WTO and Shrinking Policy Space for Food security: Issues and Challenges for China



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Shrinking Policy Space for Food security and WTO: Issues and Challenges for China Sachin Kumar Sharma*

Abstract

With 133.8 million people suffering from hunger in China, achieving food selfsufficiency and food security are primary goals of agricultural policy in China. To achieve these goals as well to support millions of low income or resource poor farmers, China is implementing Minimum Purchase Price (MPP) policy for grains through its state agencies. Besides price support, the Chinese government also gives other budgetary support to wheat in the form of subsidies for improved crop strains and seeds. However, the procurement of food grains at MPP is limited by WTO rules. In this context, this study critically examines the development space available to China to implement policy related to price support backed procurement of grains for food security under the WTO regime. In this regard, product specific support to wheat through price and other budgetary support in China is calculated at nominal prices as well as by considering inflation at different levels of procurement for the period 1999-2016. As per the commitments on agricultural products under the WTO rules, the maximum applicable limit for China to provide product specific AMS is 8.5 percent of value of production of a specific crop for a relevant year. The findings of this study show that China does not have much flexibility to implement price support for wheat in near future if the calculations are done without considering inflation. China is breaching applicable permissible limit at the procurement level of 25 and 30.5 percent of total production of wheat. It may be one the reasons why China has not increased the minimum purchase price of wheat since 2014. It would be difficult for China to implement price support as well as other product specific budgetary support policy for wheat in the immediate future due to shrinking policy space as a result of binding commitments related to agriculture sector.

Keyword: China, WTO, Amber Box, Minimum Purchase Price, Agreement on Agriculture, Price support

JEL classification: F13, F14, F51, Q17, Q18

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Section 1: Introduction

The FAO (2015) has estimated that globally 795 million people do not have access to sufficient food to live a healthy life, of which, 780 million people are living in developing countries. China is home to 133.8 million people who are facing hunger and suffering daily hardships to access sufficient food for healthy life. The challenge of ensuring food security for millions of people who are suffering from hunger remains a daunting policy task for China. In this situation, policies related to the agriculture sector have to play a crucial rule in eliminating huger and achieving the United Nations Sustainable Development Goal related to hunger by 2030. However, binding commitments under the Agreement on Agriculture (AoA) pose severe threats for many developing countries to provide sufficient food for millions of poor people.

Procurement, stockholding and distribution of food grains are important aspects of food security policies in many developing countries. According to Footnote 5 of the 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 the Green Box. However, procurement of foodgrains at administered price is limited by the rules of the WTO and is covered under the Amber Box which accounts for trade distorting support. Limited and shrinking policy space in Amber Box is creating problems in implementing the food security policies by developing countries. Finding a permanent solution to the issues related to public stockholding for food security purposes has now become a litmus test for successful conclusion of the Doha Development Round.

About the importance of price support and procurement of food grains for food security purposes in developing countries, the South Centre (2015) has highlighted that (1) given the price fluctuations in agricultural prices, building national reserves has been widely acknowledged to be a critical part of developing countries' food security strategy; (2) procuring foodgrains from surplus regions of the country and distributing to food deficit regions has been and remains an important food security instrument for developing countries;

and (3) price and procurement policies are important instruments whereby resource-poor farmers' income can be stabilised and even guaranteed. Like many other developing countries (India, Indonesia, Kenya, Zambia and Pakistan etc.), price support to the agriculture sector is an important instrument of China's agriculture policy to achieve self-sufficiency in food grain production and ensuring food security.

The agriculture policy under different five year plans including the 13th five year plan (2016-2020) aims at modernizing the agricultural sector, land reforms, protecting the quality of farmland to increase productivity, and ensuring grain self-sufficiency (at least 95%) and food safety. This is to be attained through increasing support to the agriculture sector and providing more benefits and subsidies to farmers (WTO 2016). To achieve self-sufficiency in foodgrain production as well as to ensure food security for the millions of poor people, China is implementing MPP for wheat. Price support policy in China has evolved since 1985. China started state procurement system and protective price policy in the 1990s. However, from 2004 onwards, the Chinese government implemented MPP policy to maintain stability of grain market prices, protecting the farmers and controlling the food supply.

Procurement of food grains at administered price for public stockholding has become a contentious issue in the Doha Development Round especially during the last two ministerial conferences (Bali, 2013 and Nairobi, 2015). In this context it would be useful to critically examine the policy space of China to implement price support policy for grains under the WTO regime. For this purpose, product specific support to wheat through price support in China is calculated according to the provisions of AoA.

This paper is divided into six main sections. Section 2 contains an overview of the agriculture policy of China. Section 3 discusses the methodology for calculating product specific support and relevant provisions of AoA that impinge upon the policy space of China's food security goals. Section 4 highlights the trends in domestic support to wheat based on notifications submitted by China to the WTO. Section 5 analyses the results under two broad scenarios i.e. with and without considering inflation for calculating product specific support. The final section concludes the findings of the study.

