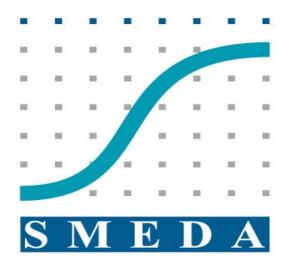
WTO AND AGRICULTURE

IMPLICATIONS FOR PAKISTAN



SMEDA PARTICIPATION

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1. Introduction

The purpose of this report is to analyze the impact of implementation of World Trade Organization's (WTO) Agreement on Agricultural (AoA) on Pakistan. At first, a basic understanding of WTO is established by giving its background, basic principals and likely impacts. The extent to which the agreement on agriculture has been implemented is also discussed along with the criticism of various country/region policies. The focus of the study revolves around agriculture sector and to evaluate the effect of WTO on Pakistan's agricultural sector. We have selected three major crops i.e. wheat, cotton and rice to be a part of the study as these crops constitute our major agricultural produce.

This study by no means is an exhaustive research on WTO and its impact on Pakistan's agricultural sector. It is based on a basic analysis of historic trade trends and policy matters. An effort has been made to evaluate the possible impacts of WTO on Pakistan's agricultural sector through a simple research exercise.

2. Overview

The period of 1860 to 1914 is considered as the golden period of international economic integration as there was liberalized international trade. At that time, there was neither any kind of trade barriers nor any kind of government intervention and the world followed a gold standard.

During the First World War, the system was suspended. The countries tried to return to that system during the inter-war period but the situation had changed. The gold reserves of various countries had changed significantly and hence the gold reserves of the adversely affected countries as compared to the beneficiaries were in great imbalance. At that time, every country tried to restrict imports and devalued its currency to give a boost to her exports. Successive devaluation lead to a non-existent exchange rate system. The world decided to have a system to regulate and monitor international trade and thus IMF and World Bank were established. This was followed by establishment of GATT (General Agreement on Tariffs and Trade) in 1947-48. The purpose of establishing GATT was to have a general agreement among countries regarding liberalized global trade. Negotiations started to take place among countries and there were a total of eight rounds to arrive at some kind of agreement regulating global trade (see the schedule below). New laws were passed and new countries joined in each round. A total of 134 countries attended the eighth round, which took place at Uruguay (1986-1994). In this round, a deadline i.e. December 15, 1993 was set for a comprehensive international trade agreement. After finalizing all the details, the agreement was signed in April 1994.

Since the purpose of GATT was to arrive at an agreement, hence it was ceased to exist on 31st December 1994. From January 1st, 1995, World Trade Organization (WTO) came into existence. The purpose of WTO is to implement the agreement reached and to settle trade disputes among countries. The agreement has given all the countries an adjustment/transition period that depends on the state of every country (defined as developed, developing or least developed country). The details are given in schedule 1 discussed later.

A schedule for the eight rounds of GATT is given below:

Year	Place/Name	Subjects covered	Countries
1947	Geneva	Tariffs	23
1949	Annecy	Tariffs	13
1951	Torquay	Tariffs	38
1956	Geneva	Tariffs	26
1960-61	Geneva (Dilon round)	Tariffs	26
1964-67	Geneva (Kennedy round)	Tariffs and anti-dumping measures	62
1973-79 Geneva (Tokyo round)		Tariffs, non-tariff measures,	102
		"framework" agreement	
1986-94	Geneva (Uruguay round)	Tariffs, non-tariff measures, rules,	134
		services, intellectual property,	
		dispute settlement, textiles,	
		agriculture, creation of WTO etc.	

2.1. Increased bindings after the Uruguay round

All the countries increased the number of imports whose tariff rates were bound^{*}. The percentage of product lines having bound tariff rates when compared before and after the 1986-94 talks, was significantly higher in the latter scenario. This is shown in the following table.

	Before	After
Developed countries	78%	99%
Developing countries	21%	73%
Transition economies	73%	98%

The percentages are not weighted according to the trade volume or value. The developed countries and the transition economies bound the tariff rates for almost all the product lines. The developing countries also showed a remarkable increase from 21% to 73%.

2.2. From GATT to WTO

In the eighties it was felt that GATT needs to be overhauled and this was achieved though WTO. WTO is the biggest reform in international trade since World War II, the time when GATT was signed. WTO is a much bigger achievement as compared to GATT. The scope of GATT was limited to goods only. WTO took account of trade in services and Intellectual Property Rights (IPR) along with goods. GATT was a provisional agreement while WTO is permanent. This agreement is to be implemented gradually stage by stage such that each and every provision of this agreement is implemented in each member country till January 1, 2005.

2.3. Basic Principals

2.3.1. Trade without discrimination (Most Favored Nation –MFN-)

No country should discriminate against another country. This principal does not literally mean most favored nation. It simply means that each country will give the same treatment to all its trading partners whether they are exporting to or importing from the trading partner. For example, if the duty is lowered for one country, the "same treatment" should also be given to all other countries as well. Currently, India and Pakistan have not given each other the MFN status. By the time the agreement is fully implemented, each signatory country will have to give this status to every other WTO member country. However, one thing is to be noted here that those countries that have signed agreements (bilaterally or in small groups) to give each other preferential treatment in trade are exempted temporarily from this provision. We have examples of NAFTA (North American Free Trade Agreement), EU (European Union), OECD (Organization of Economic Cooperation and Development), ASEAN (Association of Southeast Asian Nations) etc. Each member of such an organization is given "preferential treatment" by the other members of the organization. By the time this agreement is fully in place, such organizations will have to adjust themselves.

^{*} Bound tariff rate is the rate beyond which a country cannot raise its tariff. So this is the maximum ceiling.

2.3.2. Predictable and growing access to market

Growing access to market means that each country has to open up its market to goods and services from other countries. Bringing down the tariffs gradually and eliminating the non-tariff barriers (NTBs) will carry this out. Predictable access means that the timing and rate of tariff changes is known in advance to the concerned countries so that they can manage their businesses accordingly. Any country can not change its policy arbitrarily. Rules, regulations, tariffs, duties etc. should be changed by notifying others.

A timetable is given to each country quantifying this tariff reduction over time. The export subsidies and protection is also to be cut over the same time period. For this purpose, all the member countries are divided in two broad categories that are developed and developing countries. For industrial goods, the targets are the same for both the country groups. However, these are different in case of agriculture. These targets are given in Schedule 1 discussed later.

2.3.3. Promoting fair competition

Fair competition means that every country is given a fair chance to sell its products. This idea calls for open markets such that there is no direct or indirect hindrance to make it difficult for a country to sell its products. It not only involves reduction of tariff and non-tariff barriers but also elimination of bans and quotas. WTO calls for "gradual liberalization". It does not necessarily means "free trade" rather allows for tariffs and other protection measures in limited quantities under some special circumstances. WTO requires the conversion of non-tariff measures into tariffs and then reduction of these tariffs are generally more transparent and easy to negotiate as compared to non-tariff barriers. At the same time, it is easier to quantify the affect of tariff barriers than non-tariff barriers. The MFN status discussed earlier is also meant for promoting fair trade.

2.3.4. Encouraging development and economic reforms

WTO is widely recognized as an institution that promotes economic development by liberalizing international trade. Since the establishment of GATT, the international trade has been enjoying growth. WTO calls for more international trade resulting in more output, more productivity and lower global prices. Moreover, WTO also shows leniency towards developing and transition economies. They are given more time to liberalize trade as compared to the developed countries. WTO requires deregulation of economic controls to stimulate economic development. It also requires the better-off countries to accelerate implementing market access commitments on goods exported by the least developed countries. WTO also provides technical assistance to developing countries. Help is also being provided in dealing with animal and plant health standards and technical standards.

2.3.5. Dispute settlement

All the agreements i.e. regarding goods, services, TRIPS are under a single dispute settlement procedure. This system allows all the countries to pursue their rights. The WTO Understanding of Rules and Procedures Governing the Settlement of Disputes (DSU) carries it out. Whenever there is a dispute, the countries are given some time to make a decision and settle the dispute themselves through either of mediation, arbitration, conciliation or a combination of them. If the dispute is not settled, the countries then request the formation of a panel to settle the dispute. DSU sets out specific rules and deadlines for establishment of terms of reference and panels. If the concerned countries do not agree on the panel within 20 days, the Director General of DSU decides on it. The panel normally completes its work within six months (in case of urgency it is reduced to three months) and submits the report to Dispute Settlement Board (DSB). The decision is implemented only if DSB approves it.

2.3.6. Legal provisions

There are a number of legal provisions governing the working of WTO. In all, it is comprised of 60 separate agreements, annexes, decisions and understandings covering almost all subjects of international trade. Some important agreements are discussed below.

2.3.6.1. General Agreement on Trade and Services (GATS)

The rules governing trade in commodities should also be applicable to trade in services. The service sector includes banking, insurance, technical cooperation, education, contracting, consultancy etc. This means that the foreign entities providing these services will be given the same rights and privileges as the local entities.

2.3.6.2. Trade Related Investment Measures (TRIMS)

This provision calls for no discrimination between local and foreign investors. It says that foreign investment should be regarded as a trade. It requires that there will be no tax differentials for foreign investors or no export subsidies for local investors.

2.3.6.3. Trade Related Intellectual Property Rights. (TRIPS)

This provision relates to protection of intellectual property rights (IPR). It includes copyright laws on computer software's, books, music videos, pharmaceutical products, audiotapes and hence antipiracy laws. There are penalties against those countries that will make use of piracy.

2.3.6.4. Anti-dumping laws

The agreement clearly defines dumping and allows the affected country to impose countervailing duties on the products of that country which practiced it.

3. Basic structure of the WTO Agreements

The basic structure of the WTO agreements is summarized in the following table:

	Goods	Services	Intellectual Property	Disputes
Basic principals	GATT	GATS	TRIPS	Dispute settlement
Additional Details	Other goods Agreements And annexes	Services annexes		
Market access commitments	Country's schedule of commitments	Country's schedule of commitments (and MFN exemptions)		

Multi fiber agreement (MFA) and WTO

3.1. In the early seven Scope

The new rules and commitments under AoA call for

- Better market access by removing trade distortions that restrict imports
- Eliminating domestic support that is in form of either subsidies or guaranteed price/income for the farmer.
- Elimination of export-subsidies that are there to make exports artificially competitive.
- Elimination of quotas, restrictions and any other form of non-tariff measures. The new rule is to replace these things by tariffs and the process is called "tariffication". These tariffs are then to be reduced over the implementation period.

