

W.T.O. Agreement on Agriculture (AOA) And India's Agricultural Exports

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New thinking based on empirical facts is required in fully understanding the impact of Agreement on Agriculture (AOA) on the agri-trade of developing countries by keeping in view SPS clauses imposed by the E.U., U.S.A., Japan and other developed countries. The present paper aims at debunking the myth of vast potential of India's agri-exports in the absence of a suitable policy focusing on meeting the challenges of SPS and TBT clauses of WTO. The paper is divided into four sections. Section-I is devoted to a critical review of Agreement on Agriculture (AOA), while Section-II discusses the SPS and TBT clauses and their implications. Section-III analyses the pattern of agri-exports in India between 1987-88 and 2004-05 and section-IV presents the main conclusions emerging out of the study.

The main objective of WTO agreement on agricultures (AOA) is to ensure fairer markets to farmers of all countries. The GATT did apply to agricultural trade, but it contained deficiencies and loopholes in that it permitted countries to use some non-tariff measures such as import quotas, and to subsidize. As a result agricultural trade became highly distorted, especially with the use of export subsidies, which would not normally have been allowed for industrial products. The Uruguay Round (1986-1994) produced the first multinational agreement pertaining to the agriculture sector i.e. AOA. In a nutshell, the AOA was a significant first step towards order, fair competition and market orientation to achieve the goal of reforming the distorted trade in the agricultural sector. It was to be implemented within a six year period by the developed countries and in a ten year period by the developing countries, beginning in 1995. Further, the Uruguay Round agreement included a commitment to continue the reforms through new negotiations, launched in 2000, as required by the AOA. The objective of the AOA is to reform trade in the sector and to make policies more market-oriented. This would improve predictability and security for importing and exporting countries alike through applying new rules and commitments to market access; domestic support and export subsidies. The future success of WTO trading regime is heavily dependent on the successful implementation of AOA mutually agreed upon by

the developed and the developing countries.

SECTION – I

AGREEMENT ON AGRICULTURE (AOA): A CRITICAL REVIEW

At the very outset, it is important to state that AOA does allow governments to support their agriculture but through policies that cause less distortions in trade. The prices and the quantities at which agricultural goods are bought and sold should be the normal ones as fixed under competitive market(s). To the extent these are higher or lower than the normal ones, it indicates the presence of distortions in the agri-trade. If these distortions are minimized, it will certainly provide fairer markets to the farmers. The agreement also allows some flexibility to the way commitments are implemented. Under the agreement, the developing countries are not required to cut subsidies or lower their tariffs as much as developed countries, and they have been given extra time to complete their obligations. Furthermore, the Least Developed Countries (LDCs) are not required to do this at all.

The salient features of the WTO Agreement on Agriculture (AOA) are given below.

1. Long-term Objective: Viewed from a long-term perspective, the AOA seeks to establish a fair and market-oriented agricultural trading system” by providing “for substantial progressive reductions in agricultural support and protection sustained over an agreed period of time, resulting in correcting and preventing restrictions and distortions in world agricultural markets. So the long term objectives are :

- Increase market orientation in agricultural trade
- Strengthen rules to improve predictability and stability for importing and exporting countries
- Initiate a reform process through negotiations on support and protection
- Make specific commitments on market access, domestic support, export competition, and sanitary and phytosanitary issues
- Consider non-trade concerns such as food security, environmental protection, special and differential treatment for developing countries, possible negative effects on least-developed and net food-importing developing countries

2. On Market Access: On market access, the AOA envisages to take fully into account the particular needs and conditions of developing-country members by providing for a greater improvement of opportunities and terms of access for agricultural products of particular interest to these members, including the fullest liberalization of trade in tropical agricultural products.... On market access the main provisions are the following :

Reduce tariff and non-tariff border measures by an average of 36 per cent in developed countries (over six years) and 24 per cent in developing countries

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(over 10 years). The least-developed countries do not need to reduce their tariffs.

Maintain current access and establish minimum access tariff quotas (at reduced tariff rates) where current access is less than 3 per cent of domestic consumption. Increase minimum access tariff quotas to 5 per cent over the implementation period. There are "special safeguard" provisions in certain cases such as import of surges (where imports make up a large proportion of consumption, a lower import surge is required to trigger special safeguard action).

3. Domestic Support

The main provisions are the following :

Reduce Total Aggregate Measure of Support (Total AMS) by 20 per cent for developed countries, 13.3 per cent for developing countries, and 0% for least-developed countries during the implementation period.

Domestic support measures that have a minimal impact on trade ("green box policies") are excluded from reduction commitments. These include general government services such as research, disease control, infrastructure, and food security, as well as direct payments to producers such as "decoupled" (from production) income support, structural adjustment assistance, and direct payments under environmental programs and under regional assistance programs.

Other policies not included in the Total Aggregate Measure of Support reduction commitments are direct payments under production limiting programs, certain government assistance to encourage agricultural and rural development in developing countries, and other support that makes up only a low proportion (5 per cent for developed countries, 10 per cent for developing countries) of the value of production of individual products or the value of total agricultural production.

4 Export Subsidies

Reduce the value of main direct export subsidies to 36% below the 1986-90 base period level over the six-year implementation period, and the quantity of subsidized exports by 21 per cent over the same period. The reduction in values for developing countries will be two-thirds of the reduction for developed countries and will be carried out over a 10 year period. The least-developed countries are exempted.

Limited flexibility is provided between years in terms of export subsidy reduction commitments.

Some provisions are aimed at preventing the circumvention of the export subsidy commitments and set criteria for food aid donations and the use of export credits.