Section 2: Overview of China's Agricultural policy for Wheat

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). The state-owned China Grain Reserve Corporation (Sinograin), which was established in 2000, is responsible for implementing buffer stock policy. It purchases grains when the market price falls below the established support level. It also holds weekly auctions of grains to maintain sufficient market supplies. Besides managing grain and oilseed reserve stocks, Sinograin is also responsible for the procurement of grains and oilseeds, stock maintenance, inter-provincial shipments and international trade of grain. The government stocks consist mainly of rice, wheat, and maize (OECD 2015a). 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).

The MPP scheme for grains is linked to the volume of China's grain reserve system which is under the overall responsibility of the State Grain Administration (SGA). Detailed minimum grain inventory levels for each province are specified with the main grain producing provinces in north-eastern China required to maintain at least three months of sales inventory and other provinces to keep at least six months of sales inventory (OECD 2013). A report of OECD (2015b) pointed out that the actual level of public stockholding for food security is unknown, but the International Grains Council estimates that China's reserves of wheat, coarse grains and rice are at about 40% of total domestic use, which is much more than of any other major grain producing or consuming country. 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. Rice and wheat prices displayed much less volatility in Chinese markets compared to the international market during the last decade, and certainly during the 2007-08 price hikes.

Price support policy for the agriculture sector in China has evolved and reformed over a long period of time. During 1985-1990, the Chinese government adopted the "State Contract Purchase Price" policy to implement contract purchase system of agricultural products produced by farmers. In 1990, the Chinese government replaced "contract purchase system" with "state procurement system". Before 1995, the state procurement pricing system covered many agricultural products, including wheat, rice, corn, cotTon, soybeans, rape seeds and

sugar crops etc. In the 1996-1998 base periods, the products covered by the system only include wheat, rice, corn and cotTon (WTO 2001).

In 1993, the Chinese government adopted the protective price policy to safeguard farmers' income. Protective price determined by farmers' production cost plus a certain amount of profit. In 1997–1998, the products covered by the protective price policy were wheat, rice and corn (Cheng 2008). The Chinese government repealed the protective price policy system in 2004 and started to employ grain MPP policy to maintain stability of grain market prices, protect the farmers and control the food supply. In response to a question raised at Committee on Agriculture (CoA) in (month and year), China reported that the protective pricing system policy differed from minimum procurement/purchase price policy in the aspects of implementation time, area and products. The protective pricing system covered rice, wheat and corn while the minimum procurement price policy covers only rice and wheat; the protective price system was implemented across the board in China while the minimum procurement price system was implemented only in major rice- and wheat-producing areas; no specific implementation time was set for the protective price system while MPP is only set for the peak season or crop procurement (CoA Meeting Number 59, Question ID 59036). The minimum price for wheat increased during 2012-2014, due to an increase in production costs, but remained unchanged in 2015 and 2016. The MPPs for wheat remained at 2360 Yuan/Ton during 2014 to 2016 (table 1). The Chinese government also carried out ad-hoc interventions to procure several other agricultural commodities at pre-determined prices to protect the farmers and the consumer from price volatilities. Such interventions have covered maize, cane sugar, soybeans, rapeseed, cotTon and pork, but in 2014-15 they were

Table 1: Minimum Purchase Price for Wheat in China (Yuan/Ton)

Year	White	Red and mixed	Average
2007	1,440	1,380	1,410
2008	1,540	1,440	1,490
2009	1,740	1,660	1,700
2010	1,800	1,720	1,760
2011	1,900	1,960	1,930
2012	2,040	2,040	2,040
2013	2,240	2,240	2,240
2014	2,360	2,360	2,360

discontinued for cotTon, soybeans and rapeseeds and replaced by compensations covering the

difference between pre-determined target prices and actual market prices (OECD 2016).

2015	2,360	2,360	2,360
2016	2,360	2,360	2,360

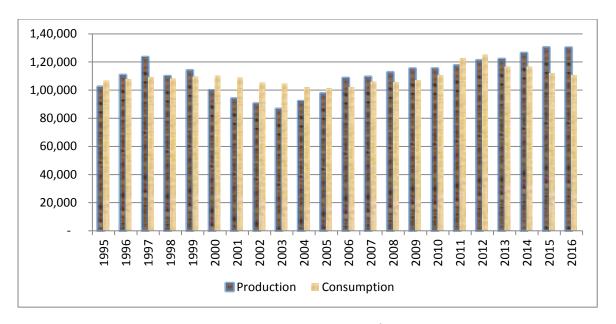
Source: OECD (2016), "China", in Agricultural Policy Monitoring and Evaluation 2016, OECD Publishing,

Paris.DOI: http://dx.doi.org/10.1787/agr_pol-2016-10-en

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).