Tariffs on all agricultural products are now bound (subject to a maximum ceiling). Previously, more than 30% of the worldwide agricultural produce has faced import quotas or other import restrictions. After signing of WTO, these are first converted to tariffs, (these tariffs when quantified equaled the same level of support as was given previously by NTBs); and then they are to be eliminated gradually over a specified period of time (see schedule I).

ties, there was an agreement between importers and exporters of textiles namely multi fiber agreement (MFA). This agreement also included leather products. The purpose of this agreement was to reduce imports and at the same time reduce competition among exporters by fixing a quota for each exporter for it's each textile product and thus save the domestic industries of the importing countries. There is an annual increase in each exporting country's quota according to an agreed upon formula. The basic flaw of this

agreement was that it restricted the growth of that country whose textile industry is growing and at the same time gives unfair advantage to those who cannot sell in absence of MFA. According to the provisions of WTO, the MFA will cease to exist in 2004; this is being done gradually by converting a part of quota into open sales each year.

Tariff Rate Quotas (TRQ's)

One way of removing non-tariff barriers is the use of Tariff Rate Quotas (TRQ's) that are created under WTO. The developed countries are required to provide a minimum level of import opportunities for products previously protected by non-tariff barriers. Using Tariff Rate Quotas (TRQ's) does this. It is a two-leveled tariff rate where the tariff charged depends on the volume of imports. A lower tariff is charged on imports within the quota volume. This is called in-quota tariff. A higher tariff is charged on imports exceeding the quota volume and such a tariff is called over-quota tariff. It implies that the over-quota tariff is higher than the in-quota tariff.

4. Unresolved issues

Certain issues regarding international trade were not decided in URAA. Such unresolved issues and emerging issues need to be taken up now. Prominent among them are the following:

- State trading enterprises (STEs)
- Sanitary or phytosanitary measures (SPS agreement)
- Biotechnology

4.1. State trading enterprise

Countries operate STEs particularly to make purchase and sales of agricultural produce. They are also actively involved in import and exports. STEs and similar organizations have significant government influence in agricultural trade. The URAA requires the countries to notify the WTO that they operate the STEs on commercial grounds and in a nondiscriminatory manner. However, the fact is that the operations and pricing policies of such organizations are not transparent and some WTO members are believed to use STEs to circumvent URAA commitments. This will enable the countries in future as well to give support to their agricultural sector and keep it artificially competitive in the global market. A set of rules needs to be established to make sure that STEs are not used to circumvent URAA commitments.

4.2. Agreement on Sanitary and Phytosanitary (SPS) Measures

This agreement gives the WTO member countries the right to adopt any measure necessary for the protection of plant, animal and human health. However, this is subject

to the condition that such measures are based on scientific principles and provide help only to the extent necessary to protect plant, animal or human life or health. This agreement is not comprehensive and does not addresses the issue that how countries should establish the "appropriate level" of sanitary and phytosanitary protection. It does not provide enough guidance to ensure that the appropriate level of protection is consistent across countries and commodities such that the support provided does not creates an artificial barrier to trade. Complex forms of food are entering world market and thus SPS agreement rules need to be clarified in such a way that no country can use this agreement to impose trade restrictions.

4.3. Biotechnology

Biotechnological processes are used to genetically manipulate crops. The crops thus produced are referred to as "genetically modified organisms" or GMOs. Currently, varieties of corn and soybean are being produced that have traits of high insect resistance and better herbicide tolerance. The future calls for further trait enhancement and including more crops such that both the producers and the consumers are benefited. There are no international rules and regulations governing the trade of GMOs. Each country has its own policies and these different sets of policies pose serious hindrances in the trade of GMOs.

5. Expected monetary gains of WTO

It is not possible to arrive at exact figures of possible gains of WTO. However, according a group of economic experts, the gains will add up to \$210 billion. The division of this gain according to their estimates will be as follows:

OECD countries —	\$ 138 billion
Seven Russian states + East Europe -	\$ 29 billion
Ninety-six Developing countries	\$ 43 billion
Total	\$210 billion

Even within the 96 developing countries, the share of economic gains is highly distorted. This division is as following:

Four old tigers	→	\$ 20 billion
Four new tigers	→	\$ 10 billion
Eighty-eight other countries —	→	\$ 13 billion

In plain words, these figures suggest that the gains be distributed among the countries according to the stage of their development, i.e. the more developed a country is, the more it will gain from implementation of WTO. This makes WTO controversial. So far the facts are supporting these figures and the major gains of WTO are confined only to rich countries. This agreement is designed in such a way that it supports those countries that are highly efficient and have very advanced technology.

6. Agriculture

The original GATT also included the agricultural sector but the problem was it had provisions that allowed quotas and export subsidies. This led to a highly distorted international agricultural market. Even now, the situation is that even big players like EU and USA are heavily subsidizing their agricultural sector. The agricultural agreement signed under WTO is called "Agreement on Agriculture" (AoA) or Uruguay Round Agreement on Agriculture (URAA). This agreement will be implemented in a time span of 10 years for developing countries and in 6 years for developed countries. This is stated in schedule 1 given on the next page.

6.1. Objective of Agreement on Agriculture

The main objective of this agreement is to make this sector more open to trade and market oriented such that it brings security and predictability to both importing and exporting countries. However, under some special circumstances, the countries are allowed to give support to their farmers. The purpose is not to give any unfair advantage but provide help in bad times and take care of non-trade concerns of individual countries. These special circumstances are given in schedule 2.

6.2. Scope

The new rules and commitments under AoA call for

- Better market access by removing trade distortions that restrict imports
- Eliminating domestic support that is in form of either subsidies or guaranteed price/income for the farmer.
- Elimination of export-subsidies that are there to make exports artificially competitive.
- Elimination of quotas, restrictions and any other form of non-tariff measures. The new rule is to replace these things by tariffs and the process is called "tariffication". These tariffs are then to be reduced over the implementation period.

Tariffs on all agricultural products are now bound (subject to a maximum ceiling). Previously, more than 30% of the worldwide agricultural produce has faced import quotas or other import restrictions. After signing of WTO, these are first converted to tariffs, (these tariffs when quantified equaled the same level of support as was given previously by NTBs); and then they are to be eliminated gradually over a specified period of time (see schedule I).

7. Special support to the sector

Under specific circumstances, a special support can be given. Before discussing these circumstances, an understanding of Aggregate Measure of Support is necessary.

7.1. Aggregate measure of support (AMS)

As defined in AoA, AMS is an index that measures the monetary value of the extent of government support to a sector. It includes budgetary outlays (direct payments to producers such as deficiency payments*), input subsidies, revenue transfer from consumer to producer as a result of market distorting policies (market price supports) and interest subsidies on commodity loan programs. It does not include estimated benefits from non-commodity specific policies (such as research and development). The WTO-defined measures of deficiency payments and market price supports are also excluded. Moreover, the final AMS for the WTO implementation period is adjusted to exclude deficiency payments under WTO special provisions, even though they are included in the WTO base period.

7.1.1. Numerical targets for cutting export subsidies

The timing and size of the elimination of support is given in the following schedule:

Schedule 1

Developed Countries Developing Countries 6 Years (1995-2000) Implementation period 10 Years (1995-2004) Tariffs** Average cut for all agricultural -36% -24% products Minimum cut per product -15% -10% (base period: 1986-88) **Domestic support Total AMS cuts for sector** -20% -13% (base period: 1986-88) **Exports** -36% -24% Value of subsidies **Subsidized quantities** -21% (base period: 1986-90)

Least developed countries agreed not to increase domestic support policies from the base period. However, they were subject to a minimum reduction of 10% per annum. There is no deadline year for them.

^{**}Includes non-tariff barriers converted to tariff.

^{*}A direct government payment made to farmers based on the difference between the target price and the market price.

The developed countries are required to implement their support reduction commitments in a time span of six years. The average tariff cut for all agricultural products has to be 36% with a minimum reduction of 15% in each product. AMS for agricultural sector will be cut by 20% per year. The value of export subsidies is to be reduced by 36% per annum and also calls for 21% annual reduction in subsidized export quantities.

On the other hand, the developing countries are given a time period of ten years to implement their support reduction commitments. Their commitment levels are two-third of the commitment levels of the developed countries. So the average tariff cut for all agricultural products has to be 24% with a minimum reduction of 10% in each product. AMS for agricultural sector will be cut by 13% per year. The value of export subsidies is to be reduced by 21% per annum and requires 14% annual reduction in subsidized export quantities.

The product specific country commitments for, Australia, Canada, China, EU, Japan and US are given in annex 6.

Membership in the WTO requires that all member countries will provide information regarding their compliance with the commitments on a periodic basis. This process is called "notification". The purpose is to keep an eye that the governments are working according to their commitment levels.

Schedule 2

Domestic policy categories regarding AMS in the Uruguay round trade agreement on agriculture *

(A traffic light analogy is used to categorize types of policies).

<u>Red light policies</u> (Elimination)

This category involves all those policies that are subject to elimination or must be stopped without any flexibility.

Amber box policies (\$115 billion) (Subject to reductions).

These include the domestic policies presumed to have the largest effects on production and trade. The base period (1986-88 for most countries) was bound (part of a country's committed schedule) for all countries. That is this level was established as an initial absolute upper limit for support. Twenty-eight countries, including most of the major agricultural producers and/or traders also agreed to phase down the level of support provided through these amber policies (as measured by the AMS) over a specified period of time. Developed countries agreed to reduction of 20% in amber policies over a period of 6 years, relative the base level of support. On the other hand, the developing countries agreed to a reduction of 13% over a period of 10 years. The least developed countries agreed not to increase the level of support beyond the base period level.

Green box policies

(\$127 billion) (Exempted)

These policies are considered to have the smallest potential effects on production and trade. These policies are exempt from support reduction commitments. These include support such as research, extension, food security stocks, disaster payments and structural adjustment programs.

Blue box policies (\$ 35 billion) (Temporary exemptions)

A blue box relates to temporary exemption category where amber box payments related to production limiting programs are placed. These policies are seen as an acceptable but temporary or transition category that helps pave the way for further reforms in the future. Those production limiting payments are eligible that are based on fixed area and yields, a fixed number of head of livestock, or if they are made on 85 % or less of base level production). Also those deficiency payments that are made on no more than 85% of established base acreage.

<u>Special and Differ-</u> <u>-ential exemptions</u> (\$4 billion)

Certain domestic investment and input subsidies of developing and least developed countries are exempt from support reduction commitments. They are also given unilateral preferential access to developed countries market.

