Agricultural Economics Research Review 2018, 31 (1), 75-86
DOI: 10.5958/0974-0279.2018.00007.1

EU-Brazil proposal on farm support: strengthening agricultural reforms or undermining them?

Sachin Kumar Sharma* and Abhijit Das

Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi-110016, India

Abstract Developing countries have been demanding substantial reduction in trade distorting domestic support to agriculture given by the developed countries. On the other hand, under the existing rules of the Agreement on Agriculture (AoA) many developing countries lack policy space to implement price support measures to augment income of the farmers. Of late, some member countries of WTO namely, Brazil, European Union, Colombia, Peru and Uruguay circulated a proposal on Overall Trade Distorting Support (OTDS) seeking a cap on trade distorting spending. This study critically examines the implications of EU-Brazil proposal regarding OTDS on the flexibility for the member countries to provide domestic support to agriculture. The results show that EU-Brazil proposal is likely to result in a steep reduction in policy space for the developing countries, which is already limited and insufficient for implementing agricultural policies. Concurrently, USA and EU will undertake negligible or no reductions in trade distorting support to agriculture and preserve their existing flexibilities in future as well. Contrary to Doha Declaration, this proposal is providing special and differential treatment to EU and USA.

Keywords EU-Brazil proposal, Trade distorting support, Agreement on Agriculture (AoA), Domestic support, de minimis limit, Agriculture negotiations

JEL classification F13, F14, Q17

1 Introduction

Agriculture plays an important role in developing countries due to its strategic importance to employment generation, food security and poverty alleviation. A majority of the farmers in these countries are resource poor and operate at subsistence level. They face several constraints, such as small landholdings, poor irrigation and infrastructure facilities and lack of institutional support amongst others. Coupled with this, they also face unfair competition from highly subsidized agricultural products from the developed countries. Massive trade distorting domestic support to the agricultural sector by the developed countries is one of the major stumbling blocks for sustained development of agriculture in the developing countries. The trade distorting subsidies in the developed countries lead to over-production and create artificial comparative advantage for them while depressing the international price of agricultural commodities (ICAC 2002; Sumner 2003; Schmitz et al. 2006). Highly subsidized agricultural exports from the developed countries exert a negative impact on the output markets of low-income or resource poor developing countries, and may have an adverse impact on the income and livelihood of farmers there (Minot & Daniels 2001; FAO 2004; Banga 2014; Oxfam 2002a; Curtis 2011).

To safeguard the interest of the farming communities in developing countries and also achieving United Nation Sustainable Development Goals (SDGs), it is important to address the issue of trade distorting domestic support. The Doha Ministerial Declaration (DMD) called for a substantial reduction in trade distorting domestic support and stressed that special and differential treatment for the developing countries (Para 13, WTO 2001). The Nairobi Ministerial

*Corresponding author: sksharma.jnu@gmail.com

Declaration (Paragraph 31, WTO 2015) reaffirms the commitment of all the WTO members to advance negotiations on domestic support to agriculture. Regrettably, even after several rounds of negotiations under the Doha Round, the issue of trade distorting support remains unresolved.

The negotiations on trade distorting domestic support have centred around the following elements: definition of trade distorting domestic support, extent of reduction in trade distorting domestic support by WTO members, time period over which the reductions would be implemented and provision for special and differential treatment in favour of developing countries. Considerable progress was made on these elements during the initial years of the Doha Round. The most detailed modalities for reduction in trade distorting domestic support are contained in the document TN/AG/W/4/ Rev.4 (December 2008 text), commonly referred to as the Rev.4 Text (WTO 2008). Under this text, Overall Trade Distorting Domestic Support (OTDS) was specified as the sum of the following three elements: (i) the Aggregate Measurement of Support (AMS), i.e., "amber box" subsidy, (ii) the de minimis support which, in the case of developed countries, for product specific support is 5% of production of that commodity, plus, in case of non-product specific support, 5% of the total agricultural production (10% in the case of developing countries for each), and (iii) the support under Article 6.5 of the Agreement on Agriculture, i.e., "blue box" subsidy. All these components of OTDS taken together, and separately, were required to be "substantially" reduced. The base period to calculate the OTDS limit is 1995-2000 for the developed countries, whereas it is 1995-2000 or 1995-2004 for the developing countries. Rev.4 proposes a tiered formula for reduction in base OTDS for the developed country members. It also proposes the special and differential treatment for the developing country members in terms of lower reduction commitments in the base OTDS as compared to the developed country members. Reduction in base OTDS shall be implemented in five and eight years for the developed and developing countries, respectively.

