Chapter One

WTO and India's Agricultural Trade

1.1. Introduction

Agriculture is still a very important component of the Indian economy. More than 65 per cent of the country's population is involved in agriculture and related activities and hence dependent on it directly or indirectly. Agriculture contributes a major share in GNP. Moreover, the problems of general poverty and inequality and other forms of underdevelopment are primarily influenced by the conditions of agriculture. Unlike the agricultural sector in the developed countries, agriculture in a country like India operates mainly with traditional modes of production and suffers from different forms of structural and institutional rigidities creating problems on both the supply as well as demand sides. This has also serious developmental consequences.

The economic environment for agriculture trade is changing in a remarkable way due to changes in the domestic policies and international trade arrangements. The international developments relevant to agricultural trade are taking place at two levels in recent years. First several countries are emerging as groups with the objectives of forming unified trade blocks. Secondly, the most important development in recent decade was the signing of the Uruguay Round of Trade negotiations wherein for the first time agriculture was brought under the General Agreements of Tariffs and Trade (GATT) discipline.

Agricultural trade has been one of the most Managed of the sectors the world over. It started with keeping agriculture out of the purview of GATT. Many countries were willing to accept a common set of rules for trade in manufacturing and at the same time they were interested in keeping their autonomy with respect to agricultural trade.
Later in 1995, agricultural trade was included as one of the areas in the WTO but there was and still is a considerable hesitancy in accepting all set of rules for agriculture by a whole lot of countries whether developed or developing.

In recent times Indian agriculture is facing another very serious problem, that of the "realization crisis". Agriculture is often suffering from the so called "market problem". Instead of suffering from the old problem of lack of sufficient marketable surplus for non-agricultural sectors, currently Indian economy is burdened with a painful duality of huge (60 million tones of buffer stock) food surplus (non-food, cash crop also) along with wide-scale poverty, malnutrition and hunger! Agriculture cannot sell its products in the market at profitable prices, because of lack of purchasing power in non-agricultural sectors and hence lack of consequent demand for food and other agricultural products used as raw materials in industry. Many researchers have however argued that in the post-WTO situation this problem of market for agriculture could be solved.

One of the great achievements of the Uruguay round (UR) was to bring agricultural policies into the mainstream of GATT discipline. Non-tariff barriers to agricultural imports were tariffed and bound and are scheduled for phased reductions and export subsidies have been reduced, mostly between 1995 and 2000. The UR agreement on agriculture together with the SPS agreement (to limit the use of quarantine restrictions), ensure that agricultural trade would be less chaotic than prior to the formation in 1995 of the new WTO. The new rules and obligations eventually have constrained further farm protection growth in both advanced and newly industrialized countries, thereby promising greater continuity and stability to international food markets. Clearly less developed countries with comparative advantage in agricultural products could experience export-led growth.

WTO focuses on multitrade liberalization and also agricultural trade liberalization, to have improved market access for least developed countries. India's participation in WTO could be a meaningful exercise if India could expand its market for agriculture through international participation. Through the constructions of free trade zones for agricultural
products, India can improve the quality of her agricultural exportables and can also become internationally competitive. Furthermore through agricultural exports India also can earn crucial “forex” which may relax the “forex” constraint for industry.

Open economy issues have attracted a fair amount of attention in recent times, thanks to the policy debates pertaining to trade liberalization and WTO provisions. In the context of the Indian economy agricultural sector has been experiencing gradual export orientation, since the introduction of economic reforms in the 1990s. The share of agricultural exports in total GDP rose from 1.3% in 1990-91 to 2.0% in 1995-96. But declined to 1.6% in 1998-99. From a phase of gradual export orientation, the agricultural sector is likely to enter a new phase of globalization in the post WTO period. The EXIM policy 2000-2001 has proposed the setting up of agricultural export zones with a view to boosting agricultural exports. The state governments have been asked to identify product specific export zones for development of exports of specific products. As global market integration intensifies, trade in agriculture and agro-based manufactures are becoming increasingly important to employment generation. According to some preliminary assessment of World Bank, many developing countries that are net exporters of agricultural products would benefit from more open global markets. Here it is worth noting that there is no country in the world, which has globalized its agricultural sector in the true sense of the term. However a beginning is expected to be made in the direction of agricultural trade liberalization with the implementation of various provisions of the WTO agreements, especially provisions relating to removal of quantitative restrictions on LDC’s agricultural exports. A key issue that emerges in the present context is the capacity of agricultural exports to contribute to relaxation of foreign exchange constraint and employment generation in a food constrained and indexed economy.