De minimis exemptions(\$5 billion)

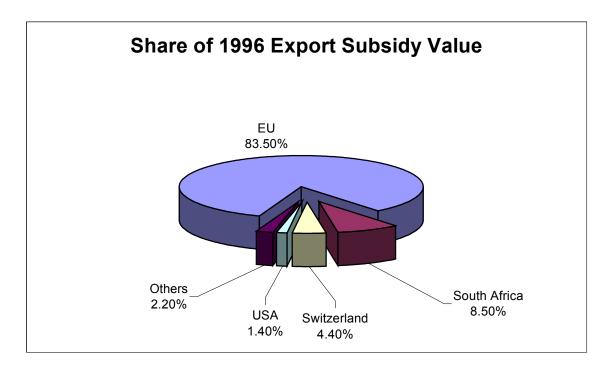
"De minimis" refers to another excludable support. The idea is that expenditures below a "certain limit" are negligible and need not to be included in the calculation of AMS. This "certain limit" is defined as 5% of the value of production for developed countries and 10% for the developing countries.

Total support

(\$ 286 billion) Total support of all the categories discussed above. Support data shown are for 1995, as reported to the WTO by individual countries.

7.2. Country commitments and Aggregate Measure of Support

Twenty-five members of the WTO are committed to reduce their export subsidies, as measured by AMS. The developed countries are required to reduce budgetary expenditure on export subsidies by at least 36% (24% for developing countries) and volume of subsidized exports by at least 21% (14% for developing countries) per annum as given in schedule 1. These reductions are to be made from the levels of support of 1986-88 that has been used as the base period. The chief users of export subsidies in 1995 and 1996 was the EU, followed by South Africa, Switzerland, USA and Japan. This is obvious from the following figure.



Most countries have been able to reduce their amber support levels much more than actually required by WTO commitments. The reason is that it is very easy to abide by these commitments. The following schedule gives the data pertaining to the support levels being used by the countries as a percentage of the allowed limits.

AMS used as a percent of commitment levels, 199					
% range	Countries				
0 - 19	Canada, Columbia, Czech Rep, Hungary, Mexico, Morocco, New Zealand, Poland				
20 - 39	Australia, United States,				
40 - 59	Slovak Republic, Venezuela				
60 - 79	Cyprus, EU, Iceland, Japan, Norway, S. Africa, Thailand				
80 - 100	Brazil, Korea, Solvenia, Switzerland, Tunisia				

The table clearly suggests that most of the countries have been well below their allowed limits. For example, the AMS ceiling for US is \$19.1 billion for the year 2000 and it is expected that their actual AMS for the year will be \$1.2 billion. The use of this limit is quantified in the following table. The data refers to the year 1995. The distribution according to the policies is also given.

Policy-specific support notified in 1995						
Country						
	Support	Policies	Policies	Policies	Exclusion	Exclusion
	\$ million		Pe	ercentage	s	
Australia	822	86	14	0	0	0
Brazil	5,531	88	0	0	6	5
Canada	3,031	51	19	0	0	30
Columbia	506	63	11	0	26	0
Cyprus	214	61	38	0	2	0
Czech Rep	176	75	25	0	0	0
EU	113,239	21	54	24	0	1
Hungary	271	39	0	0	0	61
Iceland	240	12	78	9	0	0
Japan	69,607	47	52	0	0	1
Korea	8,257	63	33	0	0	4
Mexico	4,021	60	17	0	24	0
Morocco	316	50	4	0	47	0
New Zealand	128	100	0	0	0	0
Norway	3,316	20	47	34	0	0
Poland	691	63	37	0	0	0
Slovak Rep	242		99	1	0	0
Slovenia	176	48	52	0	0	0
South Africa	1,380	55	33	0	0	12
Switzerland	5,924	39	61	0	0	0
Thailand	2,202	62	29	0	10	0
Tunisia	122	24	51	0	25	0
USA	60,926	76	10	12	0	3
Venezuela	1,259	43	43	0	14	0
Others	3,127	89	0	0	10	1
Total (\$ mln)	285,724	126,878	115,453	35,028	3,348	5,018

^{*}Special and differential exclusion

Thus, out of the 24 countries; EU, USA and Japan are by far the largest providers of amber support accounting for 90% of the total AMS. Korea and Switzerland follow this. The data also suggests that the advanced countries are heavily subsidizing their agriculture sector.

The countries are able to follow their commitments due to number of reasons. These are discussed as follows.

- The base year used had abnormally high levels of support that has made the committed levels very easy to achieve.
- Countries like EU and US have made use of green box policies (defined in schedule 2) to provide support to their farmers. As a result, the total green box support (\$127 million) was greater than total amber box support (\$115 million) in the year 1995.
- Blue box policies have created room for giving support without being included in AMS. This has enabled the countries to give support to farmers without affecting their commitment levels. The total AMS for all the countries is 57% of the base level. But if blue box policies are also included, this level becomes 73% of the base period.
- Another factor responsible for abiding by AMS commitment is de minimus rule that exempts all the payments that are less than 5% of the value of production thus understating AMS.

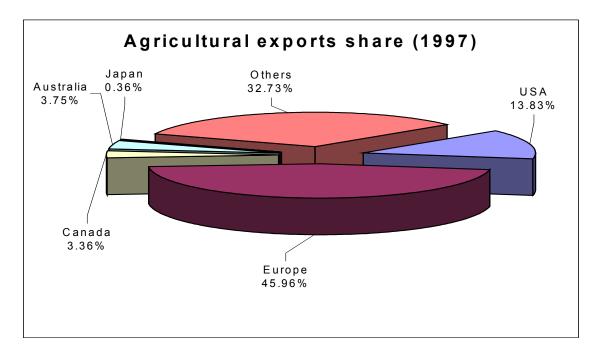
7.3. Implementation of tariff reductions

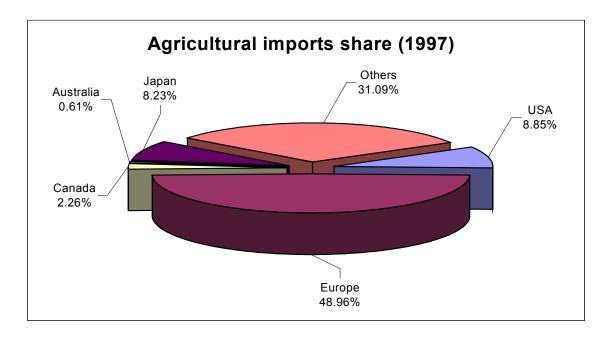
Comparing tariff reduction schedules across countries is very difficult because of the following two reasons.

- 1. Under the URAA, the counties are required to cut their tariffs in such a way that the average cut equals the commitment level. As a result, the countries have a lot of flexibility in deciding on how much to cut in each product (subject to the condition of a minimum % reduction in each product).
- 2. Countries levy tariffs in a number of ways. The broad categories are
 - Ad valorem tariffs based on the percentage of value of imports.
 - Specific tariffs as a monetary amount per unit of import. It does not fluctuate (in terms of percentage) with the price of the product.
 - Compound tariffs as a combination of the two. One component of the tariff is fixed on quantity and the other component varies with the price just as the ad valorem tariff.

The ad valorem tariff is very transparent as it is based on the value. It varies directly with the fluctuations in the prices. On the contrary, this is not the case with specific tariffs. The protection level in case of a non-ad valorem tariff varies inversely with the import price and hence provides even higher protection to the importing countries in case of low world prices. In order to compare these different types; a concept called ad valorem equivalent (AVE) is used. This is calculated by dividing the non-ad valorem tariff by an import price or import unit value. Upon calculations, one finds out that the non-ad valorem tariffs provide a higher level of protection as compared to their ad valorem counterpart.

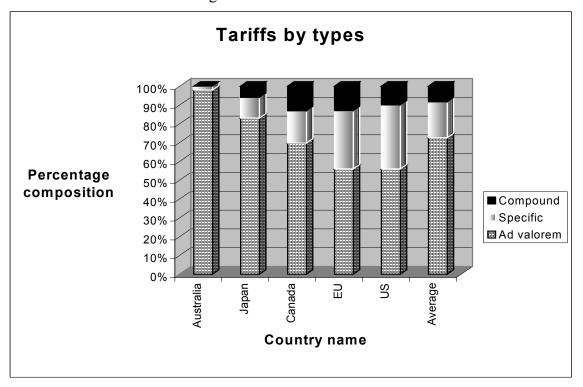
Our scope of study is limited to USA, Canada, European Union, Australia and Japan reason being that these are the major players in the world agricultural trade. This is clear from the following pie charts (also see annex 1).





The figures clearly suggest that Europe is the biggest importer and as well as exporter of the agricultural products by controlling almost half of the world agricultural trade. USA stands at the second position both as an importer and an exporter. Australia and Canada are also important players in the exporters market while Japan is a major importer of the agricultural produce.

Moreover, ad valorem tariff is the most prevalent in the agricultural trade in these countries. This is shown in the figure below:



It is clear from the bar chart that EU and US are making maximum use of non-ad valorem tariffs. Canada and then Japan follow this. Its use is almost negligible in case of Australia. Moreover, among the countries discussed, tariff protection is at its highest in EU. This is followed by US, Japan, Australia and then comes Canada. Duty-free MFN tariff lines measure this. The conversion of non-tariff barriers into tariff barriers created very high agricultural tariff rates. The provision of cutting the tariff by a minimum of 15% has allowed these countries to protect their import-sensitive commodities from international competition by reducing the tariff by a minimum of 15%.

The tariff reduction schedule is given below:

Average tariff* reductions reflect size of cuts and level of tariffs								
	% av	% average cut in: % of tariffs reduced by:						
	Ad valorem	Other	All tariffs	15%	15%-36%	>36%		
Australia	44	81	48	2	23	75		
Canada	43	34	38	26	50	23		
EU 42 32 37 0 82					18			
Japan 39 27 37 31 15 5						54		
US	38	37	37	29	36	35		

^{*}Bound MFN tariffs are discussed here.

Canada, US and Japan, each has utilized the provision of 15% minimum cut by cutting almost 30% of their tariff lines by this minimum percentage. In comparison, Australia has cut 98% of its tariffs by more than the minimum while EU has cut all its tariffs by at least 20%.

As far as the TRQ's are concerned, firstly, the over-quota tariffs were comparatively high and secondly smallest cuts were made in them. TRQ's are being used by Japan for grain and dairy products; by US for sugar, peanuts and dairy products and by Canada for poultry and dairy products.

The largest average tariff reduction has been by Australia at 48 percent. Canada follows this at 38 percent and then EU Japan and US each at 37 percent.

The product specific country commitments for, Australia, Canada, China, EU, Japan and US are given in annex 6.

7.4. Tariff reductions in different tariff rate categories

In order to discuss tariff reduction by tariff levels, the tariffs are divided into four broad categories. These are 0-5%, 5-15%, 15-25% and over 25%.

The first category that is less-than-five-percent is often called as "nuisance" tariffs. The reason being that the size of the tariff is so small that it can not distort trade. All countries have cut tariffs in these categories by greatest amounts with EU having the highest value of an average reduction of 76 percent in this category. Such reductions are not going to help increase trade appreciably.