There was no substantial progress in the negotiations on reduction in trade distorting domestic support after December 2008. The G-33[1] members have called for "global trade reforms" that address inequities and imbalances in the Uruguay Round Agreement on Agriculture (AOA) so that all WTO Members would be governed by a multilateral trading system (MTS) under the WTO which is not only open, transparent and market-oriented but also development-oriented providing a level playing field" (WTO 2017a). The ACP[2] group has proposed (JOB/AG/87 dated 15th November, 2016) to establish a binding overall comprehensive limit on the sum of all trade-distorting domestic support, as well as, binding product specific limits on trade-distorting domestic support to avoid subsidy concentration. The ACP group has also stressed that provisions of Article 6.2 of the Agreement on Agriculture should remain unchanged (Third World Network 2016). Similarly, the LDC group has asked for substantial decrease in trade-distorting domestic support and a reduction of existing asymmetries in permitted domestic support measures. More specifically, the LDC group has demanded: (1) a binding overall limit applicable to the sum of all trade distorting domestic support including AMS, blue Box and permitted *de minimis* limit; (2) a total elimination of product specific support beyond *de minimis* levels, in order to avoid excessive concentration of domestic support on few products; (3) special and differential treatment that takes full account of the development and food security needs of developing countries (Third World Network 2017a). Recently, Brazil, European Union, Colombia, Peru and Uruguay circulated a paper (hereafter EU-Brazil paper) on OTDS and demanded a cap on trade distorting spending (WTO 2017b). Besides OTDS, this proposal also contains elements on issues of public stockholding for food security purposes and of cotton.

Developing countries are demanding steep cuts in trade distorting support in developed countries to protect the interest of their farmers, majority being resource poor. Many developing countries have also been facing inadequate policy space to implement domestic support policies to enhance income of the farmers (Sharma 2016). Further cuts in policy space for developing countries will adversely impact millions of resource poor farmers. With this background, the objective of

[1] Also called "Friends of Special Products" in agriculture. Coalition of 47 developing countries pressing for flexibility for developing countries to undertake limited market opening in agriculture.

[2] 62 members from African, Caribbean and Pacific countries with preferences in the EU.

this study is to (1) critically examine the implications of EU-Brazil proposal regarding OTDS on the flexibility for the developing and developed countries to provide domestic support to agriculture, and (2) the extent to which the proposal provides for special and differential treatment for the developing countries as mentioned in Doha Declaration. The study focuses on select developing countries, viz., India, China, and Brazil; and select developed countries, viz., USA, EU, Japan, Norway and Switzerland for an evaluation.

The remaining of the paper is organized as follows. Section 2 discusses provisions of the Agreement on Agriculture related to domestic support with a brief analysis of trends in domestic support in selected developed and developing countries, and their impact. Section 3 highlights some of the suggestions contained in the EU-Brazil paper which is followed by an analysis of their impact on the flexibility to grant domestic support to selected countries based on simulations in Sections 4 and 5.

2 Agreement on agriculture and trends in domestic support

2.1 Provisions relevant for domestic support under the AOA

The domestic support under the AoA is classified into three categories, viz. green, blue and amber boxes. The measures under the green box should meet the fundamental requirements of minimal impact on trade and production, and shall not have the effect of providing price support to producers. The WTO members can spend without any financial limitation on the programmes or measures covered under this box such as government service programmes like general services, public stockholding for food security purposes under extremely restrictive conditions, domestic food aid, decoupled income support, government financial participation in income insurance, income safety, payment for relief from natural disasters and structural adjustment assistance. To quote, USA and India spend US$124 billion and US$ 18 billion respectively under green box (table 1). The blue box contains direct payments under production-limiting programmes and are exempted if these are based on fixed area and yield or if there are livestock payments made on a fixed number of heads. The member country can provide unlimited amount of support under this box without any constraint under the WTO provisions. Only a few developed countries like EU, Japan and Norway have been providing support under this box.

All domestic support measures, except exempt measures, provided in favour of agricultural producers are to be measured as the 'Aggregate Measurement of Support' (AMS), commonly known as amber box. The support provided to farmers under this box includes (1) product specific price support like price and budgetary support, and (2) non-product specific support, such as input subsidies on fertiliser and irrigation. It is to be noted that if product specific and non-product specific support is below the *de minimis* limit, then a member is not required to include it in the amber box. *De minimis* limit is the minimal amount of trade distorting domestic support that is allowed under AoA. It may be noted that the *de minimis* limit is not

Table 1. Domestic support in selected member countries as shown in their recent notification

Country	Unit	Latest notification	Green Box	Product specific	Non-product specific	Blue Box
India	Million US$	2013-14	18,362	2,050	379	-
Brazil	Million US$	2014-15	1,634	178	1,725	-
China	Hundred million RMB yuan	2010	5,346	254	977	-
USA	US$million	2014	1,24,483	8,059	5,533	-
EU	Million Euro	2013-14	68,698	7,027	946	2,664
Japan	Billion Yen	2014	1,603	619	208	75
Norway	Million NOK	2015	7,626	10,965	186	5,232
Switzerland	CHF (million)	2013	3,821	2562*		

Source: based on domestic support notifications submitted by members to WTO.
Note: "*" It also includes non-product specific support.

expressed in monetary terms. For developing countries, *de minimis* limit for product specific support is 10% of total value of basic agricultural production in the relevant year. In case of non-product specific support, this limit is 10% of that member's total agricultural production during the relevant year (WTO 2002). For developed country members, the *de minimis* limit is 5%. China became a member of the WTO in 2001, having the applicable *de minimis* limit at 8.5%.

