WTO and its implications for India and China:
Food security Vs Naked Commercial Interest

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WTO and its Implications for India and China: Food Security vs. Naked Commercial Interest

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Abstract

The USA has challenged the product specific support to foodgrains in China through the Dispute Settlement Mechanism of the WTO and claimed that China has breached its commitments under the WTO by giving $100 billion in product specific support to wheat, rice and corn in 2015. The main issue in this dispute is the price support backed procurement of foodgrains for food security purposes by China. Since India is also implementing this type of policy, this case will have important implications for it in terms of policy space. With 328 million people in India and China living in hunger and reeling under undernourishment, the problem of ensuring food security remains an important issue for both countries. In this context, to verify USA claim about domestic support in China as well to examine the policy space available for India and China, product specific support to foodgrains is calculated for these two Asian countries. China implements the Minimum Procurement Price policy to maintain stability of grain market prices, protect farmers and control food supply. In case of India, the Food Corporation of India (FCI) undertakes the procurement of foodgrain at Minimum Support Price (MSP) and provides it to the weaker sections of the society at subsidised prices through the public distribution system (PDS). The finding of this study shows that product specific support for foodgrains in India was below the de minims limit during 2011-12 to 2015-16. In case of China, it may have breached the maximum permissible limit to provide domestic support to wheat and corn in 2015 based on the assumption that the share of procurement in total production was 33% and 26 % respectively. In contrast to USTR's claim that Chinese product specific support was more than $100 billion for foodgrains, results show that support for wheat, rice and corn was only $17 billion in 2015 based on the assumption that procurement of wheat and corn was 33% and 26 % respectively of total production of these crops. In case the procurement of wheat and corn was less than 23.7 % and 14% respectively of total production in 2015, total product specific support would be zero due to the fact that product specific support remained below the de minimis limit. This paper concludes that the USA claim is highly exaggerated. This paper also highlights the different aspects of food security and the need for a level playing field in international trade of foodgrains.

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EXECUTIVE SUMMARY

1. In September, 2016, the USA challenged China's provision of market price support for three crops – rice, wheat, and corn – in excess of its commitments under the WTO rules. The USTR claims that the level of support provided to these crops was in excess of China's commitment by nearly $100 billion in 2015. The main issue in this complaint is the procurement of foodgrains at the administered price by the Chinese government in excess of its de minimis limits under the Agreement on Agriculture (AoA).

2. Price support policy to agriculture sector is not unique to China, but many other countries including India are giving price support to agriculture sector. For example SINOGRAIN in China, FCI in India, Preum BULOG in Indonesia, the National Cereals and Produce Board in Kenya, PASSCO in Pakistan, and Turkish Grain Board (TMO) in Turkey are responsible for implementing buffer stock policy by procuring grains from the farmers if the market price dips below the established support level.

3. Procurement, stockholding and distribution of foodgrains are important aspects of food security policies in many developing countries. However, the ability of the government to procure foodgrain at administered prices is significantly circumscribed by the provisions of the AoA.

4. The expenditure related to distribution and stockholding of foodgrains is permissible without any limit under Green box. Procurement of foodgrains at administered price is limited by the rules of the WTO and covered under the Amber Box which accounts for trade distorting support. For many developing countries policy space for implementing programmes aimed at food security has been eroding due to shrinking space under the Amber Box.

5. The FAO (2015) estimated that globally 795 million people do not have access to sufficient food to live a healthy life, with 780 million people living in developing countries. China and India are home to 328 million people, who are facing hunger and suffering daily hardship to access sufficient food for healthy life

6. In this context, the objective of this paper is to estimate the product specific support for foodgrains mainly wheat and rice in both countries and assess the available policy space for implementing price support policy for public stockholding to ensure food security for their people. A modest attempt also made in this study to verify the

USTR's claim that the level of support provided to wheat, rice and maize was in excess of China's commitment by nearly $100 billion in 2015.

7. The maximum limit to provide AMS for India and China is the applicable de minimis limit. For India, de minimis limit for product specific support is 10% of the total value of a basic agricultural product during the relevant year. In case of China, the negotiated de minims limit is 8.5%.

8. For India, results show that product specific support to wheat and rice remained below the de minimis limit during 2011-12 to 2015-16. By assuming that administered price and production of rice remain at 2015-16 levels, results show that India can procure upto 53.9 million ton of rice without breaching the de minimis limit. In other words, India can procure upto 52.2 % of total rice production in 2015-16 without violating its commitment under the AoA. However, given the trend in the MSP and procurement level, India will face lack of policy space in implementing price support policy for rice under existing AoA rules in the coming years. In case of wheat, there is enough policy space to implement price and procurement policy for food security purposes in the coming years.

9. By assuming the share of procurement in total production at 33%, results show that China may have breached the maximum permissible limit to provide domestic support to wheat in 2015. In case the procurement remained upto 23.7% of total value of production of wheat, product specific support would remain below the de minimis level. Product specific support to rice was below the de minimis limit during 2011 to 2016. However, product specific support to corn was higher than the de minimis limit during 2011 to 2016.

10. In contrast to USTR's claim that Chinese product specific support was more than $100 billion for foodgrains, results show that support for wheat, rice and corn was only $17 billion in 2015 based on the assumption that procurement of wheat and corn was 33% and 26 % respectively of production. In case the procurement of wheat and corn was less than 23.7 % and 14% respectively of total production in 2015, total product specific support would be zero due to the fact that product specific support remained below the de minimis limit. Overall, USTR's claim about the market price support to wheat, rice and corn seems to be exaggerated. It may happen if it is assumed total production of foodgrains as eligible production. Other possibility may be that input subsidies on fertilisers/fuel or direct payment may be considered as product specific rather than non-product specific support in the USTR analysis.

Otherwise, it seems that product specific support is very much low in comparison to the USTR's claim.

11. In case inflation is considered, product specific support to wheat and rice remained very much below the de minimis limit in China and India during 2011-12 to 2015-16.However, in case of corn, product specific support remain above the de minimis limit.

12. On the issue of level playing field, analysis shows that USA is giving huge domestic support to agriculture sector. Domestic support per person who is economically active in agriculture sector was $51194 in USA and in contrast, the figure for India and China was $201 and $191 in 2010. It is also revealed that agricultural subsidies are highly skewed in favour of rice, wheat and corn in USA and the level of subsidies is extremely high. Due to existing lopsided nature of the AoA, the USA is enjoying artificial comparative advantage in international trade of agricultural commodities.

13. China and India, with a population of 1.39 and 1.27 billion respectively spent about $11.38 and $13.81 billion respectively, on food security in 2010. On the other hand, USA with a population of 318 million has spent about $94 and $109 billion in 2010 and 2013 respectively on food security. It would be interesting to know that number of undernourished people is India and China is higher than the total population of the USA.

14. China can invoke "Peace Clause" in case product specific support to wheat is higher than the de minims limit. For this China has to notify its domestic support to agriculture sector for recent years and comply with all the other conditions mentioned in the Bali Ministerial Decision on the issue of public stockholding for food security purposes. The General Council decision on "Peace Clause" in 2014 provided that if a permanent solution on the issue of public stockholding for food security purposes is not agreed and adopted by the 11th ministerial conference, the peace clause shall continue to be in place until a permanent solution is agreed upon and agreed.