The tariff rates between 5 and 15 percent account for between one-quarter to one-third of ad valorem tariffs in the countries under discussion. The cuts in this category and the 15 to 25 percent category have been fairly high ranging from 30 to 48 percent. The reduction in these tariffs has significant affect on trade. The trade expansion following URAA will be brought about by reduction in such tariffs.

The tariffs above 25 percent provide a sound protection to a country's products. These are sometimes so high that they preclude trade. Due to this hindrance, TRQ's were created. Most of the tariffs that were reduced by the minimum percentage (15) are found in this category. However, this category includes a small number of critical tariffs and even among those is a majority of TRQ's. A subset of this category is mega-tariffs that are usually defined as tariffs greater than 100 percent. They are often called redundant tariffs as even a significant reduction in such tariffs do not results in improved market access for competitors. In order to provide enough protection, countries do not use this category rather they host to non-ad valorem tariffs, as they are more protective in nature and less transparent.

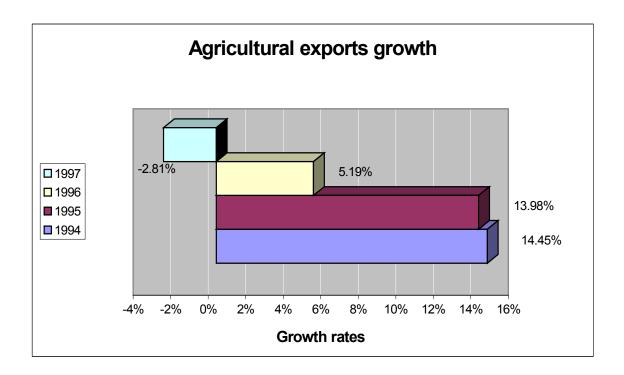
The recent discussion is supported by the data given below:

Category-wise tariff cuts under URAA					
			Original	tariff level	
		0-5%	5-15%	15-25%	>25%
			Percen	tages	
Australia	Share of total	73	24	3	1
	Average reduction	49	35	48	49
Canada	Share of total	65	32	1	2
	Average reduction	61	36	24	22
EU	Share of total	46	35	15	4
	Average reduction	76	38	30	28
Japan	Share of total	44	31	17	7
	Average reduction	49	44	34	34
US	Share of total	68	25	4	2
	Average reduction	47	37	32	23

The table clearly suggests that the major reductions have been in "nuisance tariffs" that were already not a hindrance in trade. The critical category is of 5 to 25 %. The reduction in these tariffs is believed to promote trade. The more than 25% category also has major reductions but this category does not promotes trade because even after reduction, the mega tariffs do not make the trade possible.

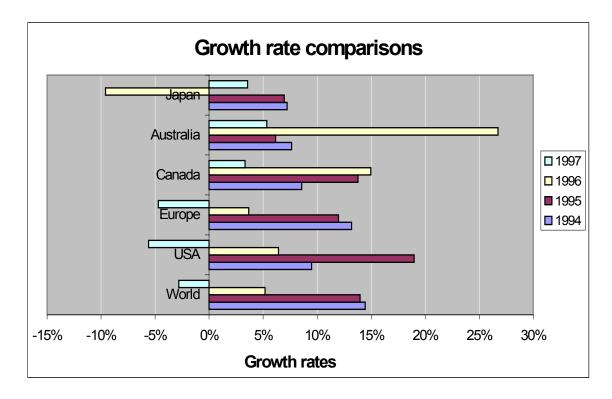
8. Criticism

The basic purpose of WTO is to liberalize trade such that it results in more trade, more output and lower prices worldwide. In order to analyze the affects of WTO, the international agricultural trade data has been analyzed. The data used is of years 1993 to 1997. The growth rate in the world total agricultural export market has been observed. The implementation of WTO was started in January 1995 and hence it was expected that it would start showing its affects at the end of 1995. However, the actual results are quiet different from the expectations. This is shown in the following figure (also see annex 2).



There was not much of a difference between the growth rates of 1994 and 1995, as the year 1995 experienced a slightly lower growth rate as compared to 1994 (growth rate fell from 14.45% to 13.98%). In 1996, the growth rate instead of increasing (as was expected) started to decline and it came down from 13.98% to 5.19%. This was a remarkable decrease, as the growth rate had become less than half of its previous value. This trend continued in the coming years as well. In 1997, the growth rate became negative and went down to -2.81% i.e. again a remarkable decrease. So in a time span of four years, the annul growth rate had declined from 14.45% to -2.81%. This means a percentage decrease of 17.26 or a reduction in value of \$64,113.4 billion over four year's time.

There are a number of factors that lead to a falling and then a negative growth rate. Before looking at the factors responsible for this trend, we will first look at the agricultural growth rates of the countries/regions under discussion. A similar trend is found in all the countries/regions. This is shown in the following chart.



As the data suggests, there is a declining trend in each area. In USA, it rose in 1995 from the 1994 level but then declined in each successive year and became negative in 1997. In Europe it has fallen in each year and became negative in 1997. In case of Canada, it has risen between 1994 to 1996 but fell in 1997. Australia has faced an erratic trend with a very high growth rate in 1996 and then a low growth rate in 1997. The growth rate of Japan has also declined from 1994 to 1996 and then rose in 1997. So except Japan, the growth rate of every country has declined in 1997.

8.1. Reasons for slower growth in agricultural trade

WTO has not been able to achieve the desired results. A number of factors are held responsible for this fallacy. There was a global recession that led to lower trade in the world agricultural markets. However, this factor can not be held solely responsible for the discussed trend. There were a number of loopholes and misused provisions in the WTO that have lead to lower growth rates. These will be discussed now.

- In the process of "tariffication", the countries established tariff equivalents that were very high and thus undermining the importance of subsequent tariff reductions.
- The non-tariff barriers still exist in form of technical barriers such as labeling, size, quality inspection requirements etc.
- In many countries, the TRQ's need considerable liberalization and so far they are acting as quotas.
- The rules regarding the export credit, food aid and marketing assistance for exports remain unsettled and they provide a room for export subsidy.

• In the construction of AMS, the "deficiency payments" are included in the base period. When AMS is calculated for any implementation year, the deficiency payments are exempted from inclusion. This creates a high commitment ceiling and thus has enabled the committing countries to keep their AMS within the committed levels. This has led to higher subsidies thus limiting liberalization of international trade.

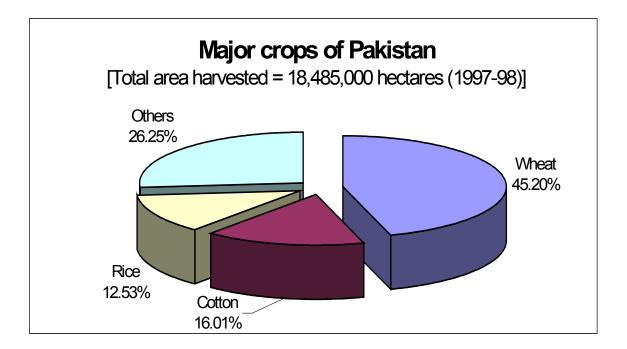
- WTO reduction commitments apply to aggregate AMS and not to the commodity-specific AMS. This gives the countries a lot of flexibility in giving a high level of support to their import sensitive commodities.
- Export subsidies and TRQ's are dealt with separately from AMS. Such policies can provide the producer with reduced import supplies and/or increased exports and domestic prices without increasing the level of AMS. This creates room for subsidizing without violating the AMS ceiling.
- In case of the EU, and US the direct payments and price support benefits were abnormally high during 1986 and 1987. So the choice of 1986-88 as the base period has helped them abide by the commitments without resorting to market orientation.
- Several countries have changed their policies in such a way that instead of relying on the support prices*, they now rely on direct payments and the green box policies and are still subsidizing their agriculture. Thus they are not moving towards market orientation.
- There is no limit on the amount of subsidy that can be given under the green box policies provided they meet the specific criteria. Of the nineteen countries that reported data on green box policies in 1995, 16 had increased this expenditure in nominal terms as compared to the base period.
- Under the US farm act, 1996, production flexibility contract payments (PFCP's)** have been initiated. These payments qualify as green box policies and thus are exempt from AMS. These payments have replaced the deficiency payments and have increased the actual amount of support.
- WTO does not monitor the trade policies of the countries. Trade policies can increase domestic support prices without disturbing the domestic support level, as measured by AMS. For example, by shifting from amber box policies to green box policies. This fallacy has enabled the countries to increasingly support their producers without violating the AMS provisions.
- If the blue box exemptions are denied in the future, many countries will find it hard to abide by AMS commitments.
- The world agricultural prices have been high and it has helped EU and other exporters (that heavily subsidize their exports) to abide by the subsidy reduction commitments. However, it is expected that in absence of high prices, it will not be possible for such exporters to follow the commitment levels.

^{*} Minimum purchase price announced by the government that acts as a producer subsidy. If the market price falls below this price, the government starts buying the crop at the announced support price and sells it to the consumer at the market price. The difference between the two prices is a subsidy.

A direct payment to farmers for contract crops. This payment has replaced the deficiency payment.

9. WTO and Pakistan

Pakistan is one of the signatories of WTO. We are among those 100 developing countries, which have been given the relaxed time period to cut support levels (discussed earlier –see schedule 1-). As mentioned earlier, the focus of this study is on agriculture and within agriculture, we will now focus on rice, cotton and wheat, as they are major crops of Pakistan. The area harvested of these crops is shown in the figure below:



In the year 1997-98, the total area harvested was almost 18.5 million hectares. Almost half of the area harvested was used for the production of wheat. So, on the basis of area harvested, wheat is our most important agricultural produce. According to this criterion, the second important crop is cotton that occupies almost 16% of the area harvested. Rice has the third largest share accounting for some 13% of the area harvested. All other crops together occupy almost one fourth of the area harvested.

Wheat, cotton and rice will be discussed individually in the coming sections.

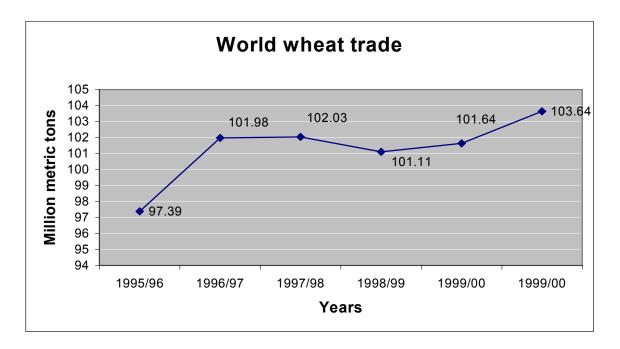
9.1. Wheat

9.1.1. Importance

The maximum share of cultivated area goes to wheat, as this is the maximum consumed grain. The production of wheat in 1997-98 was 16.65 million tonnes and we had to import 3.56 million metric tons of wheat (see annex 3). We have been importing wheat since the sixties. This trend is considered to be a threat to our balance of payment and makes the international trade trends regarding wheat more important to us.