Product specific market support is calculated by using the gap between a fixed external reference price (ERP) based on export or import price of the specific product during 1986-1988, and the applied administered price multiplied by the quantity of production eligible to receive the applied administered price (Annex 3 of AoA). Product specific support includes product specific market support and budgetary support to a specific agricultural commodity. However, the ERP for China is determined on the basis of a three-year average during 1996 to1998. Therefore, to calculate the product specific support for an agricultural commodity, its administered price is compared with its respective fixed ERP.

It is important to note that some members of WTO had given trade distorting support higher than *de minimis* limit during the Uruguay round. These members got the "double dipping" benefit or flexibility to give trade distorting support higher than *deminimis* limit in future as well. However, for those members who had trade distorting support below the *de minimis* limit during base period (1986-88), flexibility to provide amber box support was capped at *de minimis* limit. In other words, those countries which were already providing huge trade distorting support were rewarded with the flexibility to continue to provide high amber box support in comparison to those whose trade distorting support was below the *de minimis* limit during the Uruguay round. For example, USA, EU, Japan, Norway, Switzerland and Brazil have the flexibility to provide trade distorting support above the *de minimis* limit whereas India and China do not have this entitlement as their bound AMS is capped at zero (table 2).

As a special and differential treatment, under Article 6.2 of AoA, the developing country- members can grant input subsidies to low-income or resource poor farmers, and investment subsidies generally available to agriculture without any monetary ceiling. While China can provide support through measures of the types described in Article 6.2 of the AoA, the amount of such support will be included in China's calculation of its AMS.

Table 2. Existing flexibilities for selected member countries under AoA

Country	Bound AMS	Product-Specific de minimis support (% of value of specific product)	Non-Product Specific de minimis support (% of value of total agricultural production)	Blue box	Flexibility under Article 6.2	Green box
Developing country-members						
India	0	10%	10%	Without	Without	Without
Brazil	912 million US$	10%	10%	limit	limit	limit
China	0	8.5%	8.5%		No	
Developed country-members						
USA	19103 million US$	5%	5%	Without	No	Without
EU	72244 million Euro	5%	5%	limit		limit
Japan	3973 billion Yen	5%	5%			
Norway	11449 million NOK	5%	5%			
Switzerland	4257 SF million	5%	5%			

Source:
1. Domestic support notifications submitted by members to the WTO.
2. WTO (2002) The legal texts: the results of the Uruguay Round of multilateral trade negotiations.

2.2 Trends in domestic support under amber box and its impact

Studies indicate that massive agricultural subsidies provided by the developed countries adversely impact welfare of millions of farmers in the developing countries. High trade distorting support along with product specific concentration of support leads to over-production and depresses international prices of agricultural commodities. As a result, farmers in the developing countries, mostly poor suffer on multiple counts: depressed international prices, lost export opportunities and import surge of subsidised goods (FAO 2004; Oxfam 2002a; Schmidt 2016; ICAC, 2002).

FAO (2004) found that an excess supply induced by the domestic subsidies has a depressing effect on the world market price of cotton. ICAC (2002) observed that removal of US cotton subsidies would result in an average increase in international cotton prices by 22 cents per pound in 2001/02. Result by Sumner (2003) shows that removal of domestic and export subsidies for US upland cotton would lead to increase in international prices of cotton by 12.6%. Traoré (2007) also assessed the impact of US cotton subsidies on world cotton price and found their depressing effect on the world cotton price in the short as well as long run.

Similarly, across the developing countries, Minot & Daniels (2001) indicate a strong link between cotton prices and rural welfare in Benin. A 40% reduction in farm-level prices of cotton could lead to an increase in rural poverty by 8 percentage points in the short run and 6-7 percentage points in the long run. Oxfam (2002a) concludes that American cotton subsidies are destroying livelihoods of farming communities in Africa and other developing countries. By encouraging over-production and export dumping, these subsidies tend to drive down the world prices. It has led to a loss of 1% of the gross domestic product (GDP) and 12% of the export earnings in Burkina Faso. Similar effects were experienced in Mali and Benin.

Similar findings have emerged in the case of sugar, dairy, and cereals Oxfam (2002b).While assessing the impact of subsidies to European dairy farmers on the dairy sector of Bangladesh, Curtis (2011) finds that massive subsidies enabled European countries to export milk powder, among other products, in international markets at low prices. In 2005, the EU decided to change the nature of subsidies by 'decoupling' these from production levels. Despite that the decoupled subsidies continue to have a negative effect on dairy sector of Bangladesh. Schmidt (2016) investigated the impact of the agricultural subsidies in US and EU on cotton production in Benin and dairy production in Kenya. It concluded that the agricultural subsidies and trade policies have caused enormous economic losses for Benin and Kenyan farmers.

Clearly, developing countries have suffered and continue to suffer due to trade distorting policies being adopted by the developed countries. Due to bound AMS entitlement, developed countries have the flexibility to provide domestic support above the *de*

Table 3. Comparison of bound AMS and current total AMS

Country	Unit	Final Bound AMS	Current AMS	Current AMS as a % of Bound AMS	Year
1	2	3	4	5 =4/3*100	6
India	Million US$	0	0	0	2013-14
China	Million Yuan	0	0	0	2010
Brazil	Million US$	912	0	0	2014-15
USA	Million US$	19,103	3,810	20	2014
EU	Million Euro	72,244	5,972	8	2013-14
Japan	Billion Yen	3,973	601	15	2014
Norway	Million NOK	11,449	10,739	94	2015
Switzerland	SF Million	4,257	2,556	60	2013

Source: Estimated by authors based on domestic support notifications submitted to the WTO.