Agreement on Sanitary and Phyto-sanitary Measures

This separate agreement reaffirms the right of countries to set their own health and safety standards provided these are justified on scientific grounds and do not result in arbitrary or unjustified barriers to trade encourages the use of international standards, and includes certain special and differential treatment provisions.

Ministerial Decision Concerning Least-developed and Net Food-importing Developing Countries

The ministers agreed to a number of mechanisms to ensure that enough food aid continues to be provided to meet the food needs of the developing countries despite the implementation of the results of the Uruguay Round. They also agreed to ensure that any agreement relating to agricultural export credits makes appropriate provision for differential treatment in favour of the least developed and net food-importing developing countries.

The agricultural negotiations in the Uruguay Round were by no means easy. The broad scope of the negotiations and their political sensitivity necessarily required much time to reach an agreement on the new rules, and much technical work to establish sound means of formalizing commitments in policy areas beyond the scope of prior GATT practices. The Agreement on Agriculture and the Agreement on the Application of Sanitary and Phytosanitary Measures were negotiated in parallel, and a decision on measures concerning the possible negative effects of the reform programme on Least-Developed and Net Food-importing Developing Countries also formed a part of the overall outcome.

It is important to observed that further negotiations on agriculture began in early 2000. In November 2001, at the Doha Ministerial Conference, the Doha Declaration reconfirmed the long-term objective of the WTO Agriculture Agreement and set a series of deadlines for achieving it.

Numerical Targets for Cutting Subsidies and Protection

The reductions in agricultural subsidies and protection, as agreed upon in the Uruguay Round,

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are as follows:

	Developed countries 6 years: 1995-2000	Developing countries 10 years: 1995-2004
Tariffs		
Average cut for all agricultural products	-36%	-24%
Minimum cut per product	-15%	-10%
Domestic support		
Cuts in total. ("AMS") support for the sector	-20%	-13%
Exports		
Value of subsidies (outlays)	-36%	-24%
Subsidized quantities	-21%	-14%

Note : (i) *Least developed countries do not have to reduce tariffs or subsidies. The base level for tariff cuts was the bound rate before January 1, 1995; or, for unbound tariffs the actual rate charged in September 1986 when the Uruguay Round began*

(ii) *Only the figures for cutting export subsidies appear in the agreement. The other figures were targets used to calculate countries' legally binding "schedules" of commitments. Each country's specific commitments vary according to the outcome of negotiations. As a result of those negotiations. Several developing countries chose to set fixed bound tariff ceilings that do not decline over the years.*

Source: WTO document

Finalization of AOA: Major Developments

The Agreement on Agriculture (AOA) has not been still finalized by the member countries of WTO, even when the Doha deadline of 1st January 2005 has expired. We may now highlight some of the major developments in the field which are as follows:

1. Members missed the March 31, 2003 deadline for agreeing on "modalities"-targets and issues - related to rules for achieving the objective.

2. On August 31, 2003, a joint US-EU proposal on agriculture was offered in an attempt to move negotiations forward. (Forbes. com, November 10, 2003).
3. On September 14, 2003, the 5th WTO Ministerial Conference in Cancun ended without the “comprehensive draft commitments” from member countries to reduce agricultural support and protection and other distortions.
4. On January 12, 2004, US Trade Representative Zoellick sent a letter to WTO members saying that he believed “an agreement to eliminate export subsidies by a certain date” was necessary if trade talks were to progress. He proposed setting a new mid-2004 deadline for some basic accords and called on trade ministers to meet in Hong Kong before the end of 2004. .
5. No significant headway could be made in the 6th WTO Ministerial Conference held in Hong Kong in December, 2005. The ministerial declaration adopted on December 18, 2005 conceded the fact that the Doha Declaration could not be pushed forward much due to the lack of consensus. It further stated “...we recognize that much remains to be done in order to establish modalities and to conclude the negotiations. Therefore, we agree to intensify work on all outstanding issues to fulfill the Doha objectives, in particular, we have resolved to establish modalities no later than April 30, 2006 and to submit comprehensive draft Schedules based on these modalities not later than July 31, 2006”.
6. WTO meeting in July 2006 for making efforts towards completion of Doha Round collapsed as key members, including the US, remained stuck on their positions on agriculture subsidies.
7. The WTO Director General, Mr. Pascal Lamy, on his visit to India on January 19, 2007 made an appeal to all countries to re-examine their respective stands in order to kick start the trade negotiations. He said that the roadblock in agriculture negotiations needs to be overcome for Doha Round to move forward. Both developed and developing countries need to take tariff cuts though greater responsibility would be on rich nations. He said that even after the concessions, nations will have flexibilities.

The failure to reach a consensus on Agreement on Agriculture (AOA) is a matter of serious concern as this agreement is very important for the WTO Trading System. Its importance can be

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briefly discussed as follows:

Importance of the Agreement on Agriculture (AOA) for the Trading System

1. It deals with a significant sector of the world economic activity. In many countries, including many least-developed and developing countries, agricultural trade remains an important part of the overall economic activity and continues to play a major role in domestic agricultural production and employment.
2. It aims at correcting serious economic and trade distortions caused by non-market oriented mechanisms that result in grossly inefficient use of resources in developing countries.
3. It could substantially reduce world poverty. The World Bank estimates that an end to trade-distorting farm subsidies and tariffs could expand global wealth by as much as 0.5 trillion dollars and lift 150 million people out of poverty by 2015.
4. Developing countries are insisting that it (AOA) should receive utmost priority if multilateral trade negotiations are to proceed further and trading system needs to be strengthened by tilting in favour of the developing countries.
5. If developed countries with the most agriculture protection (i.e. US, EU, and Japan) renege on their commitments to the agreement, they stand to lose their credibility with developing countries in an effort to further liberalize trade
6. It addresses food security issues. The trading system also plays a fundamentally important role in global food security. For example, it ensures that temporary or protracted food deficits arising from adverse climatic and other conditions can be met from world markets.
7. Agreement on Agriculture has been long overdue. The products of greatest interest to the least-developed countries (many agricultural products, together with clothing and other labor-intensive manufactures) are among the most heavily protected in the markets of their current and potential trading partners, both developed and developing. For the first time, member governments are committed to reducing agricultural export subsidies and trade-distorting domestic support. They have agreed to prohibit subsidies that exceed the negotiated limits for specific products. And the commitments to reduce domestic support are a major innovation and are unique to the agricultural sector.
8. This Agreement is also important to the United States. "It is difficult to overstate what is at stake here. For the United States farm community, the facts speak for themselves. The United States is the world's biggest exporter of agricultural products, accounting for 12 per cent of the total. This makes up 10 per cent of total United States exports. Some three-