Participation in WTO and being integrated with the world market, especially for agriculture products may not be a smooth transition for Indian economy since it is still a weaker partner in the process of globalization. However, the multilateral liberalization, which WTO provisions attempt to put into effect, may have quite different implications for food importing, developing countries or specifically countries with historical
dependence on food aid. The set of WTO measures to reduce subsidized surplus production in developed countries is very likely to reduce the amount of food made available as food aid. There seems to be a positive relation between food aid and the level of donor countries' food stock (Konandreas, Sharma and Greenfield, 1998). To the extent that a new WTO agreement on agriculture will result in reduced stocks, this may result in declining food aid. Consequently a less developed country with comparative disadvantage in agricultural product will be affected by agricultural trade liberalization.

1.2. Agricultural Scenario since Independence

Agriculture plays an important role in the economic development of our country. It contributes sizeably to the domestic product as also to exports. More than two-thirds of our work force work in agriculture and many depend upon it being engaged in trade, in agricultural products, agro-based industries etc. Agriculture supplies food and raw materials, labour, foreign exchange, resource for capital formation, provides employment and stimulates industrial expansion. It has influences on large share of national income, provides large employment and support for many activities, influences industrial structure, transport and other services and considerable part of the productive capacity of the country is in the form of agricultural assets like irrigation facilities, ploughs, storage capacity etc. It is thus obvious that agriculture occupies an important position in the Indian economy. No doubt, agriculture is still backward in many respects but it is also true that some notable progress had been recorded in this sector. During the last many years of planning Government has played an active role in the development of agriculture. Appropriate objectives have been laid down in the various plans corresponding to these objectives. Measures have been spelt out too.

In the perspective of poverty alleviation and employment generation, the agricultural sector plays a very important role. This sector accounts for almost 25 per cent of India’s national income in recent years. The share of agriculture in national income has been declining from 56.5 per cent in 1950-51 to 52.1 per cent in 1960-61, 45.7 per cent in
1970-71, 39.6 per cent in 1980-81, 33 per cent in 1990-91, 25.2 per cent (provisional) in 1999-00, 24.2 per cent in 2000-01 (quick estimate) and 24.3 per cent in 2001-02 (advanced estimates).

Though the share of agriculture in national income has been declining, the work force engaged in agriculture has exhibited only a marginal decline. Going by the data provided by the census of India, in 1961, 75.9 per cent of total work force was engaged in agriculture (the absolute number being 143.2 million workers), in 1981 the percentage was 69 and further came down to 63.8 in 1999-00 and 59.9 in 1993-94. According to the information available, totally agriculture provided employment to 238.68 million persons in 1993-94. In 1999-00, although the percentage declined from 63.8 to 59.9 the number of persons employed remained 237.8 million.

The linkage between agriculture and industrial sector has been widely known due to suppliers of wage goods to the industrial sector, provider of raw materials to agro-based industries and generator of agricultural income that enables rural demand of industrial product to emerge. Empirical findings results show that a unit increase in agricultural output would have positive effect on both industrial production and national income. Rangarajan (1982) estimated that 1 per cent increase in agricultural output tends to raise industrial production by 0.5 per cent and augment national income by 0.7 per cent. The experiences in the “eighties and nineties “confirm the findings of Rangarajan.

History tells us that till late eighties agricultural sector in India was relatively close as the export orientation was confined to only commercial crops like spices, tea, coffee etc. and imports were largely restricted. However, during the period since then the degree of export orientation increased considerably with the removal of some of the restriction or controls on export of commodities.

The share of agricultural export in GDP (both in total GDP and GDP originated in agriculture) indicate three aspects namely the degree of openness or outward orientation of the agricultural sector in regard to the export activity, the nature of agricultural trade
strategies adopted in the country and supply capacity of the agricultural sector regards exports. An analysis carried out by the data sources – National Accounts Statistics various issues, CSO, New Delhi, Economic Survey, various issues, Government of India, New Delhi tell us that a marginal rise in the shares of agricultural exports in total GDP and in GDP originated in the agricultural sector during the seventies, the shares were on the decline in the eighties. However, since the beginning of the nineties there is a perceptible rise in the shares. The share in total GDP rose from 1.3 per cent in 1990-91 to 2.0 per cent in 1995-96. But since then it declined to 1.6 per cent in 1998-99. In case of share of agricultural exports in GDP originated from the agricultural sector the rise from 4.5 per cent to 8.0 per cent and then decelerated to 5.9 per cent during the above period. We can draw conclusion from above that the degree of openness or outward orientation of the agricultural sector with regard to exports has increased in recent times and a marginal decline occurred since 1995-96. It reflects that the impact of liberalization of agricultural export and improvement in the supply capacity of the economy in recent times.