Table 4. Product specific support (PSS) as a percentage of value of production (VoP) in USA and EU

USA			EU		
Year	Product	PSS as a % of VoP	Year	Product	PSS as a % of VoP
2005	Corn	20	2003	Butter	67
2001	Cotton	74	2009	Barley	34
2002	Dairy	30	2005	Wheat	16
2002	Mohair	141	2004	Sugar	120
2014	Peanut	16	2002	Tobacco	155
2001	Rice	82	2003	Cotton	139
2014	Sesame	57	2005	SMP	63
2014	Sugar	59	2006	Sugar	177

Source: Estimated by authors based on domestic support notifications submitted by USA and EU

minimis level as well as concentration of support on a few products. On the other hand, most of the developing counties can provide domestic support upto the *de minimis* limit i.e., 10% of the value of the specific product. Developed countries have huge policy space to further distort international trade by increasing the domestic agricultural subsidies upto bound AMS. For example, EU and USA are using only 8% and 20% of final bound AMS entitlement, respectively (table 3). Except Norway, all other developed countries with final bound AMS entitlement have massive policy space to distort international trade in the future as well. This flexibility has enabled the developed countries to give high product specific support as a percentage of value of production (VoP).

Table 4 shows that bound AMS entitlement allowed USA and EU to provide very high level of support to agricultural products in comparison to their applicable *de minimis* limit of 5% of the VoP. On the other hand, product specific support for majority of the developing countries is capped at applicable *de minimis* limit i.e., 10% of the VoP. In recent years, product specific support has shown downward trend due to high international prices of agricultural commodities. Trade distorting support to agriculture is inherently counter-cyclical in nature and, therefore, as international prices go down, domestic support will increase. Given the existing entitlement under AoA, the developed countries can provide domestic support without violating their commitments to WTO. This policy space along with the concentration of product specific support in the developed countries has devastating impact on the income and livelihood of millions of farmers in developing countries.

3 EU-Brazil proposal

3.1 Provisions related to domestic support

EU-Brazil proposal contains suggestions related to the domestic support, public stockholding for food security purposes and of cotton. On domestic support, the EU-Brazil paper has proposed an Overall Trade Distorting Support (OTDS) limit for the developed and developing countries, whereas the LDCs are exempted from this limit.

In case of developed countries, the proposed limit for the OTDS is X% of total value of production in 2018. For developing countries, there are two options:

1. Developing country-members shall not provide trade distorting domestic support in excess of [X+2%] of the total value of agricultural production as of [2022];
2. Developing country-members shall not provide trade-distorting domestic support in excess of [X%] as of [XXXX]. From [2022] until [XXXX], developing countries shall not provide trade-distorting domestic support in excess of [X+Y%] of the total value of agricultural production.

The OTDS limit will cover spending under current AMS (Article 6.3), *de minimis* limit (Article 6.4) and blue box (Article 6.5) (subject to terms defined in 12th Ministerial conference). In other words, sum of the expenditure under current AMS and *de minimis* limit should not cross the OTDS limit. According to this proposal, the total value of agricultural production for a country shall be calculated as the average VoP of agricultural commodities which it has notified for three most recent years for which domestic support notifications have been examined by the Committee on Agriculture. In addition to the OTDS limit, the members shall also continue to respect the existing limits set out in the AoA on the provision of domestic support. Besides, it also contains provisions for implementation and transparency.

3.2 Basic information: data source, different scenarios and assumptions

It is important to note that there are two broad models to establish the OTDS limit (1) floating and (2) reference period (like Rev. 4). Under the floating model, OTDS limit for a member is calculated for each year depending on VoP. As VoP increases, OTDS will also increase in monetary terms. Unlike floating model, the reference period model fixes the OTDS limit based on a percentage VoP in the reference period. In this model, the maximum amount spent on trade distortion is permanently fixed in monetary value and does not change with time. The methodology to establish an OTDS limit under Rev. 4 is also a reference period model, whereas the EU-Brazil paper seems to suggest a floating model to determine the OTDS limit. However, there is some ambiguity in this respect in the EU-Brazil proposal.

An analysis is carried out for the developing countries viz., India, Brazil, China; and the developed countries viz., USA, EU, Japan, Norway and Switzerland. The analysis is done under different scenarios by assuming X = 5, 10, 15 and 20%. Data on value of production (VoP) for these countries are extrapolated based on the historical trend growth. It is to be noted that VoP of agriculture sector for Japan (-1.01%) and Switzerland (-1.00%) has shown downward trend during 1995-2014. For the purpose of analysis, simulations for Japan and Switzerland are done based on past growth rates and also by assuming 3% growth rate in VoP (table 5).