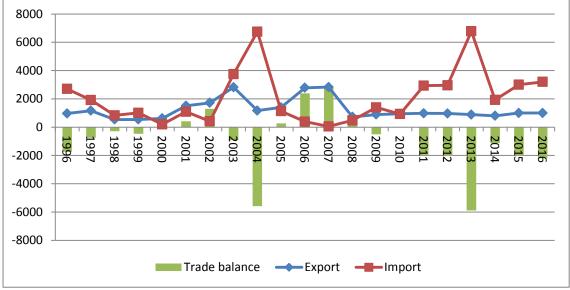
Direct payments for grain producers and almost all subsidies for chemicals and seeds are paid at a flat rate per unit of land. For instance, direct payments to support grain production and to increase grain producers' incomes were around USD 24-36/ha. It is noteworthy that the payment is provided to the person who holds the contract rights to the land, not to the person who cultivates the land. The centrally funded comprehensive subsidy on agricultural inputs is implemented as a payment per unit of land, not necessarily sown to grains. Support for improved quality seeds is provided via the Improved Seed Variety Subsidy programme. The actual implementation mechanism of this subsidy depends on the commodity. Thus, for the improved hybrid seeds of rice, maize and rapeseed, the government pays cash directly to farmers (through their account in the bank) on the basis of the cultivated area, and for the improved seeds of wheat, soybean and cotTon, it is for the provinces to decide if the subsidy takes the form either of a direct payment or of reduced seed prices (OECD 2011). In 2015, the government applied a pilot programme to combine "Three subsidies" (direct payments for grain producers, comprehensive subsidy on agricultural inputs and improved seed variety subsidy), all paid on per unit of land basis, into a single payment in five. The new programme, called "agricultural support and protection subsidy" consists of two components. Four-fifths of the value of "three subsidies" was paid per unit of land directly to owners of land use rights. This part is intended to protect arable land fertility and to preserve grain production capacity. One-fifth of budgetary allocations was set aside for "new-style" farms who rent land from neighbours, "family farms", cooperative farms, and farms run by agribusiness companies (OECD 2016).

Figure 1: Trend in production and consumption of wheat in China (1000 Ton)



Source: Index Mundi. http://www.indexmundi.com/ accessed on 10th July, 2016

Figure 2: Trend in export and import of wheat (1000 Ton)



Source: Index Mundi. http://www.indexmundi.com/ accessed on 10th July, 2016

Due to various support programmes like minimum purchase price, direct payment, subsidies for inputs and seed, production of wheat has increased sharply from 102 million Ton in 1995 to 130 million Ton in 2016. China has achieved self-sufficiency to a great extent in wheat due to increase in production vis-à-vis consumption of wheat (figure 1). Though, China is a net importer of wheat, its dependency on imported wheat has declined from 1995 to 2016 (figure 2). Domestic production is more than consumption of wheat in recent times, but China is importing wheat to support food reserves for food security purposes.

Section 3: Methodology

The methodology to calculate product specific support to wheat producers is given under the following sections:

3.1 General Provisions under Agreement on Agriculture (AOA) related to Domestic Support

The AoA provides the methodology to estimate domestic support to agriculture sector. The key aim of reducing domestic support is to correct trade distortions with a view to promote efficient allocation and use of world resources. Domestic support is the annual level of support extended to the agricultural sector. Domestic support to agriculture sector under AoA is divided into three boxes i.e. Amber, Green and Blue 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. Article 6 along with Annexes 3&4 of AoA provides the methodology to calculate the Amber box support. 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 minimis limit then a member is not required to include that support under the Amber box. De minimis limit is the minimal amounts of trade distorting domestic support that are allowed under AoA. For developing countries de minimis 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).

To be classified under the Green Box, domestic support measures 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 Green box. Direct payments under production-limiting programmes are exempted if these are based on fixed area and yield or livestock payments made on a fixed number of heads (Blue box). Besides this, 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 (Article 6.2).

3.2: Methodology to Calculate Product Specific Support

Product specific support is calculated 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. Budgetary payments made to maintain this gap, such as buying-in or storage costs, shall not be included in the AMS. The AMS shall be calculated as close as practicable to the point of first sale of the basic agricultural product concerned. Measures directed at agricultural processors shall be included to the extent that such measures benefit the producers of the basic agricultural products (Annex 3.7). About the determination of fixed ERP, Annex 3.9 of 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. The fixed reference price may be adjusted for quality differences as necessary. Therefore, to calculate product specific support administered price is compared to ERP based on 1986-88 prices. This is an illogical methodology as product specific support increases over a period of time if inflation is not considered while calculating product specific support.

3.3: Specific Provisions for China

As China became a member of WTO in 2001, the de minimis limit applicable for China was negotiated at the time of accession; it is different from that of other developing countries. In case of product specific limit, the de minimis 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. Instead of 1986-88, 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 to ERP based on 1996-1998 prices (WTO 2001). According to China's scheduled commitments on agriculture, China can provide support through measures of the types described in Article 6.2 of the AoA. But the amount of such support will be included in China's calculation of its AMS (WTO 2015a).

3.4: Product Specific Support to wheat under different Scenarios

China has notified domestic support to its agriculture sector till 2010. In this study, product specific support to wheat is estimated in nominal terms as well as by considering inflation for the years 2000-2016. Due to unavailability of procurement data for the period 2011-2016, the

product specific support is calculated by assuming different levels of procurement i.e. 20, 25, and 30.50 percent of total production of wheat in China.