9.1.2. International scenario

In 1999/2000, the world wheat trade is projected at 103.6 million tons by taking a 2% historical growth rate of the past years. The global consumption is forecasted to be lower but still exceeding production for a second year in a row. US remain the biggest exporters of wheat and China remains the biggest producer and consumer of wheat. The trend on international wheat trade is shown in the diagram given on the next page.



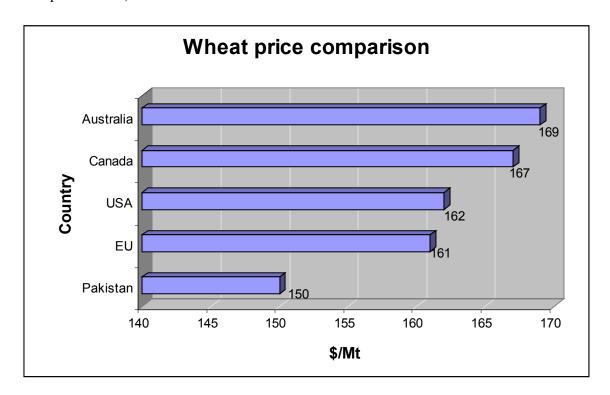
From 1995-96 to 1996-97, the trade of wheat increased at a rate of nearly 4%. After that, the trade has more or less remained on the same level till 1999 with only minor fluctuations. So the international trade of wheat is growing at an average rate of nearly one-percent per year. The overall growth rate from 1995-96 to 1999-00 that is for five years is nearly 6%.

See annex 3 for worldwide production, consumption, imports and exports data regarding wheat.

9.1.3. Tariffs and regulations

The policy regarding import of wheat is that there is no import tariff on it. However, only the public sector is allowed to import wheat because the government closely monitors the usage and transportation of wheat and its flour. The reason for such a policy is that government wants to prevent smuggling of wheat to Afghanistan and at the same time control the price of wheat flour in the country.

As far as the production side is concerned, the government announces a support price. At first, the government procures the desired quantities and only then the producers are allowed to sell in the open market. If the market price is less than the support price, the government keeps on purchasing the crop to support the farmer. The support price announced is less than the international prices so the subsidy given is less than the international standards. Now we will take a look at our support price and international export prices. For this purpose, we have converted the support price in dollar terms and this is then compared with the average export price of United States of America, European Union, Australia and Canada.



Pakistan lies at the lowest level among the countries discussed with its support price at \$150 per metric ton. The highest price is of Australia that is \$169 followed by Canada at \$167 and then EU (\$162) and USA (\$161) are very close to each other. The minimum difference of Pakistan is from EU (\$11) and even that is more than 7%. This price comparison justifies the argument that the support given to wheat in Pakistan is below the international standards. Thus, any liberalization will not threat our local producers in the prevailing circumstances. As mentioned in earlier sections, most of the developed countries have not reduced their monetary aid to the agricultural sector. All they have done is that the expenditure in amber box policies has been shifted to green box and blue

box policies to distort AMS figures. This has enabled them to abide by their commitment levels while still subsidizing their agricultural producers to keep them artificially competitive in the global trade.

9.1.4. Production trends

The production is not facing any persistent increase or decrease since 1995. This is shown in the table given below.

Year (Jul/Jun)	1995/96	1996/97	1997/98	1998/99	1999/00
Production	17,002	16,907	16,650	18,694	18,200
Imports	1,903	3,018	3,562	3,200	3,000

The production of wheat remained at nearly 17 million metric tons in the years 1995-96 and 1996-97. Then it fell in 1997-98 to 16.56 million metric tons. In 1998-99 it rose to 18.7 million metric tons. The production is expected to fall to 18.2 million metric tons in the year 1999-2000.

9.1.5. Trade trends

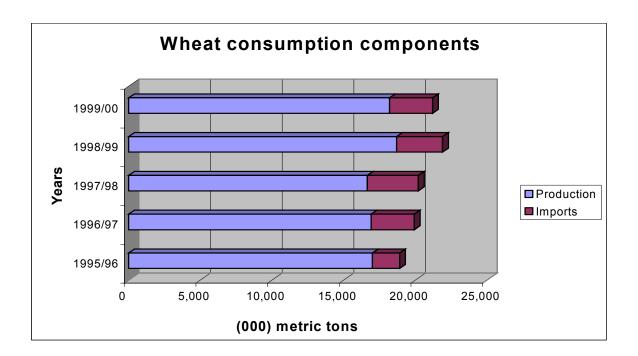
Pakistan has been a net importer of wheat since the sixties. For the last three years, on the average, we have been importing more than 3 million metric tons of wheat annually; mainly from the US. Since 1995, the imports have been increasing as is shown in the above table. We had to import 1.9 million metric tons of wheat in 1995-96. This figure increased to 3.0 million metric tons in 1996-97 and then to 3.56 million metric tons. This figure then declined to 3.2 million metric tons in 1998-99. However, this figure is expected to fall to 3.0 million metric tons in 1999-2000.

9.1.6. Likely impact of WTO

As Pakistan is a net importer of wheat and the level of support is below the international standards, so the impact of WTO on Pakistan will be positive. WTO is likely to result in lower international prices of wheat, as an outcome of reduced tariffs, thus reducing our import bill. Moreover, since the support prices have been lower than the international prices so we will also be able to pursue a policy of encouraging local production, as there will not be any problem of cheaper imports available.

The import, production and consumption data of wheat is compared for the years 1995-96 to 1999/2000. Consumption has been broken into production and imports for the sake of comparison. The data is as follows:

Year (Jul/Jun)	1995/96	1996/97	1997/98	1998/99	1999/00
Pakistan					Nov 10
Production	17,002	16,907	16,650	18,694	18,200
Imports	1,903	3,018	3,562	3,200	3,000
Consumption	18,905	20,125	20,260	21,250	21,900



The consumption of wheat is rising at a faster rate than production. This is leading to increased imports in each year. The imports have increased by almost 70% between 1995-96 and 1998-99 i.e. an increase of almost 1.3 million metric ton. Thus, falling international prices, as a result of WTO implementation will be helpful to us. However, if the prices fell so much that they surpass our production cost, then we will be under great pressure, as due to improved market access, our markets will be reached by cheaper imports. This is not likely to happen if the gray areas in the AoA are dealt with. In the presence of provisions, such as green box and blue box policies, the developed countries will keep on providing massive support to their farmers while still in compliance with WTO support standards. This will keep their agricultural produce artificially competitive in the global market.

9.2. Cotton

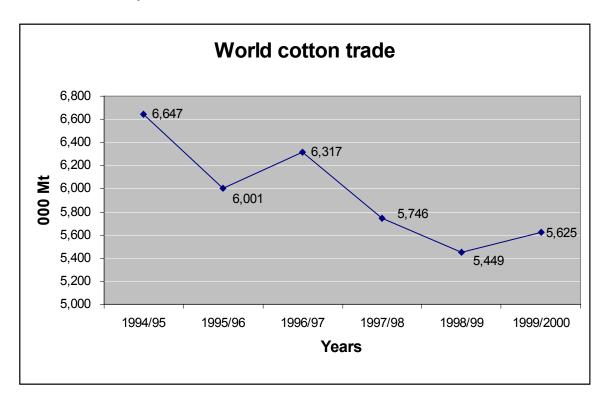
9.2.1. Importance

Cotton is the biggest source of raw material for the largest contributor of the industrial sector i.e. textiles. More than 60% of the total exports of Pakistan come from textile sector that has a 40% share in the employment of the manufacturing sector. So the cotton not only provides employment to the agricultural sector but also has a major share in the employment of the manufacturing sector.

9.2.2. International scenario

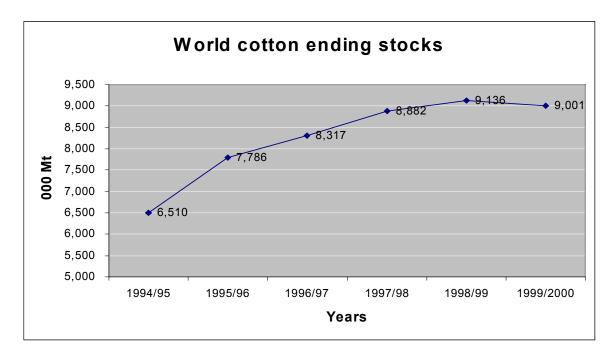
The forecast for 1999/2000 production is that it will face a significant increase as a result of high production in Pakistan, India, USA and Turkmenistan. US remain the biggest exporters and China remains the biggest producer and consumer of cotton.

The international trade of cotton is facing a downward trend. Since 1994-95, it has fallen in each year except for 1996-97. A slight growth is forecasted in the global trade of cotton for the next year. This is shown in the chart below.



During the last four years, the cotton trade has fallen from 6.647 million metric tons to 5.449 million metric tons. This means a decrease of 1.198 million metric tons or an average decrease of 0.3 million metric tons per year. The world production is not

decreasing, but due to falling trade, the ending stocks are at a rise. This is shown in the following chart.



The ending stocks have increased in each year from 1994-95 to 1998-99. The total increase during these four years is of 2.626 million metric tons or an average increase of 0.66 million metric tons. At the same time, since 1994-95, the cotton prices are falling continuously. This trend is a threat to us because cheaper international cotton will make our own produce non-competitive.

See annex 4 for worldwide production, consumption, imports and exports data regarding cotton.

9.2.3. Tariffs and regulations

The export of raw cotton has declined in the past years. The main reason for this trend is the shift in the government policy towards value addition. The government restricted the export of raw cotton by imposing export duties and at the same time has been encouraging the textile industry to produce high value added cotton-based exportable products. Currently cotton can be imported from other countries. The rate of duty charged is 10% ad valorem. However, the import of cotton related products such as gray cloth* is banned by the government to increase the use of indigenous cotton for the production of high value added textiles.

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^{*}Fabric containing 100% of cotton by weight

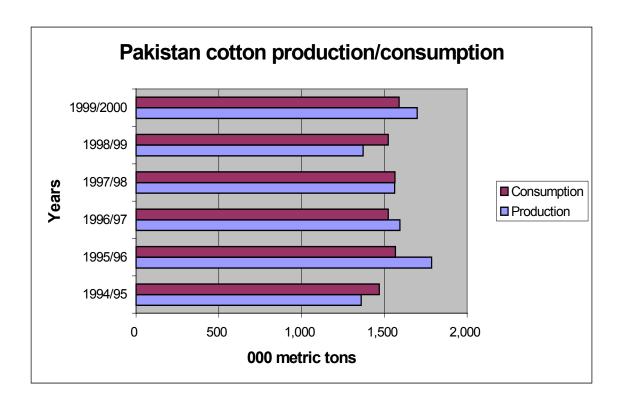
9.2.4. Production and trade trends

The government is not giving any kind of direct support to the cotton growers. Support prices were announced till 1996-1997 but then this practice was abolished. However, when the international prices face a plunge, the government intervenes and announces a price acceptable to both the farmers and the ginners. This was the case with the crop in this year. The international cotton prices fell so much that the farmer was not able to even cover his cost. We had a bumper crop and at the same time the government allowed the import of cotton resulting in greater supply than was demanded and thus falling prices for the cotton from this year's crop. So in this scenario, the government intervened and a purchase price was announced. Such a strategy is adopted only in cases of crisis.