4 Implications of EU-Brazil proposal for developing countries

We find that Brazil, Jordan, South Korea and a few more have the flexibility to provide trade distorting support above the *de minimis* limit as they got the flexibility in the form of bound AMS. However, most of the developing countries (e.g,. India, Indonesia and Pakistan) and some of the LDCs can provide trade distorting support only upto *de minimis* limit because these had been providing it during the Uruguay round or base period. Though the developing countries are entitled to provide unlimited support under blue box, it is difficult for them to use this flexibility as the provisions contained in this are not compatible with socio-economic conditions prevailing in these countries.

Theoretically, developing countries can provide trade distorting support under *de minimis* limit upto 20% of VoP, i.e. 10% product-specific and 10% non-product specific support. For China, policy space to provide trade distorting support under *de minimis* limit is 17% of VoP, i.e. 8.5% product-specific and 8.5% for non-product specific. Reduction in policy space under EU-Brazil proposal depends on the value of "X" as well as the existing policy space under AoA. According to the EU-Brazil proposal, the OTDS limit for the developing countries would be X+2.

Notably, EU-Brazil paper proposes that members shall also continue to comply with the existing limits set out in the AOA regarding the provision of domestic support. In other words, positive gain in policy space

Table 5. Basic information on value of agriculture production at current prices

	India	Brazil	China	USA	EU	Japan	Norway	Switzerland
Period	1995-2015	1995-2014	1996-2010	1995-2014	1995-2013	1995-2014	2005-2015	1995-2015
Growth rate (%)	8.0	7.2	**8.9**	4.6	3.55	assumed 3% (actual -1.01%)	4.0	assumed 3% (actual -1%)
Unit	Million US$	Million US$	Million RP	Million US$	Million EURO	Billion Yen	Million NOK	SF Million
Data Source	NAS	DS	DS	DS	DS	DS	DS	FAO

Note: NAS = National Account Statistics; DS = Domestic support notifications, FAO = Food and Agriculture Organisation under OTDS would be effectively equal to zero as the member has to abide by the existing provision of AoA. However, a positive gain in terms of OTDS limit implies that member will not undertake any reduction in the existing policy space under the AoA. We have simulated the impact of the EU-Brazil proposal on developing country members without bound AMS, and extend the analysis to Brazil, a country with bound AMS.

4.1 Implications of the proposal for developing countries without bound AMS

As mentioned above, developing countries such as India, China, Pakistan, Kenya and Indonesia do not have bound AMS commitment. The existing policy space for India and China under AoA is based on applicable *de minimis* limit i.e., 20% and 17%, respectively. Under the EU-Brazil proposal, the reduction in their policy space will depend on the agreed value of “X”. In the case X<18, India will face cut in policy space in comparison to its existing limit. At X=15%, the developing countries without final bound AMS (except China) will experience cut in policy space by 3% (table 6). China will not experience any cut in policy space if X=15% as the existing flexibility under AoA for China is 17%. Being a developing country, China will be entitled for (X+2) % which is the same as under AoA. It may be noted that for a given value of X, the developing countries without an AMS limit will face the same reduction in policy space across different years.

4.2 Implications of the EU-Brazil proposal for developing countries with bound AMS

The developing countries viz. Argentina, Brazil, Jordan and South Korea have the flexibility to provide trade distorting support above the *de minimis* level. In line with others, their applicable *de minimis* limit is 20% of VoP but they have flexibility of final bound AMS. However, the flexibility for them to provide trade distorting support is very low in comparison to that for the developed countries. Their final bound AMS in monetary terms as well as a percentage of VoP is significantly lower than that for the developed countries. Thus, reduction in their policy space will depend on the flexibility under *de minimis* limit, final bound AMS and value of “X”. Given the fact that the final bound AMS for developing countries is not high, value of “X” will largely determine the policy space along with total *de minimis* limit.

Table 6. Implication for the developing countries (% of value of agriculture production)

	India	Brazil	China
Growth rate (%) in VoP (table 5)	8%	7.2%	8.9%
Policy space under *de minimis*	20.0	20.0	17.0
Policy space under bound AMS			
2025	0.0	0.3	0.0
2040	0.0	0.1	0.0
Total policy Space under AoA			
2025	20.0	20.3	17.0
2040	20.0	20.1	17.0
Cut or gain in policy space			
EU-BRAZIL proposal (2025)			
Option 1: X=5 (dc = X+2)	-13.0	-13.3	-10.0
Option 2: X=10 (dc = X+2)	-8.0	-8.3	-5.0
Option 3: X=15 (dc = X+2)	-3.0	-3.3	0.0
Option 4: X=20 (dc = X+2)	0.0	0.0	0.0
EU-BRAZIL proposal (2040)			
Option 1: X=5 (dc = X+2)	-13.0	-13.1	-10.0
Option 2: X=10 (dc = X+2)	-8.0	-8.1	-5.0
Option 3: X=15 (dc = X+2)	-3.0	-3.1	0.0
Option 4: X=20 (dc = X+2)	0.0	0.0	0.0

Source: Estimated by authors.

Note: Cut in policy space is equal to difference between total policy space under AoA and value of X. “dc” refers to developing countries.

