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FARM SUPPORT AND TRADE RULES:
TOWARDS A NEW PARADIGM UNDER THE 2030 AGENDA

by

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Abstract

There is a need to move beyond existing metrics in agricultural trade governance. This on account of major changes in farm support policies and in the overall policy framework. The way ahead requires a pragmatic and ground-breaking approach. A comprehensive approach is needed to improve coherence between farm support policies and sustainability concerns. The boundaries of the Green Box have to be redefined accordingly. Specifically, Green Box transfers have to be made conditional on the respect of specific agri-environmental practices. Decoupled income support not subject to agri-environmental "cross-compliance" conditions should only be available to low-income or resource-poor producers. It is also important to acknowledge the fact that different developing countries have different agricultural profiles and different needs for farm support, and to give operational meaning to these differences. Overall, trade policy in agriculture should be re-oriented towards context-specific, circumstantial assessments, informed by equitable considerations and sustainability imperatives.

Keywords: International Trade Law, Green Box Subsidies; Agriculture in International Trade; Sustainable Development

JEL Classification: K33, O13, Q17, Q01

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1. INTRODUCTION

After more than two decades since the conclusion of the Uruguay Round, producer support remains a structural, systemic issue in agriculture. Most important, the playing field is far from level, due to factual and formal discriminations across countries. The Doha Round, if concluded, would redress these imbalances but only partially. The "historic" Nairobi Package on agriculture, agreed at the 10th Ministerial Conference of the World Trade Organization (WTO) in December 2015, eliminates agricultural export subsidies.[1] But important distortions and imbalances in the area of domestic support would stay. In particular, the proposed Doha disciplines would not obstruct the main gateways through which producer support is channeled today. How then to move forward in this setting? Where to set limits to farm support policies, beyond the terms of the Doha Draft? And how to arbitrate trade-offs between "policy space" and "trade fairness"?

Efforts to define the way ahead should take into account three important developments, compared to the 1980 scenario. First, the forms by which farm support is provided in the advanced market-based economies have altered significantly since the mid-1980s: from market price support to income support "decoupled" from current production and prices. This type of support, largely notified under the WTO Green Box, is exempted from reduction commitments. Second, producer support is no longer a North issue: in nominal terms and as a percentage of farm receipts, farm support has increased appreciably in key emerging economies. In a few of them, producer support is now provided at a level comparable with the OECD average. Third, the international normative environment has evolved: the 2030 Agenda for Sustainable Development,[2] the Addis Ababa Action Agenda,[3] and the Paris Agreement[4] have outlined a new development pathway that places social inclusiveness and environmental sustainability at the center of policy design. This, still evolving, framework sets an inescapable normative reference, including for WTO law.

Given the changed scenario, and given that agricultural production accounts for about a quarter of all human-caused greenhouse gas emissions,[5] the way ahead requires a pragmatic and ground-breaking pathway. Trade rules in general and domestic support disciplines in particular are to be reorganized around sustainable development outcomes. The boundaries of the Green Box have to be redefined accordingly. This re-orientation is needed if trade policy is to fit into the new programmatic framework shaped by the 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda, and the Paris Agreement. This paper elaborates on this move. It first briefly highlights the unfinished nature of trade policy reform under the Uruguay Round. It then moves on to consider the major limits of the proposed Doha disciplines on domestic support, as outlined in the Revised Daft Modalities for Agriculture of 6 December 2008 (hereafter, the Doha Draft).[6] As a conclusion, it outlines options for the way ahead.

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[1] The WTO's 10th Ministerial Conference was held in Nairobi, Kenya, from 15 to 19 December 2015. Its most significant outcome on agriculture was the elimination of agricultural export subsidies (Decision on Export Competition (WT/MIN(15)/W/47)). Other agriculture-related decisions covered public stockholding (WT/MIN(15)/W/46) and a special safeguard mechanism (SSM) for developing countries (WT/MIN(15)/W/45).

[2] See the outcome document of the United Nations Sustainable Development Summit 2015 (25 - 27 September 2015, New York): *Transforming our world: the 2030 Agenda for Sustainable Development* (GA Res. 70/1 adopted on 25 September 2015) (downloadable at https://sustainabledevelopment.un.org/frameworks).

[3] The outcome document of the Third International Conference on Financing for Development (GA Res. 69/313 adopted on 27 July 2015) (downloadable at https://sustainabledevelopment.un.org/frameworks).

[4] Outcome document of the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (Paris, 30 November to 11 December 2015) (downloadable at https://sustainabledevelopment.un.org/frameworks).

[5] IPCC, 2014: Summary for Policymakers, in O. Edenhofer et al., eds, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press: Cambridge, United Kingdom and New York), at 24.

[6] WTO document TN/AG/W/4/Rev.4 of 6 December 2008.

2. THE URUGUAY ROUND'S "IMBALANCED OUTCOME": THE UNFINISHED NATURE OF REFORM

The WTO Agreement on Agriculture (AoA)[7] was welcomed as a "breakthrough" in the multilateral framework for agricultural trade policy. It was indeed a major advance in technical terms. To some extent, it crystallized a shift in trade policy "paradigm": domestic farm stabilization policies, until then a matter for domestic discretion, became an international concern because of their trade-distorting effects. The gains were notable in terms of increased transparency and accountability: domestic farm policies, an area of regulatory greyness,[8] became framed by tight multilateral rules. Yet "reforms proved modest in substance".[9] In particular, liberalization commitments under the WTO AoA added little to the breadth of reforms that would have been undertaken without the Agreement.[10] Nor did the WTO AoA provide a "level playing field" among countries. To the contrary, it froze inequalities, in more than one respect.

2.1 NOT SO MUCH LIBERALIZATION

As regards the Uruguay Round achievements, it was argued that liberalization commitments under the WTO AoA "added little or nothing to the pace or content of reforms that would have been undertaken" without the WTO.[11] Eventually, the OECD countries showed remarkable pragmatism in protecting their interests in agriculture. As discussed in Häberli and Paarlberg, their concessions were flawed, in three important respects.[12]

First, data periods and base points were carefully selected to artificially inflate baseline levels of support (domestic farm support and export subsidization) and border protection in key advanced economies. In particular, the outdated 1986-88 base period did not count reductions in domestic support and export subsidization that had been implemented unilaterally in the United States (US) and the European Economic Community (EEC), outside the WTO, in the late 1980s and early 1990s.[13] Both the European Union (EU) and the US could count these reforms towards their Uruguay Round commitments (Box 1).

Second, disciplines on domestic support and market access allowed massive "product support focusing".[14] Domestic-support reduction commitments were not on an individual commodity basis, but on a sector-wide basis: politically sensitive commodities, such as sugar, dairy products and meat continued to receive substantial support, offset by high cuts in support for less sensitive products. The tariff cut was likewise "unweighted" (though not sector-wide, a minimum 15 per cent cuts were

[7] Contained in Annex 1A to the Final Act of the 1986–1994 Uruguay Round of trade negotiations.

[8] Though not exempted from the General Agreement on Tariffs and Trade (GATT), agriculture was to some extent carved out from key disciplines, through country-specific derogations from GATT obligations, low level of tariff bindings and resort to restrictive measures not expressly regulated under the GATT.

[9] Robert Paarlberg, 'Agricultural Policy Reform and the Uruguay Round: Synergistic Linkage in a Two-Level Game?', 51 (3) International Organization 413 (1997), 427.

[10] Ibid., at 428. For a critical assessment of the reach of WTO disciplines on agriculture, see also Christian Häberli, 'Food Security and WTO Rules', in Boris Karapinar and Christian Häberli (eds), *Food Crises and the WTO* (Cambridge University Press, 2010), 297-322; Christian Häberli, 'Do WTO Rules Improve or Impair the Right to Food?', in Melaku Desta and Joe McMahon, eds., *Research Handbook on International Agricultural Trade* (Cheltenham/UK and Northampton/US: Edward Elgar, 2012), 50–72; Christian Häberli, 'The WTO and Food Security: What's Wrong with the Rules?', in Rosemary Rayfuse and Nicole Weisfelt, eds., *The Challenge of Food Security: International Policy and Regulatory Frameworks* (Edward Elgar, 2012), 191–216.