quarters of these exports are outside the NAFTA area-40 per cent destined for Asia alone. This is why a multilateral approach to agricultural negotiations is so important for the United States. For the United States and other export-oriented producers, the negotiations could open up, on a secure and predictable basis, better access to the most dynamic food markets of the future, including the upper-income developing countries.” (Mike Moore, WTO Director General, 2001).

Keeping in view the above points, it can be said that this Agreement takes into account the long term interest of developing as well as developed countries. From this view point, this Agreement is inevitable for the smooth working of the Trading System. Developed economies should therefore give up their rigid stand and accommodate the developing countries to a large extent as “Agriculture is a way of life” for their people.

SECTION – II

WTO AGREEMENTS ON SPS AND TBT: DESCRIPTION AND CRITICAL ANALYSIS

Almost eleven years have elapsed since various trade agreements were signed under the auspices of the World Trade Organization (WTO, 1995). As already discussed, the Agreement on Agriculture (AOA) is expected to eliminate distortions in this sector and to lead to export promotion and import substitution opportunities for developing countries. The exploitation of such opportunities is subject to the adherence to two important agreements of WTO i.e. Sanitary and Phyto-sanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Hence, it is logical to discuss in next few pages the important clauses of these two agreements. Needless to over-emphasize, there exists a strong motivation for SPS and TBT clauses on theoretical grounds.

An important assumption in the neoclassical thinking is that there is complete information in the markets and elimination of tariffs and subsidies will lead to free trade among nations. However, markets are not characterized by complete information needed for a smooth and distortion-free trade. This aspect is extremely important in the global trade in food products. Traditional economics textbooks cite food and agricultural markets/products as examples of perfectly competitive markets with homogeneous products; however, nothing can be farther from the truth. Individual food products are not homogeneous across countries; different countries and firms adopt different performance standards and safety and quality norms; and, moreover, buyers cannot ascertain quality of food products merely by physical inspection. As a result, AOA by itself cannot guarantee removal of all barriers to trade.

Motivation for SPS and TBT Agreements

The traditional economic theory postulates that in a full information environment, producers will produce various kinds of quality foods and consumers will choose the precise quality

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combinations that maximize their satisfaction. Moreover, in such cases there is no need for any market intervention by the government. Henson and Traill (1993) and Viscusi Vernon and Harrington (1995) give similar arguments in terms of demand and supply for food safety. The limitation of the above analysis can be explained by drawing the distinction between Search goods, Experience goods and Credence goods (Nelson, 1970, 1974; Oarbi and Kami, 1973). For Search goods, consumers can determine a product's quality before they buy it by examining the product. For example, pre-shipment physical inspection of bananas by the buyer is good enough to ascertain quality before bananas are exported. The neoclassical analysis can hold good in this case.

Description of SPS and TBT Agreements and Their Implications

Under the auspices of the WTO, SPS and TBT agreements were signed along with many other agreements including AOA. In fact, AOA clearly endorses implementation of SPS agreement through its Article 14:

“Members agree to give effect to the Application of Sanitary and Phyto-sanitary Measures.”

However, SPS and TBT agreements have not received the kind of attention they should have from industry and researchers alike. There is a lot of confusion regarding understanding the difference between SPS and TBT agreements. The distinction between the two is as follows. The SPS articles refer to food and agricultural sector alone, while TBT measures refer to all products including food products. SPS agreement aims to protect human, animal and plant life or health from pest and diseases arising out of imports of food and agricultural products. On the other hand, TBT agreement deals with product specifications which include size, shape, weight and packaging material requirements including labeling and handling safety. Box-1 makes the distinction between the two quite clear.

Box-1 — The Difference between SPS and TBT Measures

The TBT Agreement (Article 1.5) states that the provisions of the TBT Agreement do not apply to measures as defined in Annex A of the SPS Agreement. In other words, the measures which fall within the “To protect from?” column below are **not** covered by the TBT Agreement.

Annex-A: Definition of SPS Measures

To protect what?
human or animal life

To protect from?
risks arising from additives, contaminants, toxins or disease-causing organisms in their food, beverages, feedstuffs;
(contaminants include pesticide and veterinary drug residues and extraneous matter)

human life	plant- or animal-carried diseases (zoonoses);
animal or plant life, including fish, forests and wild animals or plants	pests (including weeds), diseases, or disease-causing or ganisms;
a country	damage caused by the entry, establishment or spread of pests (including weeds)

Source: WTO document.

The TBT Agreement is similar to the SPS Agreement in its content and format. Both agreements promote the use of international standards (harmonization) and the principle of equivalence in the development of non-tariff measures. In implementing these measures, both agreements promote the concepts of non-discrimination and the avoidance of unnecessary obstacles to trade. The transparency provisions are also very similar. The difference between the agreements is primarily one of coverage and the underlying basis for the application of a measure. In general terms, under the TBT Agreement a measure has to be based on a legitimate objective. For example, governments may impose special requirements on imports of armaments (national security) or restrict imports of endangered species (environment), or mandate that labels on cigarette packs should warn consumers of the hazards of the smoking (human health). These are all examples of legitimate objectives which governments use as a basis for requirements on imported products. These measures would not fall within the scope of the SPS Agreement as they do not meet the definition of an SPS measure as set out in Box-1.