As far the trade of cotton is concerned; we are sometimes a net importer of cotton and sometimes a net exporter of cotton. This shift depends on the international prices, our production etc. We also have to import certain types of cotton, as they are not available in Pakistan e.g. long staple. The miss-match between production and consumption is dealt with international trade. That is, surplus, if any is exported and the shortfall is filled by imports. The data supporting the discussion is as follows:

Pakistan cotton production/consumption								
Years	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000		
					Estimate	Forecast		
Production	1,361	1,785	1,594	1,562	1,372	1,698		
Consumption	1,470	1,568	1,524	1,565	1,524	1,589		
Export*	(109)	218	70	(3)	(152)	109		
*A negative figure (shown in brackets) means imports								

The data given in the table is in thousand metric tons. There is no persistent trend of Pakistan as being an importer or exporter. The consumption remains more or less the same during the last four years but the production fluctuates. This is clear from the following bar chart.

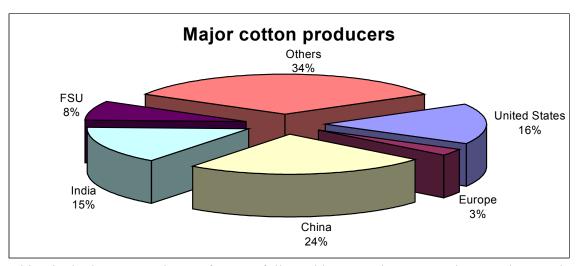


Out of the six years discussed, we had to import cotton for three years and exported it for the rest of three years. The gap between production and consumption has usually been less than 10 percent and is a result of fluctuating production in each year.

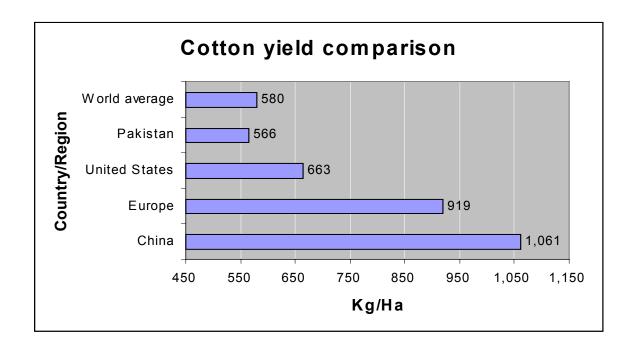
9.2.5. Likely impact of WTO

The economy of Pakistan is highly cotton dependent because of its high share in exports and employment. So any change in its global price or trade trends is of great importance to us. Europe, China, US, India and former Soviet Union produce almost two-third of the world cotton. So a variation in the production and price of these countries can cause major changes in the world prices and world trade. Their share in the world production is shown in the following table.

World cotton production (1000 bales)							
Region/Country	1998/99	1999/00					
United States	13,918	16,531					
Europe	2,269	2,333					
China	20,700	19,000					
India	12,800	12,700					
FSU	6,600	7,480					
Others	28,232	29,302					
World	84,519	87,346					



China is the largest producer of cotton followed by US. These countries together produce 66% of world cotton. This suggests that cotton is highly vulnerable to regional production and price fluctuations. It means, for example, if there is bumper crop in USA and they have a bigger exportable surplus, the world cotton price is likely to fall. Such a situation is even more important in our case. We have lower yields as compared to the rest of the world making our production cost comparatively higher than others. The yield comparison is shown in the following diagram.



China is not only the largest producer but also has the highest productivity at 1061 Kg per hectare. This is followed by Europe at 919 and then US at 663. Our yield is lowest of the

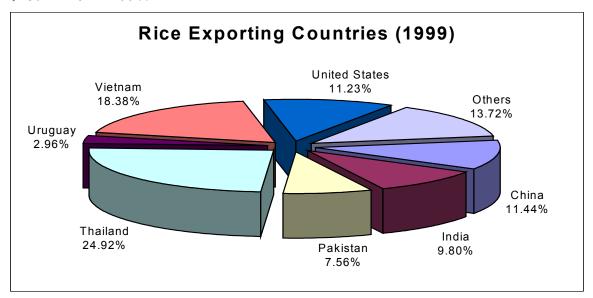
countries under discussion and even lower than the world average. As compared to China and EU, our yield is almost half of their yield.

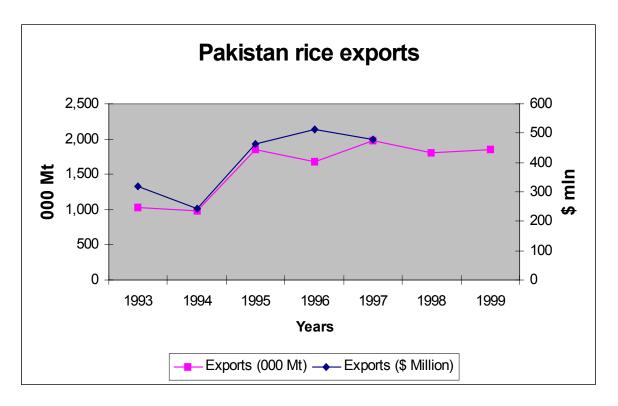
The developed countries rely on genetic-break-through supported by their green box policies. They end up producing superior quality crops with higher yields thus reducing their cost. This is not the case with us. These factors are making us noncompetitive. In case of complete implementation of WTO, we will not be able to sustain our production, as the superior high yielding varieties will be available at lower prices. Moreover, the import of gray cloth is banned in Pakistan. We will have to lift this ban under WTO. So this is the most sensitive area and needs great attention. We need to develop our cotton sector in accordance with the global competition.

9.3. Rice

9.3.1. Importance

Rice is the largest agricultural export of Pakistan. We are the sixth largest exporter of rice (see the figure below) in the world. We have been exporting rice for a very long time reason being that we offer good quality at a reasonable price. The rice exports totaled \$480 million in 1997.

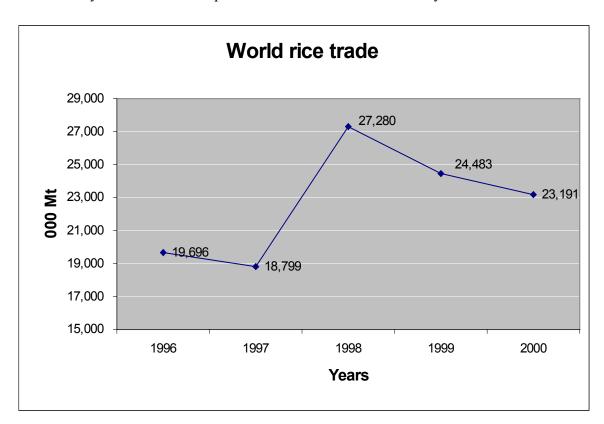




The rice exports remained at more or less the same level during 1993 and 1994. However, the exports almost doubled between 1994 and 1995. There was a slight decline in the quantity exported in 1996 but then exports rose again in 1997 with a growth rate of over 18%. The exports fell in 1998 but still well above the 1996 level. Then there is a slight increase in 1999. The rice exports reached their peak in 1995 and are now are again almost at the same level. The exports are expected to increase in the year 2000 at a rate of 7.5% thus reaching 2.0 million metric tons.

9.3.2. International scenario

The global rice prices are expected to decline in the year 2000 similar to that of 1999. The reason for this falling trend is record global production especially in China and India. Thailand remains the biggest exporter of rice and accounts for 25% of the world rice trade in the year 1999 and is expected to maintain its share in the year 2000 as well.



There was a tremendous increase in the rice trade between 1997 and 1998 when the rice trade grew by more than 45%. The main reason for this growth was a remarkable increase in imports of Philippines, Indonesia and Bangladesh. The world trade declined in 1999 and is likely to decline further in 2000.

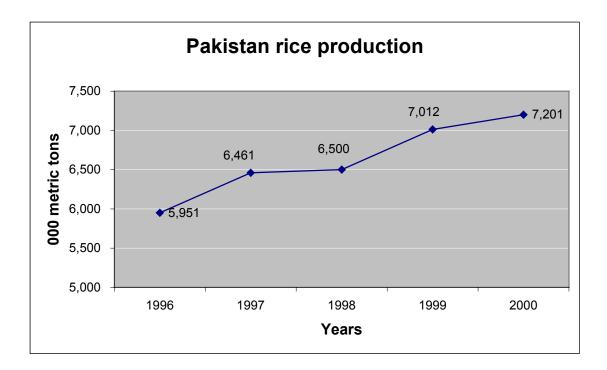
See annex 5 for worldwide imports and exports data regarding rice.

9.3.3. Tariffs and regulations

Rice varieties produced in Pakistan fetch good prices because of their good quality and taste. There is no export duty on rice; however, a 25% ad valorem import duty has been levied on imports of rice. This tariff is not going to affect Pakistan because we are competitive in the world market and remain a net exporter of rice.

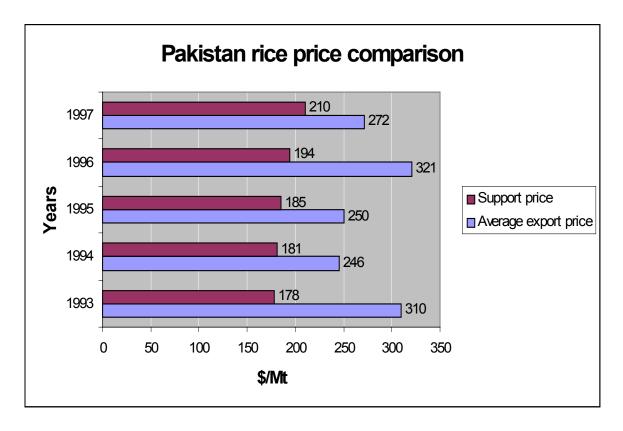
9.3.4. Production and trade trends

The rice production and export is following an increasing trend and the forecast for the year 2000 shows that this trend will continue. This is shown in the following figure.



The production grew at nearly 10% between 1996 and 1997. However, the growth for the next year i.e. 1998 was negligible. In 1999, it grew again by almost 8%. The forecast is that rice exports will observe slight growth in the year 2000.