[11] Paarlberg, above n 9, at 428.

[12] For a detailed assessment, Paarlberg, above n 9. See also Häberli, above n 10.

[13] As detailed by Paarlberg (above n 9, at 428-433 and 434-439).

[14] For a detailed assessment, Paarlberg, above n 9, at 429-30.

required for each line), which allowed continued protection for sensitive items. As regards current and minimum access opportunities,[15] sensitive products could be aggregated with less sensitive items (rather than measuring tariff access line by line, at a very disaggregated level); and special trading relationships could be counted.[16]

Finally, the Amber Box of trade-distorting support – the Aggregate Measurement of Support (AMS) category – was "carefully written to exclude some key domestic policy support instruments" in the EU and the US.[17] In particular, most kinds of direct cash payments to farmer were set aside as not counting towards the AMS, if made under certain conditions.[18] In practice, major instruments of farm support in the EU and the US (in the form of direct payments to producers) were exempted from reduction commitments.

All together, these expedients significantly undermined the meaningfulness of liberalization commitments under the AoA, and introduced a number of loopholes in regulation.

Box 1: Domestic support reductions in the EU

The 1986-88 base period allowed the EU to count, towards its Uruguay commitments, domestic support (DS) reductions that had been implemented unilaterally outside the WTO framework. By 1995/96 (the first year of implementation of the AoA), AMS support in the EU had already fallen from 73.53 billion ECU (1986-88 Base Total AMS) to 50.181 billion ECU. This was well below the Final Bound Total AMS (FBTAMS) of 61.20* billion ECU that the EU had committed to achieve by 2000. These cuts had been implemented under the enhanced "stabilizers" reform (marketing year 1987/88) and the MacSharry reform of the CAP (gradually implemented from the 1993/94 to the 1995/96 marketing years). The DS cuts (a reduction of about 23 billion ECU in Amber Box support level between 1986-88 and 1995) were cushioned by "compensation payments" (around 21 billion ECU in 1995 alone) to farmers. Such payments essentially consisted of area and headage payments on the land sown or the number of beef cattle kept ("coupled" payments, outside the Green Box). Subject to set-aside requirements (e.g., to withdraw land from production) and other accompanying measures, they were declared as Blue Box payments, and exempted from reduction commitments. Everything changed, and at the same time, nothing changed, if not in the instrumentalities of support (Box "shifting").

Source: Notification G/AG/N/EEC/12/Rev.2 of 11 May 2009 (Table DS:1) (Current Total AMS for the marketing year 1994/95); Schedule LXXX – European Communities, annexed to the Marrakesh Protocol, and G/AG/AGST/EEC, supporting table 9a (Base Total AMS and FBTAMS); WTO Agriculture Information Management System, Datasets of notified information - Domestic support, Production-limiting programmes notified under Article 6.5 of the Agreement on Agriculture (level of Blue support for 1995, as notified). Note*: Following enlargement, the final bound AMS was revised and fixed at 67.2 billion €.

2.2 AN IMBALANCED OUTCOME

Conceived as a first step towards a more equitable order, the AoA eventually froze up imbalances. Indeed, there was (and is) some unfairness in the resulting subsidy set-up.[19] Developed countries were

[15] As part of the tariffication package, WTO Members were required to maintain, for tariffied products, import access opportunities at levels existing during the 1986-88 base period ("current" access). Where "current" access levels had been less than 5 per cent of domestic consumption of the product in question in the base period, an (additional) "minimum" access opportunity had to be granted on a most-favoured-nation basis.

[16] Paarlberg, above n 9, at 430.

[17] Ibid, at 428.

[18] Direct payments to farmers were excluded from counting towards the AMS if made under "production limiting programmes", based on historical/fixed areas/yields, and made on 85 per cent or less of base production (Blue Box exclusion, AoA Art. 6.5).

[19] The focus is here on domestic support. Unfairness was also claimed for market access. It has been observed in this respect that the "tariffication" process (i.e. the conversion of non-tariff border protection measures into the tariff equivalent) resulted in artificially high tariffs. This outcome (known as "dirty tariffication") was largely due to the use of a reference period when the difference between the world market price and the domestic price was wide (the tariff equivalent to a non-

allowed to continue to provide substantial domestic support and export subsidies to their farm sector, while developing countries were constrained by comparatively more stringent disciplines.[20] This is due to the fact that only those countries that originally subsidized their farm sector (for the most part, developed countries) have scheduled domestic support/export subsidy commitments under the AoA. These commitments provide a legal basis to maintain subsidies - albeit at reduced level from a (historically high) base level. The other Members (mostly developing countries) should keep domestic support within the *de minimis* threshold, and were prevented from introducing export subsidies. Here are some examples:

- About 90 per cent of developed country Members have scheduled AMS commitments and can continue to provide substantial domestic support, beyond the *de minimis* level. For example, the EU ceiling was set at 67.2 billion EUR (about 22 per cent of the reported value of total agricultural production in the EU in 2009); the US capped AMS support at 19.10 billion $ (7 per cent of the total value of production in 2009); Japan at 3,972 billion ¥ (48 per cent of the value of agricultural production in 2009). Though in all these countries Current Total AMS levels (CTAMS) are well below these ceilings (an instance of "subsidy overhang"), countries could freely adjust their current AMS within their bindings.

- Until Nairobi, more than three-fourths of developed country Members could continue to use export subsidies, within the limits specified in their schedules. For example, the EU could use export subsidies for 20 different product groups.[21] Though most export refund schemes in the developed economies were set to zero in recent years, countries were not legally prevented from reintroducing them – in spite of strong political language not to do so.[22]

- Of 111 developing country Members, only 16 (14 per cent) have AMS commitments and can continue to provide Amber Box (AMS) subsidies above their *de minimis* ceilings. Most of them are emerging/newly industrialized economies, in the high- or middle-income group. All other developing countries (including all the Least Developed Countries (LDCs) and all sub-Saharan African countries – except South Africa) have to keep within 10 per cent[23] of the value of agricultural production (non-product-specific (NPS) support) and of the value of production of the commodity concerned (product-specific (PS) support).

- Only 9 developing countries (8 per cent of developing country Members) could use scheduled export subsidies, within bound levels.[24] All other developing countries were prevented from using export subsidies, except subsidies consistent with the special and differential treatment (S&DT) provision for developing country Members (Article 9.4 of the Agreement). Article 9.4 sets a temporary exemption for developing countries, allowing them to subsidize marketing,

tariff barrier being calculated as the difference between the average domestic price and the average world market price). Tariff "peaks" and "escalation" were other drawbacks. UNCTAD, Module 3.15. WTO: Agriculture (UNCTAD/EDM/Misc.232/Add.32), *Course on Dispute Settlement in International Trade, Investment and Intellectual Property* (United Nations, 2003).

[20] For a critical assessment, Abhijit Das, 'Aussie Spin on Trade Reform', The Economic Times Mumbai, 18 November 2011 (online edition); 'The Doha Deal: More Harm than Good to Developing Countries?', published in South Bulletin 123, 1 May 2006 (South Centre); Martin Khor, 'WTO Food Fight Before and at the Bali Ministerial', 78 South Bulletin, 4 March 2014, at 5-9, at 6. See also various South Centre Experts' Reports in South Bulletin, Issue 78, 4 March 2014.

[21] Wheat and wheat flour, coarse grains, rice, rapeseed, olive oil, sugar, butter and butter oil, skim milk powder, cheese, other milk products, beef meat, pig meat, poultry meat, eggs, wine, fruit and vegetables, fresh fruit and vegetables, processed, raw tobacco, alcohol, incorporated products (Section II of Part IV, EC Schedule).

[22] As mentioned, this is no longer the case: under the Nairobi Decision on Export Competition, developed countries undertook to immediately eliminate their remaining scheduled export subsidy entitlements. An exception was provided for notified scheduled export subsidies on processed products, dairy products, and swine meat, to be eliminated by the end of 2020.

[23] Unless specified differently for more recently acceded members (e.g., 8.5 per cent in the case of China).