Articles 3.1 and 3.2 of SPS state (paraphrased):

“Members shall base their sanitary and phyto-sanitary³ measures on international standards, guidelines and recommendations. The sanitary and phyto-sanitary measures that conform to the international standards, guidelines and recommendations will be deemed necessary to protect human, animal or plant life or health.”

For food products, the international standards, guidelines and recommendations refer to the guidelines suggested by the Codex Alimentations Commission (CAC). CAC is a commission established by World Health Organization (WHO) and Food and Agricultural Organization (FAO). Although the CAC guidelines have no backing of any international law, the WTO endorsement of these standards through SPS and TBT agreements has made these standards de facto mandatory.

An important CAC guideline for food processing companies is to follow a food quality management system called Hazard Analysis and Critical Control Points (HACCP). India needs to strengthen this system for ensuring good quality exports (imports) on the pattern of EU and US.

If India does not comply with the SPS articles, it may face non-tariff-barriers to trade. But one must remember that many of the SPS articles favour the western nations. For example, in continuation of **Articles 3.1 and 3.2, Article 3.3 states:**

“Members may introduce or maintain sanitary or phyto-sanitary measures which

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result in a higher level of sanitary or phyto-sanitary protection than would be achieved by measures based on the relevant international standards, guidelines or recommendations, if there is a scientific justification ...”

This article was introduced at the behest of some of the western countries including US. But this clearly amounts to undermining the importance of CAC standards and the harmonization principle of SPS agreement. CAC standards are based on scientific justification, and, once WTO endorses the international standards set by CAC, there is no need to allow countries to set standards stricter than the CAC standards.

There are numerous examples of non-tariff-barriers to trade encountered by the developing countries. Here are a few examples that affect India in particular:

- The requirement for aflatoxin content in groundnut is decided at 15 parts per billion (ppb) by CAC. Indian laws permit 30 ppb. Thus, there is a scope for improvement in the Indian standard. However, despite the CAC guideline of 15 ppb, EC has a stricter aflatoxin standard of only 4 ppb. Thus, even if Indian standards are improved to match the CAC standards, EC standards prevent any import of groundnut from countries like India. This is a gross violation of CAC guidelines.
- Similarly, in India, 0.2 ppm lead content in milk is considered safe. However, international requirements are 0.02 ppm.
- In one of the CAC meeting rounds, standard for sulphur in sugar was set at a maximum of 20 ppm. However, Indian scientists established at a later date that sulphur content of 75 ppm in Indian sugar is also quite safe.
- Spain is known to ban imports of squid and other marine products on the grounds of heavy metal contamination due to the presence of mercury. However, this ban is imposed mostly when there are excessive landings of these products by the Spanish fishermen. The ban is removed when their landings are quite low.

Then there are other articles, which refer to infrastructure development in the developing countries and their participation in the CAC standards setting meetings. **Article 9 of SPS** agreement and a similar article for the TBT agreement (Article 11) mention that member countries agree to give assistance to developing countries, either bilaterally or through international organisations, in the areas of processing technology, infrastructure and research. As per the clauses, this assistance may take the form of advice, credit, donations, grants and/or technical expertise. However, no time-bound and concrete commitments are expressed in these articles.

Finally, **Articles 3.4 of SPS** agreement and **Article 2.6 of the TBT** agreement express the wish that developing countries should fully participate in the standard setting meetings in relevant international organizations such as CAC. However, this remains only a wishful thinking

as many developing countries do not have the requisite qualified personnel to actively participate in such meetings. India is an exception to this, but nonetheless, our participation in such meetings is poor. A critical evaluation of the existing knowledge on these clauses suggests that India, unlike other developing countries, has all the qualified personnel, and it should go in for strengthening and introduction of SPS and TBT clauses to agriculture market.

SECTION III

PATTERN OF AGRI-EXPORTS IN INDIA

Before we analyze the pattern of agri-exports in India, let us try to find out the growth of agriculture sector vis-à-vis the overall growth of the economy as a whole. The annual average growth rates of GDP and the agriculture and allied sectors, since the beginning of 7th Five Year Plan (1985-1990), have been shown in Table-1. It is clear from the table that the growth rates of the agriculture and allied sectors have always been significantly less than that of the overall growth rate of GDP during the last 21 years, but for the year 2003-2004 when it was higher than the overall growth rate of GDP.

Table-1

Annual Average Growth Rate (at constant prices in per cent)		
Five Year Plan	Overall GDP growth rate	Agriculture & Allied Sectors
Seventh Plan (1985-1990)	6.0	3.2
Annual Plan (1990-92)	3.4	1.3
Eighth Plan (1992-97)	6.7	4.7
Ninth Plan(1997-2002)	5.5	2.1
Tenth Plan (2002-07)		
2002-03	3.8	-6.9
2003-04(P)	8.5	10.0
2004-05(Q)	7.5	0.7
2005-06(A)	8.1	2.3

P: Provisional, Q: Quick estimates, A: Advance estimates

Note: Growth rates prior to 2001 based on 1993-94 prices and from 2000-01 onwards based on new series at 1999-2000 prices.