Section 4: Overview of domestic support in China

4.1 Trends in domestic support to agriculture sector based on notifications

China has notified domestic support to agriculture for the period 1999 to 2010. Supporting tables related to commitments on agricultural products in Part IV of the schedules show that China has notified domestic support in Yuan (WTO 2001). This document contains information about domestic support to agriculture sector in China for the base period i.e. 1996-998.

Schedules related to domestic support show that product and non-product specific support to the agriculture sector in China was below the de minimis limit during the base period i.e. 1996-1998 (WTO 2001). Product specific and non-product specific support during 1999 to 2010 was also below the de minimis limit. China has not given any support under Article 6.2 and the Blue Box during 1999-2010. Green box support which is permissible under AoA without any limit, accounts the major share in total domestic support to agriculture sector in China (table 1). General services and direct payments have more than 85 percent share in total Green Box support for the year 2010. The share of public stockholding for food security purposes has declined but in absolute terms it increased during 1999 to 2010 (table 2). China has spent 77 billion Yuan on public stockholding in 2010.

Table 1: Trends in domestic support to agriculture sector in China

Year	Current AMS (Y millions)		Green Box	Total support	Value of Production (VoP)	Total support as a percent VoP
	Product Specific	Non- Product specific	(Y millions)	(Y millions)	Y millions	%
AGST	935	29,402	137,595	167,932	2,048,860	8.2
1999	2,854	700	184,335	187,889	2,199,010	8.5
2000	3,503	745	207,899	212,147	2,220,320	9.6
2001	1,790	748	242,332	244,870	2,336,460	10.5
2002	1,275	234	252,117	253,626	2,513,970	10.1
2003	1,314	1,282	257,962	260,558	2,646,390	9.8
2004	4,194	1,974	308,493	314,661	3,254,030	9.7
2005	2,454	2,200	309,566	314,220	3,543,479	8.9
2006	1,364	14,951	356,524	372,839	3,684,030	10.1

2007	11,481	30,754	457,856	500,091	4,443,544	11.3
2008	16,764	78,863	593,014	688,641	5,279,877	13.0
2009	19,471	89,123	477,460	586,054	5,473,460	10.7
2010	25,351	97,664	534,632	657,647	6,289,740	10.5

Source: China's WTO notifications on domestic support

Note: Product specific and non product specific support was below the de minimis limit during 1999-2010

Table 2: Composition of Green Box Support in China

Year	Green Box	General	services	Public stockholdi food secur purposes		Domestic food aid		g for aid		ayments
	Y millions	Y millions	Percent	Y millions	Percent	Y millions	Percent	Y millions	Percent	
AGST	137,595	78,559	57.09	38,378	27.89	1,884	1.37	18,774	13.64	
1999	184,335	1,09,110	59.19	47,596	25.82	2,640	1.43	24,989	13.56	
2000	207,899	1,21,230	58.31	53,799	25.88	2,360	1.14	30,510	14.68	
2001	242,332	1,45,046	59.85	59,685	24.63	683	0.28	36,918	15.23	
2002	252,116	1,51,417	60.06	53,148	21.08	401	0.16	47,150	18.70	
2003	257,962	1,54,274	59.81	54,526	21.14	178	0.07	48,984	18.99	
2004	308,494	1,65,603	53.68	42,061	13.63	132	0.04	1,00,698	32.64	
2005	309,566	1,72,729	55.80	44,087	14.24	99	0.03	92,651	29.93	
2006	356,525	2,00,784	56.32	50,378	14.13	93	0.03	1,05,269	29.53	
2007	457,857	2,80,164	61.19	54,201	11.84	49	0.01	1,23,443	26.96	
2008	593,015	3,55,126	59.88	57,932	9.77	64	0.01	1,79,893	30.34	
2009	477,460	2,32,279	48.65	69,538	14.56	59	0.01	1,75,584	36.77	
2010	534,632	2,50,076	46.78	77,045	14.41	14	0.00	2,07,497	38.81	

Source: China's WTO notifications on domestic support

4.2 Trends in product specific support to Wheat in China

China was a net importer of wheat during 1996-1998 and therefore, ERP was determined on the basis of average import price i.e. CIF price during the base period (Table 3). ERP of wheat for the purpose of calculating product specific support is 1698 Yuan/Ton.

Table 3: Determination of external reference price of wheat in China- HS code 10011000

	Import Volume	Import Value	CIF Price	CIF Price 1/
Calendar Year	(Tons)	(US \$)	(US \$/Ton)	(RMB Yuan/Ton)
1996	45,12,381	1,02,30,59,000	226.7	1,885.0
1997	15,08,909	29,66,53,000	196.6	1,629.6
1998	12,75,384	24,33,73,000	190.8	1,579.8

Average of 1996-98		204.7	1.698.1
Average or 1990-90		ZU4./	1.090.1

Source: WTO (2001)

Product specific support to wheat in China was negative during the base period because the administered price was lower than the fixed ERP (table 4). Eligible production for state procurement price refers to the amount purchased by state-owned enterprises from farmers at state procurement price for the food security purpose, whereas the eligible production for Protective Price refers to the amount purchased by state-owned enterprises from farmers at protective price in order to protect farmer's income.