[24] Under the Nairobi Decision on Export Competition, developing countries agreed to eliminate their export subsidy entitlements by the end of 2018. They retained the right to use export subsidies for transport and marketing (covered by Article 9.4 of the Agreement on Agriculture) until the end of 2023 (least developed countries and net food-importing developing countries until the end of 2030).

cost reduction and transport during the Uruguay Round phase-in period. Some developed countries argue that the exemption no longer holds, absent a legally-binding decision by the WTO to extend the application of Article 9.4 of the AoA.

Table 1: Number of Members with scheduled commitments, grouped by category (developing, transition and developed economies)

Economic group		DS	ES	TQ	SSG	Total WTO Members
Developing	LDC	0	0	0	0	34
	ExLDC	16	9	25	23	77
Transition		7	0	5	0	11
Developed		34	32	35	32	38

Source: Authors' computation as at 11/01/2015, based on the List of Members with scheduled commitments (WTO Members' Transparency Toolkit) and author's compilation. Note: Developing, transition and developed economies as defined by UNCTAD (UNCTAD Handbook of Statistics 2013). DS, ES, TQ and SSG indicate the right to use domestic support (AMS) above *de minimis* (DS), export subsidies (ES), tariff quotas (TQ) and special safeguard measures (SSG).

This imbalanced outcome is explained by the "unfinished" nature of reform under the AoA. It was felt at that time that further cuts in support, leading to a more balanced outcome, would be agreed in following trade rounds. Because the subsequent WTO's Doha Round staggered to a stalemate, the reform agenda "built-in" the AoA has remained largely unaccomplished. Some provisions of the AoA – conceived as a first step towards further liberalization – eventually maintained imbalances and safeguarded existent distortions.

3. THE DOHA DRAFT TERMS: TOWARDS REDRESSING EXISTING IMBALANCES?

The Doha Round, if concluded, would partially redress these imbalances. Specifically, the Doha proposals (Box 2 and Annex 2), if agreed upon, would significantly constrain producer support policies (AMS and Blue Box subsidies) in the advanced economies. However, the Doha Round would not ensure a level and fair playing field where small developing countries would be able to compete. Even if the Doha Round were concluded, important distortions and imbalances would stay. In particular, the proposed Doha disciplines would not obstruct the main gateways through which producer support is channeled today, as discussed below. The post-Doha scenario is still one where farm producers in LDCs and small vulnerable economies (SVEs) have to compete, at home and abroad, with the export dynamism of large countries that subsidize heavily their agricultural sector.

Box 2: Domestic support disciplines under the Doha terms

The Doha Draft envisaged a three-pronged approach to domestic support.

First, a new constraint would be established on actual support levels: the Overall Amount of Trade-Distorting Support (OTDS). Members would establish a "base" OTDS, equal to the Final Bound AMS specified in a Member's Schedule + combined PS and NPS *de minimis* in the base period[25] + the higher of average Blue Box payments or 5 per cent of the average total value of agricultural production in the base period.[26] The Base OTDS would be reduced in accordance with a tiered formula, with cuts ranging from 80 to 55 per cent (with steeper cuts for higher levels of support).[27] For developing countries with scheduled FBTAMS, the reduction would be two-thirds of the agreed rates for developed countries.[28] Developing countries with no FBTAMS commitments (e.g., India and China), net food-importing developing countries (NFIDCs) and some recently acceded members (RAMs) would not be required to undertake reduction commitments in their Base OTDS.[29] Yet they would schedule (bind) their Base OTDS.

Second, traditional categories of support (FBTAMS, Blue Box payments and *de minimis*) would be cut or limited: the FBTAMS sharply reduced in accordance with a tiered formula (with cuts ranging from 70 to 45 per cent); the *de minimis* thresholds significantly lowered for developed countries and developing countries with AMS commitments;[30] and Blue Box payments capped.

Third, product-specific caps/limits would be set for AMS and Blue Box payments (then subject to overall and product-specific ceilings).[31] Green Box support and support under Article 6.2 would remain unconstrained.

Source: WTO document TN/AG/W/4/Rev.4. A synopsis of the domestic support disciplines of the Doha Draft is set out in Annex 2.

3.1 THE GREEN BOX ESCAPE

Green Box subsidies (a notified 71.1 billion € in the EU in 201232 and 125.1 billion $ in the US in 201133) are left unconstrained by the draft Doha disciplines on domestic support. Even if the Doha Round were concluded, transfers to producers under the Green Box would remain comprehensively carved out from reduction commitments. Considering that the bulk of support in the advanced economies is now provided under the Green Box, this comprehensive exemption significantly limits the reach of the Doha proposals. Indeed, the forms by which support is provided in OECD countries have evolved significantly since the mid-1980s. In terms of producer support estimate (PSE) sub-

[25] For developed countries, 10 per cent of the average total value of agricultural production in the 1995-2000 base period (5 per cent of the average total value of production for PS and NPS AMS respectively); for developing countries, 20 per cent of the average total value of agricultural production in the 1995-2000 or 1995-2004 period. WTO document TN/AG/W/4/Rev.4, paras. 1(b) and 2.

[26] WTO document TN/AG/W/4/Rev.4, paras. 1 and 2.

[27] TN/AG/W/4/Rev.4, paras. 3 and 4. The EU, the US and Japan – with the largest support programmes in absolute terms – would reduce their OTDS by between 80 and 70 per cent.

[28] TN/AG/W/4/Rev.4, para. 7.

[29] TN/AG/W/4/Rev.4, paras. 6, 7 and 9.

[30] Developing countries with no FBTAMS commitments or with AMS commitments, but that either allocate almost all that support for subsistence and resource-poor producers, or that are NFIDCs would keep their *de minimis* entitlements as provided for in Article 6.4(b) of the AoA (TN/AG/W/4/Rev.4, para. 32).

[31] See December 2008 revised draft modalities, paras. 21-29 (product-specific AMS limits) and paras. 40-47 (product-specific limits on Blue Box entitlements).

[32] Notification G/AG/N/EU/26, 2 November 2015 (MY 2012/13).

[33] Notification G/AG/N/USA/93, 9 January 2014 (MY 2011/12).

categories,[34] support has moved from market price intervention to a policy mix of area and headage payments and income supplements, variously decoupled from current production (Table 2). Overall, what has occurred is more a change in intervention tools and strategies ("box shifting", or the "re-instrumentalization" of support, in OECD jargon), than a substantial reduction in overall support. Furthermore, producer support has been increasingly presented as "market-correcting", as a way to remunerate farmers for the provision of public goods associated with agriculture, with a shift in emphasis from "a paradigm of justice" to "a paradigm of sustainability".[35]

Table 2: OECD: Estimates of support to agriculture ($ mn and %)

Category		Unit	1986-88	1995-97	2012-14
Total value of production (at farm gate)		$ mn	592,135	771,656	1,262,987
Producer Support Estimate (PSE)		$ mn	238,465	252,958	250,881
		% TSE	83.6	78.0	72.2
	Support based on commodity output	$ mn	195,598	177,496	119,657
		% PSE	82.0	70.2	47.7
	of which MPS	$ mn	183,000	170,461	113,958
		% PSE	76.7	67.4	45.4
	Payments based on input use	$ mn	20,197	24,053	31,509
		% PSE	8.5	9.5	12.6
	Payments based on current A/An/R/I, production required	$ mn	18,736	41,779	33,691
		% PSE	7.9	16.5	13.4
	Payments based on non-current A/An/R/I, production required	$ mn	533	459	1'949
		% PSE	0.2	0.2	0.8
	Payments based on non-current A/An/R/I, production not required	$ mn	2,080	6,626	57,995
		% PSE	0.9	2.6	23.1
	Payments based on non-commodity criteria	$ mn	1,077	3,135	5,609
		% PSE	0.5	1.2	2.2
	Miscellaneous payments	$ mn	243	-589	471
		% PSE	0.1	-0.2	0.2
Percentage PSE (%)			36.9	29.6	17.9
General Services Support Estimate (GSSE)		$ mn	26,881	45,886	47,012
		% TSE	9.4	14.2	13.5
Transfers to consumers from taxpayers		$ mn	19,875	25,291	49,421
		% TSE	7.0	7.8	14.2
Total Support Estimate (TSE)			285,221	324,134	347,314
Percentage TSE (% of GDP)			2.8	1.5	0.8

Source: Data extracted on 13 Nov 2015 from OECD.Stat. Note: TSE = PSE + GSSE + Transfers to consumers from taxpayers.

