies the use of budgetary outlays to notify the three measures.]

[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*

For each of the four commodities examined, Brazil's level of support exceeds its product-specific *de minimis* threshold.

[Your assertion is all the more unfounded for the recent period that, according to André Nassar, "*Higher prices in 2008 interrupted any upward trends in the use of the support mechanisms observed from 2005 to 2007, except in the case of cotton for which almost two-thirds of production received the premiums in 2007/08, with support rising for maize in 2008/09*".

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

[45] Réges Chimello, Fatores determinantes da produção para autoconsumo na agricultura familiar, http://editora.unoesc.edu.br/index.php/acet/article/viewFile/58/pdf_75

[46] Marcio Gazolla e Sergio Schneider, *Produçâo para autoconsumo e seguranza alimentar, uma abordagem com base na agricultura familiar*, http://www.wuuta.com/result.php?Keywords=Produção%20para%20autoconsumo%20e%20segurança%20alimentar:%20uma&Keywords-fr=Produção%20para%20autoconsumo%20e%20segurança%20alimentar:%20uma&sa=Buscar

[47] Antônio Márcio Buainain, Alberto Di Sabbato, Carlos Enrique Guanziroli, *Agricultura Familiar: Um estudo de Focalização Regional* , www.sober.org.br/palestra/12/09O437.pdf

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.

[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.

<u>Credit Programs</u>

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.

[You should also consider that the resource poor farmers are exempted from reducing their input and investment subsidies under URAA article 6.2. In Brazil although the 4.360 million of family farms – against 807,000 agribusiness farms - account for 40% of total agricultural production, only 1.2 million have access to credit and, in the last agricultural year 2009-10, only 80% of these last ones have actually subscribe a loan[48].]

[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.*

[48] Frei Sérgio Görgen, *Agricultura Familiar x Agronegócio*, 24 dezembro 2009, http://www.wuuta.com/result.php?Keywords=estabelecimentos%20familiares%20dos%20tipos%20C%20e%20D%20das%20rendas&Keywords-fr=estabelecimentos%20familiares%20dos%20tipos%20C%20e%20D%20das%20rendas&sa=Buscar

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 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.

[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.

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.

[Yet the percentage of wheat having benefited from the AGF minimum price has been of only 32.7% in 2007-08 and of 0.4% in 2008-09, according to André Nassar. And, according to CONAB statistics, this percentage has been of 3.5% in 2010-11 (20,337 tons against a production of 5.886 million tons). Besides, according to CONAB last data from July to November 2011 the average domestic farm price of wheat has been of Rs. 408.6/MT (approximately $237/MT), significantly lower than the data from the US GAIN report, against Rs369.8/MT (approximately $214/MT) for the minimum price in Rio Grande do Sul and $242.8/MT for the Soft Red Winter in Chicago[49]. Therefore, with the AMS methodology for administered prices, the wheat AMS would have been of $1.69 million [$83.07/MT (214-130.93) x 20,337 MT] or 1.2% of the *de minimis* threshold, instead of the $765 million alleged by DTB.]

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.

[Yet, the percentage of corn having benefited from the AGF minimum price has been nil in 2007-08 and of 7.5% in 2008-09, according to André Nassar and, according to CONAB last statistics, practically nil in 2010-11 (1,200 tons against a production of 57.5 million tons). Besides, from July to November 2011 the average domestic farm price of corn has been of Rs. 442.7/MT (approximately $257/MT), against Rs291/MT (approximately $169/MT) for the minimum price in Rio Grande do Sul and $263/MT in Chicago. With a minimum price in 2011 much lower than the figures of the GAIN report and with the AMS methodology for administered prices, the corn AMS would have been of $444,600 [$37.05/MT (169-131.95) x 1,200 MT], or 0.05% of the *de minimis* threshold, instead of the $1.09 billion alleged by DTB.]

[49] http://www.conab.gov.br/conteudos.php?a=549&t=2

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.

[Yet, the percentage of paddy rice (fine long grain) production having benefited from the AGF minimum price has been nil in 2007-08 and of 5.3% in 2008-09 (669,000 tons on 12.603 million tons) according to André Nassar and, according to CONAB last statistics, of 2.9% in 2010-11 (396,327 MT against a production of 13.613 million tons). Besides, from July to November 2011 the average domestic farm price of paddy rice (fine long grain) has been of Rs. 450.6/MT (approximately $261.3/MT), lower than the minimum price in Rio Grande do Sul of Rs. 516/MT (approximately $299/MT). Despite a minimal price in 2011 higher than the figures of the GAIN report and with the AMS methodology for administered prices, the rice AMS would have been of $49.5 million [$124.87/MT (299-174.13) x 396,327 MT], or 11.8% of the *de minimis* threshold, instead of the $908.5 million alleged by DTB.]

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.

[But in a meeting of the Ministry of Agriculture of 31 March 2010 the Sectorial Bureau for cotton expected a subsidy of PEPRO of R$ 440 million (or $239 million) for 2010.]

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**

[Conclusion: according to our comments all the actual specific AMS for wheat, corn and rice in 2010-11 have been much below their product-specific *de minimis* so that the current total AMS was limited to $239 million for cotton.]

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.

[Yes but, according to the TMO report for 2010, the percentage of cereals procured has remained low and DTB should have shown the corresponding production data to not imply that the procured price should apply to the whole production[50]. On average from 2006 to 2010 the TMO (Chart 123) has purchased 5.3% of wheat production per year (of which however 18% in 2009 and 5% in 2010), 7.8% of barley (of which 17% in 2009 and 13% in 2010) and 5.4% of corn (of which 4% in 2009 and 2% in 2010). The main reason for the TMO limited purchases is that they are only triggered when market prices are low, which has not been the case very often: "*TMO's main role is to intervene in the market, buying grains from farmers when market prices fall below a predetermined floor level based on production costs. Its purchases vary widely from year to year, depending on market fluctuations. In 2007 and 2008, while prices were moving upward, it bought only 122,000 tonnes and 40,000 tonnes, respectively. However, after prices collapsed during the global financial crisis, TMO stepped in to buy 3.77 million tonnes of wheat from registered farmers in 2009*"[51].

Incidentally let us stress Turkey's flexible use of tariffs on grains, underlined in an USDA report of 2010: "*Tariffs are often adjusted by the Agriculture Ministry in response to supply and demand. Wheat, barley, rye, and oat tariff rates increased from 50% to 80% in December 2009 and increased to the maximum bound rate of 130% on May 15, 2009. They remain at that level*". 2010 TMO report states also that "Customs taxes rate apploied for wheat *dropped from 130 % to 8 % on November 2007 and to 0 % in 2008 considering*

[50] http://www.tmo.gov.tr/Upload/Document/yayinlar/2010_Hububat_Raporu_ING.pdf
[51] http://www.world-grain.com/News/News%20Home/Features/2011/12/Turkish%20Grain%20Board%20restructuring.aspx?p=1

production and market stock conditions". An EU report adds that "*A review of customs duties by products and countries is published annually*"[52]. Turkey also uses extensively the inward processing regime to import wheat duty free before re-exporting wheat flour for which Turkey is the first global exporter. However the Turkish Grain Board (TMO) can also sell wheat to wheat flour exporters at a lower price than the local price.