Table 4: Product specific aggregate measurement of support: market price support

Calendar year	Measure type (s)	Applied administered	External reference price (RMB Yuan/Ton)	Eligible production (1000 Tons)	Total market price support (million RMB Yuan)
1996	State Procurement Pricing	1480.0	1885.0	15000	-6075
1997	State Procurement Pricing	1480.0	1629.6	15000	-2244
1997	Protective Price System	1340.0	1629.6	31002	-8979
1998	State Procurement Pricing	1420.0	1579.8	15000	-2397
	Protective Price System	1260.0	1579.8	12956	-4144

Source: China's schedule, WTO

Table 5: Notified product specific market price support to wheat producer in China

Year	Applied administered price	External reference price	Eligible Production	Value of Production (VoP)	Total market price support	Share (Market price support/VoP)
	Yuan/Ton	Yuan/Ton	Thousand Ton	million Yuan	million Yuan	Percent
1999	1,254	1,698	37,800	NA	-16,783	1
2000	1,136	1,698	35,050	NA	-19,698	-
2001	1,124	1,698	38,600	NA	-22,156	-
2002	1,240	1,698	34,850	105,280	-15,961	-15.16
2003	1,100	1,698	20,460	105,600	-12,235	-11.59
2004	-	1,698	0	141,610	=	-
2005	-	1,698	0	161,860	=	-
2006	1,410	1,698	40,688	161,360	-11,718	-7.26
2007	1,410	1,698	28,925	182,750	-8,330	-4.56
2008	1,490	1,698	41,740	199,300	-8,682	-4.36
2009	1,700	1,698	39,855	222,460	80	2.00
2010	1,760	1,698	23,113	235,330	14	2.46

Source: China's WTO notifications on domestic support

Table 6: Notified product specific Support to wheat (market price support and other product specific budgetary support)

Year	Product Specific Market Price Support	Other Product Specific Budgetary Outlays	Total Product Specific support	Value of Production (VoP)	Other product specific budgetary outlays	Total Product specific support
	million Yuan	million Yuan	million Yuan	million Yuan	% of VoP	% of VoP
1999	-16,783	0	-16,783	NA	-	-
2000	-19,698	0	-19,698	NA	-	-
2001	-22,156	0	-22,156	NA	-	-
2002	-15,961	4	-15,957	1,05,280	0.00	-15.16
2003	-12,235	110	-12,125	1,05,600	0.10	-11.48
2004	-	201	201	1,41,610	0.14	0.14
2005	-	1,058	1,058	1,61,860	0.65	0.65
2006	-11,718	1,081	-10,637	1,61,360	0.67	-6.59
2007	-8,330	1,101	-7,229	1,82,750	0.60	-3.96
2008	-8,682	2,159	-6,523	1,99,300	1.08	-3.27
2009	80	4,371	4,451	2,22,460	1.96	2.00
2010	1433	4,359	5,792	2,35,330	1.85	2.46

Source: China's WTO notifications on domestic support

China is providing product specific support to wheat through price support (minimum purchase price scheme) 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 to wheat was negative during 1999-2008 as the administered price of wheat was lower than the fixed ERP. Product specific price support was positive but below the de minimis limit for the years 2009 and 2010 (table 5). Other product specific budgetary outlays for wheat have increased steeply from 0.10 percent of value of production in 2003 to 1.85 percent in 2010. Product specific AMS for wheat was 2.46 percent of value of production of wheat in 2010. Table 6 shows that product specific support which includes price and budgetary support to wheat was below the de minimis limit during 1999-2010.

Section 5: Result

This section deals with calculation of product specific support to wheat at different levels of procurement of wheat by government agencies. This section is divided into two broad subsections i.e. product specific support with, and without considering inflation in the Chinese economy.

5.1: Product Specific Support to wheat without considering inflation

Product specific support to wheat is calculated as per the methodology given in AoA for calculating Amber Box support. On an average, the share of procurement of wheat by

government agencies in total production was 33 percent during 1999-2010 (table 7). Due to non-availability of data on procurement, product specific support is calculated by assuming procurement level at 20, 25 and 30.5 percent for the period 2011-2016.

Table 7: Trend in production and procurement of wheat in China

Year	Production Procurement		Share of procurement in production
	1000 Ton	1000 Ton	Percent
1999	113,880	37,800	33
2000	99,640	35,050	35
2001	93,873	38,600	41
2002	90,290	34,850	39
2003	86,490	20,460	24
2004	91,952	No procurement	0
2005	97,445	No procurement	0
2006	108,466	40,688	38
2007	109,298	28,925	26
2008	112,464	41,740	37
2009	115,120	39,855	35
2010	115,180	23,113	20
Average (1999-2010)	102,842	34,108	33

Source: Index Mundi and China's domestic support notifications to WTO.