For example, in the EU between 1986-88 and 2011-13, market price support[36] and payments based on output[37] dropped on average from around 91 per cent of PSE to 20 per cent. Over the same period, the part of income support (area and headage payments, and transfers based on non-commodity criteria) increased from 4 per cent (average 1986-88) to 65 per cent of PSE (2011-13). Income support has become increasingly "decoupled" from current market parameters: "coupled" payments, about 36 per

[34] The OECD PSE broadly captures market price support (including indirect price support, from border protection), input subsidies and direct payments to producers (decoupled or not). It straddles across the WTO Amber, Blue and Green Boxes.

[35] Martin Petrick, 'The Co-evolution of Semantics and Policy Paradigms: 50 Years of Europe's Common Agricultural Policy', 43 (4) Intereconomics 246 (2008). As discussed in the concluding part of this report, there is a disconnect, in some instances, between the "sustainability" objectives of farm support policies and the modalities of farm support.

[36] As defined by the OECD, "market price support" (MPS) arises from policy measures (e.g., price controls and tariffs) that create a gap between domestic market prices and border prices.

[37] As defined by the OECD, "payments based on output" include policy measures based on current output of a specific agricultural commodity (e.g., compensation payments and loan deficiency payments).

cent of PSE in 2003, only accounted for 17 of PSE in 2001-13; while “decoupled” payments, virtually non-existent until the mid-2000s, increased to an average 45 per cent of support in 2011-13.[38]

These policy changes are reflected in support figures as notified to the WTO. The EU’s trade-distorting support, as measured by its Amber Box notifications, fell from 55 per cent to 8 per cent of total support (Amber + Blue + Green) between 1995-97 and 2010-12. On the other hand, Green Box support rose significantly, from 22 per cent of overall support in 1995-97 to 88 per cent in 2010-12 – which may indicate “box shifting”. The surge of Green Box subsidies was largely driven by the rapid increase in direct payments to producers, the most controversial form of Green Box support - accounting for about 86 per cent of all EU Green Box subsides during 2010-12*.* Similar patterns (shift from market price intervention to direct payments) are observable for other large subsidizers in the OECD region, including Switzerland, the USA, Japan (since the mid-2000s) and Norway - with notable variations though.

Figure 1: Amber and Green Box subsides in the EU (€ millions)

Data source: Domestic support data was sourced from the WTO Members’ Transparency Toolkit (Datasets of Notified Information, Table DS:1, data extracted on 15 November 2015 from http://agims.wto.org). For the marketing years 2010, 2011 and 2012, the dataset was complemented by recent DS:1 notifications (G/AG/N/EU/17, 13 February 2014 (MY 2010/11), G/AG/N/EU/20, 22 October 2014 (MY 2011/12), and G/AG/N/EU/26, 2 November 2015 (MY 2012/13)).

The Green Box (Annex 2 of the AoA) contains subsidies allegedly “no, or at most minimal, trade-distorting”, which can be increased without limit. As a separate requirement, the chapeau to Annex 2 requires that the exempted measures be at most minimally trade-distorting. Yet a short-hand interpretation has prevailed, whereby all the schemes defined in the Annex 2 of the AoA are by default determined to be non-trade distorting. Covered schemes include, among other, decoupled income

[38] OECD.Stat (data extracted on 21 Nov 2014). The first development (from price to “coupled” income support) largely reflects policy changes under the 1992 Mac Sharry reform. The second development (“decoupling” of area and headage payments) was instigated by the Fischler Reforms of 2003.

support, certain income insurance and safety net programmes, specific types of credit subsidies, environmental payments, regional assistance payments and other direct transfers to producers.

This common shorthand (Green Box = non-trade distorting) is in question. There is increasing theoretical and empirical evidence that Green Box expenditures have a bearing on production and prices, by providing incentives for resource use that may be inconsistent with market signals.[39] In the end, as pointed out by a commentator, "any subsidy […] is increasing the competitiveness of the benefitting product and hence has a dumping effect when it is exported and a protective effect vis-à-vis imported products".[40] As a matter of fact, the hierarchy between different types of agricultural support in the AoA was not based on agreed metrics on what is minimal or non-trade distorting support. The exercise was highly political in nature. As discussed, the contours of the Boxes reflected the relative negotiating capabilities and leverage of the various parties, and codified specific power dynamics.

3.2 DOMESTIC SUPPORT IN KEY EMERGING ECONOMIES

A second form of support that would remain largely unconstrained is trade-distorting producer support in a few large emerging economies that are significant exporters of agricultural commodities. In nominal terms, farm support – as captured by the PSE – has increased appreciably in key emerging economies, including China, Turkey and Russia. Most remarkably, since the late 1990s, there has been a steady rise in farm support in China, with a rapid increase since 2008. In 2010, China reportedly spent $147 billion on agricultural subsidies, outranking the EU.[41] This rising trend in subsidies reflects a policy shift from taxing to supporting the farm sector, in response to pressing equity and food security concerns.[42]

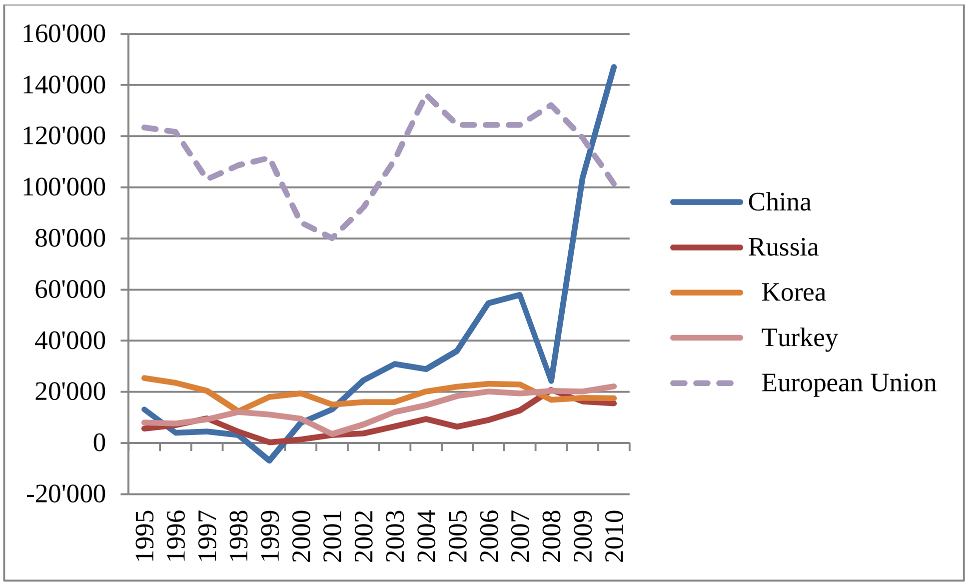
[39] It is argued theoretically that subsidies, even if unrelated to prices and output, may have significant production (and trade) distorting effects. This by means of their income effects, when a guaranteed income stream encourages farmers to plant, or through their risk/insurance effects, by reducing the perceived risks associated with farming. Even the most undisputed schemes – general services – have an obvious bearing on the famous "level-playing field" between countries, as a country's agricultural competitiveness is proactively shaped by the extent and quality of its supply-side services. Some empirical studies corroborate this insight. According to a recent impact assessment, over the 1995-2007 period agricultural productivity would have increased around 60 per cent in the EU and 51 per cent in the US on account of Green Box subsidies (Rashmi Banga, 'Impact of Green Box Subsidies on Agricultural Productivity, Production and International Trade', UNCTAD Background Paper No. RVC-11, 2014). See also Ricardo Meléndez-Ortiz, Christophe Bellmann, Jonathan Hepburn (eds.), *Agricultural Subsidies in the WTO Green Box* (Cambridge University Press, 2009); Apelu Tielu and Ivan Roberts, 'Farm Income Support: Implications for Gains from Trade of Changes in Methods of Support Overseas', ABARE Current Issues, No. 98.4, 1998; WTO document G/AG/NG/W/14 of 23 June 2000 (Cuba, Dominican Republic, Honduras, Pakistan, Haiti, Nicaragua, Kenya, Uganda, Zimbabwe, Sri Lanka and El Salvador: Green Box/Annex 2 Subsidies).