Source: *Economic Survey 2005-2006*

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Table-2

International Comparisons of Yield: Selected Commodities (2002)

		Kg/hectares			
Rice/Paddy		Wheat		Maize	
Bangladesh	3448	Bangladesh	2164	China	5022
Egypt	9135	China	3885	Egypt	7789
India	2915	France	7449	France	8813
Japan	6582	India	2770	India	1705
Myanmar	3532	Iran	1905	Italy	9560
Pakistan	2882	Pakistan	2262	Pakistan	1769
Thailand	2597	U.K	8043	Philippines	1803
USA	7372				
World	3916	World	2720	World	4343
Sugarcane		Tobacco Leaves		Groundnut (in shell)	
Bangladesh	39890	Bangladesh	1233	Argentina	2329
China	66353	Canada	2600	Brazil	2043
Colombia	94789	France	2778	China	2986
Egypt	119893	India	1353	India	794
Guatemala	94032	Indonesia	829	Sudan	630
India	68049	Italy	3333	U.S.A	2869
Pakistan	48042	Pakistan	1848	Uganda	701
World	65802	World	1589	World	1381

Source : Ministry of Agriculture and Cooperation, Economic Survey 2005-2006

Table-3
Area and Production of Major Horticultural Crops in India
(Area-Million hectare, Production Million tonnes)

Crops	2002-03		2003-04		2004-05*		2005-06*	
	Area	Production	Area	Production	Area	Production	Area	Production
Fruits	3.8	45.2	4.8	49.2	5.0	53.1	5.2	57.6
Vegetables	6.1	84.8	5.9	84.8	6.1	91.6	6.3	99.4

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Spices	2.4	2.9	2.4	3.8	2.5	4.1	2.6	4.4
Plantation Crops	3.0	9.7	3.1	13.1	3.2	14.1	3.3	15.3
Flowers	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Others	1.0	1.6	0.9	0.9	0.9	1.0	1.0	1.1
Total	16.3	144.4	17.2	152.0	17.8	164.1	18.6	178.1

Source: National Horticulture Board, Economic Survey 2005-2006

* Estimated

Table 4

Production and Export of Marine Products in India					
Year	Fish Production (Million tonnes)			Export of marine products	
	Marine	Inaland	Total	Quantity ('000 tonnes)	Value (Rs.crore)
1950-51	0.5	0.2	0.7	20	2
1960-61	0.9	0.3	1.2	20	4
1970-71	1.1	0.7	1.8	40	35
1980-81	1.5	0.9	2.4	80	235
1990-91	2.3	1.5	3.8	140	893
2000-01	2.8	2.8	5.6	503	6296
2001-02	2.8	3.1	5.9	458	5815
2002-03	3.0	3.2	6.2	521	6793
2003-04	3.0	3.4	6.4	412	6086
2004-05	2.8	3.5	6.3	474	6188

Source: Department of Animal Husbandry, Dairying and Fisheries. Economic Survey 2005-06

Taking the Tables 2, 3 and 4 together for analysis, we observe some important facts about Indian agriculture and allied sectors. The latest data on agriculture productivity for 2002 as indicated in Table-2 shows that the productivity of rice, wheat, maize, sugarcane, tobacco and groundnut in India is very low as compared to other developing and developed countries of the world. This needs to be increased if we want to increase our agri-exports in the post-WTO era. The latest data on production and area of major horticultural crops also suggest that there exists a vast potential for increase in the exports of these commodities provided the Government of India strengthens the institutional and other infrastructure, especially the availability of skilled personnel for the implementation of SPS and

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TBT clauses of the WTO. It is ironical that economists and the agriculture experts of most of the developing countries do not understand that to exploit the gains of Agreement on Agriculture (AOA) through liberalizing the agricultural trade, the understanding of SPS and TBT clauses is a prerequisite. In the absence of such an understanding and implementation of these two and other agreements of WTO, India's vast potential of agri-export cannot be converted into a reality.

Table-5
Share of Agriculture Exports in India's Total Exports:
1987-88 to 2004-05

Year	India's Total Exports (Rs.Crore)	Total Exports of Agriculture and allied products (Rs.Crore)	Agriculture Export As a % of Total Export
1987-88	15673.66	3320.13	21.18
1988-89	20231.50	3500.63	17.30
1989-90	27658.42	4749.57	17.17
1990-91	32557.63	6018.70	18.49
1991-92	44041.81	7894.75	17.93
1992-93	53688.26	9081.96	16.92
1993-94	69751.39	12632.55	18.11
1994-95	82674.11	13269.42	16.05
1995-96	106353.34	20344.00	19.13
1996-97	118817.08	24362.57	20.50
1997-98	130100.64	24626.16	18.93
1998-99	139753.14	25387.33	18.17
1999-00	159561.39	24301.17	15.23
2000-01	203571.01	27288.19	13.40
2001-02	209017.97	28143.99	13.46
2002-03	255137.28	32473.34	12.73
2003-04	293366.75	34615.73	11.80
2004-05	356068.88	35963.25	10.10

Source: Economic Survey 2005-2006

Table 5 shows the share of agriculture exports in India's total exports from 1987-88 to 2004-05. The agricultural exports constituted 21.18 per cent of total exports of India in 1987-88 which fell to 17.93 per cent in 1991-92. After the introduction of economic reforms in 1990-91, the share of agriculture exports increased (with fluctuations) to 20.50 per cent in 1996-97. Thereafter it has continuously fallen down to 10.10 per cent in 2004-05. One of the reasons (among many others) has been the failure of poor quality Indian agri-products to clear the international standards of quality and control set by the CAC, by EU, Japan and US. Therefore, it is necessary that SPS clauses are properly understood and better quality and control are introduced in the agri-export

of the country, otherwise the exports of this category will continue to fall even in the future.