15. The dispute between USA and China on product specific support for foodgrains would set precedence on dealing with a situation where a developing member country breaches its commitment levels on account of procurement of foodgrains for food security purposes. Many developing countries that are implementing price support backed procurement policy will have keen interest in this dispute due to its implications for food security policy. In the meantime, developing countries should sustain their demand for an early permanent solution on the issue of public

stockholding for food security purposes that allow enough policy space to implement price support backed procurement of foodgrains under the WTO rules

WTO and its Implications for India and China: Food Security vs. Naked Commercial Interest

Sachin Kumar Sharma

Section 1: INTRODUCTION

In September, 2016, the United States of America (USA) challenged China's provision of market price support for rice, wheat, and corn in excess of its commitments under the WTO rules (WTO 2016a). Analysis by the United States Trade Representative (USTR) shows that China appears to breach the applicable permissible limit under the WTO rules for these three agricultural products during (USTR 2016). The level of support provided to these crops was in excess of China's commitment by nearly $100 billion in 2015. The USTR claims that through the market price support policy, China has maintained domestic prices at levels above world market levels since 2012, influencing domestic production decisions and displacing imports of cereals. It was also mentioned that "the actions of the Chinese government and increasingly those of other advanced developing countries are having a detrimental impact on America's farmers and ranchers". "Other advanced developing countries" in the last sentence may include India. The main issue in this complaint is the procurement of foodgrains at the administered price by the Chinese government in excess of de minims limits under the Agreement on Agriculture (AoA).

Market price support policy to agriculture sector is not unique to China, but many other countries developing countries are also providing price support to agriculture sector which is linked with food security policy. Price and procurement policies are an important instrument whereby resource-poor farmers' income can be stabilised and even guaranteed (South Centre 2015). An integral element of food security programmes in many developing countries is intervention by the government in the market for ensuring stabilisation of prices of commodities such as cereals which are essential for ensuring food security. For example SINOGRAIN in China, FCI in India, Preum BULOG in Indonesia, the National Cereals and Produce Board (NCPB) in Kenya, PASSCO in Pakistan, and Turkish Grain Board (TMO) in Turkey are responsible for implementing buffer stock policy by procuring grains from the farmers if the market price dips below the established support level.

However, the ability of developing countries to procure foodgrains at administered prices is significantly circumscribed by the provisions of the AoA. The different components of food

security, that is, procurement, stockholding and distribution of foodgrains are treated differently in the AoA. According to Footnote 5 of AoA, "government stockholding programmes for food security purposes in developing countries whose operation is transparent and conducted in accordance with officially published criteria or guidelines shall be considered to be in conformity with the provisions of Green Box, including programmes under which stock of foodstuffs for food security purposes are acquired and released at administered prices, provided that the difference between the acquisition price and the external price is accounted for in the AMS" (WTO 2002). In other words, the expenditure related to distribution and stockholding of foodgrains is permissible without any limit under Green Box. However, procurement of foodgrains at administered price is limited by the rules of the WTO and covered under Amber Box which account for trade distorting support. For many developing countries, the policy space for implementing programmes aimed at food security has been eroding due to shrinking space under the Amber Box. In fact, the provisions related to calculating support arising from procurement of foodgrains at administered prices are crucial to understand the problems faced by developing countries which are discussed in section 3.

In this context, it would be useful to assess the policy space available in two advanced developing countries, that is, India and China in implementing the food security policy to protect the interest of farmers and consumers. The FAO (2015) has estimated that globally 795 million people do not have access to sufficient food to live a healthy life, with 780 million people are living in developing countries. China and India are home to 328 million people, who are facing hunger and suffering daily hardship to access sufficient food for healthy life. Though the absolute number of undernourished has declined in both countries, but 41 percent of world's undernourished people are living in these two developing countries (Table 1).

Ensuring food security for millions of people who are suffering from hunger and undernourishment is a big challenge for both the Asian countries. The challenges facing both the countries are not only attaining self-sufficiency in foodgrain production with limited resources but also to ensure access to food for the poor people. It is crucial to support resource poor farmers and disadvantaged groups in society to eliminate huger and achieving United Nation Sustainable Development Goal related to hunger by 2030.

Table 1: Trend in undernourishment in India and China

Regions	1990-92	2000-02	2005-07	2010-12	2014-16	Change from the 1990-92 baselines (%)
Number of people undernourished (million)						
China	289	211.2	207.3	163.2	133.8	-53.7
India	210.1	185.5	233.8	189.9	194.6	-7.4
China + India	499.1	396.7	441.1	353.1	328.4	-34.2
World	1010.6	929.6	942.3	820.7	794.6	-21.4
As a percentage of World (%)						
China	28.6	22.7	22.0	19.9	16.8	-41.1
India	20.8	20.0	24.8	23.1	24.5	17.8
China + India	49.4	42.7	46.8	43.0	41.3	-16.3
Proportion of undernourished in total population (%)						
China	23.9	16	15.3	11.7	9.3	-61.1
India	23.7	17.5	20.5	15.6	15.2	-35.9
World	18.6	14.9	14.3	11.8	10.9	-41.4

Source: Regional overview of Food insecurity Asia and the Pacific 2015, FAO. (http://www.fao.org/3/a-i4624e.pdf accessed on 15th September, 2016)

To achieve the self-sufficiency in foodgrain production as well as to ensure food security for the millions of poor people, China is implementing Minimum Purchase Price (MPP) for foodgrains. In China, the National Development and Reform Commission (NDRC) announces the MPP for grains every year in consultation with the Ministry of Agriculture and other government institutions (WTO 2016). In case of India, the Food Corporation of India (FCI) procures foodgrains mainly wheat and rice at Minimum Support Price (MSP) and distributes it to the poor people at subsidised rate through the public distribution system (PDS). The main objective of the agricultural price policy in India is to ensure food security as well as protect both farmers and consumers from price fluctuations. In 2013, the Indian parliament passed the National Food Security Act (NFSA) which seeks to make the right to food a legal entitlement by providing subsidised foodgrains to nearly two third of the population. However, procurement of foodgrains at administered price for public stockholding has become a contentious issue in Doha Development round due to varied interest of developed and developing countries on this issue. In this context, the objective of this paper is to estimate the product specific support for foodgrains mainly wheat and rice in both countries and assess the available policy space for implementing price support policy for public stockholding to ensure food security for their people. A modest attempt is also made in

this study to verify the USTR's claim that the level of support provided to wheat, rice and maize was in excess of China's commitment by nearly $100 billion in 2015.

This paper is divided into seven main sections. Section 2 contains a brief overview of price support policy of India and China. Section 3 provides methodology and provisions of the AoA applicable to domestic support. Section 4 and Section 5 provide an elaborate account of product specific support to foodgrains in India and China respectively. Section 6 deals with the complaint filed by the USA to the WTO against China on price support to foodgrains and other related issues. The last section summarises the main finding of this study.

Section 2: Price support policy in India and China

2.1 Price Support policy in China

In China, Sinograin is responsible for the procurement of grains and oilseeds, stock maintenance, inter-provincial shipments and international trade of grain (OECD 2015a). It purchases grains when the market price falls below the established support level. The amounts of crops purchased by Sinograin at minimum or intervention prices change from one year to the next, depending on the relative levels of market prices and those offered by the government (OECD 2015b). China's buffer stock policy is cited as one of the reasons why China experienced stable domestic food prices during the 2007-08 food price crises.

Price support policy for the agriculture sector in China has evolved and has reformed over a long period of time. In 1993, the Chinese government adopted the protective price policy to safeguard farmers' income (Cheng 2008). The Chinese government repealed the protective price policy system in 2004 and implemented the MPP policy to maintain stability of grain market prices, protect the farmers and control the food supply. The MPP for wheat and rice remained stable since 2014. However, the Chinese government reduced the MPP for early Indica rice in 2016 (Table 2). OECD (2016) pointed out that the Chinese government carries out ad-hoc interventions to procure several other agricultural commodities at pre-determined prices to protect the farmers and the consumer from price volatilities.