[40] Comments by Jacques Berthelot on WTO Conference, 15 September 2011, at http://solidarite.asso.fr/IMG/pdf/WTO_disciplines_on_agricultural_support_J-_Berthelot_comments-3.pdf.

[41] OECD, Dataset: 2011 E) Emerging Economies: Producer Support Estimate by country.

[42] For a detailed assessment, Fuzhi Cheng, 'China: Shadow WTO Agricultural Domestic Support Notifications', IFPRI Discussion Paper 00793, September 2008.

Figure 2: PSE in selected emerging economies and the EU ($ mn)



Source: OECD, Dataset: 2011 E) Emerging Economies: Producer Support Estimate by country. Note: India is not included as it does not report data to the OECD.

In a few emerging and transition economies (including Turkey, Indonesia, China and the Russian Federation), producer support as a percentage of gross farm receipts (%PSE) is provided at a level comparable with the OECD average.

Table 3: Agricultural producer support estimates, as a percentage of gross farm receipts (%PSE)

Country	1986-88	1995-97	2010-12
South Africa		11.1	2.5
Chile		8.0	3.0
Brazil		-12.0	4.6
Mexico	3.2	4.9	12.5
China		2.5	15.0
Russian Federation		17.7	16.6
Indonesia		3.3	18.8
Turkey	20.4	25.9	23.7
Korea	69.6	67.0	48.6
OECD	37.0	29.7	18.7
United States	21.9	12.3	7.5
EU28	39.2	33.6	18.9

Source: OECD Factbook 2014: Economic, Environmental and Social Statistics. Note: India is not included as it does not report data to the OECD.

Common types of farm support provided by emerging economies include market price interventions, compensatory/deficiency payments ("coupled") and input subsidies. In China, for example, market price support (effected through tariffs, minimum guaranteed prices and intervention purchases) is the main channel for providing support to Chinese farmers: it accounts for as high as 79 percent of PSE (2012-14 average).[43] In Indonesia, support is provided almost exclusively through market price support and input subsidies (98 per cent of PSE in 2012-14).[44] India has also been increasing its support to agriculture, including through government-led interventions at pre-determined prices intended to stabilize market prices and to ensure adequate supplies.[45] China, Indonesia and India have committed zero AMS in the WTO. Yet, existing WTO disciplines allow substantial room for potentially trade-distorting subsidies under other venues, namely: the *de minimis* entitlements;[46] S&DT support as provided in Article 6.2 of the AoA;[47] and the notification of some schemes under the Green Box (e.g. expenditures for public stockholding for food security purposes, income-support payments and investment subsidies).

Box 3: "Box painting" or (unintended) policy space?

For a few large emerging and transition economies, there is an apparent mismatch between WTO and OECD domestic support data concerning the potentially most production and trade distorting policies. Overall, OECD data report higher levels of trade-distorting support compared to the WTO system. How can these discrepancies be explained?

The WTO and OECD domestic support measurement systems differ in some important respects. In particular, the PSE sub-categories for the potentially most distorting support (market price support, production-linked payments and variable inputs subsidies) cannot be used as a proxy for Amber box (AMS) support. There are notable differences in terms of policy coverage. For example, the OECD market price support subcategory includes *indirect* price support provided through tariffs, tariff rate quotas (TRQ) and state trading. In the WTO context, this type of support is captured under the market access pillar of the AoA and does not count against a country's AMS limits. Note also that the PSE sub-categories for the potentially most distorting support include support channeled through policies or programmes that in the WTO have been exempted from counting against the AMS, not necessarily on economic grounds (Art. 6.2 investment and input subsidies; *de minimis* AMS ceilings; Blue box payments under Art. 6.5 of the AoA, and certain Green Box transfers). In some cases, these differences in terms of policy coverage result in a higher level of trade-distorting support reported under the OECD system compared to the WTO system.

Computation methods also differ across the two systems. In the OECD, market price support is calculated using current prices (domestic producer and reference prices relative to the year in question), while for WTO purposes (AMS calculation), MPS is calculated using the gap between domestic administrative support prices and a fixed reference price (border prices in a base period, generally the three-year 1986-88 average). Overall, the OECD system tries to gauge support in economic terms. The WTO Amber Box (AMS category) is a political measure of support, carefully crafted to accommodate various sensitivities, in an effort to strike a balance between competing interests.

[43] OECD.Stat (data extracted on 13 Nov 2015).

[44] Ibid.

[45] For a review, Orden et al, 'WTO Disciplines on Agricultural Support: Experience to Date and Assessment of Doha Proposals', IFPRI Research Brief, May 2011; Panos Konandreas and George Mermigkas, 'WTO Domestic Support Disciplines: Options for Alleviating Constraints to Stockholding in Developing Countries in the Follow-up to Bali', FAO Commodity Trade Policy Research Working Paper No. 45, January 2014; DTB Associates, 'Domestic Support and WTO Obligations in Key Developing Countries', September 2011; DTB Associates, 'Agricultural Subsidies in Key Developing Countries: November 2014 Update'; Sudha Narayanan, 'The Balance: The National Food Security Act vis- à -vis the WTO Agreement on Agriculture', Indira Gandhi Institute of Development Research, Mumbai, December 2013; Lars Brink, 'Support to Agriculture in India in 1995-2013 and the Rules of the WTO', IATRC Working Paper 14-01, 13 April 2014.

[46] 10 per cent of the VOP (8.5 per cent in China). When the value of production is large, these thresholds do not impose real constraints.

[47] China does not have recourse to Article 6.2.

Flexibility for trade-distorting (AMS) support in large emerging economies raises particularly intractable trade-offs. On the one hand, many developing countries would justifiably require significant policy space for agricultural development, for socio-economic developmental purposes such as poverty alleviation, rural development and food security. For a few large developing economies, the current flexibilities enshrined in multilateral disciplines are under strain. In particular, a number of developing countries are at risk of exceeding their product-specific AMS limits.[48]

Note also that *de minimis* threshold of permissible price support, 10 per cent of the value of that crop production, would mean little if the current agricultural output is minimal.[49] Technical flaws add to current strictures. Under existing price support disciplines, administered prices are not assessed against current market prices, but against the "base-period" price, i.e. the average 1986-88 international price for the product in question.[50] This external fixed reference price tends to be lower than the current market prices, which results in inflated figures on domestic support.[51]

On the other hand, farm support in a developing country can encroach upon the right of peasant farmers in other developing countries to compete on fair terms in third markets (or at home). Overall, large developing countries' domestic price support policies can adversely hit more vulnerable countries. These latter include LDCs and SVEs heavily dependent on one or at best two cash crops for the bulk of their export proceeds. "Price-takers" on the export side, they are hostage of the policy decisions of the larger exporters (Annex 4). Eventually, the reality of interdependence limits a developing country's policy space to pursue agricultural policies supportive of rural livelihood and food security at home without harming livelihood concerns in equally vulnerable countries.

[48] India, China, Pakistan, Egypt, Turkey, and The Philippines, among other countries, face compliance problems, as reported in a few studies based on publicly available data. Note that different computation methods (e.g., to account for deflation /exchange rate movements) lead to different results. Cf Konandreas and Mermigkas, DTB Associates, Narayanan, and Brink, above n 45.

[49] Sophia Murphy, 'Trade and Food Reserves: What Role Does the WTO Play?', Institute for Agriculture and Trade Policy, 2010.

[50] The average export (f.o.b.) price notified for 1986-88, in the case of a net exporters; and the average import (c.i.f.) price in the case of a net importer. AoA Annex 3 (Calculation of Aggregate Measurement of Support).