Table 8 shows that applied administered price for wheat was higher than the ERP and the gap between these two variables has widened during 2011-2016. The Chinese government has not increased the administered price of wheat during 2014-2016 and it remained at 2360 yuan/Ton during the same period. The value of production is calculated by multiplying administered price with total production of wheat for the period 2011-2016.

Based on the assumption that eligible production equals 20 percent of production, the result shows that product specific market price support has increased from 2.40 percent to 5.61 percent during 2011-2016. It remained at 5.61 percent of value of production for the period 2014-16 because of stable administered price over the same period. As applicable de minimis limit for China is 8.5 percent of value of production, the results show that product specific price support to wheat at 20 percent procurement level is under the permissible limit. Results are same even in case of procurement level at 25 percent of total production of wheat as product specific price support remained below the de minimis level. Product specific market price support to wheat is higher than the de minimis limit if the procurement level is 30.5 percent of total production of wheat (table 9). Product specific market price support to wheat

was 8.56 percent during 2014-16 and it crosses the de minimis limit applicable for China. It is clear that China does not have much policy space to implement price support policy for wheat under the WTO regime.

Table 8: Product specific market price support to wheat by assuming eligible production 20% of total wheat production

Year	Applied administer ed price	External reference price	Eligible production	Total production	Value of production (VoP)	Total market support	Share (price support/VoP
	Yuan/Ton	Yuan/To n	Thousand Ton	Thousand Ton	Million Yuan	Million Yuan	Percent
2011	1930	1698	23480	117400	226582	5447	2.40
2012	2040	1698	24205	121023	246887	8278	3.35
2013	2240	1698	24386	121930	273123	13217	4.84
2014	2360	1698	25242	126208	297851	16710	5.61
2015	2360	1698	26038	130190	307248	17237	5.61
2016	2360	1698	26000	130000	306800	17212	5.61

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 9: Product specific market price support to wheat under different level of eligible production

Year	Market support (Million Yuan)	Percent of VoP	Market support (Million Yuan)	Percent of VoP	Market support (Million Yuan)	Percent of VoP
Eligible Production →	20%		25%		30.50%	
2011	5,447	2.40	6,809	3.01	8,307	3.67
2012	8,278	3.35	10,347	4.19	12,624	5.11
2013	13,217	4.84	16,522	6.05	20,156	7.38
2014	16,710	5.61	20,887	7.01	25,483	8.56
2015	17,237	5.61	21,546	7.01	26,287	8.56
2016	17,212	5.61	21,515	7.01	26,248	8.56

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

However, policy space would further shrink if other budgetary support to wheat is included in these calculations. By assuming that the other budgetary support is 1.85 percent of value of production during 2011-2016 (same level as in 2010), total product specific support to wheat is calculated by adding product specific price support and other budgetary support to wheat during 2011-2016. Table 10 shows that product specific support to wheat where eligible production equals 20 percent of production was 7.46 percent in 2016, which is very close to the maximum permissible limit applicable (8.5 percent) for China. The Chinese government policy to keep price support to wheat at 2360 Yuan/Ton has helped in keeping product specific support below the de minimis level at 20 percent level of procurement. At procurement levels equal to 25 and 30.5 percent, product specific support crosses the de minimis level during 2014-2016. To keep the product specific support for wheat below the de minimis limit, China has to refrain from increasing purchase price or procurement quantity and other budgetary support in future. Therefore, it is difficult for China to continue with market support policy for wheat due to shrinking policy space under the Amber Box.

Table 10: Product specific support (price and budgetary support) to wheat

Year	Other Product specific budgetary support	Product specific market price support at different level of procurement			Total Product specific support at different level of procurement		
Eligible Production →	(assuming at same level as in 2010)	20%	25%	30.50%	20%	25%	30.50%
2011	1.85	2.40	3.01	3.67	4.25	4.86	5.52
2012	1.85	3.35	4.19	5.11	5.20	6.04	6.96
2013	1.85	4.84	6.05	7.38	6.69	7.90	9.23
2014	1.85	5.61	7.01	8.56	7.46	8.86	10.41
2015	1.85	5.61	7.01	8.56	7.46	8.86	10.41
2016	1.85	5.61	7.01	8.56	7.46	8.86	10.41

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

5.2 Product specific support without considering inflation

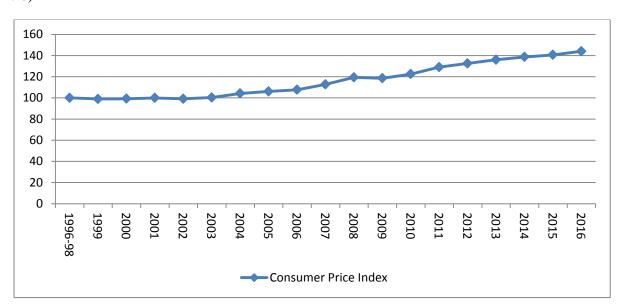
Comparison of the administered price with the ERP (1996-98) by ignoring inflation is questionable on the basis of economic logic. Due to inflation, the value of money or purchasing power of money declines as they have an inverse relationship. Though, Article

18.4 of AoA mentions inflation, it is not a Member's unilateral right to consider inflation while calculating product specific support. Article 18.4 of AoA states that:

"In the review process Members shall give due consideration to the influence of excessive rates of inflation on the ability of any Member to abide by its domestic support commitments".