Another reason to not consider the whole production as eligible is the importance of self-consumption which, according to the Turkish Grain Board (TMO)'s 2010 Report, accounts for 34%: "*Approximately 30-35 million tons grain is produced in our country every year and 20-23 million tons of this production is supplied to the market while remaining part is used for the local consumption*". This was confirmed by an e-mail received from a USDA FAS Officer in Ankara whom I consulted for clarification: "*In order to receive grain payment you need to show invoice to the Ministry of Agriculture. It means that only marketed products can get premium*." And the FAS Officer adds: "*Farmers in especially some region tend to cheat government. Farmers go to the marketer and say lets increase the amount on the invoice and share the extra premium. If marketers agree then they increase the actual number and get more premium and share with farmers. This lead high production estimates on some products*". This is also confirmed by an EU report: "*Considering that most of the farms are small in size in Turkey, a considerable amount of cereals is produced by small farms, but mainly for home consumption… This implies that large farms operated by a small proportion of the farmers produce most of the value of production and hence receive most of the benefits of the market price support component of agricultural support. The large farmers, with relatively better access to and intensive use of subsidised resources such as water, machinery and agricultural chemicals, also benefit more from the support policies that the smaller farmers*"[53]. And the eligible production is also constrained by the TMO storage capacity which was of 4.1 million tons in 2010.

However the essential reason – to consider not only that the whole production is not eligible for market price support but even more that agricultural subsidies are not reaching all farmers – results from the fact that only farmers' land registered in the ÇKS (Farmer Registration System) can get subsidy. A first confirmation was given by the same USDA FAS Officer in Ankara: "*Farmers should be registered to the CKS in order to have farm subsidy. Because of land ownership problem not all farmers are registered to CKS system. Some farmers lease government land and they don't get farm subsidy… Due to inheritance law landownership is a big problem. A lot of land is still registered under the name of dead father or mother. Because of conflict between brothers and sisters they can't solve landownership problem. In order to register to CKS system you need to show legal deeds certificate that shows that land is owned by yourself*". A second confirmation came from a scientific research published in January 2011 that we quote extensively: "*In Turkey, information on farmers and farmland is registered in the National Registry of Farmers (NRF) system. The NRF system is used for the administration of different types of agricultural subsidies to farmers including de-coupled direct payments... The NRF system is based on declarations by farmers, which depend on the land registry and related land use rights (title, land use contract, consent from first order relatives or notary statement) as proof of right for agricultural activity. The system operates on a centrally managed web-service that enables the provincial directorates of the Ministry of Agriculture and Rural Affairs (MARA) to enter and update the information submitted by farmers…*

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[52] http://www.avrupa.info.tr/Files/File/EU&TURKEY/Yeni%20klas%C3%B6r/screening_report_11_tr_internet_en.pdf

[53] CEEC Agri Policy. *Assessment and outlook in the cereals sector*, 2006, http://www.euroqualityfiles.net/cecap/Report%202/CEECAP%20report%202%20section%201%20cereals%20report.pdf

This study showed that an average of 69.6% (75.0 and 64.1% each) (Table 2) of agricultural land in two pilot areas was not registered in the NRF system in 2006, which means that there were undeclared land and thus farmers who did not gain any income through agricultural subsidies. Since there are only slight changes in the amount of registered land and numbers of farmers in the NRF system over a few previous years (Inan and Yomralioglu, 2006), it is possible to estimate that this ratio is more or less the same for future years. Therefore, it is clear that the number of registered farmers and the amount of farming land in the NRF system in two pilot areas differs enormously from the reality of land use. This may be generalised for the Black Sea region where subsistence and semi-subsistence farming is common (DG Agri., 2003). In fact, this style of farming may cause farmers not to declare their land for agricultural subsidies"[54].

And they conclude: "*It is proven with this study that the current structure of the NFR system is not adequate for the management of agricultural subsidies within the agricultural policy because it does not include all of the agricultural land, it does not include required spatial data for the control of farmer declarations and for the determination of undeclared land*".]

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.)

[54] Halil Ibrahim Inan, Tahsin Yomralioglu and Nihat Enver Ulger, *Evaluation of national farmers' registry data in geoinformation context: Case study of Trabzon, Turkey*, Scientific Research and Essays Vol. 6(2), pp. 422-429, 18 January, 2011, http://www.academicjournals.org/sre/PDF/pdf2011/18Jan/Inan%20et%20al.pdf

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).

[But this alleged price support of wheat would have been totally inefficient without the huge tariff on wheat (130% *ad valorem*) even if the government has suspended it from 25 February 2011 to 1 May 2011[55]. The determinant role of tariff in the price level was confirmed in a report of 2005: "*The difference between domestic and world market prices is determined by the customs tariff*"[56].
Furthermore a recent OECD report on Turkish agricultural policy underlines that "*Minimum purchase prices exist for cereals, sugar, tobacco and tea… However, as these prices are generally not announced until well after the planting date – and sometimes after the delivery date – market uncertainty is accentuated and farmers' production plans can be frustrated*"[57]. This was confirmed in another previous report: "*Cereal prices in Turkey are supported by an intervention price system, tariffs, and export subsidies. Intervention prices vary from year to year according to the political situation and the phase of the election cycle. Their impact on market prices, however, has declined in recent years, as the quantity bought by the Turkish Grain Board (Toprak Mahsulleri Ofisi, TMO) has declined significantly. Moreover, payments were often delayed so that, due to inflation, the real value of the payments was far below that announced at the time of harvest*"[58].]

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)

[However, as Turkey has only procured 978,390 tons of wheat in 2010 (according to the 2010 TMO report), the specific AMS for wheat along the URAA methodology – particularly meaningless given the huge tariff on wheat – was of $193 million [197.30 (299.76 – 102.46) x 978,390], according to the administered price in $ given by DTB. However, the GAIN report and hence this DTB report have not taken the appropriate exchange rate for the procurement price of 550 LM/MT because the rate of 1.83 TL for $1 has only been reached the last trimester of 2011. The 2010 TMO report claims that the dollar equivalent was $357/MT, based on the exchange rate in May 2010 (Chart 12) but it is more accurate to use the average annual exchange rate of 1.569 TL to $1[59], which gives $350.54/MT for 550 LM/MT. So that the wheat AMS market price support (MPS) linked to administered price was of $249 million [248.08 (350.54 – 102.46) x 978,390].