Table-6 shows the value of agricultural exports from 1987-88 to 2004-05. The value of agricultural exports (in terms of rupees) has increased in absolute terms, but this table is misleading because if we try to analyze the percentage share of major agriculture commodities in total agriculture exports, we find that in case of most of the commodities it has been, by and large, falling over time. Only a few commodities, for example rice, are an exception to this trend.

Table-7 indicates the percentage share of major agriculture commodities in India's agricultural exports. The exports of tea were 18.11 per cent of total agri-exports in 1987-88 which fell to 15.35 per cent in 1991-92, to 7.62 per cent in 1997-98 and further to 4.96 per cent in 2004-05. Similarly the share of exports of coffee in agri-exports was 7.88 per cent in 1987-88 which fell to 4.21 per cent in 1991-92. It showed an increase to 6.89 per cent in 1997-98, but again fell to 2.80 per cent in 2004-05. The export of rice from India has been rising during the last 21 years. The share of rice export in total agriculture exports was 10.20 per cent in 1987-88, which increased to 10.74 per cent in 1992-93 and further to 24.74 per cent in 1998-99; thereafter it fell to 18.47 per cent in 2004-05.

The export share of wheat shows a very fluctuating behaviour over the period under study. Barring some years, its share has not only been very low but also falling, over time. It is only after 2000-01 that the share of wheat exports in total exports of India shows very inconsistent behaviour for the period under analysis. It was as high as 14.05 per cent in 1990-91 and as low as 0.15 in 2001-02 and 2002-03. The export shares of tobacco, cashew including cashewnuts, shell and spices represent a mixed performance. In some years under study, their export shares have increased while in some years they fell.

The export share of oilseeds in total agricultural exports has been double digit ranging from 10.11 per cent to 18.40 per cent for the period 1988-89 to 1997-98. However, since 1997-98 the share has almost halved touching the low of 4.58 per cent in 2002-03.

Table-7 shows that the contribution of marine products in total agricultural exports has, despite fluctuations, remained significant. Marine products constituted more than one fourth (26.65 per cent) of the total agricultural exports in the year 1994-95. The exports of meat and meat preparations and 'other products' have registered an overall increase during the period under study from 2.64 per cent and 1.17 per cent respectively in 1987-88 to 4.82 per cent and 16 per cent respectively in the year 2004-05. Although during the intervening period, the performance of 'other products' has been highly erratic – sometime registering a very high percentage in total agriculture exports while at other times, the percentage has gone very low. These two items, namely meat and meat preparations and 'other products' can really be a source of sustained increase in our agri-exports, provided we strengthen our quality in accordance with WTO, SPS and TBT clauses.

Table-6 : Exports of Agricultural Commodities: 1987-88 to 2004-05 (Rupees Crores)

Year	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
A. Agriculture and									
allied products	3320.13	3500.63	4749.57	6018.70	7894.75	9081.96	12632.55	13269.42	20344.00
1 Tea	601.18	609.41	916.85	1070.06	1211.64	976.56	1059.16	975.48	1171.11
2 Coffee	261.55	293.52	347.12	252.19	332.09	376.25	545.60	1052.93	1502.94
3 Rice	338.60	331.44	426.52	461.57	755.59	975.60	1286.71	1205.79	4568.08
4 Wheat	35.39	2.99	2.14	31.13	126.98	10.21	0.21	42.34	366.76
5 Cotton raw including waste	109.50	21.37	128.37	845.85	304.89	181.78	653.59	139.76	203.54
6 Tobacco	135.09	125.94	175.04	263.39	377.04	474.04	461.21	254.75	446.82
7 Cashew including cashew nut shell liquid	315.15	275.88	367.63	446.95	675.52	748.66	1048.20	1247.08	1237.16
8 Spices	336.56	275.09	276.98	233.94	372.13	393.42	568.91	612.24	793.52
9 Oil seeds	213.36	408.66	610.16	608.50	921.39	1545.29	2323.92	1797.84	2348.61
10 Fruits and vegetables	128.24	170.42	201.90	213.25	348.98	312.43	414.34	436.74	527.60
11 Processed fruits, juices, miscellaneous processed items	174.07	177.09	210.48	212.70	190.49	228.20	284.02	361.19	887.76
12 Marine products	533.23	629.95	687.18	960.01	1442.72	1743.15	2551.89	3536.64	3381.13
13 Sugar and molasses	11.74	9.67	32.51	37.57	157.25	353.51	178.08	62.16	506.40
14 Meat and meat preparations	87.72	94.05	113.70	139.84	230.79	257.11	344.52	402.73	627.00
15 Others	38.75	75.15	252.99	241.74	447.25	505.75	912.19	1141.75	1775.57

Source : Economic Survey, Ministry of Finance, Government of India

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Table-7 : Percentage share of major Agricultural Commodities in total agricultural exports.