Table 2: Minimum Purchase Price for Wheat and Rice in China (Yuan/Ton)

Year	Wheat			Rice			
	White	Red and mixed	Average	Japonica	Early Indica	Mid to late season Indica	Average Rice Price
2007	1440	1380	1410	1500	1400	1440	1447
2008	1540	1440	1490	1640	1540	1580	1587
2009	1740	1660	1700	1900	1800	1840	1847
2010	1800	1720	1760	2100	1860	1940	1967
2011	1900	1960	1930	2560	2040	2140	2247
2012	2040	2040	2040	2800	2400	2500	2567
2013	2240	2240	2240	3000	2640	2700	2780
2014	2360	2360	2360	3100	2700	2760	2853
2015	2360	2360	2360	3100	2700	2760	2853
2016	2360	2360	2360	3100	2660	2760	2840

Sources:

1. Based on OECD (2016), "China", in Agricultural Policy Monitoring and Evaluation 2016, OECD Publishing, Paris.DOI: http://dx.doi.org/10.1787/agr_pol-2016-10-en .
2. China's WTO notifications on domestic support to agriculture sector

Besides market price support, the Chinese government supports the farmers through budgetary transfers. Most of them are provided through four basic programmes: (1) direct payments for grain producers; (2) payments to compensate farmers for an increase in prices of agricultural inputs, in particular fertilisers and fuels; (3) subsidies for improved seeds; and (4) subsidies for purchase of agricultural machinery. China is in the process of restructuring its overall agricultural subsidy policy. The aim of this reform is to protect the land and attain food security (WTO 2016).

Table 3: Overview of wheat and rice sector in China (1000 Ton)

Year	Production	Consumption	Export	Import	Trade Balance
Wheat					
2000	99640	110278	623	195	428
2005	97445	101500	1397	1129	268
2010	115180	110500	941	927	14
2016	130000	110500	1000	3200	-2200
Rice					
2000	131536	134300	1847	270	1577
2005	126414	128000	1216	654	562
2010	137000	135000	500	540	-40
2016	146500	145000	300	5000	-4700

Source: Index mundi (http://www.indexmundi.com/agriculture/, accessed on 16 September, 2016

Due to various support programmes like MPP, public stockholding, direct payment, subsidies for inputs and seed, China has achieved self-sufficiency to a great extent in foodgrains. Even though, China is a net importer of wheat and rice in 2016, its dependency on imported foodgrains has been very low during 1995 to 2016 (Table 3).

2.2 Price Support Policy in India

The main objective of the agricultural price policy in India is to ensure food security as well as protect both farmers and consumers from price fluctuations. On the basis of recommendations of Commission for Agricultural Costs and Prices (CACP), the Government of Indian (GoI) announces the Minimum Support Price (MSP) for 23 major crops. The Food Corporation of India (FCI) undertakes procurement of foodgrains at the administered prices and ensures availability of foodgrains to consumers at subsidised prices through the public distribution system (PDS). The FCI also keeps a strategic reserve to stabilise markets for basic foodgrain. At present, the FCI is playing a significant role in implementing the National Food Security Act (NFSA) to eliminate the hunger and protect the interest of vulnerable section of the society. Under the NFSA, 2013, the priority households are entitled to receive foodgrain at the rate of 5 kg per person per month at subsidiesed rate (GoI 2015). The MSP for wheat and paddy was Rs.15250 and Rs.14100 per Ton respectively for 2015-16 (Table 4). India has achieved self-sufficiency in foodgrain production to a great extent as shown in Table 5.

Table 4: Trend in minimum support price of wheat and rice in India

Marketing year	Wheat	Paddy	Rice	Wheat	Rice
	RS/Ton			US$/Ton	
1995-96	3800	3600	5400	113.6	161.4
2000-01	6100	5100	7650	134.0	167.5
2005-06	6500	5700	8550	158.1	193.1
2010-11	11700	10000	15000	256.8	329.2
2011-12	12850	10800	16200	268.2	338.1
2012-13	13500	12500	18750	248.1	344.6
2013-14	14000	13100	19650	231.4	324.7
2014-15	14500	13600	20400	237.2	333.7
2015-16	15250	14100	21150	234.1	324.7

Source: Agriculture statistic at Glance, Ministry of Agriculture, Government of India
Note: the MSP for rice is calculated by multiplying the MSP of paddy with conversion factor i.e. 1.5

Table 5: Overview of wheat and rice sector in India (1000 Ton)

Year	Production	Consumption	Export	Import	Trade Balance
Wheat					
2000	76369	66821	1569	441	1128
2005	68637	69977	801	41	760
2010	80804	81764	72	272	-200
2016	88000	93100	400	2000	-1600
Rice					
2000	84980	75960	1685	0	1685
2005	91790	85088	4688	6	4682
2010	95980	90206	2774	0	2774
2016	105000	98600	8500	0	8500

Source: Index mundi (http://www.indexmundi.com/agriculture/, accessed on 16 September, 2016

The agriculture price policy, FCI operations along with concentrated efforts by the Indian government for agricultural development has played a crucial role in ensuring food security for the millions of poor people along with ensuring livelihood security for farmers in India. Overall, price support backed procurement of foodgrains is an important element in food security strategy of the two most populous countries of the world to eliminate hunger and undernourishment.

Section 3: Methodology

Domestic support to agriculture sector under the AoA is classified into three categories, popularly called Amber, Green and Blue Box. Domestic support measures under Green Box should meet the fundamental requirement that they have minimal impact on trade and production and shall not have the effect of providing price support to producers. A member country can spend without any financial limitation on measures that fit the description of the Green Box. Direct payments under production-limiting programmes covered by Blue Box and are exempted if these are based on fixed area and yield or livestock payments made on a fixed number of heads. As per Article 6.2 of the AoA, all the direct or indirect government support provided to encourage agricultural and rural development, investment subsidies and agricultural input subsidies provided to low income or resource poor farmers in developing countries are exempted from the reduction commitments. For China, it 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 (WTO 2015).

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 support like price and budgetary support and; (2) non-product specific support like fertiliser, irrigation subsidies. It is to be noted that if product specific and non-product specific support is below the de minims limit then a member is not required to include that support under the Amber Box. De minims limit is the minimal amount of trade distorting domestic support that is allowed under the AoA. For developing countries including India, de minims limit for product specific support is 10% of that member's total value of a basic agricultural product during 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). As China became a member of the WTO in 2001, the de minims limit applicable for China was negotiated at the time of accession and it is different from that of other developing countries. In case of product specific limit, the de minims limit for China is 8.5 per cent of value of a specific product, whereas for non-product specific support it is 8.5 per cent of the total value of agricultural production in China (Table 6).

Table 6: Basic information about domestic support in India and China

Description	India	China
Membership Year	1995	2001
Country Status	Developing	Developing
Base Total AMS	below de minims	below de minims
Final Bound AMS	0	0
De minims limit	10%	8.50%
Base Period	1986-88	1996-98
Flexibility under Art. 6.2 for input subsidies	Yes	No

Source: Based on Schedule of Commitments and notifications submitted to WTO by India and China

Product specific market support is calculated by using the gap between a fixed External Reference Price (ERP) and the applied administered price multiplied by the quantity of production eligible to receive the applied administered price. Product specific support includes product specific market support and budgetary support to a specific agricultural product. About the determination of fixed ERP, Annex 3.9 of the AoA states that it shall be based on the years 1986 to 1988 and shall generally be the average FOB (Free On Board) unit

value for the basic agricultural product concerned in a net exporting country and the average CIF (Cost, Insurance and Freight) unit value for the basic agricultural product concerned in a net importing country in the base period. Therefore, to calculate product specific support, the administered price is compared to the ERP based on 1986-88 prices. However, the ERP for China is determined on the basis of a three year average during 1996-1998. Therefore, to calculate product specific support, the administered price is compared with fixed ERP for an agricultural product. This is an illogical methodology as product specific support increases over a period of time if inflation is not considered for calculation purposes.