[51] A few countries have argued for a revision of the price gap methodology to account for inflation. In October 2013, two interim options were brought to the table by some G-33 members for consideration at Bali: a revision of the external reference price, to reflect changing market conditions (e.g., based on a moving average of market prices, or the previous year reference price); the possibility to deflate the administered price at which foodstuffs are procured. See G-33 Non-paper, WTO document JOB/AG/25, 3 October 2013, Geneva.

4. CONCLUSION: THE WAY AHEAD

More than a decade after the launch of the Doha Round, countries are yet to deliver on the Doha Work Programme in agriculture. Certainly, there has been some progress in certain areas, notably, a steady decline in export subsidies in countries with scheduled commitments, and a reduction in Amber Box support in the advanced market economies. The "Nairobi Package", i.e. the outcome of WTO 10th Ministerial Conference in Nairobi achieved the elimination of agricultural export subsidies immediately by developed countries[52] and within 3 years by developing countries, alongside the agreements on export credits. Yet, the Nairobi Package provided no hard commitment as regards domestic support.

During the implementation of the AoA, what has occurred in practice is a re-instrumentalizion of support in the traditional subsidizers (under the Green Box cover), and a dramatic increase in exempt farm support in a number of emerging economies under *de minimis* entitlements or development (Article 6.2) exemptions which can be trade-distorting to agricultural producers in other developing countries. These are the main gateways for producer support today that are likely to remain unconstrained even if the Doha round were successfully concluded. How then to move forward in this setting? Where to set limits to farm support policies, beyond the Doha terms? And how to arbitrate trade-offs between the need for policy space and considerations of trade fairness?

The way ahead requires a pragmatic and ground-breaking approach. Time has come to consider new options for bringing the agricultural trade regime in line with a changed trading environment and with pressing sustainability concerns. Agricultural production is said to account for around a quarter of all human-caused greenhouse gas emissions.[53] A comprehensive approach is needed to improve coherence between trade policy on the one hand and the sustainability agenda enshrined in the 2030 Agenda framework and the Paris Agreement on the other hand.

This involves a rethinking of the Green Box. As discussed, there is increasing evidence that Green Box subsidies have a bearing on production and prices, by providing incentives for resource use that may be inconsistent with market signals.[54] The dichotomous trade-distorting *versus* non or minimal trade-distorting choice has a somewhat legalistic flavour. This challenges the legitimacy of Green Box subsidies, and invites to re-orient the policy objectives upon which green box subsidies depend. A new rationale is needed.

In the 2030 Agenda framework, the legitimacy of Green Box transfers is to be re-assessed through a sustainable lens that reflects considerations of environmental sustainability and social inclusiveness. The new rationale for Green Box support is to be furnished by the sustainability paradigm: the need to capture the externalities and public goods generated by agriculture (environmental sustainability); and support to the welfare of poor farmers, men and women (social inclusiveness). In order to functionally link the Green Box to sustainability concerns, the boundaries of the Green Box have to be redefined accordingly. The solution is twofold.

4.1 "GREENING" THE GREEN BOX

First, Green Box transfers have to be made conditional on the respect of specific agri-environmental practices, with the exception of transfers that are specifically geared towards subsistence / disadvantages producers (see section two below). Under the existing Green Box, there is no requirement in this direction. More precisely, out of twelve substantive Green Box headings, only one includes environmental conditionalities (Annex 2, para. 12 - Payments under environmental

[52] Scheduled export subsidies on processed products, dairy products, and swine meat will be eliminated by the end of 2020.

[53] IPCC, 2014: Summary for Policymakers', above n 5.

[54] See above, note **Error! Bookmark not defined.** and text at p. 8.

programmes). All the other Annex 2 policies meet the criteria for exemption whatever their environmental impact.

A closer look at the composition of support under the Green Box sheds further light on the current disconnect between Green Box payments and environmental sustainability. In the EU, environmental payments accounted for just 12 per cent of total Green Box subsidies in the marketing year 2012/13.[55] All other Green Box-notified direct payments to producers (74 per cent of all Green Box transfers) were de-linked from agri-environmental and animal welfare conditions.[56] Skewed towards the large, highly capitalized, intensive farms, these payments eventually support a business model (commercial agribusiness) that generates significant environmental externalities.

A "greened" Green Box should thus be reorganized around what is now paragraph 12 of Annex 2 (environmental programmes). This heading provides the interface through which sustainability concerns are factored into the trade regime. This means that, to meet the criteria for Green Box exemption, support to producers through direct payments, revenue foregone or any payment in kind (apart from decoupled payments to peasant /disadvantaged producers - see below) should be part of a clearly defined government environmental programme, and made dependent on the fulfilment of specific conditions related to production methods and inputs.

In Green Box terms, decoupled income support,[57] subsidized income insurance and safety-net programmes,[58] investment aids[59] should be linked to heading 12 (payments under environmental programmes). This heading should be flexibly scoped to cover a wide array of otherwise non-exempt measures, including: "coupled" payments conditional on the adoption of production practices that improve animal welfare or environmental sustainability (for example, payments to organic crop farming and agri-environmental grass premium); long-term resource retirement schemes (afforestation, conservation); input subsidies subject to agri-environmental constraints (i.e. that limit the total amount used or the type of input used); subsidized credit and insurance schemes conditional on complying with agri-environmental criteria. As already specified in paragraph 12, these transfer should be meaningfully structured as environmental payments. This means that Green Box payment should be proportionate to the extra cost or income loss involved in complying with the environmental programme, or the (estimated) environmental benefit generated by farmers who adopt eco-friendly activities.

4.2 MAKING THE GREEN BOX WORK BETTER FOR SOCIAL INCLUSIVENESS

A second normative objective is social inclusiveness, or the objective of supporting low-income, subsistence or resource-poor producers, as distinctly articulated in the WTO AoA (Article 6.2) and the Doha Draft (para 32, Annex B, para. 6 of Annex F, para. 12 of Annex L). Even in this respect, there is an evident disconnect between Green Box payments and sustainability objectives. In the US, for example, the distribution of decoupled income support has been skewed towards the large farms: as reported in de Gorter, in 2005, the largest farms, defined as those with over 500,000 $ in sales (7 per cent of all farms) received 35 per cent of all decoupled payments, while the smaller units, with less than 50,000

[55] These are payments linked to the "protection of environment and preservation of the countryside, aid for environmentally sensitive areas; support and protection of organic production by creating conditions of fair competition; aid for forestry measures in agriculture; conservation and improvement of rural heritage". Notification G/AG/N/EU/26, 2 November 2015 (MY 2012/13).

[56] Data extracted from Notification G/AG/N/EU/26, 2 November 2015 (MY 2012/13).

[57] AoA, Annex 2, para. 6.

[58] AoA, Annex 2, para. 7.

[59] AoA, Annex 2, para. 11.

$ in sales (39 per cent of total farms), received only 2 per cent of decoupled payments.[60] A similar distributional pattern was observed for Europe.[61]

Social inclusiveness concerns need to be more explicitly worked into the Green Box, through a better targeting of Green Box transfers. The approach is twofold: provide some leeway for direct payments not subject to agri-environmental “cross-compliance” conditions, but narrow eligibility to “low income, resource poor, or subsistence farmers, including disadvantaged or vulnerable communities and women”.[62] Two inroads are available for targeting support to subsistence-oriented peasants in developing countries and disadvantaged rural communities in the advanced economies: a revision of the paragraph 6 expenditure category of the green box (decoupled income support); and paragraph 13 (payments under regional assistance programmes).

Decoupled income support not subject to agri-environmental “cross-compliance” conditions should only be available to low-income or resource-poor producers in low to middle income countries. Paragraph 6 should be amended in this direction. Decoupled payments to commercial farmers, whatever the income level of the country, would still be covered by the Green Box, but conditioned on the fulfilment of specific conditions related to production methods and inputs, as discussed above.

Paragraph 13 should be retained as such and leveraged to sustain the livelihood of disadvantaged or vulnerable rural communities in the advanced economies (e.g., upland farming in the Alpine region). Note also that general services with a public good character (the most important Green Box category, with direct payments) would continue to fall under the Green Box coverage.