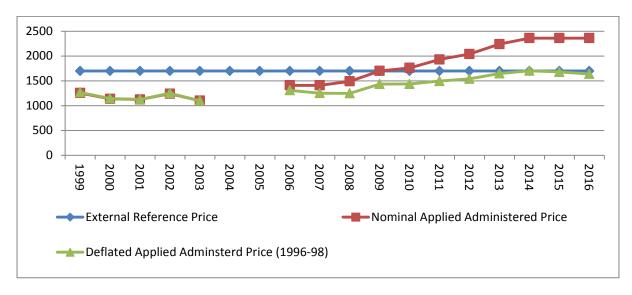
This flexibility depends on the discretion of other members of WTO during the review process. For example, in case of breaching de minimis limit, China has to submit domestic support notification without considering the inflation. Then members in the review process or in Committee on Agriculture may give flexibility to China to consider inflation while calculating domestic support. The other related issue is the definition of "excessive inflation". China can argue for full inflation allowance to be given while calculating domestic support, but other Members may not allow for full inflation allowance and can argue that excessive inflation does not mean full inflation allowance. It is to be noted that a country may need to seek endorsement from Committee on Agriculture (CoA) in various years which would lead to unpredictability. There is still a lot of ambiguity about the definition of "excessive inflation" which is curtailing policy space for developing countries. Despite the ambiguity about the definition of excessive inflation, product specific price support to wheat in China is calculated by considering full inflation allowance. The data on consumer price index (CPI) for China is extracted from World Bank database. The value of CPI was 144 in 2016 and the inflation rate was around 2.39 percent per annum during the base period (1996-98) to 2016 (figure 3).

Figure 3: Trend in consumer price index of China during 1996 to 2016 (base year 1996-98)



Source: World Development Indicators, World Bank http://data.worldbank.org/data-catalog/world-development-indicators access on 10th July, 2016

Figure 4: Comparison of external reference price and applied administered price (Yaun/Ton)



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. World Development Indicators, World Bank http://data.worldbank.org/data-catalog/world-development-indicators access on 10th July, 2016

Given the rates of inflation, it is obvious that administered price at current prices is higher than the fixed ERP as shown in figure 4; this is eroding the policy space to implement price support policy. Without considering inflation, breaching the product specific de minimis limit is inevitable. However, the result will be different if inflation is taken into account while calculating product specific price support. Deflated administered price is consistently below ERP during 1999 to 2016 except in the year 2014. It results in a negative price support for wheat in China in almost all the years except in 2014. Product specific price support was -11.28 percent in 1999 and it increased to -.72 percent in 2016 (table 11).

Table 11: Product specific market price support to wheat in China by considering inflation

Year	Applied administ ered price (RMB Yuan/To n)	External reference price (RMB Yuan/To n)	Eligible production (thousand Ton)	Total production (1000 MT)	Value of production (VoP) (Yuan millions)	Total market support (million RMB Yuan)	Share (price support/V oP)
1999	1,267	1,698	37,800	1,13,880	1,44,338	-16,275	-11.28
2000	1,145	1,698	35,050	99,640	1,14,114	-19,373	-16.98

2001	1,125	1,698	38,600	93,873	1,05,610	-22,116	-20.94
2002	1,251	1,698	34,850	90,290	1,12,928	-15,588	-13.80
2003	1,097	1,698	20,460	86,490	94,865	-12,300	-12.97
2004		1,698	-	91,952	-	0	
2005		1,698	1	97,445	-	0	
2006	1,310	1,698	40,688	1,08,466	1,42,090	-15,787	-11.11
2007	1,251	1,698	28,925	1,09,298	1,36,687	-12,941	-9.47
2008	1,248	1,698	41,740	1,12,464	1,40,393	-18,769	-13.37
2009	1,434	1,698	39,855	1,15,120	1,65,123	-10,507	-6.36
2010	1,437	1,698	23,113	1,15,180	1,65,553	-6,025	-3.64
	Eligible p	roduction eq	ual to 20 percent of	of total production	n of wheat during	2011-2016	
2011	1,495	1,698	23,480	1,17,400	1,75,544	-4,760	-2.71
2012	1,540	1,698	24,205	1,21,023	1,86,333	-3,833	-2.06
2013	1,647	1,698	24,386	1,21,930	2,00,851	-1,237	-0.62
2014	1,702	1,698	25,242	1,26,208	2,14,834	107	0.05
2015	1,678	1,698	26,038	1,30,190	2,18,461	-520	-0.24
2016	1,639	1,698	26,000	1,30,000	2,13,051	-1,538	-0.72

