AN ANALYSIS OF DOMESTIC SUPPORT TO AGRICULTURE SECTOR IN PAKISTAN UNDER WTO REGIME

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In this paper, Pakistan's domestic support to agriculture sector as notified to WTO has been analyzed. The findings of the study indicate that Pakistan is far behind in allocating resources to the agricultural sector. The current total Aggregate Measurement of Support (AMS) in case of Pakistan is negative implying that on an overall basis, agriculture sector receives no support in Pakistan. There is a lot of potential to increase its support to the farm sector without contravening the Agreement on Agriculture (AoA). The agreement sets no ceiling on Green Box and SDT expenditures, so there are no direct consequences for policy. The main problem seems to be very low levels of support to agriculture, given the important role of the sector in the economy.

Keywords: Domestic support, Pakistan, WTO regime, Agreement on Agriculture (AoA)

INTRODUCTION

Trade liberalization has been the dream of the world economy since the appearance of Adam Smith's writings. However, organized efforts in this direction began to appear only since the first round of trade negotiations under the General Agreement on Tariffs and Trade (GATT) in 1948 (Chaudhry, 2001). These efforts culminated in the form of the World Trade Organization (WTO) which is now the only international body dealing with the rules of trade between almost all the nations of the world. Among various agreements of the WTO, the Agreement on Agriculture (AoA) is of great relevance for developing countries with respect to their economies and food security.

The principal aim (three pillars) of the AOA pertains to market access (developed countries have to reduce the tariff by 36 percent and developing countries 24 percent on average), reduction of domestic support (the purpose is to reduce domestic support by 20 percent for developed countries and 13.3 percent by developing countries), and elimination of export subsidies (export subsidies are to be reduced by 36 percent by developed countries and 24 percent by developing countries).

The domestic support commitments in favour of agricultural producers under the provision of the World Trade Organization (WTO) include the government measures of assistance, whether direct or indirect, to encourage agriculture and rural development. The domestic support under WTO has been annexed with three Boxes i.e. Amber, Blue and Green. The domestic support measures included in Amber Box i.e. payments and subsidies paid to producers are to be reduced, but not eliminated. These measures are based on Aggregate Measurement of Support (AMS), which is cash equivalent to total government support for agriculture producers. Blue Box embodies certain direct payments to farmers aimed at limiting production and are specifically exempted from reduction commitments. This type of support is given in only European Union (EU) and United States. The Green Box measures are non-actionable i.e. are permitted. The Green-Box category is comprised of forms of support that are considered to have no or minimally distorting effects on production or trade. These include such policies as general government services (in areas such as research, pest and disease, and so on); public stockholding for food security purpose; domestic food aid; direct payments to producers; 'decoupled 'income support (that is, support not related to or based on production); structural adjustment assistance; payments under environmental programme; and payments under regional assistance programmes.

The *de minimis* payments are the domestic agricultural support payments representing only a small percentage of transfer to producers. It covers up to 5 percent of GDP for developed countries and 10 percent of production value (GDP) for developing countries. These payments are permitted to be paid in addition to the Green, Amber and Blue Boxes and are exempted from reduction commitments even if the effects of such support are potentially production or trade distorting.

The domestic support reduction commitments under the WTO have many implications for developing countries like Pakistan where agriculture is mainstay of the economy. Under the WTO rules and requirements, every member country has to notify its domestic support to WTO headquarters. The research paper in hand analyzes the domestic support being provided currently to the agriculture sector in Pakistan and its future scope under the WTO Regime.

MATERIALS AND METHODS

The study in hand is based on secondary sources of information. The secondary sources of data consulted for this paper included official publications of various offices of Govt. of Pakistan. The data relating to Pakistan's domestic support to agriculture sector including Aggregate Measurement of Support (AMS) and Green Box outlays as notified by Govt. of Pakistan to World Trade Organization (WTO) were acquired

from online data base available on WTO website http://docsoline.wto.org and Ministry of Food, Agricultural and Livestock, and Ministry of Commerce, Govt. of Pakistan. Simple statistical techniques like averages have been used to analyze the data.

RESULTS AND DISCUSSION

Pakistan at present is in full conformity with WTO regime on agriculture and has already fulfilled all of its obligations relating to Agreement on Agriculture (AoA) vis-à-vis market access, domestic support and export competition. Regarding domestic support, agricultural producers in Pakistan are provided price support for few commodities. The implementation of the support price policy has been restricted to wheat, rice, cotton and sugarcane. Crops such as gram, onion, potato, and non-traditional oilseeds, i.e. sunflower, canola, soybean and safflower have been excluded from the programme and now these are traded in private sector.