Section 4: Policy space for India to provide product specific support to foodgrains

India's schedule of commitments on agricultural products shows that product specific support and non-product specific support to the agriculture sector was either negative or below the de minims limit during 1986-87 to 1988-89 (WTO 1995). Therefore, the maximum limit to provide AMS for India is the de minims limit applicable for developing countries. India has notified domestic support to agriculture sector for the period 1995-96 to 2010-11. It has provided domestic support to agriculture sector mainly by the programmes and measures covered by Green Box and Article 6.2. India spent US$13,812 million on account of food subsidies whereas total expenditure under Green Box was US$19,472 million in 2010–2011 (Table 7). Under Article 6.2, India has given support in the form of investment subsidies generally available to agriculture and input subsidies generally available to low-income or resource-poor producers. India has defined the low-income or resource-poor farmers on the basis of land holding up to 10 hectare (WTO 1995). As per the Agriculture Census of India (2010), more than 99% of agricultural landholdings come under this category. Due to this, input subsidies such as fertilisers, canal irrigation, electricity, etc. provided to low-income or resource-poor farmers in India are not included in non-product specific AMS calculations. Product specific and non-product specific support to agriculture sector was below the de minims limit during the notified period.

Based on the notifications submitted by India to the WTO, it is found that product specific support to rice has increased from (-) 55.40% in 1995-96 to 7.21% in 2010-11 (Table 8). The administered price of rice was below the ERP during 1995-96 to 2006-07 which resulted in negative price support during the same period. For the period 2007-08 to 2010-11, product specific support was positive but remained below the de minims limit. It is to be noted that India did not notify Value of Production (VoP) of agricultural goods during 1995-96 to 2010-

11. On a conservative basis, VoP is calculated by multiplying the administered price with the total production of specific agricultural product during a relevant year. As market price of foodgrains is normally higher than the administered price, the VoP would be higher if it is calculated by multiplying the market price with the total production of specific agricultural product during a relevant year. For the period 2011-12 to 2015-16, product specific support for rice is calculated. Results show that product specific support for rice has declined from 7.2% in 2010-11 to 6.33% in 2015-16 and remained below the de minims limit (Table 9). However, the administered price of rice remained higher than the ERP during 2011-12 to 2015-16.

Table 7: Domestic support to the agriculture sector in India (million US$)

| Description | AMS | Green Box | | | | Art. 6.2 | Investment subsidies | Input subsidies generally available to low-income or resource-poor producers |
		Green Box Total	General services	Public stockholding for food security purposes	Direct payments			
1995-96	Below de-minims limit	2196	398	1570	228	254	105	150
1999-00		2493	85	2123	284	7165	2	7163
2005-06		5907	488	5211	207	12316	485	11831
2008-09		16927	872	9495	6560	31459	1466	29989
2009-10		17381	776	12282	4323	29857	1614	28241
2010-11		19472	1124	13812	4542	31610	2530	29078

Source: India's domestic support notifications to Committee on Agriculture

Further, policy space for India in terms of procurement of rice under the WTO regime is determined in Table 10. By assuming administered price and production of rice remained at 2015-16 level, results show that India can procure upto 53.9 million Ton of rice without breaching the de minims limit. In other words, India can procure upto 52.2 % of total rice production in 2015-16 without violating its commitment under the AoA rules. Regarding the policy space for administered price, India can raise the administered price of rice upto $360.75/Ton on the basis of procurement and production of rice at 2015-16 level. Future policy space for rice depends on the changes in production, market price, administered price and exchange rate.

Table 8: Notified product specific support to rice in India

Marketing year	Applied administered price (US$/Ton)	External reference price (US$/Ton)	Eligible production (million Ton)	Production (million Ton)	VoP (million US$)	Product specific support (US $ million)	PS as a % of VoP	Notified Exchange Rate
1	2	3	4	5	6 = 2*5	7 = (2-3)*4	8 = 7/6*100	9
1995-96	168.92	262.51	80.96	80.96	13676	-7577	-55.40	33.45
1999-00	170.00	262.51	18.22	89.68	15246	-1686	-11.06	43.33
2005-06	193.12	262.51	27.66	91.79	17726	-1919	-10.83	44.27
2008-09	293.54	262.51	34.10	99.18	29113	1058	3.63	45.99
2009-10	316.32	262.51	32.03	89.09	28181	1724	6.12	47.42
2010-11	329.24	262.51	34.20	95.98	31600	2278	7.21	45.56

Source: India's domestic support notifications to Committee on Agriculture, WTO

Table 9: Calculated product specific support to Rice

Marketing year	Applied administered price (US$/Ton)	External reference price (US$/Ton)	Eligible production (million Ton)	Production (million Ton)	VoP (million US$)	Product specific support (US $ million)	PS as a % of VoP	Exchange Rate
1	2	3	4	5	6 = 2*5	7 = (2-3)*4	8 = 7/6*100	9
2011-12	338.06	262.51	35.04	105.30	35598	2647	7.44	47.92
2012-13	344.61	262.51	34.04	105.24	36266	2795	7.71	54.41
2013-14	324.74	262.51	31.85	106.65	34633	1982	5.72	60.51
2014-15	333.66	262.51	32.04	104.80	34968	2280	6.52	61.14
2015-16	324.69	262.51	34.14	103.30	33540	2123	6.33	65.14

Source: Author's Calculation based on
- India's domestic support notifications to Committee on Agriculture, WTO
- Government of India (GoI), Agricultural Statistic at Glance (Various issues)
- Reserve Bank of India, Handbook of Statistics on Indian Economy

Table 10: Determination of policy space for India by assuming 2015-16 level of administered price and production of rice

Product	VoP	De minims Limit	difference (administered Price-ERP)	Maximum eligible Production	Production	Procurement Limit as a % of total production
	US million		US$	million Ton		%
1	2	3 = 10% of (2)	4	5 = (3/4)	6	7 = (5/6*100)
Rice	33540	3354	62.2	53.9	103.30	52.2

Source: Author's calculation based on Table 9

In case of wheat, product specific support remained below the de minims limit during the notified period because the administered price of wheat was less than the ERP during the same period (Table 11). Even for the period 2011-12 to 2015-16, the product specific support

to wheat remained below the de minims limit (Table 12). The administered price of wheat was below the ERP which resulted in negative product specific support during 2012-13 to 2015-16.

Table 11: Notified product specific support to wheat in India

Marketing year	Applied administered price (US$/Ton)	External reference price (US$/Ton)	Eligible production (million Ton)	Production (million Ton)	VoP (million US$)	Product specific support (US $ million)	PS as a % of VoP	Notified Exchange Rate
1995-96	113.61	264	64	64	7271	-9625	-132.37	33.45
1999-00	134.00	264	14	76	10234	-1838	-17.96	43.33
2005-06	158.12	264	15	69	10966	-1566	-14.28	44.27
2008-09	234.83	264	23	81	18946	-662	-3.49	45.99
2009-10	231.97	264	25	81	18743	-813	-4.34	47.42
2010-11	256.80	264	23	87	22308	-162	-0.73	45.56

Source: India's domestic support notifications to Committee on Agriculture, WTO

Table 12: Calculated Product specific support to wheat in India

Marketing year	Applied administered price (US$/Ton)	External reference price (US$/Ton)	Eligible production (million Ton)	Production (million Ton)	VoP (million US$)	Product specific support (US $ million)	PS as a % of VoP	Notified Exchange Rate
2011-12	268.16	264	28	95	25443	118	0.46	47.92
2012-13	248.12	264	38	94	23201	-606	-2.61	54.41
2013-14	231.37	264	25	96	22176	-819	-3.69	60.51
2014-15	237.16	264	28	89	21093	-752	-3.57	61.14
2015-16	234.11	264	28	94	21964	-839	-3.82	65.14

Source: Author's Calculation based on
1. India's domestic support notifications to Committee on Agriculture, WTO
2. Government of India (GoI), Agricultural Statistic at Glance (Various issues)
3. Reserve Bank of India, Handbook of Statistics on Indian Economy

Overall, results show that product specific support for wheat and rice remained below the de minims limit during 2011-12 to 2015-16. However, given the increasing trend in the MSP and procurement level, India will face lack of policy space in implementing price support policy for rice under existing rules of the AoA in coming years. In case of wheat, there is enough policy space to implement price and procurement policy for food security purposes.