From phase of gradual export orientation the agricultural sector in India is likely to enter into a new phase of globalization with the implementation of various provisions of WTO. It is also very important to note that there is no country in the world, which has globalized its agriculture sector in the true sense of the term even in the advanced market economy countries agricultural sector, is relatively protected, in some highly protected European Union and Japan. However, by implementing the various provisions of WTO agreements, especially the provisions relating to removal of quantitative restrictions it is expected that a beginning will be made in this direction.

1.3. Agricultural Development

Agriculture plays a very important role in the Indian economy. Though the share of agriculture to Gross Domestic Product (GDP) is less than one-fourth now, nearly two-third of Indian population is directly getting employed in this sector. There is agricultural and Industry linkage where good performance in agricultural sector increases the income.
of the Industrial sector and vise versa. The growth of commercial crops can become a significant potential for promoting exports of agricultural commodities and bringing about faster development of agro-based industries. Therefore agriculture not only contributes the overall growth of an economy, it tries to eradicate poverty by providing food security and employment to the two-third of our population.

In 1950 the share of agriculture to Gross Domestic Product was (GDP) about 57 per cent the same two-third of population was employed in agriculture and now the paradoxes is that there is no change in the population dependent on agriculture but the share in GDP has come down to as low as 20 per cent. From the diagram we can understand that the agricultures share in GDP declined from 57.7 in 1950-51 to 22 per cent in 2002-03. Between 1961 and 1999-2000, there was a decline of 30 per cent points in the share of...
agriculture in GDP. The result was the gap between labour productivity in agriculture and non-agriculture increased rapidly.


In 1980, the highest growth rate of GDP from agriculture was of more than 3 per cent per annum recorded. But in the post-reform period it decreased to 2.76 per cent per annum. This reduction in the share of agricultural GDP between the first half of the 1990s and the later period is very much disturbing. It is a matter of serious concern that during the 1997-98 to 2004-05 period, agricultural growth was only 1.6 per cent per annum.

1.4. Historical Anecdotes of WTO

The WTO was established on 1st January 1995 after converting general Agreement of Tariffs and Trade (GATT) of 1947-94 as a outcome of the Uruguay Round Agreement on April 15, 1994 in Marrakesh, Morocco. It is the highest body for setting rules for
international trade. The establishment of World Trade Organisation (WTO) is a trend
towards globalization of the World’s economy. The world economy had been
experiencing a progressive international economic integration since the last quarter of the
20th century. After seven years of negotiations called Uruguay Round of Trade
negotiations – the most powerful world trade regulating agency came into existence. It
covered many new areas such as agriculture, textiles, technology, intellectual property
rights (IPRs) and trade related investment services gradually the areas of WTO
negotiations expanded (Kaushik and Karol, 2005). The legal text of the WTO agreement
is a list of sixty agreements, annexures and decisions. At present 148 countries are its
members including India and China. About 29 countries including Russia are waiting to
become WTO members. The highest, decision making body of WTO is a Ministerial
Conference which meets at least once in two years. Till date six ministerial conferences
have been held in Singapore (December 1996), Geneva (May 1998), Seattle-USA (Nov-
Dec 1999), Doha – Qatar (Nov.2001) and Cancun – Mexico (Sept.2003) respectively
(Madan 2005). The sixth Ministerial Conference was held in Hong Kong during
December 13-18 2005. Agriculture was also included in the WTO (Agreement on
Agriculture), India being one of the signatories of WTO after loosing its appeal in the
WTO, liberalized trade on Agro-commodities as per WTO norms.

General Agreement on Tariff and Trade (GATT), 1947 had a general rule of prohibiting
the use of quantitative restrictions on both imports and exports. Agriculture was
exempted from this rule in the interest of domestic concerns regarding quantities to be
marketed or produced or to remove a temporary surplus of the domestic products. In
addition to some of the member of the body had obtained specific dispensation enabling
them to impose quantitative restriction on agricultural produce. Agricultural imports also
often had to be satisfied with restriction like variable import duties, minimum import
prices, voluntary export restrain and similar border measures other than ordinary custom
duties.

The Dunkel Draft, for the first time brought agriculture within the gambit of the GATT
discipline. The Agreement on Agriculture (AoA) is a comprehensive document that
makes a decisive move towards the objective of “increased market orientation in agricultural trade” (final text 1994).

1.5. GATT and WTO

In 1948, the Second World War had just ended. The founders of the post-war economic order had the foresight to recognize that economic co-operation must be central to achieve a lasting peace. This is perhaps most clearly encapsulated in the words of President Roosevelt to the Bretton Woods conference in 1944. He reflected that “Commerce is the life blood of a free society.” He also urged that “we must see to it that the arteries which carry that blood stream are not clogged again, as they have been in the past, by artificial barriers created through senseless economic rivalries”. From this imperative, were built the three pillars of the post-war international economic order as follows.