Year	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05P
Agriculture and allied products																		
Sr.																		
1. Tea	18.11	17.41	19.30	17.78	15.35	10.75	8.38	7.35	5.76	4.26	7.62	8.92	7.34	6.55	6.11	5.09	4.73	4.96
2. Coffee	7.88	8.38	7.31	4.19	4.21	4.14	4.32	7.94	7.39	5.86	6.89	6.81	5.90	4.34	3.89	3.06	3.14	2.80
3. Rice	10.20	9.47	8.98	7.67	9.57	10.74	10.19	9.09	22.45	13.02	13.69	24.74	12.86	10.75	11.28	17.96	12.04	18.47
4. Wheat	1.07	0.09	0.05	0.52	1.61	0.11	0.00	0.32	1.80	2.87	0.00	0.01	0.00	1.52	4.73	5.42	6.91	4.03
5. Cotton raw including waste	3.30	0.61	2.70	14.05	3.86	2.00	5.17	1.05	1.00	6.46	3.34	0.82	0.32	0.81	0.15	0.15	2.72	1.01
6. Tobacco	4.07	3.60	3.69	4.38	4.78	5.22	3.65	1.92	2.20	3.11	4.35	3.00	4.15	3.18	2.87	3.15	3.17	3.47
7. Cashew including cashew nut shell liquid	9.49	7.88	7.74	7.43	8.56	8.24	8.30	9.40	6.08	5.29	5.71	6.43	10.13	7.53	6.37	6.35	4.93	6.53
8. Spices	10.14	7.86	5.83	3.89	4.71	4.33	4.50	4.61	3.90	4.93	5.72	6.43	7.27	5.93	5.32	5.10	4.46	4.99
9. Oil seeds	6.43	11.67	12.85	10.11	11.67	17.01	18.40	13.55	11.54	14.35	13.95	7.65	6.74	7.49	8.04	4.58	9.67	8.62
10. Fruits and vegetables	3.86	4.87	4.25	3.54	4.42	3.44	3.28	3.29	2.59	2.38	2.39	2.13	2.65	3.09	3.75	3.66	5.18	4.69
11. Processed fruits, juices, miscellaneous processed items	5.24	5.06	4.43	3.53	2.41	2.51	2.25	2.72	4.36	4.48	2.62	2.81	3.51	4.83	4.39	4.57	4.05	3.36
12. Marine products	16.06	18.00	14.47	15.95	18.27	19.19	20.20	26.65	16.62	16.45	18.22	17.21	21.09	23.33	20.96	21.33	17.64	15.84
13. Sugar and molasses	0.35	0.28	0.68	0.62	1.99	3.89	1.41	0.47	2.49	4.42	1.04	0.10	0.17	1.85	6.33	5.59	3.57	0.41
14. Meat and meat preparations	2.64	2.69	2.39	2.32	2.92	2.83	2.73	3.04	3.08	2.91	3.28	3.10	3.37	5.39	4.24	4.24	4.95	4.82
15. Others	1.17	2.15	5.33	4.02	5.67	5.57	7.22	8.60	8.73	67.70	11.18	9.86	14.50	13.41	11.57	9.75	12.85	16.00

Source : Economic Survey, Ministry of Finance, Government of India

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Table-5 shows that the share of total agriculture and allied sectors in the total exports of India has fallen from 21.18 per cent in 1987-88 to 10.10 per cent in 2004-05. In fact there has been a continuous fall in the export share of this sector since 1996-97. A disaggregating of total agricultural and allied export over the same period shows that this trend is common to all the major agricultural exports. It is observed from Table-8 that the share of all major agricultural commodities in the total exports of India is not only very low, but also the share has come down in 2004-05 in comparison to 1987-88 in the case of all the selected agricultural commodities except wheat and 'other products'. Two cases typical of this trend are tea and coffee. The share of tea declined from 3.84 per cent to 1.10 per cent in 1995-96 and further to 0.82 in 2001-02; it was only 0.50 per cent in 2004-05. The share of coffee exports was 1.67 per cent in 1986-87 which declined to 1.41 per cent in 1995-96 and further to 0.52 per cent in 2001-02. The share of coffee exports in total exports of India was only 0.28 per cent in 2004-05. India, the largest producer and consumer of tea in the world, accounts for around 27 per cent of the world's production and 30 per cent of world trade. However exports of tea were only 20 per cent of domestic production in 2004-05. Theoretically, India should exhibit the ultra export biased growth in tea industry; but due to the problem of high cost of production and stagnant productivity, it has been a distant dream. The exports of coffee, on the other hand, has picked up during the last 50 years simply because of low domestic consumption while its production has been increasing continuously. Nevertheless, India contributes only 4 per cent of the total world production. Hence there is a vast potential to be tapped by India in both tea and coffee exports. Furthermore, the export of rice, wheat, cashewnuts, spices, and oil seeds can also play an important role in turning the myth into a reality, provided policy makers do make a visionary and dynamic production and export policy of all these products. Infrastructure for agricultural marketing should be improved by introducing and promoting Public Private Partnership (PPP).

The exports of agri-products such as fruits and vegetables processed fruits, juice, and others can be increased manifold by strengthening the SPS and TBT clauses as it will increase the credibility of these agri-exports in the markets of developed countries, particularly, EU, US and Japan. India does possess the necessary institutional and personnel infrastructure to achieve this feat unlike most of the developing countries which are lacking in such facilities.

SECTION IV

SUMMARY AND POLICY SUGGESTIONS

To conclude, Agreement on Agriculture (AOA) alone cannot guarantee freer trade in the food sector. The reason is that due to experience-good and credence-good nature of food products, countries impose many restrictions on imports of food and agricultural commodities. The concerns of importing countries are valid, as they would like to prevent any harm to their citizens, plant and animal life health due to pests and diseases carried-in through imports of food and agricultural products. However, imposition of these restrictions can be and is also used to create unfair

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Table-8 : Percentage share of major Agricultural Commodities in total exports.