Section 5: Policy space for China to provide product specific support to foodgrains

Schedules related to domestic support show that product and non-product specific support to the agriculture sector in China was below the de minims limit during the base period i.e. 1996-1998 (WTO 2001). China has notified domestic support to agriculture for the period 1999 to 2010. Product specific and non-product specific support during 1999 to 2010 was also below the de minims limit. Green Box support accounted for the major share in total domestic support to agriculture sector with general services and direct payments having more than 85 percent share in total Green Box support for the year 2010 (Table 13). The share of public stockholding for food security purposes in Green Box has declined but in absolute terms it increased during 1999 to 2010.

Table 13: Trends in domestic support to agriculture sector in China (Yuan million)

Year	Current AMS		Green Box	General services	Public stockholding for food security purposes	Domestic food aid	Direct payments
	Product Specific	Non-Product specific					
1999	2854	700	184335	109110	47596	2640	24989
2000	3503	745	207899	121230	53799	2360	30510
2001	1790	748	242332	145046	59685	683	36918
2002	1275	234	252117	151417	53148	401	47150
2003	1314	1282	257962	154274	54526	178	48984
2004	4194	1974	308493	165603	42061	132	100698
2005	2454	2200	309566	172729	44087	99	92651
2006	1364	14951	356524	200784	50378	93	105269
2007	11481	30754	457856	280164	54201	49	123443
2008	16764	78863	593014	355126	57932	64	179893
2009	19471	89123	477460	232279	69538	59	175584
2010	25351	97664	534632	250076	77045	14	207497

Source: China's WTO notifications on domestic support
Note: Product specific and non product specific support was below the de minims limit during 1999-2010

China is providing product specific support to wheat through price support as well as in the form of other product specific budgetary outlay which includes subsidies for improved crop strains and seeds. Product specific market price support for wheat was negative during 1999-2008 because the administered price of wheat was lower than the fixed ERP. Other product specific budgetary outlays for wheat have increased steeply from 0.10 percent of VoP in 2003 to 1.85 percent in 2010 (Table 14). Product specific support for wheat was below the de minims limit during the notified period 1999 to 2010. On an average, the share of

procurement of wheat by government agencies in total production was 33 percent during 1999-2010.

Table 14: Notified product specific support to wheat in China

Year	Applied administered price	External reference price	Eligible Production	Total market price support	Other Product Specific Budgetary Outlays	Total Product Specific support	Value of Production (VoP)	Share (Market price support/VoP)
	Yuan/Ton	Yuan/Ton	Thousand Ton	million Yuan				Percent
1999	1254	1698	37800	-16783	0	-16783	NA	-
2000	1136	1698	35050	-19698	0	-19698	NA	-
2001	1124	1698	38600	-22156	0	-22156	NA	-
2002	1240	1698	34850	-15961	4	-15957	105280	-15.16
2003	1100	1698	20460	-12235	110	-12125	105600	-11.48
2004		1698	0	0	201	201	141610	0.14
2005		1698	0	0	1058	1058	161860	0.65
2006	1410	1698	40688	-11718	1081	-10637	161360	-6.59
2007	1410	1698	28925	-8330	1101	-7229	182750	-3.96
2008	1490	1698	41740	-8682	2159	-6523	199300	-3.27
2009	1700	1698	39855	80	4371	4451	222460	2.00
2010	1760	1698	23113	1433	4359	5792	235330	2.46

Source: China's WTO notifications on domestic support

Table 15: Calculated product specific support to wheat

Year	Applied administered	External reference price	Eligible production (assumed 33 % of production)	Total production	Value of production (VoP)	Total market support	Other Product specific budgetary support	Product specific AMS	PSS as a % of VoP
	Yuan/Ton		1000 Ton		million Yuan				%
2011	1930	1698	38742	117400	226582	8988	4192	13180	5.82
2012	2040	1698	39938	121023	246887	13659	4567	18226	7.38
2013	2240	1698	40237	121930	273123	21808	5053	26861	9.83
2014	2360	1698	41649	126208	297851	27571	5510	33082	11.11
2015	2360	1698	42963	130190	307248	28441	5684	34125	11.11
2016	2360	1698	42900	130000	306800	28400	5676	34076	11.11

Source:

1. OECD (2016), "China", in Agricultural Policy Monitoring and Evaluation 2016, OECD Publishing, Paris.DOI: http://dx.doi.org/10.1787/agr_pol-2016-10-en
2. China's WTO notifications on domestic support
3. Index Mundi. http://www.indexmundi.com/ accessed on 10th July, 2016

It is to be noted that the Chinese government procured only 20% to total production of wheat in 2010. For the calculation purposes of wheat, eligible production is also assumed at 33 percent during 2011-2016. As the share of other budgetary support for wheat in terms of

value of production was 1.89 percent in 2010, it is assumed that this percentage remained same for the period 2011-16. Based on these assumptions, results reveal that China breached the de minims limit from 2013 onwards (Table 15). It clearly indicates the shrinking of policy space for China to provide support to wheat under the WTO rules.

In case of rice, product specific support during the notified period was below the de minims limit (Table 16). Market price support was negative during this period due to the fact that the administered price of rice was less than ERP. Other budgetary support to rice accounted for 1.69 percent of total value of rice in 2010 and the same percentage is applied for the calculation purposes for the period 2011-16. On an average, the share of procurement of rice in total production was 11 percent during the notified period. To calculate the product specific support to rice, eligible production is also assumed at 11 percent during 2011-2016. Based on these assumptions, the product specific support remained below the de minims limit during 2011-2016 (Table 17). Even after assuming total production of rice as eligible production, results remained the same in 2016. Therefore, it is unlikely that China would have breached the de minims limit in case of rice during 2011-16.