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
- 4. World Development Indicators, World Bank http://data.worldbank.org/data-catalog/world-development-indicators access on 10th July, 2016

Table 12: Product specific market price support to wheat under different level of eligible production (by considering inflation)

Year	Market support (Million Yuan)	Percent of VoP	Market support (Million Yuan)	Percent of VoP	Market support (Million Yuan)	Percent of VoP	
Eligible Production →	20%		259	%	30.50%		
2011	-4760	-2.71	-5950	-3.39	-7140	-4.07	
2012	-3833	-2.06	-4791	-2.57	-5749	-3.09	
2013	-1237	-0.62	-1547	-0.77	-1856	-0.92	
2014	107	0.05	133	0.06	160	0.07	
2015	-520	-0.24	-650	-0.30	-780	-0.36	
2016	-1538	-0.72	-1922	-0.90	-2307	-1.08	

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
- 4. World Development Indicators, World Bank http://data.worldbank.org/data-catalog/world-development-indicators access on 10th July, 2016

At procurement levels of 25 and 30.5 percent, product specific price support remained below the de minimis level (table 12). Product specific support which includes both price as well as budgetary support also remained well below the applicable permissible limit for China. Therefore, China has no problem in implementing price and budgetary support policy for wheat in near future if due consideration is given to inflation while calculating product specific support (table 13). However, the gap between deflated administered price and the ERP is narrowing down on the one hand, and the upward trend in product specific budgetary support on the other may create problems for China to keep product specific support to wheat within the permissible limit.

Table 13: Product specific support (price and other budgetary support) to wheat under different level of eligible production (by considering inflation)

Vaca				ice support at			fic support at
Year Eligible	Other Product specific budgetary support	differen	it level of p	procurement	differen	it level of p	procurement
Production -	(assuming at same level as in 2010)	20%	25%	30.50%	20%	25%	30.50%
2011	1.85	-2.71	-3.39	-4.07	-0.86	-1.54	-2.22
2012	1.85	-2.06	-2.57	-3.09	-0.21	-0.72	-1.24
2013	1.85	-0.62	-0.77	-0.92	1.23	1.08	0.93
2014	1.85	0.05	0.06	0.07	1.90	1.91	1.92
2015	1.85	-0.24	-0.30	-0.36	1.61	1.55	1.49
2016	1.85	-0.72	-0.90	-1.08	1.13	0.95	0.77

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
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Section 6: Conclusion and way forward

The absolute number of undernourished people in China has declined steeply from around 300 million in 1991 to 145 million in 2014–16 due to proactive agricultural policies and programmes. Procurement of foodgrains though price support measures as well as product specific budgetary support would acquire greater importance in targeting hunger and supporting millions of low income or resource poor farmers. Results of this study show that China does not have much needed flexibility or policy space to implement price support policy for wheat in near future. It would be difficult for China to provide product specific

support to wheat without breaching the applicable AMS limit for product specific support to agriculture sector and it would severely constrain the efforts of the government to address undernourishment prevalent amongst 133 million of its population.

Results also show that calculation of product specific support by considering inflation helps in keeping support to grains within permissible limit. But there is ambiguity about the definition of "excessive inflation" under Article 18.4 of AoA and using full inflation allowance to calculate product specific support. Given these constraints, China has not increased minimum purchase price for wheat since 2014 despite increase in cost of cultivation of wheat. It is difficult for China to increase minimum purchase price, procurement of grains and other product specific support to wheat due to China's binding commitments related to agriculture sector.

Given the fact that a very large number of people are suffering from hunger and undernourishment, the erosion of policy space to implement price support based food security policy will hamper the welfare of millions of low income or resource poor farmers as well as millions of undernourished people living in China. In many developing countries, markets which are not well developed need price support backed public stockholding programmes to support their farmers. Even many developed countries like the USA and the EU are using price support to build their own agriculture sector and support their farmers. Due to the eroding policy space, developing countries have sought to amend the provisions of the AoA so that they will not face problems in implementing food security policy without breaching their commitments under the WTO rules. Various proposals on food security by different negotiating groups such as the African Group and the G 33 Group were discussed during the Doha Round negotiations which sought to give flexibility to the developing countries members to implement the food security policy without violating the provisions of AoA. Due to the differences among the WTO members, a permanent solution on the food security issue remained elusive during the 10th Ministerial Conference held at Nairobi during 15-18 December, 2015. At the Nairobi ministerial conference, it was decided that members shall engage to negotiate and make all the concentrated efforts to agree and adopt a permanent solution (WTO 2015b). At present, WTO member countries are engaged in finding a permanent solution so that developing countries members have the flexibility to implement food security policy as per their prevailing socio-economic situation without breaching their commitments under AoA. Whatever the permanent solution to the issue of public

stockholding, the WTO members should ensure that no one dies of hunger and extreme poverty due to unfair and unjust provisions of WTO. China along with other developing countries should come together and demand a permanent solution which allows member countries to implement their food security policies without being constrained by WTO rules.

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