On the other hand DTB has underestimated the value of AHR wheat production in 2010 for

[55] http://www.fao.org/giews/countrybrief/policy_detail.jsp?code=VNM
[56] Hüsnü EGE, Deniz DÖNMEZ, Neslihan YILMAZ, John BELT, *Turkish Cereal Sector Analysis*, http://www.lei.wur.nl/NR/rdonlyres/24883C99-4400-49BC-9630-BC9688BE2459/97109/TurkishCerealSectorAnalysis.pdf
[57] OECD, *Evolution of agricultural policy reforms in Turkey*, 21 September 2011, http://www.keepeek.com/Digital-Asset-Management/oecd/agriculture-and-food/evaluation-of-agricultural-policy-reforms-in-turkey/evolution-of-agricultural-policies-in-turkey_9789264113220-4-en
[58] Enno-Burghard Weitzel, Ahmet Bayaner, *Spatial price transmission on the Turkish wheat market – An initial application*, 2006 http://www.iamo.de/forum2006/files/Contributed_papers/25-Weitzel-Final-1.pdf
[59] http://www.irs.gov/businesses/small/international/article/0,,id=206089,00.html

three reasons:
i) It has underestimated the level of wheat production: of 19.7 million tons according to TMO against 17 million tons according to USDA (Chart 4 of 2010 TMO report) and this raises an issue. For USDA, in the GAIN report of July 2009, "*There is a big difference between the post forecast and the official Turkish forecast of wheat production this year. The Turkish forecast does not take into consideration production losses, resulting in a higher forecast. Another reason for inflated official forecasts is premiums. In order to get more premiums, yields are exaggerated*". Even if this is true, as long as TMO's statistics are used by the other government bodies and to derive yields and other calculations, we are obliged to use them, the more so as we do not have all the series of USDA estimates.
ii) It has underestimated the average market price which has been of 605 TL/MT (Chart 13 in the 2010 TOM report).
iii) And, as just said, it has underestimated the exchange rate has been of 1.569 TL for one dollar in 2010[60].
Eventually the wheat production value was of $7.596 billion and the *de minimis* exemption level of $760 million, much above the MPS AMS of $249 million.

Table 13 – Turkish trade in wheat from 1986 to 1988

	1986	1987	1988	Average
Import quantity	788170	370912	9903	389662
Import value	97897	32637	2895	44476
CIF price	124.21	87.99	292.24	168.15
Export quantity	16214	296595	1993240	768683
Export value	1835	28304	196918	75686
FOB price	113.17	95.43	98.79	102.46

Source: FAOSTAT]

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.

[However the quoted article above has shown that 70% of the land in the Black Sea region has not been registered in the National Registry of Farmers (NRF) and has suggested that a large share as well of the agricultural land in Turkey has likely not been registered *"where subsistence and semi-subsistence farming is common*", so that the corresponding share of grains production has not received subsidies. We know also that 30% of wheat production was self-consumed: "*Wheat is the major cereal crop for farmers and is the staple food item for Turkish consumers, with a marketing ratio of about 70 %. The rest is used on the farm of origin. Wheat accounts for 67 % of the value of total cereal production and 16 % of the value of total crop production*". A World Bank report states that "*well informed anecdotal evidence strongly points towards generalized unbalanced application [of fertilizers] – serious overuse on commercial farms and very little application on smaller, poorer holdings*"[61].

A new OECD report on Turkish agriculture shows that "*66% of all holdings are less than 5 ha in size (these are mainly oriented toward self-sufficiency and have lower than average income)... About 79% of agricultural holdings occupying 34% of the land are less than 10 ha in size… 59.2% are less than 4 ha… In 2006 about 91.6% of farms were in an income bracket of less than TRY 13 000 (EUR 7 222)… There were as many as 34.5% of farms with income below TRY 2 000 (EUR 1 111)… Average per capita non-agricultural income was about three times larger than that of agriculture… Farm structures are dominated by small-*

[60] http://www.irs.gov/businesses/small/international/article/0,,id=206089,00.html
[61] http://siteresources.worldbank.org/INTTURKEY/Resources/361616-1121189080247/turkey_ag_report_chapter3.pdf

sized, family-owned and highly-fragmented farm holdings, using only elementary technologies…. The average farm size in Turkey has remained almost unchanged since 1991, at 6 ha… Approximately 12% of ploughing is still done with draught animals… Turkey's labour productivity in the agricultural sector is lower than in the EU countries with relatively large agricultural sectors or similar farm structures, such as Bulgaria and Romania"[62]. And the Turkish Statistical Institute has shown that the percentage of farmers below the complete poverty line has risen from 34.6% in 2008 to 38.7% in 2009[63].

All this evidence leads to conclude that most Turkish farmers are "resource-poor" in the sense of the URAA Article 6.2 so that their input and investments subsidies (seed subsidy, soil analysis subsidy, fuel subsidy and fertilizers subsidies) should not be counted in the AMS, and this for at least 35% of production. Therefore we disagree with DTB's statement below that "*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*". It is at least likely that the self-consumed production does not receive most of these 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.)

[62] OECD, *Evaluation of agricultural policy reforms in Turkey*, 2011, http://www.keepeek.com/Digital-Asset-Management/oecd/agriculture-and-food/evaluation-of-agricultural-policy-reforms-in-turkey_9789264113220-en
[63] http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=6365

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.

[Not at all ! First because it is not justified to consider these input subsidies (on seed, soil analysis, fuel and fertilizer) as product-specific, the more so that these types of subsidies have been notified as non-product-specific in most developed countries, at least when they have been notified at all, which they have not in the EU and US ! Therefore we have to dissociate the wheat specific support, made of the market price support and the wheat premium, from the input subsidies to be notified in the non-product-specific AMS. Then, based on the evidence shown above, we will consider that at least 35% of wheat production does not receive the wheat premium and the input subsidies. On the other hand, we should use the production of 19.7 million tonnes on 8.094 million ha (Chart 2 of the 2010 TMO report) and the exchange rate of 1.569TL/$1 instead of the 17 million tonnes on 8 million ha and 1.83 TL/$1 used by DTB. But this area is not appropriate for the seed subsidy because the quoted GAIN report states: "*Total wheat area in MY 2011 is 7.4 million ha and only 1.14 million ha area was planted with certified wheat seed, despite government supports (60 TL/ha) for usage of certified wheat seed*", and the 2010 TMO report explains that "*Considering the fact that the wheat is a cleistogamic plant requiring the replacement of the seeds with certified wheat seeds in every 3 years*", it is therefore false to calculate the seed subsidy on 8 million ha, and we will use 1.14 million ha. The OECD report on Turkish agriculture shows also that only 50% of farms are using certified seeds. Furthermore the GAIN report shows that the seed subsidy was only of 50TL/ha in 2010 even if it has risen to 60 TL in 2011.

So that the wheat specific AMS has been of $657 million in 2010, below the *de minimis* level of $760 million. In fact it would have sufficed that only 19.4% of the wheat production did not receive the wheat premium to remain below the *de minimis* level. And the non-product-specific AMS has been of $360 million, a small share of the non-product-specific *de minimis* of 10% of the whole agricultural production value in 2010, which was of $7.247 billion according to OECD which shows an agricultural production value of $72.468 billion. But clearly the share of wheat to the non-product-specific AMS has to be added to the shares of the other products.

Table 14 – Rectified wheat specific AMS and contribution to the non-product-specific AMS in 2010

Program CY2010	AMS in TL	AMS in $
1) Price support	0.391 b	$0.249 b
2) Wheat Premium: specific subsidy	65% of (50TL x 19.7 m)= 0.640 b	$0.408 b
Wheat specific AMS	**1.013 b**	**$0.657 b<*de minimis* $0.760 b**
Subsidies in the non-product-specific AMS		
3) Seed Subsidy	65% of (50TL x 1.140)=0.037 b	$0.024 b
4) Soil Analysis Subsidy	65% of (25TL x 8.094)=0.132 b	$0.084 b
5) Fuel Subsidy	65% of (32.5TL x 8.094)=0.171 b	$0.109 b
6) Fertilizer Subsidy	65% of (42.7TL x 8.094)=0.225 b	$0.143 b
Wheat non-product-specific AMS	**0.565 b**	**$0.360 b<*de minimis* $7.247 b**

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.