Table 16: Notified product specific support to rice in China

Year	Applied administered price	External reference price	Eligible Production	Total market price support	Other Product Specific Budgetary Outlays	Total Product Specific support	Value of Production (VoP)	PSS as a % of VoP
	Yuan/Ton	Yuan/Ton	Thousand Ton	million Yuan				Share
1999	1152	2659	45100	-67900				
2000	1152	2659	44900	-67664				
2001	1124	2659	30600	-46971				
2002	1080	2659	10980	-17337	6	-17331	209270	-8.28
2003	1040	2659	7470	-12094	9	-12085	194390	-6.22
2004	1500	2659	0	0	2741	2741	297470	0.92
2005	1420	2659	11930	-14781	2835	-11946	297970	-4.01
2006	1420	2659	9213	-11415	2927	-8488	277690	-3.06
2007	1500	2659	484	-561	4021	3460	328540	1.05
2008	1520	2659	1854	-2112	7379	5267	362900	1.45
2009	1847	2659	8469	-6877	8317	1440	391560	0.37
2010	1967	2659	0	0	7557	7557	446830	1.69

Source: China's WTO notifications on domestic support

Table 17: Calculated product specific support to rice in China

Year	Applied administered	External reference price	Eligible production (assumed 11% of production)	Total production	Total market support	Other Product specific budgetary support	Product specific AMS	Value of production (VoP)	PSS as a % of VoP
	Yuan/Ton		Thousand Ton		million Yuan				%
1	2	3	4 = 11% of (5)	5	6 = (2-3)*4	7	8 = 6+7	9 = 2*5	10 = 8/9*100
2011	2247	2659	15477	140700	-6382	5342	-1039	316106	-0.33
2012	2567	2659	15730	143000	-1452	6203	4750	367033	1.29
2013	2780	2659	15678	142530	1897	6696	8593	396233	2.17
2014	2853	2659	15902	144560	3090	6971	10061	412478	2.44
2015	2853	2659	16035	145770	3116	7029	10145	415930	2.44
2016	2840	2659	16115	146500	2917	7031	9948	416060	2.39
Assuming total production as eligible production									
2016	2840	2659	146500	146500	26517	7031	33548	416060	8.06

Source:

1. OECD (2016), "China", in Agricultural Policy Monitoring and Evaluation 2016, OECD Publishing, Paris.DOI: http://dx.doi.org/10.1787/agr_pol-2016-10-en
2. China's WTO notifications on domestic support
3. Index Mundi. http://www.indexmundi.com/ accessed on 10th July, 2016

Table 18: Determination of policy space for China by assuming administered price and production of wheat and rice of 2016 level

Product	VoP	De minims Limit	Other budgetary support	Remaining limit	difference (administered Price- ERP)	eligible Production	Production	Procurement Limit
	Yuan million				Yuan	million Ton		%
1	2	3 = 8.5% of (2)	4	5 = (3-5)	6	7 = (5/6)	8	9 = (7/8*100)
Wheat	306800	26078	5676	20402	662	30.8	130.0	23.7
Rice	416060	35365	7031	28334	181	156.5	146.5	106.9

Source: Author's calculation based on Table 15 and Table 17

Policy space for China in terms of procurement of wheat and rice is calcualted in table 18. Based on the assumption that the administered price, production and other budgetary support remained at 2016 level, the results show that China can procure upto 23.7 % and 106 % of wheat and rice respectively without breaching the de minims limit. In case the procurement of wheat is less than 23.7% of total production, then product specific support would be below the de minims level in 2016.

For corn, China government has implemented "the temporary reserve programme" by procuring corn from farmers at reserve price or floor price. It has the similar impact like MPP for wheat and rice and therefore, operates as price support programme. In 2016, China initiated the reform on the procurement and stockholding scheme for corn and abolished the temporary reserve programme which is replaced by a new mechanism of "marketized purchase" (USDA 2016). The reform is market oriented, under which price will be determined by the market, reflecting the conditions of demand and supply. Corn producers will sell their corn following the market signals and subsidy will be provided to corn producers. (CoA meeting 80, ID 80036).

Table 19: Notified Product specific support to corn in China

Year	Applied administered price	External reference price	Eligible Production	Total market price support	Other Product Specific Budgetary Outlays	Total Product Specific support	Value of Production (VoP)	Share (Market price support/VoP)
	Yuan/Ton	Yuan/Ton	Thousand Ton	million Yuan				Percent
1999	926	1199	53500	-14606		-14606		
2000	936	1199	37250	-9797		-9797		
2001	918	1199	31100	-8739		-8739		
2002	880	1199	21190	-6760	1	-6759	137440	-4.92
2003	860	1199	13040	-4421	8	-4413	145250	-3.04
2004	0	1199			167	167	196340	0.09
2005		1199			179	179	199300	0.09
2006		1199			366	366	208650	0.18
2007		1199			373	373	236720	0.16
2008		1199			2200	2200	262040	0.84
2009		1199			5989	5989	258420	2.32
2010		1199			5994	5994	303010	1.98

Source: China's WTO notifications on domestic support

Domestic support notifications show that product specific support was below the de minims level during 1999-2010. For the period 2004-2010, China is supporting corn farmers by providing other product specific budgetary support for improved crop strains and seeds. China has not provided any market price support during 2004-2010. Other budgetary support was 5994 million Yuan which accounted for 1.98 % of Value of Production in 2010 (Table 19). For the period 1999-2003, China provided the market price support for corn by procuring on an average 26.58 % of total production of corn. Due to non-availability of procurement data, it is assumed that China procured same percentage of total production

during 2011 to 2015. Other budgetary support is assumed to be 1.98% of VoP during 2011-2016. Result shows that China breached the de minims limit during 2011-2015 and product specific support turns out to be 14.40 percent of VoP (Table 20). However, product specific support is below the de minims limit in 2016 because China abolished the reserve price for corn by replacing it new market scheme.

Table 20: Calculated product specific support to corn during 2011-2016

Year	Applied administered	External reference price	Eligible production	Total production	Total market support	Other Product specific budgetary support (1.98%)	Product specific AMS	Value of production (VoP)	PSS as a % of VoP
	Yuan/Ton		Thousand Ton		million Yuan				%
1	2	3	4 = 26.58% of (5)	5	6 = (2-3)*4	7	8 = 6+7	9 = 2*5	10 = 8/9*100
2011	1980	1199	51241	192780	40019	7558	47577	381704	12.46
2012	2120	1199	54652	205614	50335	8631	58966	435902	13.53
2013	2240	1199	58075	218490	60456	9690	70146	489418	14.33
2014	2250	1199	57319	215646	60242	9607	69849	485204	14.40
2015	2250	1199	59693	224580	62738	10005	72743	505305	14.40
2016		1199		218000	0	11719	11719	591870	1.98

Source:
- China's WTO notifications on domestic support
- Index Mundi. http://www.indexmundi.com/ accessed on 16th September, 2016
- USDA (2015) China grain and feed annual -2015. GAIN Report no. CHU5014. Accessed on 22nd September, 2016.

Note: VoP for 2016 is calculated by multiplying total production with producer price (based on FAOSTAT)

Table 21: Determination of policy space in terms of procurement of corn in China in 2015

Product	VoP	De minims Limit	Other budgetary support	Remaining limit	difference (administered Price-ERP)	eligible Production	Production	Procurement Limit
		Yuan million			Yuan	million Ton		%
1	2	3 = 8.5% of (2)	4	5 = (3-5)	6	7 = (5/6)	8	9 = (7/8*100)
Corn	505305	42951	10005	32946	1051	31	224	13.99

Source: based on Table 20

About the policy space to procure corn in 2015, Table 21 shows that China could procure upto 14 % of total production of corn without breaching the de minims limit. In a nutshell, analysis shows that China is at the risk of breaching the de minims limit in case of wheat and corn.

Section 6: Other issues related to price support to foodgrains
6.1 Verification of USTR's claim about domestic support in China

The USTR has claimed that market support to wheat, rice and corn in 2015 was nearly 100 billion in excess of the levels of China's commitment related to domestic support under the WTO rules. Based on the analysis of the product specific support for wheat, rice and corn, it is found that the total product specific support to these products was 106.87 billion Yuan or 17.16 billion US$ in 2015 (Table 22). This is very much less than the USTR's claim regarding the product specific support to China for these products. In case the procurement of wheat and corn was less than 23.7 % and 14% respectively of total production in 2015, total product specific support would be zero due to the fact that product specific support remained below the de minims limit. It is important note that China spent 22 billion Yuan on seed subsidy in 2011 (USDA 2015) which comes under "other budgetary product specific support" in notifications submitted by China. The Chinese government provided the seed subsidy to rice, wheat, cotton, corn, soybean, rapeseed, potato, highland barley and peanut as given in notification for the year 2010. Other budgetary product specific for wheat, rice and corn in this study amounted to 17 billion Yuan in 2011. As seed subsidy for other crops is not considered, it seems other budgetary support has been taken on higher side for the calculation purposes. Chinese government also provides input subsidies to agriculture sector which is notified in the form of non-product specific support.