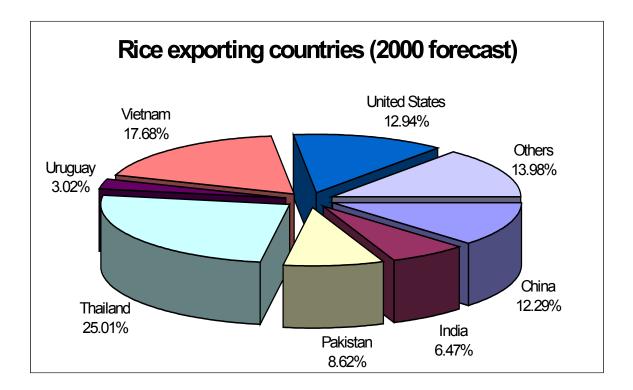
The support price of rice has always been lower than the international prices. These support prices are compared with the average export price of Pakistan in the diagram shown on the next page.



In each of the years discussed, the support price has been significantly less than the average export price of Pakistan. This shows that the level of support given to rice producers is much below the international standards. This will help us increase our rice exports as a result of increased market access under WTO.

9.3.5. Likely impact of WTO

The world rice trade is expected to rise upon complete implementation of WTO, as rice remains highly protected in many countries. The important examples of protecting countries are of Korea and Japan. Increased market orientation and improved market access under WTO will benefit Pakistan in form of higher exports. This increase is subject to meeting the branding and packaging regulations of WTO. USDA forecasts the rice exports of Pakistan to increase in the year 2000 from 1.85 million metric tons (1999) to 2.0 million metric tons. This means an increase of 7.5%. This increased share is shown in the pie chart given on the next page:



The world rice export share of Pakistan is forecasted to increase from the 1999 level of 7.56% to 8.62% in the year 2000. This is equal to an increase of 1.5 million metric tons of rice exports. This trend is likely to prevail in the future as well as a result of WTO implementation. So rice can be regarded as an area which can help us take advantage of WTO agreements.

9.4. Other threats to agriculture sector under WTO

Under WTO, there are very strict requirements for standardization*, packaging and branding. Currently, these practices are not being strictly followed in Pakistan. With only a few exceptions, our exporters do not follow any kind of standardization and different export varieties are mixed together. The use of brand names is also rare along with poor packaging practices that are much below the international standards. If the developing countries are not going to change their practices, they will not only loose on market shares but will also start to get lower prices for their exports. These issues need a thorough understanding. We need to educate our exporters so that they can upgrade their practices to the tune of international standards. These issues should be addressed as early as possible so that we are prepared to face the international competition without loosing our market

The agreement regarding Trade related intellectual property rights (TRIPS) is also going to affect us. It requires all the exporting countries to get their export varieties of crops registered with WTO. The name once registered can not be used by others. For example, an American has got the basmati variety of rice registered with WTO. This variety originally belongs to Pakistan and is being exported for many years. But under the laws of WTO, we will not be able to make use of this brand name. This has created a dispute between the American exporters and the Pakistani exporters. This dispute has not been settled yet. If we will not take care of provisions of TRIPS, we can face similar problems in the future as well.

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^{*} All the units of the product are alike i.e. different varieties are not mixed.

10. Conclusion

According to our preliminary study, the implementation of AoA is not likely to affect agriculture in Pakistan, as it would affect the developed countries, if implemented in its true spirit. The agricultural sector of developed countries is working under a great deal of support and protection. The base year of 1986-88 has also resulted in slow implementation of various articles of AoA. During the base year, the AMS were record high for certain agricultural commodities.

Among all the crops, it appears that cotton is the most vulnerable sector of our agricultural economy. The falling global prices can make the domestic prices touch the rock bottom and even fall below the production cost, as has already been observed during the recent cotton crisis. In order to develop this crop on sustainable and globally competitive basis, we need to invest in developing high yield varieties and adopting modern farming techniques. Such practices than should be replicated for other crops as well.

Another area that needs to be given due importance is the effect of articles such as TRIPS. In future, developing countries might face problems in marketing their products without branding. This phenomenon has already put under threat the basmati rice exports from Pakistan.

The fiasco at the WTO summit at Seattle, resulting in a deadlock among developed countries, should be considered as an opportunity to organize our agriculture sector. Such events definitely effect the implementation of international agreements. The developed nations are the ones who are going to get maximum benefit out of WTO and even then they are so careful. We need to be careful as well so that by avoiding the possible implications, we can get some benefit out of WTO agreement implementation. We also need to take care of the unresolved issues of WTO such as SPS agreement and STEs. These issues, when incorporated in WTO agreements, will also affect us. It would be better to be preemptive rather than wait for the things to happen and then go for remedies.

WTO's agreements, when fully implemented, will not only affect our exportable crops but each and every good and service that we produce. Under WTO, we are required to open up our markets to the rest of the world. We will only be able to compete globally if we are able to reduce our costs to the tune of international standards, whether its agriculture or any other sector of the economy.

Furthermore, interests of the country should be given foremost importance while understanding the pros and cons of international arrangements like WTO. It has been felt in the past that developing countries have always acted as an ostrich in the face of important international events. There is a need to conduct in depth analysis of WTO and its agreements so as to evaluate the impact on domestic economy across all the sectors and sub-sectors.

11. ANNEXTURES

11.1. World agricultural trade

Agricultural imports (\$1000)

Country name	1993	1994	1995	1996	1997
World	356,109,400	404,302,700	461,233,600	478,012,700	464,266,800
USA	28,799,240	30,900,960	33,839,290	37,892,920	41,067,660
Europe	184,343,000	209,343,900	232,111,900	237,435,800	227,317,300
Canada	7,983,817	8,606,709	9,079,771	9,522,567	10,515,630
Australia	1,869,805	2,029,231	2,590,032	2,789,488	2,834,351
Japan	31,720,360	37,703,620	41,180,650	41,789,660	38,204,720
Others	101,393,178	115,718,280	142,431,957	148,582,265	144,327,139

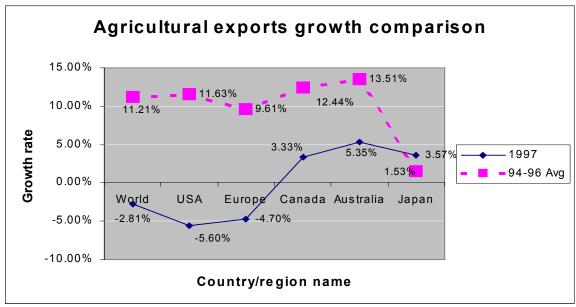
Agricultural exports (\$1000)

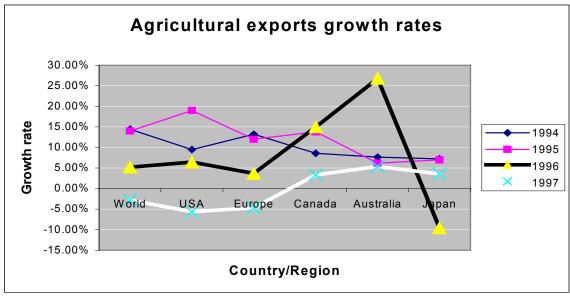
Country	1993	1994	1995	1996	1997
name					
World	339,029,600	388,012,700	442,270,500	465,207,100	452,126,100
USA	47,795,210	52,331,550	62,259,440	66,256,350	62,544,430
Europe	165,949,300	187,839,000	210,336,400	218,052,500	207,802,900
Canada	10,351,030	11,238,970	12,788,890	14,702,480	15,191,570
Australia	11,107,670	11,954,890	12,691,180	16,085,480	16,946,170
Japan	1,526,015	1,636,184	1,749,991	1,582,253	1,638,668
Others	102,300,375	123,012,106	142,444,599	148,528,037	148,002,362

11.2. World agricultural trade growth rates

Agricultural trade growth rates

Country	1994	1995	1996	1997	94-96 Avg.
name					
World	14.45%	13.98%	5.19%	-2.81%	11.21%
USA	9.49%	18.97%	6.42%	-5.60%	11.63%
Europe	13.19%	11.98%	3.67%	-4.70%	9.61%
Canada	8.58%	13.79%	14.96%	3.33%	12.44%
Australia	7.63%	6.16%	26.75%	5.35%	13.51%
Japan	7.22%	6.96%	-9.59%	3.57%	1.53%





11.3. World wheat trade

World wheat, flour and products trade (000 metric tons)

Year (Jul/Jun)	1995/96	1996/97	1997/98	1998/99	1999/00	1999/00
					Nov 10	Dec 10
EXPORTS						
Argentina	4,442	10,073	9,566	8,700	9,500	10,000
Australia	12,131	18,223	15,398	16,000	18,000	18,000
Canada	17,066	18,167	21,283	14,388	17,500	18,500
India	1,944	866	0	0	200	200
Kazakhstan	3,493	2,026	3,375	2,072	2,800	3,300
Syria	364	500	796	700	500	300
Turkey	1,178	967	1,306	3,000	1,500	1,500
EU	13,250	17,834	14,196	16,000	16,000	16,000
Eastern Europe	6,170	1,526	2,905	3,900	1,525	2,225
Others	3,666	4,701	5,119	7,315	4,610	4,610
Subtotal	63,704	74,883	73,944	72,075	72,135	74,635
United States	33,681	27,093	28,090	29,035	29,500	29,000
WORLD TOTAL	97,385	101,976	102,034	101,110	101,635	103,635