[It has actually exported 1.854 million MT (Chart 10 in 2010TMO report) but the majority of these exports have been made under the inward processing regime, that is from duty free imports of wheat, so that we cannot speak of export subsidies in that instance.]

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.

[We prefer to rely on TMO official data for production (4.31 million tonnes), acreage (594,000 ha), procurement level (83.500 MT) – which was of 0.019% of production – and price ($312.3/MT) given the actual average exchange rate for 2010 (1.569TL=$1) and on FAOSTAT data for the average CIF price from 1986 to 1988 ($128.1/MT). This gives a corn price support for 2010 of $1.54 million [184.2 (312.3 – 128.1) x 83.5], much lower than the corn AMS.

However we question the idea that, whatever the rate of production procured, it has necessarily a determinant impact on the domestic price level. In the case of corn, the average rate of procurement has been of 1.1% from 2000 to 2010, as against 8.3% in the case of wheat, even if for wheat also it is the high tariff and occasional exports which have the key impact of the domestic price. It is even more verified for corn and the other coarse grains (barley, rye) which enjoy also a high tariff of 130%, except in case of domestic deficit.

Taking the average price of 466.1 TL/MT or $297.1/MT on Turkish commodity exchanges in 2010 as a proxy to the average farm price, the maize production value was $1.281 billion and the *de minimis* of $128 million.

Table 15 – Turkish trade in corn from 1986 to 1988

	1986	1987	1988	Average
Import quantity	190613	94664	185553	156943
Import value	29627	11823	19290	20247
CIF price	155.4	124.9	104.0	128.1
Export quantity	6526	13121	4914	8187
Export value	779	1201	2700	1560
FOB price	119.4	91.5	549.5	253.5

Source: FAOSTAT

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.

[We also consider, for the same reasons advanced for wheat, that input subsidies should be

notified in the non-product-specific AMS and that at least 35% of the production comes from resource-poor farmers whose input subsidies are not in the AMS (URAA Article 6.2). As for the corn premium, there are likely about 35% of farmers who are not registered and consequently do not receive the premium. Finally the corn AMS was of $71.4 million in 2010, much below the product-specific AMS of $128 million. In any case if we would consider that all farmers receive the premium the corn specific AMS would be of $111.5 million, still lower than *de minimis.*

Table 16 – Rectified corn specific AMS and contribution to the non-product-specific AMS in 2010

Program CY2010	AMS in TL million (m)	AMS in $ million (m)
1) Price support	2.42 m	$1.54 m
2) Corn premium: specific subsidy	65% of (40TL x 4.31)= 112 m	$71.4 m
Corn specific AMS	**114.4 m**	**$72.9 m<*de minimis* $128 m**
Subsidies in the non-product-specific AMS		
3) Fuel Subsidy	65% of (32.5TL x 0.594=12.55 m	$8.00 m
4) Fertilizer Subsidy	65% of (42.5TL x 0.594)=16.41 m	$10.46 m
5) Soil Analysis Subsidy	65% of (25TL x 0.594)=9.65 m	$6.15 m
Corn non-product-specific AMS	**38.61 m**	**$24.7 m<*de minimis* $7.247 b**

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

[According to the 2010 TMO report, barley production has been of 7.240 million tonnes in 2010 (Charts 30 and 32) on 3.033 million ha (Chart 30), TMO procurement of 917,000 tonnes (Chart 123) at a procurement price of $264.5/MT. We did not use the procurement price of $361/MT given in Chart 35 because it is based on the exchange rate of May 2010 whereas the average annual exchange rate has been of TL1.569 for $1. On the other hand there has been almost no difference between the average notified reference price for 1986-88 and the average FOB price. The barley market price support for 2010 has therefore be of $1.148 [158.6 (264.5-105.9) x 7.24]. The average price for 2010 of barley sold in Turkey's commodity exchanges has been of 410 TL/MT or of $261.1/MT so that the production value has been of $2.61 billion and the *de minimis* of $261 million. In that case the *de minimis* product-specific ceiling has been largely exceeded.

Table 17 – Turkish trade in barley from 1986 to 1988

	1986	1987	1988	Average
Import quantity	-	-	93349	31116
Import value	-	-	7560	2520
CIF price	-	-	81.0	81.0
Export quantity	979	17222	389535	135912
Export value	107	1790	40710	14202
FOB price	109.3	103.9	104.5	105.9

Source: FAOSTAT

Other Amber Box Programs

Program MY 2010	Subsidy per unit	Estimated Total Outlays MY 2010 TL* Ho	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.

[Indeed the barley product-specific AMS has been largely exceeded in 2010 but let us remind the reader that this way of calculating is a fake market price support (MPS) implying no subsidy and that the impact of this MPS on domestic price is insignificant because, as in the case of wheat, it depends much more on the high tariff (130% ad valorem) preventing foreign barley to enter except when the domestic production is insufficient. Furthermore the rate of procurement over production is generally low: 6.4% on average from 2000 to 2010, even if it has peaked in 2009 (17%) and 2010 (13%) after 0% in 2007 and 2008. Since 90% of barley production goes to feed, it is likely that a large share is self-consumed on farms and that a significant share of small farmers are not registered in the National Registry of Farmers (NRF) and do not get the barley premium.

On the other hand the contribution to the non-product-specific AMS of input subsidies for barley have been of $125.7 million. As for wheat, at least 35% of the production comes from resource-poor farmers whose input subsidies are not in the AMS.

Table 18 – Rectified barley specific AMS and contribution to the non-product-specific AMS in 2010

Program CY2010	AMS in TL million (m)	AMS in $ million (m)
1) Price support	1,801 m	$1,148 m
2) Barley premium: specific subsidy	65% of (40TL x 4.31)= 112.1 m	$66.3 m
Barley specific AMS	**1,913 m**	**$1,214 m>*de minimis* $261 m**
Subsidies in the non-product-specific AMS		
3) Fuel Subsidy	65% of (32.5TL x 3.033=64.07 m	$40.84 m
4) Fertilizer Subsidy	65% of (42.5TL x 3.033)=83.79 m	$53.40 m
5) Soil Analysis Subsidy	65% of (25TL x 3.033)=49.29 m	$31.41 m
Barley non-product-specific AMS	**197.15 m**	**$125.7 m<*de minimis* $7.247 b**

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

[According to the 2010 TMO report, oats production has been of 203,870 tonnes in 2010 (Chart 63) on 88,390 ha, TMO procurement of 400 tonnes (Chart 124) – a minuscule rate of 0.002% of production –, at a procurement price of 430 TL/MT or $274.1/MT.

More generally, given the minuscule rate of procurement relatively to production – 1,618 tonnes procured on average from 2000 to 2010 for a production of 246,458 tonnes, or a rate of 0.0066%, about the same as that of rye (0.0047%)! –, we must question the idea that, whatever the rate of procurement, it has necessarily a determinant impact on the domestic price level. If we could admit a limited role in the case of wheat – with an average rate of procurement of 8.3% from 2000 to 2010 –, corn – with an average rate of procurement of 6.8% –, paddy rice – with an average rate of procurement of 6.5% – and barley – with an average rate of procurement of 6.4% –, even for those cereals it is the high tariff of 130% and occasional exports which has had the key impact on domestic prices, even if the tariffs are frequently lowered in cases of domestic deficit. Thus oats has been imported duty free, like wheat, from 25 February to 15 May 2011. Furthermore let us repeat that this part of the AMS is a fake market price support (MPS) implying no subsidy.