Total Aggregate Measurement of Support (AMS)

The current total Aggregate Measurement of Support (AMS) has always been negative since the emergence of WTO in case of Pakistan. Therefore, Pakistan has no reduction commitments on this front. In the base period i.e. 1986-88, total AMS extended by Pakistan to its agriculture sector was negative 552.9 million US\$. In the implementation period and through out the subsequent years, AMS remained negative with fluctuating trend. Negative AMS implies that agriculture sector in Pakistan did not actually receive any support rather it was taxed. In the year 2003-04, the AMS figure for Pakistan became less negative i.e. -22.2 million US \$. This was largely due to increased wheat production thereby becoming eligible for receiving price support. In spite of this, Pakistan still has a cushion for continuation of its price support programme for wheat until this figure approaches to zero plus the de minimus level of support (Table 1).

Table 1. Total AMS as notified by Pakistan to WTO (Million US \$)

Year	Product Specific AMS	Non Product Specific AMS	Total AMS		
1986-88	-640	87.1	-552.9		
1995-96	-203	10.8	-192.2		
1996-97	-72	15.5	-56.5		
1997-98	-143	22.5	-120.5		
1998-99	-191.29	26.7	-164.59		
1999-00	-257.37	12.6	-244.77		
2000-01	-337.01	161.55	-175.46		
2001-02	-218.43	0	-218.43		
2002-03	-163.27	1.89	-161.38		
2003-04	-80.9	58.7	-22.2		

Source: WTO (Pakistan's Notifications)

Product Specific Aggregate Measurement of Support (AMS)

The product-specific aggregate measures of support (AMS) mainly focuses on the individual commodities in agriculture sector. In the base year 1986-88, Pakistan submitted AMS for 11 crops that received market price support programmes. The total product specific AMS in that period was a negative US \$ -640 million, with positive AMS only for the sugarcane (US\$ 24.2 million). In dollar terms, product specific AMS levels changed from the base period negative US\$ -640 to US\$ -257 in 1999-00. During the initial part of implementation period government changed its policy towards product specific AMS i.e. the measure attained the lowest negative value of 72 in year 1996-97. Through the following years, the total values of product-specific AMS grew more negative and was US\$ -337.01 in year 2000-01. The product specific AMS started getting less negative towards the end of 2003-04 and US\$-80.9 million were notified by Pakistan to WTO in that year (Table 2).

The reason behind this spiral change in the total value is that Pakistan notified the eligible production for most crops to be zero so the AMS was also zero. For example, of the 11 original crops for which AMS was computed for 1986-88, eligible production was assumed zero for eight in 1995/96, ten in 1996/97, 1997/98 and 1998-99. Part of the sharp change in total AMS was also accounted for wheat, where support became less negative.

There was also great variation in AMS provisions for individual crops e.g. for wheat total AMS first changed from negative US\$ -251.8 in base period to negative US\$ -172 in 1995-95, US\$ -72.4 in 1996-97 and US\$ -337.01 in 2000-01. Wheat was the main contributor in this category. Seed cotton had been the second largest contributor to the total value of the measure. As can be observed from Table 2, total support for seed cotton was negative US\$ -187.1 in base period and it assumed zero value during whole of implementation period. Basmati Rice imparts the third largest share to the total product-specific measure of support with a value of negative US\$-117.4 in base period, -20.1 in year 1995-96 and zero in the later years.

Sugarcane is the only crop that was given a positive support during the total period concerned. With a positive support of US\$ 24 in the base year, during the later years, sugarcane like other crops was not given any support. Other crops as onions, gram, soybean, sunflower and safflower were given least importance in terms of product-specific measure of support.

Table 2. Product Specific Aggregate Measurement of Support (AMS) of Pakistan (Million US\$)

Product	1986-88	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Wheat	-251.8	-172.0	-72.4	-143.4	-191.29	-257.37	-377.01	-218.43	-163.27	-80.9
Seed cotton	-187.1	0	0	0	0	0	0	0	0	0
Rice (Basmati)	-117.4	-20.1	0	0	0	0	0	0	0	0
Rice (Coarse)	-48.6	-10.4	0	0	0	0	0	0	0	0
Sugarcane	+24.2	0	0	0	0	0	0	0	0	0
Onions	-0.2	0	0	0	0	-0.1	0	0	0	0
Potatoes	-57.8	0	0	0	0	-0.05	0	0	0	0
Gram	-1.1	0	0	0	0	0	0	0	0	0
Soybean	-0.4	0	0	0	0	0	0	0	0	0
Sunflower	-0.1	0	0	0	0	-0.02	0	0	0	0
Safflower	0	0	0	0	0	0	0	0	0	0
Total	-640	-203	-72	-143	-191.29	-257.37	-337.01	-218.43	-163.27	-80.9