The reform outlined above would improve coherence between domestic support disciplines and the sustainability agenda. It would also close a loophole in the existing trade regime that allows unlimited (Green Box disguised) income support to highly capitalized, large-sized commercial farmers.

Finally, for social inclusiveness seen from the global perspective, it is important to acknowledge the fact that different developing countries have different agricultural profiles, different vulnerabilities to external price shocks in agriculture, and different needs for farm support.[63] Furthermore, as discussed, farm support increasingly involves trade-offs between competing interests across developing countries: measures intended to serve peasant interests in a developing country can well hit the interests of small farmers in another developing country.

This concern has been to an extent reflected in the WTO Nairobi Ministerial Decision on Cotton (WT/Min(15)/W/48). As Annex Table 3 shows, the combined cotton exports of three low-income cotton exporters – Mali, Burkina Faso and Benin – was just below 8 per cent of world cotton exports in 2011/2012, compared to 26 per cent by the US and 15.5 per cent by India. As a share of a country’s total merchandise exports, however, the earnings from cotton exports accounted for 30 per cent in Mali and Burkina Faso and 22 per cent in Benin, compared to 0.5 per cent for the US and 1.2 per cent for India. Any reduction in cotton exports of these three low-income countries, resulting from significant domestic support received by producers in “large exporters” would have little significance in the world cotton market. But such a reduction could significantly reduce these countries’ income gains from trade, which could reduce the speed of improving socioeconomic conditions needed for sustainable development. These aspects are to be accounted for by the multilateral trade regime.

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[60] Harry de Gorter, ‘The Distributional Structure of US Green Box Subsidies’, in Meléndez-Ortiz et al. *Agricultural Subsidies in the WTO Green Box* (Cambridge University Press, 2009), 304.

[61] Teresa Cavero, ‘Subsidy Reform in the EU Context: Options for Achieving Change’, in Meléndez-Ortiz et al. *Agricultural Subsidies in the WTO Green Box* (Cambridge University Press, 2009), 583.

[62] Drawing from the list of indicators for the designation of special products (TN/AG/W/4/Rev.4, Annex F).

[63] In this direction, Mauritius, ‘Developing Countries and Non-trade Concerns’, International Conference on Non-Trade Concerns in Agriculture, Ullesvang, Norway, 2-4 July 2000, Discussion Paper Five rev.1, WTO Doc. G/AG/NG/W/36/Rev.1, 9 November 2000.

REFERENCES

Banga, Rashmi. "Impact of Green Box Subsidies on Agricultural Productivity, Production and International Trade." UNCTAD Background Paper No. RVC-11. UNCTAD, 2014.

Brink, Lars. "Support to Agriculture in India in 1995-2013 and the Rules of the WTO." IATRC Working Paper 14-01, April 13, 2014.

Cavero, Teresa. "Subsidy Reform in the EU Context: Options for Achieving Change." In *Agricultural Subsidies in the WTO Green Box*, edited by Ricardo Meléndez-Ortiz, Christophe Bellmann, and Jonathan Hepburn, 583–603. Cambridge, UK and New York: Cambridge University Press, 2009.

Cheng, Fuzhi. "China: Shadow WTO Agricultural Domestic Support Notifications." IFPRI Discussion Paper 00793. International Food Policy Research Institute, 2008.

Das, Abhijit. "Aussie Spin on Trade Reform." *The Economic Times Mumbai*, November 18, 2011.

———. "Bali, Post-Bali and Beyond Doha." Geneva, 2014.

de Gorter, Harry. "The Distributional Structure of US Green Box Subsidies." In *Agricultural Subsidies in the WTO Green Box*, edited by Ricardo Meléndez-Ortiz, Christophe Bellmann, and Jonathan Hepburn, 304–26. Cambridge University Press, 2009.

DTB Associates. "Agricultural Subsidies in Key Developing Countries: November 2014 Update," 2014. http://www.dtbassociates.com/docs/DomesticSupportStudy11-2014.pdf.

———. "Domestic Support and WTO Obligations in Key Developing Countries," September 2011.

Edenhofer, Ottmar, Ramon Pichs-Madruga, Youba Sokona, Ellie Farahani, Susanne Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds). *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK and New York: Cambridge University Press, 2014.

Häberli, Christian. "Do WTO Rules Improve or Impair the Right to Food?" In *Research Handbook on the WTO Agriculture Agreement: New and Emerging Issues in International Agricultural Trade Law*, edited by Joseph A. McMahon and Melaku Geboye Desta, 70–103. Cheltenam, UK and Northampton, MA: Edward Elgar, 2012.

———. "Food Security and WTO Rules." In *Food Crises and the WTO*, edited by Baris Karapinar and Christian Häberli, 297–322. Cambridge, UK and New York: Cambridge University Press, 2010.

———. "God, the WTO – and Hunger." In *Poverty and the International Economic Legal System*, Krista Nadakavukaren Schefer., 79–106. Cambridge, UK and New York: Cambridge University Press, 2013.

———. "The WTO and Food Security: What's Wrong with the Rules?" In *The Challenge of Food Security: International Policy and Regulatory Frameworks*, edited by Rosemary Rayfuse and Nicole Weisfelt, 191–216. Cheltenham, UK and Northampton, MA: Edward Elgar, 2012.

———. "After Bali: WTO Rules Applying to Public Food Reserves." presented at the Expert Meeting on Reserves/Stocks and Specifically their Potential Role in Market/Price Stabilization, FAO, Rome, January 30, 2014.

Keck, Alexander, and Patrick Low. "Special and Differential Treatment in the WTO: Why, When and How?" Staff Working Paper. WTO Economic Research and Statistics Division, January 2004.

Khor, Martin. "WTO Food Fight Before and at the Bali Ministerial." *South Bulletin* 78 (March 4, 2014): 5–9.

Konandreas, Panos, and George Mermigkas. "WTO Domestic Support Disciplines: Options for Alleviating Constraints to Stockholding in Developing Countries in the Follow-up to Bali." FAO Commodity Trade Policy Research Working Paper No. 45, January 2014.

Meléndez-Ortiz, Ricardo, Christophe Bellmann, and Jonathan Hepburn. "Agricultural Subsidies in the WTO Green Box: Ensuring Coherence with Sustainable Development Goals." Cambridge, UK and New York: Cambridge University Press, 2009.

Murphy, Sophia. “Trade and Food Reserves: What Role Does the WTO Play?” Institute for Agriculture and Trade Policy, 2010.

Narayanan, Sudha. “The Balance: The National Food Security Act vis- à -vis the WTO Agreement on Agriculture.” Indira Gandhi Institute of Development Research, December 2013.

OECD. *Agricultural Policy Monitoring and Evaluation*. Paris: OECD Publishing, 2015.

Orden, David, David Blandford, Tim Josling, and Lars Brink. “WTO Disciplines on Agricultural Support: Experience to Date and Assessment of Doha Proposals.” IFPRI Research Brief. IFPRI, May 2011.

Paarlberg, Robert. “Agricultural Policy Reform and the Uruguay Round: Synergistic Linkage in a Two-Level Game?” *International Organization* 51, no. 3 (July 1, 1997): 413–44.

Petrick, Martin. “The Co-Evolution of Semantics and Policy Paradigms: 50 Years of Europe’s Common Agricultural Policy.” *Intereconomics: Review of European Economic Policy* 43, no. 4 (2008): 246–52.

Slayton, Tom. “Rice Crisis Forensics: How Asian Governments Carelessly Set the World Rice Market on Fire.” Working Paper 163. Center for Global Development, March 2009.

South Centre. “The WTO’s Bali Ministerial and Food Security for Developing Countries: Need for Equity and Justice in the Rules on Agricultural Subsidies.” South Centre, 2013.

Stevens, Christopher. “The Future of Special and Differential Treatment (SDT) for Developing Countries in the WTO.” IDS Working Paper 163. Institute for Development Studies, January 2002.

“The Doha Deal: More Harm than Good to Developing Countries?” *South Bulletin* 123 (May 1, 2006).