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 has practically not traded oats in the 1986-88 period (only 4,000 tonnes imported in 1988) so that there is no national reference price and we have to rely on the notified price of $110/MT. The oats market price support for 2010 has therefore be of $0.066 million [164.1 (274.1-110) x 400]. The average price for 2010 of oats sold in Turkey's commodity exchanges has been of 512TL/MT or $326.2/MT so that the production value has been of $66.5 billion and the *de minimis* of $6.7 million.]

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

[As for barley and the other feed cereals (rye and corn), it is likely that a large share is self-consumed on farms and that a significant share of small farmers are not registered in the National Registry of Farmers (NRF) and do not get the oats premium.

On the other hand the contribution to the non-product-specific AMS of input subsidies for oats has been of $3.7 million.

Table 19 – Rectified oats specific AMS and contribution to the non-product-specific AMS in 2010

Program CY2010	AMS in TL million (m)	AMS in $ million (m)
1) Price support	0.103 m	$0.066 m
2) Oats premium: specific subsidy	65% of (40TL x 203,870)= 5.30 m	$3.14 m
Oats specific AMS	**5.403 m**	**$3.206 m<*de minimis* $6.7 m**
Subsidies in the non-product-specific AMS		
3) Fuel Subsidy	65% of (32.5TL x 88,390=1.87 m	$1.19 m
4) Fertilizer Subsidy	65% of (42.5TL x 88,390)=2.44 m	$1.56 m
5) Soil Analysis Subsidy	65% of (25TL x 88,390)=1.44 m	$0.92 m
Oats non-product-specific AMS	**5.75 m**	**$3.7 m<*de minimis* $7.247 b**

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

[According to the 2010 TMO report, rye production has been of 365,560 tonnes in 2010 (Chart 48) on 141,000 ha and TMO procurement of 15,000 tonnes (Chart 124) – corresponding to a procurement rate of 4.1%, much higher than the minuscule average rate of 0.0047% from 2000 to 2010 –, at a procurement price of 430 TL/MT or $274/MT.

On the other hand Turkey has practically not traded rye in the 1986-88 period (only 40,000 tonnes exported in 1988) so that there is no national reference price and we have to rely on the notified price of $110/MT. The rye market price support for 2010 has therefore be of $2.46 million [164.1 (274-110) x 15]. The average price for 2010 of oats sold in Turkey's commodity exchanges has been of 408TL/MT or $260/MT so that the production value has been of $95 billion and the *de minimis* of $9.5 million. Therefore the rye price support has been much below the product-specific *de minimis* ceiling.

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.

Table 19 – Rectified rye specific AMS and contribution to the non-product-specific AMS in 2010

Program CY2010	AMS in TL million (m)	AMS in $ million (m)
1) Price support	3.86 m	$2.46 m
2) Rye premium: specific subsidy	65% of (40TL x 0,365)= 9.49 m	$6.05 m
Rye specific AMS	**13.4 m**	**$8.5 m<*de minimis* $9.5 m**
Subsidies in the non-product-specific AMS		
3) Fuel Subsidy	65% of (32.5TL x 141,000)=2.98 m	$1.90 m
4) Fertilizer Subsidy	65% of (42.5TL x 141,000)=3.90 m	$2.48 m
5) Soil Analysis Subsidy	65% of (25TL x 141,000)=2.29 m	$1.46 m
Rye non-product-specific AMS	**9.17 m**	**$5.8 m<*de minimis* $7.247 b**

[No, we have seen that the rye price support has remained much below its product-specific AMS in 2010 and let us repeat that rye benefit also of the same high tariff (130% ad valorem) preventing foreign rye to enter (no import in 2010) except when the domestic production is insufficient. On the other hand the contribution to the non-product-specific AMS of input subsidies for rye has been of $3.7 million.

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.

[Which is fair since this variety represents 95% of total production].

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.

[Instead of taking the EU external reference price, DTB should have taken Turkey average CIF price of milled rice for 1986-88, of $250.8/MT.

Table 19 – Turkish trade in rice from 1986 to 1988

	1986	1987	1988	Average
Import quantity	76146	158419	91108	108558
Import value	18875	33609	26638	26374
CIF price	247.9	212.2	292.4	250.8
Export quantity	53	1260	118	477
Export value	35	337	88	153
FOB price	660.4	267.5	745.8	557.9

Source: FAOSTAT

However, as Turkey did not procure paddy rice in 2010, we should not count any price support for that year, so let us try to take 2008 when the last procurement price was of 790 TL for the medium grain paddy (corresponding to the Osmancik variety) which, at the exchange rate of 1.358 TL/$ in 2008, was worth $582MT. But there was only 1,000 tonnes procured in 2008 – a procurement rate of 0.0013%, against an average rate of 6.5% from 2000 to 2010 – so that it is ridiculous to assess the price support and above all to extend it to the whole production. Then let us take 2009, with the 2008 procured price of 790TL/MT but at the 2009 exchange rate of 1.619TL/$, which becomes $488/MT. 11,000 tonnes of paddy (equivalent to 7,150 tonnes of rice) were procured in 2009 for a production of 750,000 tonnes on 97,000 ha (against 860,000 tonnes on 99,000 ha in 2010), with an average market price of Osmancik paddy of 1,170TL/MT and of Osmancik rice of 2,116TL/MT (against respectively 1,047TL and 1,986TL in 2010). Let us make the calculus in paddy and for that we convert the reference price of rice in 1986-88 ($250.8/MT) in an equivalent reference price of paddy ($386/MT). The price support has then been in 2009 $1.12 million [102 (488-386) x 11,000)] for a production value of 87.75 million of TL or $54.2 million. Therefore the price support has been largely below the *de minimis level* of $5.4 million. Let us add that, although Turkey is a structural net importer of rice, nevertheless it has maintained a significantly high tariff of 45% ad valorem. Above all it seems all the less unjustified to assess the price support AMS on the basis of the whole production as the percentage of procured paddy was so low (1.5% in 2009, 0.1% in 2008, 0% in 2010) and cannot have had any significant impact on the domestic market price.]

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.

[No ! For 2010, the paddy production value was of 1.006 billion (860.000 tonnes x 1,170 TL/MT) and hence of $100.6 million for the product-specific *de minimis*. The rice (paddy) premium has been of 86 million TL or $54.8 million (here we do not take into account the non-registered production). Therefore total product-specific AMS was of $55.9 million, well below the *de minimis* level.

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.

[Despite that the market price support (MPS) component of the sugar AMS has long been very large in the EU, and to a lesser extent in the US, we should question the rational of this type of notification, also for Turkey. Indeed, in Turkey as in the EU, the domestic price level has essentially resulted from a combination of production quotas, deterrent tariffs, plus for the EU huge export subsidies, including through exports of C quota sugar as the Appellate Body has rightly ruled against the EU in April 2005. And it is largely the EU huge exports subsidies on exports of A and B quotas plus its exports of C sugar which explain the very low level of the world prices, hence of the external reference price for Turkey as well, in the base period 1986-88 for the calculation of the sugar MPS. Indeed in that period the EU-12 had exported an annual average of 4.5 million tonnes (FAOSTAT), owing to average export subsidies of ECU 1.440 billion[64] but owing also to the fact that C quotas exports made at the world price were compensated by the huge EU domestic price, 3.6 times higher than world prices owing to deterrent tariffs, as confirmed by Alan Swinbank: "*As reported in Agra Europe (20 March 1992), for white sugar the internal price over the base period was given as 719 ecu/tonne and the external price as 195 ecu/tonne, giving a tariff equivalent of 524 ecu/tonne (equivalent to an ad valorem tariff of 268.7 percent)*"[65]. Another World Bank report of 1990 estimated that "*The results of our work indicate that the European Community's dumping of A and B quota sugar on the world market alone has the potential to lower world price by 17.5 per cent on average over the long term and by at least 30 per cent during the low price phases of the world price cycle*"[66].