Year	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05P
Agriculture and allied products																		
Sr.																		
No.																		
1. Tea	3.84	3.01	3.31	3.29	2.75	1.82	1.52	1.18	1.10	0.87	1.44	1.62	1.12	0.88	0.82	0.65	0.56	0.50
2. Coffee	1.67	1.45	1.26	0.77	0.75	0.70	0.78	1.27	1.41	1.20	1.30	1.24	0.90	0.58	0.52	0.39	0.37	0.28
3. Rice	2.16	1.64	1.54	1.42	1.72	1.82	1.84	1.46	4.30	2.67	2.59	4.49	1.96	1.44	1.52	2.29	1.42	1.87
4. Wheat	0.23	0.01	0.01	0.10	0.29	0.02	0.00	0.05	0.34	0.59	0.00	0.00	0.00	0.20	0.64	0.69	0.82	0.41
5. Cotton raw including waste	0.70	0.11	0.46	2.60	0.69	0.34	0.94	0.17	0.19	1.33	0.63	0.15	0.05	0.11	0.02	0.02	0.32	0.10
6. Tobacco	0.86	0.62	0.63	0.81	0.86	0.88	0.66	0.31	0.42	0.64	0.82	0.55	0.63	0.43	0.39	0.40	0.37	0.35
7. Cashew including cashew nut shell liquid	2.01	1.36	1.33	1.37	1.53	1.39	1.50	1.51	1.16	1.08	1.08	1.17	1.54	1.01	0.86	0.81	0.58	0.66
8. Spices	2.15	1.36	1.00	0.72	0.84	0.73	0.82	0.74	0.75	1.01	1.08	1.17	1.11	0.79	0.72	0.65	0.53	0.50
9. Oil seeds	1.36	2.02	2.21	1.87	2.09	2.88	3.33	2.17	2.21	2.94	2.64	1.39	1.03	1.00	1.08	0.58	1.14	0.87
10. Fruits and vegetables	0.82	0.84	0.73	0.65	0.79	0.58	0.59	0.53	0.50	0.49	0.45	0.39	0.40	0.41	0.50	0.47	0.61	0.47
11. Processed fruits, juices, miscellaneous processed items	1.11	0.88	0.76	0.65	0.43	0.43	0.41	0.44	0.83	0.92	0.50	0.51	0.53	0.65	0.59	0.58	0.48	0.34
12. Marine products	3.40	3.11	2.48	2.95	3.28	3.25	3.66	4.28	3.18	3.37	3.45	3.13	3.21	3.13	2.82	2.72	2.08	1.60
13. Sugar and mollasses	0.07	0.05	0.12	0.12	0.36	0.66	0.26	0.08	0.48	0.91	0.20	0.02	0.03	0.25	0.85	0.71	0.42	0.04
14. Meat and meat preparations	0.56	0.46	0.41	0.43	0.52	0.48	0.49	0.49	0.59	0.60	0.62	0.56	0.51	0.72	0.57	0.54	0.58	0.49
15. Others	0.25	0.37	0.91	0.74	1.02	0.94	1.31	1.38	1.67	1.89	2.12	1.79	2.21	1.80	1.56	1.24	1.52	1.62

Source : Economic Survey, Ministry of Finance, Government of India

barriers to imports. Taking this experience into account, SPS and TBT agreements guarantee the importing countries to adopt SPS measures, but, at the same time, also aim at preventing unjust discrimination faced by imported products.

The foregoing discussion of the important articles of SPS and TBT makes it fairly obvious that India will have to improve its quality norms by quantum leaps. However, at the same time, one must realize that since the SPS and TBT guidelines are decided by the member countries in the CAC meetings, India must have a strategy for negotiating and arriving at just and fair food standards for its strategically important food products. Hence, the policy prescriptions for India are two-fold – one, for the domestic reforms and the other, for strategic re-negotiation of SPS and TBT clauses. It is only after adopting such foolproof strategy that India's vast potential of agri-exports can be converted into a reality. An in-depth and detailed research is needed for identifying appropriate domestic reforms and strategies for renegotiations at industry level. However, some of the broad policy implications emerging from the present scenario are as follows:

1. Indian food industry does not have a trained manpower to handle post-harvest quality management practices and food processing activities. There is an urgent need to train labourers engaged in post-harvest practices and shop-floor workers engaged in food processing activities. Setting-up of farm schools on the lines of Industrial Training Institutes (ITIs) should be given priority, where essentials of hygiene, food handling practices and processing are taught in certificate courses. Such training be made mandatory to hire workers on farm or in processed food sector.
2. Many of the food products imported into India contain weights measured in ounces and pounds. Labels are many times written in a foreign language, and the products contain additives that are not allowed by the Prevention of Food Adulteration Act (PFA) applicable to domestic products. Thus, our laws need to be applied with equal force on imported products, and wherever science permits, domestic food companies be allowed to use recently developed food additives and preservatives so that they can effectively compete with the imported products. For example, decolourant for buffalo milk is permitted elsewhere but not in India. Nisin, an important preservative essential for tropical climates, is not permitted in India. These things need to be changed.
3. Article 3.3 of SPS, as discussed earlier, is quite discriminatory. It allows countries to impose standards stricter than the ones suggested by the CAC. The examples provided in the earlier section are clear indications of unfair trade barriers. In the coming round of renegotiations, India must oppose this article which undermines the importance of the CAC guidelines and the principle of harmonization of food standards among member countries. In this regard, H. Nakajima, the Director General of WHO (in 1996) also strengthens the above by saying:

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“Stricter Standards (other than Codex) do not necessarily offer better health protection and may be used as non-tariff trade barriers (Dawson, 1996)”.

4. In fact, SPS agreement endorses guidelines of the CAC. However, more often than not, we never have a representation in the CAC meetings when the standards on various food products are set. Due to lack of participation, such standards get set which are unfavourable to developing countries. Articles 3.4 and 2.6 of SPS and TBT respectively, encourage developing countries to participate in standard setting meetings of the CAC. India must take advantage of this provision. We must request FAO and WTO to facilitate such participation through subsidizing trips for the meetings and organizing these meetings in developing countries.
5. Articles 9 and 11 of SPS and TBT respectively allow for assistance to developing countries for upgrading their infrastructure, food technology and research. However, no concrete time-bound commitments are expressed in these articles. Thus, the articles remain only a wishful thinking. If India has to improve its food quality standards sooner, if not overnight, to the CAC levels, then in the re-negotiations we must insist on concrete, time-bound assistance commitments from the WTO and FAO.

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