Source: WTO (Pakistan's Notifications)

Non Product Specific AMS

The total subsidy on farm inputs for the base period was notified as having been 3652 million rupees (US\$203 million), 43 percent of which fell within non-product-specific AMS and 57 percent under Special and Deferential Treatment (SDT) (FAO, 2000). The AMS-related expenditures amounted to US\$87 million in 1986-88, however have been much lower in most of the implementation years (Table 3). In the base year,

The level of support is thus minimal, compared to the 10 percent *de minimis* level specified in the AoA.

As regards the Special and Differential Treatments (SDT) subsidies, where the total outlay was 2085 million rupees (US\$116 million) in 1986-88, 67 percent was on fertilizer, 32 percent on credit and 1 percent on tubewell. In Pakistan's notification, tubewell subsidies were justified under the SDT category as being part of a national strategy for agricultural and rural development. The 74 percent of the total subsidy on

Table 3. Non-product-specific AMS of Pakistan (Million US\$)

Type of measure	1986-88	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Fertilizer subsidy	27.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Electricity subsidy	58.1	10.4	15.5	22.5	26.7	12.6	161.55	0.0	1.89	58.7
Credit subsidy	1.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Total	87.1	10.8	15.5	22.5	26.7	12.6	161.55	0.0	1.89	58.7
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Source: WTO (Pakistan's Notifications)

about two thirds of total support was originally because of electricity subsidies, followed by subsidies on fertilizers (32 percent) and very little on credit. During the year 1999-2000, non-product specific support was provided only to electricity, which was 14 percent of the base period value. The total non-product specific AMS, which amounted to less than 1 percent of the value of agricultural production in 1986-88, has since fallen even further, to around or below 0.1 percent in the year 1999-2000. The government of Pakistan allocated the largest amount of \$161.55 million to non-product specific measure of support in year 2000-01. However the measure was almost zero during next two years.

fertilizers that was reported under the SDT category benefited poor farmers, with land holdings of less than five hectares. Credit subsidies were estimated separately for interest-free loans and subsidized credits. The former was shown under the SDT category and the latter under the AMS, again using the five-hectare criterion. In the 1995/96 notification, the total SDT outlay was reported as only one million rupees (US\$55,500), a drastic cut from the base period, and exclusively on fertilizers. No SDT outlays were reported in the subsequent two years, essentially indicating that all forms of SDT subsidies had been eliminated (FAO, 2000).

Green Box Outlays

Pakistan has been regularly sending notifications to WTO regarding its expenditures on domestic support. Pakistan has been giving domestic support under Green Box in the following categories: General services on research, storage facilities, marketing services. extension services, general infrastructural services, flood protection services, water supply facilities. The total Green Box outlay of Pakistan in the base period (1986-88) was US\$ 228.5 million. During the implementation period i.e. in 1995-96, it hiked to a maximum of US\$439.9 million. Afterwards, government gradually reduced expenditure on Green Box and it came down from US\$392.7 million in 1996-97 to US\$156.6 million in 2001-02. However, the notifications of the government to WTO revealed that it started increasing Green Box expenditure and US\$ 177.72 and 269.9 were spent on Green Box related items in 2002-03 and 2003-04 respectively (Table 4).

year, marketing services received 0.1 million dollars and in the year 1999-00 and 2002-03, nothing was allocated to the marketing services. Under the category of extension services, the government spent \$ 22.1 million in the year 1986-88. Up to 1999-00, expenditure on extension services decreased. However, from 2000-01, expenditure on extension services was on rise and it went up from \$ 4.58 million to \$ 29.3 million in the year 2003-04.

Infrastructural services were given prime importance in terms of budget allocation in the base period and throughout the implementation period. In the base year, US\$ 147.5 million were spent on the provision of infrastructural services. The highest share of the infrastructural services in the total AMS was in 2002-03. The flood protection service received \$ 34.6 million in the year 1995-96 and subsequently, the expenditure on these services decreased and in the year 2003-04, no amount was allocated for flood protection services.