In other words the sugar domestic price in Turkey results essentially from high tariffs plus highly flexible production quotas – much more than in the EU – as the quotas vary from year to year under the combined effect of the Sugar Agency and Government intervention which might change the amount of quotas, including those of starch-based sugar, determined by the Sugar Agency by up to 50%[67]. All this to conclude that this sugar MPS AMS is almost meaningless, the more so as it does not relate to the gap between the current administered price and the current world price but between the current administered price and the world dumped reference price of 1986-88.]

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 T, while "A" quota sugar sold at $1,310 MT.[17]

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

[64] http://aei.pitt.edu/view/eusubjects/eagus.html
[65] Swinbank, Alan, *Dirty Tariffication Revisited: The EU and Sugar*, http://www.allbusiness.com/legal/international-trade-law-tariffs-customs-duties/16087943-1.html
[66] http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1990/10/01/000009265_3960929234135/Rendered/PDF/multi0page.pdf
[67] http://books.google.fr/books?id=U8aG2wEUOhoC&pg=PA67&lpg=PA67&dq=Turkey%E2%80%99s+Price+Support+for+Sugar+Beets&source=bl&ots=UO3INbByd9&sig=cDK_aRKQ_AchJ37YyuTAnRNzQP0&hl=fr&sa=X&ei=ZR__TvyOGsbWsgaB2-DXDw&ved=0CFwQ6AEwBw#v=onepage&q=Turkey%E2%80%99s%20Price%20Support%20for%20Sugar%20Beets&f=false

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.

[As we did not find enough evidence, we do not object this DTB assessment.]

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.
[As we did not find enough evidence, we do not object this DTB assessment.]

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.
[As we did not find enough evidence, we do not object this DTB assessment.]

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.
[Formally yes but, as you recognized above, all WTO developing Members enjoy a product-specific *de minimis* of 10% of their individual product production value and a non-product specific *de minimis* of 10% of their whole agricultural production value (URAA article 7.2), of $7.247 billion for Turkey.]

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**

Table 20 – Actual current AMS in 2010

Program in 2010	AMS in TL million (m)	AMS in $ million (m)
Product-specific AMS		
Wheat Support	1,013 mb	657 m<*de minimis* 760 m
Corn Support	114.4 m	72.9 m<*de minimis* 128 m
Barley Support	1,913 m	1,214 m>*de minimis* 261 m
Oats Support	5.403 m	$3.206 m<*de minimis* $6.7 m
Rye Support	13.4 m	8.5 m<*de minimis* 9.5 m
Rice Support (2009)	87.7 m	55.9 m<*de minimis* 100.6m
Sugar Support	1,260 m	686 m>*de minimis* 119 m
Cotton support	252 m	137 m<*de minimis* 290 m
Soybean Support	25 m	13 m>de minimis 2 m
Sunflower Seed Support	218 m	118>*de minimis* 66 m
Total product-specific support	5,005	3,030>*de minimis* 1,743 m
Total product-specific AMS (>de minimis)	1,214 + 686 + 13 + 118=2,031 m	
" of which premium subsidies of $334 m (66.3 + 137 + 13+ 118) and fake MPS of $1,697 b		
Contribution of each product to the non-product-specific AMS		
Wheat Support	565 m	360 m
Corn Support	38.6 m	24.7 m
Barley Support	197.2 m	125.7 m
Oats Support	5.8 m	3.7 m
Rye Support	9.2 m	5.8 m
Total non-product-specific AMS	815.8	519.9 m<de minimis 7,247 b
Current total AMS	**2.031 b of which only $334 m of actual premium subsidies**	

To conclude, if, as we should, we do not take into account the $1,697 billion of fake MPS of Turkey product-specific AMS but only the $334 million of premium subsidies, Turkey actual current AMS is very low. And the $6.727 billion available in the non-product-specific *de minimis* could help Turkey to increase its AMS.]

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. [No a new one has started the 7 October 2011 with the launch of the Pheu Thai Party's rice mortgage policy, programmed till 29 Februrary 2012, which could raise the price of rice nearly 50%, offering farmers mortgages of 20,000 baht for one ton of unmilled jasmine rice and 15,000 baht ($US482) for one ton of unmilled white and sticky rice, about 40% above current market rates.[68] According to Bangkok Post of 18 May 2011, "*That is 36.4% higher than the current 11,000 baht that farmers can obtain from the income guarantee programme that has been implemented for the past two years by the Democrat-led coalition.*"[69] The new programme has replaced the insurance programme (or income guarantee programme) under which farmers were compensated directly if their selling prices were below agreed benchmarks set every two weeks.]

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

[68] http://www.huffingtonpost.com/2011/09/20/thailand-rice-food-prices_n_970814.html

[69] http://www.thairiceexporters.or.th/Int%20news/News_2011/int_news_170611-2.html

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.

[According to FAOSTAT, Thailand has had an average FOB price of $219/MT from 1986 to 1988, without any import:

Table 21 – Thailand's trade in rice from 1986 to 1988

	1986	1987	1988	Average
Export quantity (tonnes)	3414580	3942770	4660580	4005977
Export value (US $)	642109	809543	1228580	893411
FOB price $/MT	188.05	205.32	263.61	219.00

Source: FAOSTAT]

On the other hand the average annual exchange rates were of 34.603 bahts/$ in 2008, 35.953 bahts/$ in 2009 and 33.227 bahts/$ in 2010[70], so that the administered price in 2008 was of $312.1 and the gap with the fixed external reference price of 1986-88 was of $93.1/MT and the total MPS for 29 million MT would have been of $2.7 billion.

However you cannot assess Thailand rice specific AMS with the same methodology used for a fake market price support not linked to actual government subsidies: in Thailand the Paddy Rice Pledging Scheme is similar to the former US non-recourse marketing loan where farmers can forfeit (in fact sell if they do not redeem the loan) their paddy to government at the guaranteed price (loan rate), much higher than the market price in Thailand. Furthermore the former (till 2008-09) and the new Pledging schemes (or mortgage programmes) apply to unlimited production levels whereas the Abhisit's rice price guarantee policy had a ceiling of 30 tons per type of rice per harvest and the loan was based on the farmer's rice acreage so that there has been a lot of cheating with subsidies paid on actually not cultivated rice land[71]. Therefore the appropriate way to assess this actual price subsidy is on the basis of URAA Annex 3 paragraph 10: "*Non-exempt direct payments*: *non-exempt direct payments which are dependent on a price gap shall be calculated either using the gap between the fixed reference price and the applied administered price multiplied by the quantity of production eligible to receive the administered price, or budgetary outlays*" (not underlined in the Agreement). It is precisely the reason why Thailand has always rightly notified its rice supports as non-exempt direct payments.
According to a GAIN report of 10/29/2009 "*In addition to the budgetary burden estimated at over US$3 billion in 2008, few of the benefits fell to the farmers. The current program suffered from "slippage," made illicit cross-border trade very attractive, and invited public and behind-the-scenes political wrangling.*"[72] Therefore we could not consider the actual budget burden to have been of $3 billion given to farmers. As for the new Paddy Mortgage Scheme, the GAIN report of 8/08/2011 says: "*About 70 percent of rice farmers will likely be worse off under the Paddy Pledging Program, as compared to the Price Insurance Program. In general, farmers participating in the Paddy Pledging Program in the past account for only one third of total rice farmers, most of them are large-scale farmers in the central plain. Meanwhile, small-scale farmers, particularly the northeastern farmers with average holdings of 10-20 rai (2-3 hectares), have limited ability to participate in the program due to*