Brazil has the flexibility to provide domestic support above the *de minimis* limit in the form of final bound AMS. The final bound AMS is a fixed monetary value that does not change with the value of production. As VoP increases over time, the final bound AMS as percentage of VoP will decline (figure 1). For Brazil, under our assumption of growth rate in VoP, the bound AMS as % of VoP for Brazil is likely to be 0.3% in 2025 and 0.1 % in 2040.Therefore, the role of bound AMS in determining the policy space for such developing countries is relatively less, as compared to the *de minimis* limit. As the flexibility under bound AMS as percentage of VoP moves towards zero, there will be a reduction in policy space for Brazil if X is less than 18%. Table 5 shows that Brazil will face cut in policy space if X is 5%, 10% and 15% respectively.

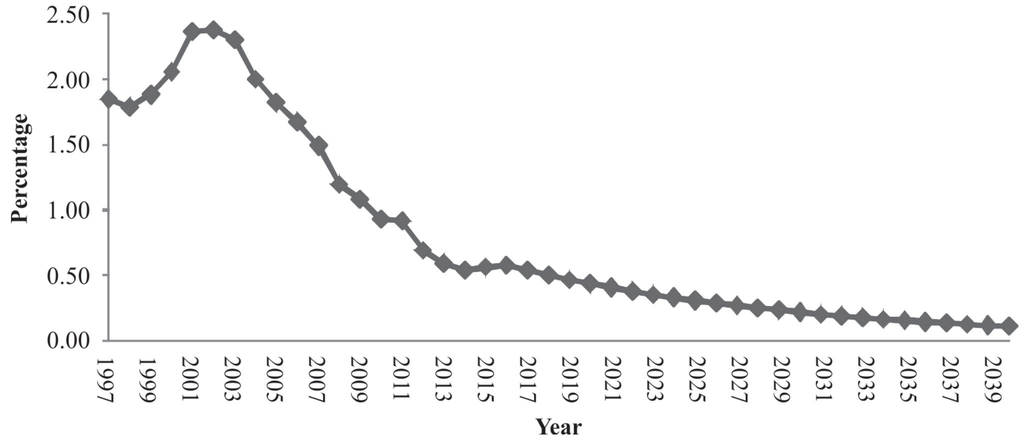

Figure 1. Trend of final bound AMS as a percentage of VoP in Brazil

Source: Domestic support notifications and authors' estimates.

5 Implications of the proposal for developed countries

The developed countries would have the flexibility to provide trade distorting support above the *de minimis* limit as they are entitled for final bound AMS under the existing rules of AoA. The *de minimis* limit for developed countries include (1) product specific support which is 5% of VoP of a specific agricultural product; and (2) non-product specific support which is 5% of total value of agricultural production in the relevant year. Thus, developed countries can provide upto 10% of the total value of agricultural production under the *de minimis* limit. Some of developed countries - EU, Japan and Norway also provide blue box support to agriculture. We do not consider expenditure under blue box in the analysis as EU-Brazil proposal mentions that expenditure under it is subject to terms to be defined in the 12th Ministerial Conference.

Cut or gain in the policy space would depend on the value of "X", applicable *de minimis* limit and final bound AMS. The USA, EU, Japan, Norway and Switzerland are entitled to final bound AMS fixed in monetary terms. Bound AMS as a percentage of VoP would decline and tend towards zero over the years if the VoP shows an upward trend (figure 2). Therefore, the role of final bound AMS in policy space will gradually diminish to zero in long run as VoP moves upwards. However, VoP for Japan and Switzerland has shown a downward trend, and, therefore, the bound AMS as a percentage of VoP has been increasing over the past few years. In the case of Japan and Switzerland, the simulation is done based on (1) actual trends in growth, and (2) assumed rate of growth at 3%.

In the case of USA, the final bound AMS would be 3.0% of VoP in 2025 and 1.5% of VoP in 2040.This would tend towards zero as VoP increases. At X=15, USA will not face any reduction in the policy space (table 7). However, at X=10, USA will experience cut in the policy space, but given its AMS entitlement, there would hardly be any effect in the long run even if the final bound AMS (% of VoP) tends to be zero. This will shelter the USA from undertaking any commitments towards reducing AMS.

For EU, the final bound AMS (% of VoP will be 13.1% and 7.8% in 2025 and 2040, respectively. EU will face policy cut in all scenarios in 2025 but not in 2040 if X=20%. It is important to note that if X=15%, while the policy space for EU gets reduced by 7.6% of VoP, the reduction would be just 2.8% in 2040.

For G-10 countries viz. Japan, Norway and Switzerland, this proposal implies a steep cut in the existing flexibility under all scenarios (X = 5, 10, 15 and 20%). It is due to the fact that the final bound AMS as a proportion of VoP is very high. Therefore, gain to these countries due to X>10% would be offset by cut in flexibility under bound AMS. These countries have opposed attempts to put a ceiling on OTDS based on the percentage of the value of overall production (Third World Network 2017b).