IMPORTS	1995/96	1996/97	1997/98	1998/99	1999/00	1999/00
Algeria	3,780	3,628	5,221	4,400	4,500	4,500
Bangladesh	1,243	957	839	2,200	1,000	1,500
Bolivia	327	387	287	225	350	350
Brazil	5,556	5,662	5,758	7,290	6,700	6,700
Chile	789	439	490	700	700	600
China	12,531	2,692	1,914	1,000	1,000	1,000
Colombia	1,003	938	1,048	1,100	1,000	1,000
Cuba	767	951	943	950	900	900
Ecuador	391	442	407	400	550	550
Egypt	5,932	6,893	7,156	7,300	6,700	6,700
Ethiopia	455	148	417	450	500	500
Georgia	527	614	598	600	500	500
India	50	1,781	2,344	1,092	1,300	1,600
Indonesia	3,613	4,200	3,665	3,000	2,500	2,500
Iran	2,793	7,048	3,587	3,000	6,000	6,500
Iraq	511	1,135	2,707	2,500	2,500	2,500
Israel	920	958	1,297	1,500	1,200	1,500
Japan	6,101	6,264	6,200	5,883	5,900	5,900
Jordan .	779	599	691	700	750	750
Korea, North	190	495	674	550	950	950
Korea, South	2,554	3,465	3,917	4,689	4,500	4,200
Lebanon	362	401	468	475	475	475
Libya	910	1,379	1,311	1,400	1,400	1,400
Malaysia	1,084	1,236	1,160	1,300	1,200	1,200
Mexico	1,581	1,940	2,166	2,500	2,500	2,500
Morocco	2,336	1,558	2,568	2,800	2,800	2,800
Nigeria	674	956	1,099	1,500	1,200	1,200
Pakistan	1,903	3,018	3,562	3,200	3,000	3,000
Peru	956	1,290	1,259	1,300	1,400	1,400
Philippines	1,978	2,174	1,960	2,300	2,200	2,200
Russia	5,291	2,572	3,028	2,500	2,500	3,000
South Africa	718	958	663	585	500	500
Sri Lanka	937	889	761	875	900	900
Taiwan	1,094	1,025	1,027	1,000	1,000	1,000
Thailand	787	694	653	725	750	750
Tunisia	825	978	1,461	1,100	1,000	1,000
Turkey	2,119	2,578	1,570	1,600	1,500	1,500
UAE	505	605	694	650	600	600
Ukraine	1,048	200	93	100	100	100
Uzbekistan	1,329	1,033	729	400	500	500
Venezuela	1,022	1,204	1,224	1,275	1,300	1,300
Vietnam	466	440	585	500	550	550
Yemen	2,026	2,292	2,366	2,100	2,000	2,000
EU	2,545	2,442	3,858	3,800	3,600	3,600
O.W. Europe	409	514	492	520	550	550
Eastern Europe	2,602	5,285	1,837	2,100	2,300	2,300
United States	1,748	2,577	2,488	2,850	2,800	2,800
Other Countries	9,424	10,881	11,015	10,882	11,580	
Unaccounted	(106)	1,161	1,777	1,244	1,430	11,795
WORLD TOTAL	97,385	101,976	102,034	101,110	101,635	103,635

World Wheat Production, Consumption And Stock (000 metric tons)

	1995/96	1996/97	1997/98	1998/99	1999/00	1999/00
PRODUCTION					Nov 10	Dec 10
Algeria	1,500	2,980	670	2,200	1,500	1,500
Argentina	8,600	15,900	14,800	12,000	14,000	14,500
Australia	16,504	23,702	19,417	22,110	23,000	23,000
Brazil	1,526	3,195	2,380	2,200	2,200	2,200
Canada	25,037	29,801	24,280	24,076	26,000	26,850
China	102,215	110,570	123,300	109,730	115,000	115,000
India	65,470	62,097	69,350	65,907	71,500	71,500
Japan	444	478	573	569	600	600
Kazakhstan	6,490	7,700	8,950	4,700	11,000	11,000
Mexico	3,468	3,107	3,639	3,250	3,100	3,100
Morocco	1,100	5,916	2,317	4,378	2,100	2,100
Pakistan	17,002	16,907	16,650	18,694	18,200	17,854
Russia	30,100	34,900	44,200	26,900	32,000	30,500
Saudi Arabia	2,000	1,200	1,800	1,800	1,800	1,800
Tunisia	530	2,000	950	1,353	1,400	1,400
Turkey	15,500	16,000	16,000	18,500	16,500	16,500
Ukraine	16,273	13,550	18,404	14,937	14,000	14,000
EU	86,161	98,506	94,181	103,036	96,435	96,560
Eastern Europe	34,979	26,125	34,345	33,736	28,730	28,730
Others	44,244	46,137	45,590	49,253	42,805	42,658
Subtotal	479,143	520,771	541,796	519,329	521,870	521,352
United States	59,404	61,980	67,534	69,327	62,812	62,812
World Total	538,547	582,751	609,330	588,656	584,682	584,164
CONCUMPTION						
CONSUMPTION Algeria	5,965	6.020	6,191	6,200	6,200	6,200
Australia	4,170	6,020 3,602	5,157	5,088	5,100	5,100
Brazil	8,224	8,497	8,684	9,200	9,200	9,200
Canada	7,807	8,221	7,310	8,215	8,700	8,500
China	111,711	112,388	114,875	116,000	117,000	117,000
Egypt	11,624	12,456	12,805	13,193	13,300	13,300
India	62,920	66,842	68,000	67,344	69,050	69,250
Japan	6,380	6,144	6,218	6,283	6,200	6,200
Morocco	4,752	5,275	5,547	5,800	5,800	5,800
Pakistan	18,905	20,125	20,260	21,250	21,900	21,548
Russia	39,720	38,092	39,942	35,150	34,300	33,300
Turkey	16,068	16,290	16,589	17,050	17,300	17,300
Ukraine	16,798	16,446	16,401	12,500	11,600	11,600
EU	76,249	79,514	82,637	86,496	88,579	88,297
Eastern Europe	30,919	31,259	32,028	33,044	31,020	30,520
Others	95,451	109,289	108,299	111,359	111,254	111,828
Subtotal	517,663	540,460	550,943	554,172	556,503	554,943
United States	31,028	35,397	34,212	37,701	34,211	34,074
World Total	548,691	575,857	585,155	591,873	590,714	589,017

11.4. World cotton trade

World Cotton Supply, Use, and Trade (000 metric tons)							
	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	
Production					Estimate	Forecast	
World Total	18,694	20,263	19,507	19,950	18,402	19,018	
China	4,333	4,768	4,202	4,594	4,507	4,137	
United States	4,281	3,897	4,124	4,092	3,030	3,599	
India	2,427	2,885	3,030	2,686	2,787	2,765	
Pakistan	1,361	1,785	1,594	1,562	1,372	1,698	
Uzbekistan	1,258	1,250	1,048	1,138	1,002	1,132	
Franc-Zone Africa	578	685	798	941	882	906	
Turkey	628	852	784	795	838	849	
Others	3,827	4,141	3,926	4,142	3,985	3,931	
Consumption							
World Total	18,625	18,920	19,395	19,264	18,507	19,120	
China	4,572	4,485	4,648	4,529	4,311	4,463	
India	2,296	2,608	2,857	2,760	2,722	2,830	
United States	2,438	2,318	2,422	2,471	2,265	2,221	
Pakistan	1,470	1,568	1,524	1,565	1,524	1,589	
EU15	1,205	1,121	1,146	1,170	1,119	1,089	
Turkey	850	950	1,031	1,089	970	1,045	
SE Asia	961	964	961	868	910	968	
Others	4,832	4,907	4,805	4,813	4,687	4,914	
Imports							
World Total	6,647	6,001	6,317	5,746	5,449	5,625	
SE Asia	938	998	980	859	914	994	
EU15	1,073	1,034	1,043	1,010	931	931	
Mexico	126	151	207	322	316	457	
Brazil	351	385	519	410	297	359	
Korea, South	380	362	327	288	320	348	
Taiwan	243	300	283	263	299	316	
Japan	381	330	292	292	275	272	
Others	3,154	2,441	2,665	2,302	2,096	1,947	
Exports							
World Total	6,180	6,043	5,845	5,804	5,119	5,594	
United States	2,047	1,671	1,495	1,633	946	1,241	
Uzbekistan, Rep.	1,090	985	991	995	827	893	
Franc-Zone Africa	584	609	720	788	788	806	
Australia	293	319	519	590	631	610	
EU15	295	365	336	294	292	312	
China	40	5	2	7	148	261	
Syria	124	123	146	197	250	218	
Others	1,708	1,966	1,636	1,300	1,236	1,254	
	.,	.,	1.,000	.,	.,	1 ,	

11.5. World rice trade

World rice trade (000 metric tons)								
	1996	1997	1998	1999	2000	2000		
EXPORTS					Nov 10	Dec 10		
Argentina	365	530	589	525	500	500		
Australia	562	651	556	700	700	500		
Burma	265	15	94	75	100	100		
China	265	938	3,734	2,800	2,750	2,850		
Guyana	262	286	250	300	310	310		
India	3,549	1,954	4,491	2,400	1,500	1,500		
Pakistan	1,677	1,982	1,800	1,850	2,000	2,000		
Thailand	5,281	5,216	6,367	6,100	5,800	5,800		
Uruguay	597	640	639	725	700	700		
Vietnam	3,040	3,327	3,776	4,500	4,100	4,100		
EU	318	372	346	350	350	350		
United States	2,624	2,292	3,165	2,750	3,000	3,000		
Others	891	596	1,473	1,408	1,406	1,481		
World Total	19,696	18,799	27,280	24,483	23,216	23,191		

	1996	1997	1998	1999	2000	2000
IMPORTS					Nov 10	Dec 10
Bangladesh	665	44	2,499	1,400	1,000	900
Brazil	786	845	1,457	850	1,100	1,100
Canada	225	240	239	240	240	240
China	832	326	261	200	400	400
Colombia	154	225	246	150	150	150
Costa Rica	85	62	72	85	95	95
Cote d'Ivoire	291	470	520	550	500	500
Cuba	389	267	334	375	400	400
Ghana	178	132	142	200	175	200
Guinea	200	200	200	300	325	325
Haiti	171	195	205	200	200	200
Indonesia	1,029	808	6,081	3,900	3,000	3,000
Iran	1,344	973	500	850	900	1,000
Iraq	234	684	610	700	700	700
Jamaica & Dep.	78	85	75	75	75	75
Japan	446	546	479	725	750	750
Jordan	120	210	100	100	100	100
Korea, North	195	272	250	300	250	150
Korea, South	83	28	86	100	125	125
Malaysia	573	645	593	650	675	675
Mexico	307	289	295	360	365	365
Nigeria	350	731	900	900	850	850
Peru	437	216	230	200	200	200
Philippines	768	814	2,187	1,200	900	900
Russia	405	284	200	300	300	300
Saudi Arabia	814	660	775	750	800	800
Senegal	604	575	600	600	600	600
Singapore	312	293	267	350	350	350
South Africa	481	573	525	550	575	575
Sri Lanka	394	349	168	150	175	175
Syria	158	228	160	200	220	220
Turkey	341	274	232	250	350	350
UAE	88	102	90	225	150	225
Yemen	158	184	121	175	150	175
EU	952	844	787	700	750	750
O.W. Europe	45	46	60	50	50	50
Eastern Europe	200	247	250	240	247	247
United States	268	302	294	300	310	310
Subtotal	15,160	14,268	23,090	19,450	18,502	18,527
Others	2,753	2,916	2,911	3,020	2,766	2,894
Unaccounted	1,783	1,615	1,279	2,013	1,948	1,770
World Total	19,696	18,799	27,280	24,483	23,216	23,191

11.6. Product specific country commitments

WTO agreement commitments of Australia, Canada, China, EU, Japan and US for cotton and all the cereals including rice and wheat are attached herewith. These tariff commitments are applicable to those countries that have been given the MFN status.