[70] http://www.irs.gov/businesses/small/international/article/0,,id=206089,00.html
[71] http://www.huffingtonpost.com/2011/09/20/thailand-rice-food-prices_n_970814.html
[72] http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Price%20Insurance%20Starts%20to%20Replace%20Mortgage%20Scheme_Bangkok_Thailand_10-29-2009.pdf

liquidity and logistical concerns and will be forced to sell at market prices which are usually far below the intervention prices."]

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.

[No: the Direct Purchase program is only a complement to the main program which is the Price Insurance Scheme as explained in the GAIN Report of 3/22/2011: "*The government has additional measure on the Direct Purchase Program with a target of 2.0 million tons of paddy to buy paddy at benchmark prices, effective March 16, 2011. The objective of the program is to help stabilize domestic prices of paddy which are under downward pressure during the harvest. However, the program is unlikely to buy up to the target of 2.0 million tons as the benchmark prices are closed to market prices. In MY2009/10, the program bought only 150,000 tons*". However these direct purchases do not represent a subsidy because we do not know the actual price at which the government will resell eventually these purchases.]

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]

[No because I have quoted the Appellate Body report which told the contrary: "*In establishing its program for future market price support, a government is able to define and to limit "eligible" production… In the present case, Korea, in effect, declared the quantity of "eligible production" when it announced in January, 1997, that it would purchase 500 head per day of Hanwoo cattle above 500 kg within the 27 January to 31 December 1997 period, which would be 170,000 head of cattle for the 1997 calendar year. That figure, under paragraph 8 of Annex 3, accordingly constitutes the quantity of "eligible production*"[73]. And this purchase of the eligible production for 1997 represented only 19.2% of the actual production.]

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.

[No, as I have reminded at the beginning of my comments, the US is not using any longer total milk production in its notifications but, since 2008, only that of butter, NFDM and Cheddar cheese and, besides, they are the huge tariffs on dairy products, not the

[73] *Korea – Measures affecting imports of fresh, chilled and frozen beef*, Report of the Appellate Body, WT/DS169/AB/R, 11 December 2000, http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds161_e.htm.

administered prices, which explain the domestic prices levels.]

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

[How can you change the fixed external reference price from $167 to $182.06 if it is that of the 1996-88 period?

Besides you cannot even table on 2 million tonnes as stated by the GAIN report of 3/22/2011: "*However, the program is unlikely to buy up to the target of 2.0 million tons as the benchmark prices are closed to market prices. In MY2009/10, the program bought only 150,000 tons*". Therefore, with the average exchange rate of 33.227 bahts/$ in 2010, the administered price was of $255.82 and the gap with the Thai FOB rice price of $219.00 in 1986--8 was of $36.82 and with an eligible production of between 150,000 and 2 million tonnes, this would amount to between $5.52 and $73.64 million in price support.

However, as explained above, you cannot use here the usual methodology of URAA Annex 3 paragraph 8 but only that of paragraph 10 based on non-exempt direct payments. But, as long as we ignore the resale price of these direct purchases, you cannot assess the eventual subsidy.]

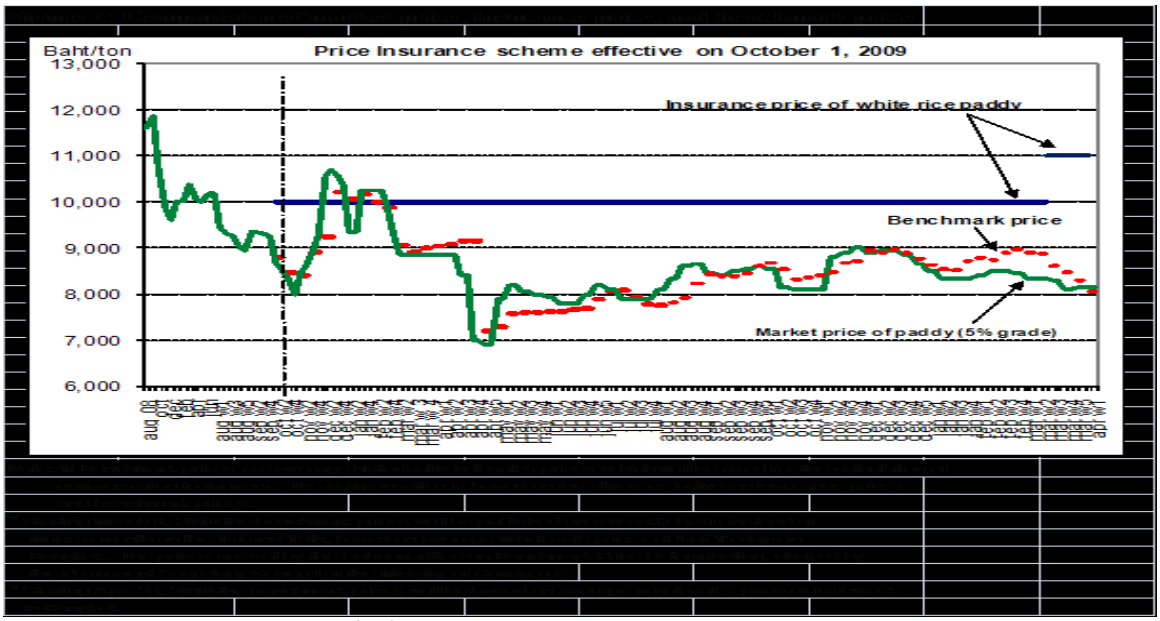
Other Amber Box programs

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.

[However Article 6.2 exemption has nothing to do here as it is not related to price support but only to investment and input subsidies. You have been misled by the word "insurance" although you have just quoted above the GAIN report speaking of "*"insurance" (i.e. target) prices*".]

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.

[Yes, the GAIN report of 3/22/2011 states that "*In MY2009/10 Price Insurance Scheme, the government paid around 48 billion baht ($1.5 billion) for compensation to farmers, as compared to the buy-in cost of the MY2008/09 Paddy Mortgage Scheme of 130 billion baht ($3.8 billion), which excludes post-harvest handling costs.*"[74] Therefore it is these actual subsidies which should be considered as non-exempt direct payments. And you cannot add an alleged market price support with the methodology of URAA Annex 3 paragraph 8.]