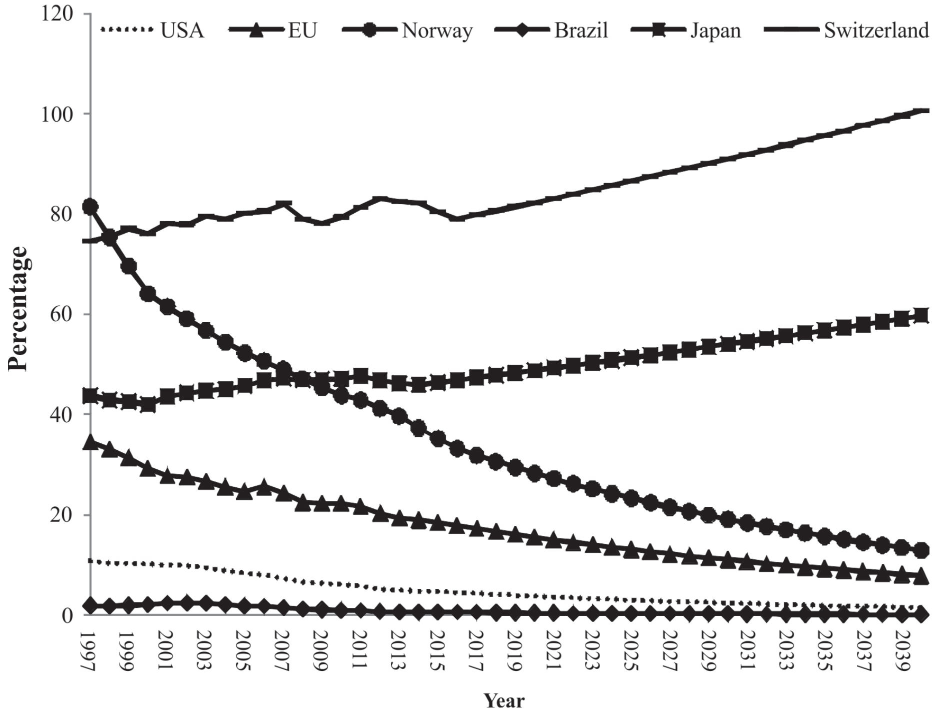

Figure 2. Trend in bound AMS as a percentage of VoP in developed countries
Source: Domestic support notifications and authors' estimates.

Table 7. Implication for policy space in developed countries

Description	USA	EU	Japan	Japan	Norway	Switzerland	Switzerland
Growth rate (%) in VoP (table 5)	4.6	3.55	Assumed 3%	Actual growth (-1.01%)	4.0	Assumed 3.0%	Actual (-1.0%)
Policy space under *de minimis*	10	10	10	10	10	10	10
Policy space under bound AMS							
2025	3.0	13.1	34.5	51.3	23.2	58.2	86.5
2040	1.5	7.8	22.1	59.7	12.9	37.4	100.6
Total policy space under AoA							
2025	13.0	23.1	44.5	61.3	33.2	68.2	96.5
2040	11.5	17.8	32.1	69.7	22.9	47.4	110.6
Cut in policy space							
EU-BRAZIL proposal (2025)							
Option 1: X=5	-8.0	-18.1	-39.5	-56.3	-28.2	-63.2	-91.5
Option 2: X=10	-3.0	-13.1	-34.5	-51.3	-23.2	-58.2	-86.5
Option 3: X=15	0.0	-8.1	-29.5	-46.3	-18.2	-53.2	-81.5
Option 4: X=20	0.0	-3.1	-24.5	-41.3	-13.2	-48.2	-76.5
EU-BRAZIL proposal (2040)							
Option 1: X=5	-6.5	-12.8	-27.1	-64.7	-17.9	-42.4	-105.6
Option 2: X=10	-1.5	-7.8	-22.1	-59.7	-12.9	-37.4	-100.6
Option 3: X=15	0.0	-2.8	-17.1	-54.7	-7.9	-32.4	-95.6
Option 4: X=20	0.0	0.0	-12.1	-49.7	-2.9	-27.4	-90.6

Source: Estimated by authors
Note: Cut in policy space is equal to difference between total policy space under AoA and value of X.

6 Conclusions

Under the AoA, majority of the developing countries can provide domestic support upto the applicable *de minimis* limit i.e., 10% of VoP. However, the developed countries can provide domestic support upto final bound AMS and, hence are not significantly constrained by the *de minimis* limit. Further, the entitlement to final bound AMS provides flexibility to the developed members to give product specific support beyond the *de minimis* limit as well as concentrate trade distorting support in a few agricultural products. On the other hand, in the absence of the entitlement for AMS, the developing countries cannot provide support to specific products beyond the 10% VoP *de minimis* limit. Therefore, several developing countries are demanding (1) a steep cut in domestic support by the developed countries; (2) ceilings on product specific to prevent concentration of domestic support in a few products; and (3) effective special and differential treatment for the developing countries.