Overall, USTR's claim about the market price support to wheat, rice and corn seems to be exaggerated. It may happen if it is assumed total production of foodgrains as eligible production. Other possibility may be that input subsidies on fertilisers/fuel or direct payment may be considered as product specific rather than non-product specific support in the USTR analysis. Otherwise, it seems that product specific support is very much lower in comparison to the USTR's claim.

Table 22: Total product specific support AMS to selected products

Year	Wheat	Rice	Corn	Total Product specific AMS	
		million Yuan			Million $
2011	de minims		47577	47577	7363
2012	de minims		58966	58966	9341
2013	26861	de minims	70146	97007	15657
2014	33082		69849	102931	16755
2015	34125		72743	106868	17161
2016	34076			34076	5109

Source: based on Table 15, Table 17 and Table 20

6.2 Consideration of Inflation and its impact on domestic support

It is to be noted that the results for China would have been different if inflation is considered while calculating product specific support. The methodology to compute product specific support is illogical as the administered price of an agricultural commodity is compared with the fixed ERP which is based on 1986-88 and 1996-98 prices for India and China respectively. Though, Article 18.4 of the AoA gives some consideration to inflation in the calculation of domestic support, this does not apply as a matter of a Member's unilateral right (WTO 2002). This flexibility depends on the discretion of other members of the WTO during the review process.

Table 23: Deflated product specific support to wheat in China

Year	Deflated Applied administered	External reference price	Eligible production (assumed 33 % of production)	Total production	Deflated value of production (VoP)	Total market support	Price 26up pose as a % of VoP	Other Product specific budgetary support	Product specific AMS	Consumer price Index (base year 1996-98)
	Yuan/Ton		1000 Ton		Million Yuan					
1	2	3	4 = 33% of (5)	5	6 = (2-3)*4	7 = (2-3)*4	8 = 7/6*100	9	10 = 8+9	11
2011	1495.27	1698	38742	117400	175544	-7854	-4.47	1.85	-2.62	129.07
2012	1539.65	1698	39938	121023	186333	-6324	-3.39	1.85	-1.54	132.50
2013	1647.26	1698	40237	121930	200851	-2042	-1.02	1.85	0.83	135.98
2014	1702.22	1698	41649	126208	214834	176	0.08	1.85	1.93	138.64
2015	1678.02	1698	42963	130190	218461	-859	-0.39	1.85	1.46	140.64
2016	1638.86	1698	42900	130000	213051	-2537	-1.19	1.85	0.66	144.00

Source: (1) same as Table 15

2: World development indicators, World Bank

The other related issue is the ambiguity on definition of "excessive inflation" which is not defined under the AoA. For the calculation purpose, full inflation allowance is considered to see the trend in product specific support in India and China. Results show that product specific support to wheat and rice in India and China remained below the de minims limit (Table 23 and 24). However, product specific support still remain higher than the de minimis limit during 2012 to 2015 because deflated administered price was higher than the ERP during the same period. China abolished floor price for corn, therefore other budgetary support is considered for product specific support in 2016. In case of India, product specific support to foodgrains was negative after considering inflation for calculation purpose.

Table 24: Deflated product specific support to wheat and rice in India and China (%)

Year	China			India	
	Wheat	Rice	Corn	Wheat	Rice
2011	-2.62	-4.1	7.8	-18.12	-8.89
2012	-1.54	-2.4	8.6	-27.41	-6.37
2013	0.83	-1.6	9.2	-20.63	-7.96
2014	1.93	-1.5	8.9	-26.50	-9.21
2015	1.46	-1.7	8.6	-25.03	-10.47
2016	0.66	-2.1	1.98		

Source: (1) same as Table 9, 12, 15, 17, 20
2: World development indicators, World Bank
Note: For India, CPI index is used with base year 1986-88 whereas for China base year is 1996-98

6.3: Level playing field in agriculture sector

The USA has blamed emerging developing countries for not providing level playing field to American farmers due to domestic support policies for agriculture sector in these countries. However, it is the developing countries who are suffering due to huge subsidies given to agriculture sector by the USA for products like cereals, milk and cotton etc. It is a fact that USA has provided product specific support above the applicable de minims limit (5%) for many agricultural products including wheat, rice and corn for many years as shown in Table 25. For example, the product specific support to rice as a percentage of VoP was 82.5% in 2001. The USA has the policy space to provide support above the de minims level because applicable final bound AMS level is $19 billion. The USA got this flexibility because it was distorting international trade in agriculture sector through trade distorting support during the Uruguay round. In case of India and China, final bound AMS is zero and therefore, both countries cannot give Amber Box support above the de minims limit. In other words, those countries that were not distorting trade during the base period were penalised, whereas other

countries were rewarded with high Amber Box cap due to the fact that these countries were distorting agricultural trade during the base period. Even comparison of per person domestic support who is economically active in agriculture sector shows that per person domestic support to agriculture sector in USA was US$ 51194 in comparison to nominal domestic support in 2010 (Table 26).

Table 25: Product specific support to selected products in USA

Category/Product	Corn	Rice	Wheat
1998	8.1	De minims	7.6
1999	14.9	35.3	17.4
2000	15.1	59.5	14.7
2001	7.0	82.5	De minims
2002	De minims	72.6	De minims
2003	De minims	30.9	De minims
2004	12.5	7.7	De minims
2005	20.2	7.6	De minims

Source: USA's notification on domestic support to WTO

Table 26: Domestic support per person who is economically active in agriculture sector

Year	India	China	USA
2001	51	58	23729
2002	52	60	25101
2003	61	62	25612
2004	68	75	30142
2005	73	75	32742
2006	86	92	31855
2007	125	129	31598
2008	191	195	38772
2009	186	169	43880
2010	201	191	51194
2011	0	0	56586
2012	0	0	57915

Source: (1) Domestic support notifications submitted by India, China and USA
(2) World Bank, World Development Indicators and EconStats (http://www.econstats.com/wdi/wdiv_375.htm accessed on 16th September, 2016)
 Note: Domestic support includes Amber Box, Green Box, Blue box, support below de minims limit and expenditure under Article 6.2

Even the Environmental Working Group (EWG) subsidy database shows that the USA is giving huge subsidies to agriculture sector to ensure income of farmers by managing the variation in agricultural production and profitability due to variations in weather, market prices, and other factors. Agricultural subsidies in USA are highly skewed toward the five

major commodities of corn, soybeans, wheat, cotton, and rice. Per recipient subsidy for these crop in USA is extremely high (Table 27). It seems the USA is making playing field uneven for the developing countries in agricultural trade and then criticising agricultural policy in developing countries to get market access for its highly subsidised foodgrains. Wise and Patnaik (2015) rightly pointed that "it was hypocrisy for close disciplines on payments to some of the poorest farmers in the world in order to feed some of the hungriest people in the world when US farmers are far better off and recipients of US government food assistance get four times the amount of food".

Table 27: Crop specific subsidies per recipient in USA

	Recipient	Payment	Subsidy per recipient
2010			
Wheat	564316	2012216841	3565.8
Rice	30289	454184250	14995.0
Corn	666798	3771863080	5656.7
2014			
Wheat	21832	969087516	44,388.4
Rice	1326	61620249	46,470.8
Corn	23667	2354643573	99,490.6

Source: Environmental Working Group (https://farm.ewg.org/ accessed on 16th September, 2016).