Tielu, Apelu, and Ivan Roberts. *Farm Income Support: Implications for Gains from Trade of Changes in Methods of Support Overseas*. ABARE, 1998.

Trends in Domestic Support. Communication from the Cairns Group. WTO Doc. G/AG/W/141, March 2, 2015.

USDA. “International Agricultural Trade Report,” August 2014.

South Bulletin 78 (March 4, 2014).

Annex 1: WTO AoA disciplines – Ceilings and escapes/exemptions

		Developed	Developing
Market access			
Ceilings		Bound levels (1986-88 base period, reduced by 36 per cent)	Bound levels (often ceiling bindings, above previously applied tarrifs)
Safeguards		Special safeguard (SSG) mechanism (only on "tariffied" products for which the SSG right reserved in a Member's schedule) (Art.5 AoA)	
Domestic support (DS)			
Ceilings	Members with AMS commitments	FBTAMS (1986-88 base level,* reduced by 20 per cent) (*de minimis* excluded)	FBTAMS (1986-88 base level,* reduced by 13 per cent) (*de minimis* excluded)
	Members with no AMS commitments (FBTAMS nil/blank/zero)	Up to the *de minimis* thresholds: For PS support, 5 per cent of the VOP of the product concerned; for NPS support, 5 per cent of the total VOP	*De minimis* thresholds: For PS support, 10 per cent** of the product's VOP; for NPS support, 10* per cent of the total VOP
Permissible DS		Blue Box; Green Box; *de minimis.*	Blue Box; Green Box; *de minimis*; Art. 6.2 (general investment subsidies; input subsidies generally available to resource-poor/low-income farmers; incentives to diversify from illicit narcotic crops)**
Export subsidies (ES) *(until Nairobi)*			
Ceilings	Members with ES reduction commitments	Could subsidize exports up to bound levels (1986-90 level, reduced by 36 per cent (outlays) and 21 per cent (volumes))	Could subsidize exports up to bound levels (1986-90 level, reduced by 21 per cent (outlays) and 14 per cent (volumes))
	Members without ES commitments	Could not introduce export subsidies	Could not introduce export subsidies
Permissible ES		-	Art. 9.4 subsidies (transitional exemption) to cover marketing costs / preferential internal transport and freight for export shipments

Source: Author's compilation, based on the WTO AoA. Note: * With few exceptions for countries that joined after 1995.** Some developing countries that acceded at a later stage agreed on different terms (e.g., China agreed on a 8.5 per cent *de minimis* and gave up the Art. 6.2 exclusion).

Annex 2: Revised draft modalities for agriculture of 6 December 2008 (Doha Draft) – Domestic support disciplines

Category	Developed countries	Developing countries (with blank/zero FBTAMS) (e.g., China and India)	Developing countries (with scheduled FBTAMS) (e.g., Argentina, Brazil, Mexico)	Other S&D
OTDS				
Base OTDS	FBTAMS + 10% base period (bp) VOP + higher of average Blue Box payments or 5% of bp VOP	20% base period (bp) VOP + higher of average bp Blue Box payments or 5% of bp VOP	FBTAMS + 20% base period (bp) VOP + higher of average Blue Box payments or 5% of bp VOP	
Reduction	Tiered formula: - 1st tier (Base OTDS > $60 bn, e.g. EU): 80% reduction - 2nd tier (Base OTDS > $10 bn ≤ $60 bn, e.g. US): 70% - 3rd tier (Base OTDS ≤ $10 bn e.g. Norway): 55% reduction	No reduction (only required to schedule their Base OTDS)	Gentler cuts: Two-thirds of the relevant rate for developed country Members	No reduction (even if with AMS commitments): NFIDCs; very RAMs;* small low-income RAMs with economies in transition
FBTAMS				
Reduction	Tiered formula: - 1st tier (FBTAMS> $40 bn): 70% reduction - 2nd tier (FBTAMS > $15 bn ≤ $40 billion): 60% - 3rd tier (FBTAMS ≤ $15 bn): 45% reduction	No reduction, as FBTAMS already set to 0	Gentler cuts: two-thirds of the reduction applicable for developed country Members	No reduction (even if with AMS commitments): Developing countries with FBTAMS levels ≤ $ 100 million; NFIDCs; very RAMs; small low-income RAMs with economies in transition
PRODUCT-SPECIFIC (PS) AMS LIMITS				
Caps	Average PS AMS during the base period (specific terms for USA)	Average PS AMS during the base period / or two times the Member's PS *de minimis* level during the base period	Average PS AMS during the base period / or two times the Member's PS *de minimis* level during the base period / or 20% of the Annual Bound Total AMS in the year	
DE MINIMIS				
Reduction	50% (i.e. 2.5% of the VOP)	No reduction	Gentler cuts: two-thirds of the reduction rate specified for developed countries	No reduction (even if with AMS commitments): Developing country Members that allocate almost all AMS support for subsistence and resource-poor producers; NFIDCs; Very RAMs;* small low-income RAMs with economies in transition
BLUE BOX				
Overall cap	2.5% of average VOP in the base period	5% of average VOP in the base period	5% of average VOP in the base period	RAMs: 5%
PS cap	Average PS Blue Box support during the base period (different terms for US)	Average PS Blue Box support during the base period (if no support provided, up to 10% of the overall Blue Box limit)	Average PS Blue Box support during the base period (if no support provided, up to 10% of the overall Blue Box limit)	
BASE PERIOD VOP	1995-2000 average	1995-2000 or 1995-2004	1995-2000 or 1995-2004	

Source: Author's compilation based on TN/AG/W/4/Rev.4. Note*: Recently acceded members (RAMs) are countries that negotiated and joined the WTO after 1995.

Annex 3: Large exporters and minor (but heavily dependent) exporters, average 2011-12 exports

Products and Category	Country	Share of world commodity exports (value)	Share of the country export earnings % total merchandise	% total agricultural
[061] Sugar, molasses and honey				
Largest exporters	Brazil	28.51	5.56	16.05
	Thailand	9.19	1.71	8.75
	India	4.9	0.72	5.56
Minor exporters, heavily export dependent on the commodity	Cuba	2.03	16.21	48.74
	Swaziland	0.64	16.4	45.57
	Mauritius	0.61	11.05	35.88
	Algeria	0.48	0.33	68.18
	Guyana	0.33	11.33	33.28
[071] Coffee and coffee substitutes				
Largest exporters	Brazil	15.97	3.05	8.79
	Germany*	9.12	0.26	4.21
	Viet Nam	9.08	3.08	14.29
	Colombia	5.45	4.04	37.65
Minor exporters, heavily export dependent on the commodity	Ethiopia	2.2	31.56	37.4
	Uganda	1.04	20.65	32.15
	El Salvador	0.77	7.62	30.53
	Rwanda	0.25	17.67	45.17
	Burundi	0.15	47.04	74.35
	Timor-Leste	0.00	5.36	89.89
[072] Cocoa				
Largest exporters	Ghana	20.14	29.39	65.92
	Côte d'Ivoire	17.36	31.24	57.96
	Netherlands*	16.47	0.56	3.13
	Nigeria	5.8	0.86	21.73
	Malaysia	5.55	0.5	3.14
	Indonesia	5.27	0.58	2.46
Minor exporters, heavily export dependent on the commodity	Cameroon	2.2	11.07	28.47
	Sierra Leone	0.26	6.04	21.65
	Togo	0.18	10.15	30.57
	Sao Tome and Principe	0.04	42.01	91.41
[263] Cotton				
Largest exporters	United States	26.16	0.49	4.39
	India	15.51	1.23	9.44
	Australia	11.19	1.02	7.04
	Brazil	8.74	0.75	2.16
	Uzbekistan	7.19	16.62	57.47
Minor exporters, heavily export dependent on the commodity	Mali	4.06	29.85	81.97
	Burkina Faso	2.84	32.32	67.77
	Turkmenistan	1.73	3.15	61.67
	Benin	1.13	21.73	40.49
	Tajikistan	0.87	17.26	73.19
	Chad	0.7	3.11	70.65

Source: UNCTAD GlobStat Database. SITC Rev. 3. Note: * Re-exports/exports in semi-processed forms.

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