This paper attempted to evaluate the EU-Brazil proposal in terms of these three criterions. The proposal disappoints on all three counts. It is silent on product specific ceilings, a discipline that was envisaged in Rev. 4 Modality. Acceptance of this proposal would fail to check concentration of the domestic support in few products by the developed countries. As is well known, the AoA is beset with asymmetries and imbalances that adversely affect the interest of the developing countries. Acceptance and implementation of the EU-Brazil proposal would further tilt the rules against the developing countries. It is found that first, if X is less than 18%, then the policy space available to the developing countries to provide *de minimis* product specific and non-product specific support would be curtailed. In absolute terms the developing countries would be worse off. Second, as against the current difference of 10% in the *de minimis* of the developed and developing countries (product specific plus non-product specific), the EU-Brazil proposal would reduce the difference to 2 percentage points. This would again make developing countries worse off as compared to the developed countries. Third, for a given value of X, the reduction in policy space measured as a percentage of VoP would be higher for the developing countries as compared to some of the developed countries. Fourth, for a given value of X, the reduction in policy space measured as percentage of VoP remains constant over the years for developing countries. The same for the developed countries would decline over time, thereby resulting in no reduction in policy space in the long run. Fifth, as the existing level of AMS support in the developed countries is only a small fraction of the final bound AMS limit, there would be no real reduction in the existing level of AMS support even if EU-Brazil proposal is agreed and implemented. Overall analysis indicates that in terms of policy space to provide support to farmers, the developing countries would be worse off if the EU-Brazil proposal is implemented in absolute as well as relative terms.The proposal could provide special and differential treatment to farmers of USA and EU, generally rich, at the expense of millions of resource poor farmers in the developing countries. The latter must exercise caution in negotiations so that any agreed formula related to domestic support is fair to millions of their farmers.

References

Banga, R. (2014). Impact of green box subsidies on agricultural productivity, production and international trade. Background paper no. RVC-11, UNCTAD, Geneva. Available athttp://unctad.org/en/PublicationsLibrary/ecidc2014misc1_bp10.pdf.

Curtis, M.(2011). Milking the poor: how EU subsidies hurt dairy producers in Bangladesh? ActionAid, Denmark.

FAO. (2004). Cotton: impact of support policies on developing countries - why do the numbers vary? Trade policy briefs on issues related to the WTO negotiations on agriculture.FAO, Rome. Available at http://www.fao.org/3/a-y5533e.pdf.

Traoré, F. (2007).The impact of United States subsidies on world cotton price : evidence from a simultaneous equations model. CERDI-UniversitÈ díAuvergne. Available athttp://www.africametrics.org/documents/conference07/Day%203/Session%209/TRAORE%20The%20Impact%20of%20United%20States%20Subsidies.pdf).

ICAC. (2002). Production and trade policies affecting the cotton industry. Available at: https://www.icac.org/cotton_info/publications/statistics/stats_wtd/gm_02.pdf.

Minot, N. & Daniels, L. (2001). Impact of global cotton markets on rural poverty in Benin. MSSD Discussion Paper No. 48, International Food Policy Research Institute, Washington, USA.

Oxfam. (2002a). Cultivating poverty: the impact of US cotton subsidies on Africa. Briefing paper 30, Oxfam international.

Oxfam.(2002b). Stop the dumping! how EU agricultural subsidies are damaging livelihoods in the developing world? Briefing paper 31, Oxfam international.

Schmitz,A., Schmitz, T.G.& Rossi, F. (2006). Agricultural subsidies in developed countries: impact on global welfare. Review of Agricultural Economics, 28(3), 416-425.

Sharma, S.K. (2016). The WTO and food security: implications for developing countries. Springer, Singapore.

Sumner, D. (2003). The impacts of U.S. cotton subsidies on cotton prices and quantities: simulation analysis for the WTO dispute. Available at: https://projects.ncsu.edu/project/arepublication/Effects_US_Cotton_Subsidies.pdf.

Third World Network.(2016). Agriculture: proposals tabled on domestic support, market access. TWN Info Service on WTO and Trade Issues. http://www.twn.my/title2/wto.info/2016/ti161116.htm

Third World Network.(2017a). LDCs push for concrete outcomes at MC11 on agri-domestic support. TWN Info Service on WTO and Trade Issues. Available at: https://www.twn.my/title2/wto.info/2017/ti170103.htm.

Third World Network.(2017b). South nations for ending AMS, cuts in "green box" in agriculture. TWN Info Service on WTO and Trade Issues. Available at: https://www.twn.my/title2/wto.info/2017/ti170711.htm.

WTO. (2001). Ministerial declaration, ministerial conference fourth session. Document no. wt/min(01)/dec/1.

WTO. (2002). The legal texts: the results of the Uruguay round of multilateral trade negotiations. WTO Secretariat Publication.

WTO. (2008).Revised draftmodalities for agriculture, committee on agriculture special session. Document no. tn/ag/w/4/rev.4.

WTO. (2015). Nairobi ministerial declaration: ministerial conference tenth session. Document no. wt/min(15)/dec.

WTO (2017a). Reaffirming development - MC11: submission by the G-33. Document no. tn/ag/gen/43

WTO. (2017b). Proposal on domestic support, public stockholding for food security purposes and cotton from Brazil, European Union, Colombia, Peru And Uruguay. Job/ag/99. http://trade.ec.europa.eu/doclib/docs/2017/july/tradoc_155777.pdf.

Received: 4 January 2018; Accepted: 4 April 2018