6.4: Comparison of expenditure on food security

It is also interesting to compare the expenditure on food security by China, India and USA. China and India with a population of 1.39 and 1.27 billion respectively are spending on food security about $11.38 and $13.81 billion respectively in 2010 (Figure 2). On the other hand, USA with a population of 318 million has spent about $94 and $109 billion in 2010 and 2013 respectively. It is interesting to know that number of undernourished people is India and China is higher than the total population of the USA.

Therefore, protecting the interests of 328 million undernourished people is and should be the priority of both the Asian countries. Given the socio-economic situation prevailing in these two countries, price support backed procurement of foodgrains would remain an integral part of ensuring food security for the millions of undernourished people and protecting the interest of resource poor farmers in India and China. Both countries should not succumb to USA pressure backed by the unjust rules of the AoA to get market access in their countries for highly subsidiesed foodgrains produced in USA and should protect the policy

space to implement food security policy for the millions of poor farmers and undernourished people.

Figure 2: Expenditure on food security in India, China and USA
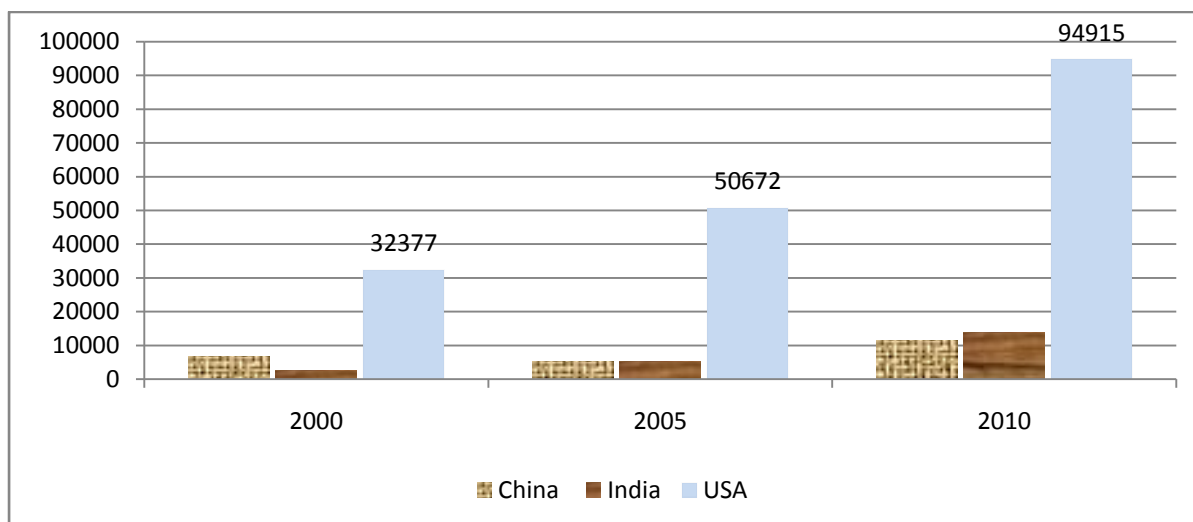
Source: WTO notifications on domestic support to agriculture sector submitted by India, China and USA

Section 7: Conclusion

The USA's dispute with China on price support to wheat, rice and corn has also implications for many other developing countries. In this dispute, USA claimed that China is giving $100 billion trade distorting support to foodgrains in 2015 by providing price support to farmers. Price support to foodgrains is an integral part of food security and agricultural policy in many developing countries like China, India, Turkey, Indonesia, Pakistan, Kenya etc. Procurement of foodgrains at administered price is a contentious issue in Doha Development Round especially in the last two Ministerial Conferences held in Bali (2013) and Nairobi (2015).

To assess USA's claim about domestic support in China as well to examine the policy space available for India and China, product specific support to foodgrains is calculated for these two Asian countries. By assuming the share of procurement in total production at 33%, results show that China breached the maximum permissible limit to provide domestic support to wheat in 2015. In case the procurement remained upto 23.7% of total production of wheat, product specific support would be below the de minims level. Product specific support to rice was below the de minims limit during 2011 to 2016. In contrast to USTR's claim that Chinese product specific support was more than $100 billion for foodgrains, result shows that

support for wheat, rice and corn was only $5 billion in 2015 based on the assumption that procurement of wheat was 33% of production. Thus USA's claim appears highly exaggerated.

For India, product specific support to wheat and rice was under the permissible limit during 2011-12 to 2015-16. In case of rice, support was 6.33 percent of total value of production in 2015-16. Given the trend in the MSP, procurement, production and exchange rate, policy space to implement price support for rice will shrink in coming years. In case inflation is considered, product specific support to foodgrains remains very much below the de minims limit in China and India during 2011-12 to 2015-16. Analysis also shows that the USA is giving huge domestic support to agriculture sector. Domestic support per person who is economically active in agriculture sector was $51194 in USA and in contrast, the figure for India and China was $201 and $191 respectively in 2010. It is also revealed that agricultural subsidies are highly skewed in favour of rice, wheat and corn in USA and the level of subsidies is unimaginable. Based on these high levels of agricultural subsidies, the USA is enjoying artificial comparative advantage in international trade of agricultural commodities. About the expenditure on food security, the USA has spent $94 billion in comparison to $11.38 billion and $13.81 billion by China and India respectively in 2010. With 328 million undernourished people in India and China, which is higher than the total population of USA, protecting the policy space to implement procurement policy of foodgrains is very crucial to eliminate hunger and achieving the Sustainable Development Goals (SDGs) by 2030.

Anticipating the problems in implementing the policy of public stockholding for food security purposes, developing countries are demanding amendments in the AoA to provide policy space to implement food security policy which is compatible with the socio-economic situation prevailing in their countries. Due to the various proposals by developing countries and tough stance taken by certain developing countries at the Bali Ministerial Conference in 2013, the WTO members agreed to a "Peace Clause" as an interim solution. As per the "Peace Clause" members shall refrain from challenging through the WTO Dispute Settlement Mechanism, compliance of a developing member with its obligations related to domestic support under the AoA provisions (WTO 2013). In other words, if a developing country member breaches its permissible limit for Amber Box on account of procurement of foodgrains at administered price for food security purposes, other member countries would refrain from challenging it at the WTO. The General Council decision on "Peace Clause" in

2014 provided that if a permanent solution on the issue of public stockholding for food security purposes is not agreed and adopted by the 11th ministerial conference, the peace clause shall continue to be in place until a permanent solution is agreed upon and agreed.

The Peace Clause decision requires a developing country to comply with notification and transparency requirements. In order to take advantage of the decision, the concerned country would have to confess that it is in breach of, or is likely to violate, its obligations under the AoA. A developing country has to ensure that its stockholding programme does not distort trade or adversely affect the food security of other countries. China can invoke the "Peace Clause" in case product specific support to wheat is higher than the de minims limit. For this China would have to notify its domestic support to the agriculture sector for recent years and comply with all other conditions mentioned in Ministerial Decision on the issue of public stockholding for food security purposes. The dispute between USA and China on product specific support for foodgrain would set an precedence on dealing with a situation when a member country breach its commitment level on account of procurement of foodgrains for food security purposes. Many developing countries that are implementing price support backed procurement policy will have a keen interest in this case due to its implications for food security policy. In the meantime, developing countries should sustain their demand for an early permanent solution on the issue of public stockholding for food security purposes that allow enough policy space to implement price support backed procurement of foodgrains under the WTO rules and make sure that issue of food security for millions of undernourished and poor prevails over the naked commercial interests of few developed countries.

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