Table 4. Green Box outlays of Pakistan (US\$ million)

Type of Measure	1986-88	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	Total
General services on research	14.5	12.8	7.7	7.6	2.44	3.18	1.67	2.14	6.03	17.2	75.26
Storage facilities	4.8	0.8	0.3	0.2	0	0.08	0.19	0.04	0	0	6.41
Marketing services	0.1	0.1	0.1	0	0.11	0	0.02	2.32	0	0.4	3.15
Extension services	22.1	2.4	2.2	1.6	2.44	1.86	4.58	8.87	5.85	29.3	81.2
General services	0.3	0.5	0	0	0.7	0.01	0.06	0.3	0.2	15.5	17.57
Infrastructural services	147.5	335	312.6	266.1	235.76	213.07	203.59	140.94	164.91	190.2	2209.67
Flood protection services	7.9	34.6	15.9	22.8	7.94	7.18	7.38	1.17	0	0	104.87
Water supply services	31.3	53.7	53.9	14.1	14.43	13.04	7.71	0.82	0.73	17.3	207.03
Year Total	228.5	439.9	392.7	312.4	263.82	238.42	225.2	156.6	177.72	269.9	2705.16

Source: WTO (Pakistan's Notifications)

General services on research's share in the total Green Box expenditure have not been considerable. In the base year, it was \$ 14.5 million. Afterwards, from 1995-96 to 2000-02, it gradually decreased from \$12.8 million to \$ 1.67 million. Nonetheless, in the year 2003-04, this sector received the greatest allocation of \$17.2 million. Expenditure incurred on storage services was the highest in the base year and later on little amount was allocated for the provision of storage services in the country. In the last years, nothing was spent on the storage services in the country. The data in table 4 reveals that very little amount of money was allocated for the provision of marketing services. In the base

The expenditure on water supply services ranked second with highest share in 1996-97 i.e. US\$53.9 million. However, subsequently expenditure on this service continuously decline and in 2003-04, an amount of US \$17.3 million was incurred on this category.

CONCLUSION AND RECOMMENDATIONS

Agriculture plays an important role in Pakistan's economy, accounting for about 22 percent of GDP and employing 44.8 percent of the country's workforce. Agricultural output has increased at an average annual rate of over 4 percent in the past two decades,

contributing significantly to overall economic growth, food supplies and nutrition and exports. Agricultural exports have contributed significantly to overall export growth (Govt. of Pakistan, 2005-06).

Despite the rising trend of agricultural output, the country faces a number of challenges in respect of the sector. One is to reduce food imports, which have been growing steadily, especially in recent years. With limited scope for expansion of cropped land, higher crop output will have to come essentially from higher yields, which requires investments in agricultural research and irrigation. Contrary to the requirement, investment in agriculture in Pakistan is far below than the desired level and international standards. Continued high incidence of poverty is also a major challenge. Broad-based agricultural growth provides the best chance for reducing poverty in general and rural poverty in particular.

Pakistan has a strong comparative advantage in the production and exports of a number of agricultural products, including cotton and rice. The country's climate and location give it an advantage in accessing a number of markets and it is generally considered that, given an enabling environment, agricultural exports could grow substantially. All this necessitates that owing to its importance in the economy of Pakistan, agriculture sector be prioritized in the allocation of resources and all types of permissible domestics support should be extended to this sector.

The findings of the study reveal that that Pakistan is far behind in allocating resources for the agricultural sector. Pakistan can increase support to agriculture in all forms as on domestic support, there is very little by way of constraint on policy. Pakistan's product-specific AMS was negative and non-product-specific AMS was less than 1 percent of the value of agricultural production. It means Pakistan has a big cushion to provide domestic support first to reach a positive sign and then it can further utilize the de minimus provisions laid down in the agreement. The Agreement on Agriculture (AoA) sets no ceiling on Green Box and so there are expenditures, no consequences for policy. Rather, the main problem seems to be very low levels of support to agriculture, given the important role of the sector in the economy. Pakistan's federal and provincial agricultural ministries should review the existing support provided under the Green Box policies and their impact on the output of Pakistan's agriculture sector. Although Amber Box type of domestic support bars provision of certain types of support but Green Box type domestic support has no limits. Therefore, the government should explore the possibilities to provide domestic support under Green Box. This will enable the needy sector to get due share. Even the developed world is also transforming its domestic support structure by curtailing its Amber Box type support and enhancing support falling under the category of Green Box. Pakistan should also vigorously pursue this Green Box type of support as if this will not be provided then Pakistan cannot compete in international agriculture business.

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