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

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http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Annual_Bangkok_Thailand_3-22-2011.pdf

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

[However there are at least two reasons to question this figure:
- The first is that Thailand avail of URAA Article 6.2, given that a significant percentage of production comes from resource-poor farmers. According to the Socio-economic survey of 2007, 32.6% of the rice production is self-consumed by farmers[75], which represented 37.8% of the rice production value. Besides a significant part of rice farmers are net buyers of rice. The author of this article adds: "*In Thailand, the agricultural input markets are mostly free from government intervention. Public policies on chemical fertilizers mainly involved their distribution to the farmers at the prevailing marketing price or at reduced costs. The loan was financed by Farmers' Aid Fund. The government has previously used the Market Organization for Farmers (MOF) and agricultural cooperatives as a network to distribute the fertilizer with a subsidized transportation cost. Due to limited funds, a small number of farmers could access this program and most of them are farmers in irrigated environment. The program had no impact on the small-farmers in remote areas since their eligibility was not met. As a consequence of rising fertilizer price and production cost, it is inescapable that the food production of small farmers would be affected most.*" Furthermore "*the economic survey in 2007 has shown that subsistence rice farmers had to pay 62.9% of their value of production for operating cost while receiving only 10.9% for rice sold*".
In other words, we could deduct at least 37.8% of these subsidies going to resource-poor farmers, and the figure would become $239 million.
- The second reason is that you cannot mix the support from one year to that of another one: if there is no data for 2010 and, if you cannot show that this 2007 support is still working, you should forget it altogether.
- The third, minor, reason is that the average exchange rate for 2007 was of 33.831 bahts/$[76] so that total subsidies would have been of $ 220 million (62.2% of 353.3).]

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.

[75] Somporn Isvilanonda, *Food Security in Thailand: Status, Rural Poor Vulnerability, and Some Policy Options*, Faculty of Economics, Kasetsart University, 2011-07-14, http://www.agnet.org/library.php?func=view&id=20110726102632&type_id=4

[76] http://www.irs.gov/businesses/small/international/article/0,,id=206089,00.html

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**

[As already argued, and conform to the methodology of Thailand notifications, you cannot calculate a rice price support with the methodology of URAA Annex 3 paragraph 8 which is used when there are no actual subsidy so that you can only count the income insurance scheme and the soft loan program for a total of $1.72 billion (1.5 +0.22).]

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.

[No, as for paddy rice, you err in using an inappropriate methodology to assess the corn price support because here also it is non-exempt direct payments which are at stake, and Thailand has actually notified non-exempt direct payments for corn.]

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.

[However, as you confess above, and has been confirmed by the GAIN report of 3/322/2011, there has been no subsidy for corn in 2010: "*MY2010/11 Price Insurance Scheme for corn will likely continue to be implemented in MY2011/12. The government did not pay any compensation in MY2010/11 program as market prices of corn have been above insurance prices*".

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
Total AMS	**22.9 b**	**$676 m**
DE MINIMIS THRESHOLD (2010)[2/]	**2.8 b**	**$90.7 m**

1/ Based on 2008 exchange rate.
2/ Calculation of *de minimis* threshold: 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	**17.4 b**	**$499 m**
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.

[No there has not been any market price support nor any subsidy for corn in 2010.]

Cassava (manioc)

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

[Again the methodology based on URAA Annex 3 paragraph 8 using an external reference price of 1986-88 is irrelevant for a policy based on subsidies like that of Thailand and not on a fake market price support. You should calculate instead the non-exempt direct payments based on paragraph 10.

As clearly explained the 12 July 2010 by Jon Fernquest of the Bangkok Post: "*At the start of each planting season, the government, millers and farmers jointly estimate how much sugar will be produced and the prices it will fetch on world markets. This is used to calculate the preliminary cane price that millers must pay farmers… After the crop season ends in October, all parties review actual output and global prices, with the so-called Quota B the most important factor, and settle on a final cane price. If the final price is higher than the preliminary price, millers pay farmers the difference. If the final price is lower, farmers don't have to pay anything back and the government will reimburse the millers*"[77].
But the high export prices of the two last years has permitted to have final cane prices much higher than the preliminary cane price as confirmed by the GAIN report of 21 October 2010: "*MY 2009/10 average market prices of sugar cane will likely be 10 - 20 percent higher than support prices which were set at 965 baht/ton ($32.2/MT) due to record global sugar prices driven by the India's sugar production shortfall. MY2010/11 sugar support prices are expected to be lower than the previous year as global sugar prices will likely ease in anticipation of production recoveries in major producing countries. Meanwhile, domestic sugar prices will likely remain unchanged due to government price controls from levels set on May 1, 2008 as concerns over inflation linger as the economic recovers… The government controlled sugar prices are currently set at 19 baht/kg ($26 cent/lb) for white sugar, and 20 baht/kg ($27 cent/lb) for refined sugar, ex-factory wholesale (excluding 7 percent Value Added Tax). The retail prices (include Value Added Tax) are set at 21.85 baht/kg ($33.0 cent/lb) for white sugar, and 22.85 baht/kg ($34.5 cent/lb) for refined sugar. However, market*

[77] http://www.readbangkokpost.com/easybusinessnews/agriculture/overview_of_how_thailands_suga.php

prices are 10-30 percent higher than control prices due to record international sugar prices driven by lower-than-expected global sugarcane production. Sugar export prices remain attractive at more than $600/MT ($27.2 cent/lb) for delivery in March 2011, as compared to average prices of $530/MT in the first half of 2010".

Therefore there has not been any subsidy to reimburse the millers for purchases of sugar cane. Not to speak of the huge profits they have made from sugar exports at high world prices. Furthermore, even if there is no import revenues for the government, given the deterrent sugar tariff of 94%, the government collects the Value-Added Tax on domestic sales of sugar and the State controlled Thailand Cane and Sugar Corporation (TCSC), which has overall responsibility for pricing and selling raw sugar under the B quota and managing all the cane-sugar chain, receives also a margin from the export of this B sugar.

Besides, as the exported sugar has represented around 2/3 of production, you cannot take into account the whole production of A, B and C sugar, even if it is clear that, according to the WTO Appellate Body rulings in the EU sugar case in April 2005 and in the Dairy products of Canada case of December 2000 and 2001, the exported B and C sugar are indirectly subsidized through the high domestic price paid by consumers for the A sugar owing to the high tariff of 94%. This is implicitly confirmed by the US sugar Alliance: "*About a third of Thailand's sugar production is consumed in the country; the remaining two thirds is sold on the world dump market*."[78]]

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.
[The GAIN report of 27 September 2011 clarifies the issue: "*According to the government, from the 3.0 billion baht ($100 million) three year soft loan approved on September 7, 2010 for cane growers to buy harvesters to improve their efficiency, these have applied for approximately 1.4 billion baht ($47 million) of the loan*". However we do not know the rate of subsidization of these loans.]

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**

[We have shown that there has been no subsidy on price support to sugar cane in 2010 and we do not know the actual subsidy on the soft loan, which furthermore would cover three years. In any case this subsidy would remain much lower than the *de minimis*, not to speak

[78] http://www.sugaralliance.org/sugar-trade/thailand.html

of the possibility to notify it in the non-product-specific AMS and to deduct the share going to resource-poor farmers according to URAA Article 6.2.]

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.

[Yes the AMS limit has been exceeded but infinitely less than claimed by DTB as it has been limited to $1.72 billion for rice: $1.5 billion of income insurance scheme and $0.22 billion for the soft loan program. This is an actual support almost 9 times less than the alleged $15.236 billion.]