- The International Monetary Fund
- The International Bank for Reconstruction and Development (the World Bank)
- The multilateral trading system embodied in the General Agreement on Tariffs and Trade

The GATT was created to bring order, security and fair and transparent competition to international trade. Its rules defined what the governments could - or could not - do with their trade policies. GATT was also a forum for countries to settle disputes and to negotiate lower trade barriers. GATT was the outcome of the great depression and the Second World War; a time in our history where countries mistakenly believed that they could solve their problems by living in isolation. The Hawley Smoot Tariff Act that had raised US tariffs to their highest protective levels ever, had set in a motion a trade war. The net result of that war was a sharp decline in international trade, and a loss of welfare of massive proportions. But from the mistakes of our past, came an important lesson for
our future that we needed multilateral institutions that could make the world a more orderly place to live in.

The World Trade Organization (WTO) was founded in 1995 to replace the GATT. The establishment of the WTO represented “a gigantic leap forward towards broader and more intensive international co-operation”. This multilateral organization aims to lower tariffs and non-tariff barriers so as to increase international trade. The WTO deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible. The 146 member states meet in ministerial sessions at least once every two years. Essentially, it is a place where member governments try to sort out the trade problems they face with each other. It is an organization for liberalizing trade. It operates a system of the trade rules.

The bulk of the WTO’s current work comes from the 1986-94 negotiations called the Uruguay Round and earlier negotiations under the General Agreement on Tariffs and Trade. The Uruguay Round with 123 member countries took major steps towards correcting some serious weaknesses in the international trade rules, though some of them were taken reluctantly. But steps like incorporations of agriculture within the international rules have not been fully implemented in economies like USA, EU and Japan.

1.6. WTO Ministerial Conferences

The Ministerial Conference is the highest authority in the World Trade Organization (WTO) structure and takes decisions on all matters under multilateral trade agreements. Since its inception in 1995, the WTO has held six Ministerial Conferences, the sixth one being held from 13 to 18 December 2005 in Hong Kong, a founding member of the WTO.

The First WTO Ministerial Conference was held in Singapore between 9 and 13 December 1996. Trade, foreign, finance and agriculture Ministers from more than 120
World Trade Organization Member governments and from those in the process of acceding to the WTO participated in the Conference. The Conference was the first since the WTO entered into force on 1 January 1995. It included plenary meetings and various multilateral, plurilateral and bilateral business sessions. The members examined issues related to the work of the WTO's first two years of activity and the implementation of the Uruguay Round Agreements. They reviewed the ongoing negotiations and Work Programme and examined developments in world trade.

The Second WTO Ministerial Conference was held in Geneva (WTO Website) Switzerland between 18 and 20 May 1998. It took place at a particularly significant time for the multilateral trading system, when the fiftieth anniversary of its establishment was being commemorated. On this occasion members paid tribute to the system's important contribution over the past half-century to growth, employment and stability by promoting the liberalization and expansion of trade and providing a framework for the conduct of international trade relations, in accordance with the objectives embodied in the Preambles to the General Agreement on Tariffs and Trade and the World Trade Organization Agreement.

The third Meeting in Seattle in November 1999 collapsed since developing countries refused to accept a process from which they had been excluded. It was all "take and no give" by developed countries. There were many differences in the perspectives of developing and industrialized nations on the current reality of free trade and how it affected them. There had been a shift in the balance of power. The developing countries concluded that they could not only negotiate, they could block negotiations.

More than 700 organizations and between 50,000 and 1,00,000 people took part in the protests on November 30 against the WTO's Third Ministerial conference. The fact that so many people turned up in the pouring rain, through all the police crackdowns etc indicates the sheer number of people who were concerned at the current issues, as obviously not everyone could be in Seattle. They argued against the current corporate-led free trade but in favour of fairer trade with less exploitation. These groups and citizens
sensed a cascading loss of human and labor rights in the world. The reports say that 587 persons were arrested on that day. One eyewitness, a promoter of non-violence, Matt Guynn, distributed the following account of police brutality over the Internet (Paul Donahue 2000).

In one scene I witnessed this morning (at 8th Ave and Seneca), police who had been standing behind a blockade line began marching in lock-step toward the line, swinging their batons forward, and when they reached the line they began striking the (nonviolent, seated) protestors repeatedly in the back. Then they ripped off the protestors' gas masks, and sprayed pepper spray at point-blank range into their eyes repeatedly. After spraying, they rubbed the protestors' eyes and pushed their fingers around on their lips to aggravate the effect of the spray. And after all THIS, they began striking them again with batons.... The police then were able to break up the line, and the protestors retreated to the steps of a nearby church for medical assistance.

The Fourth WTO Ministerial Conference (WTO website) was held in Doha, Qatar from 9 to 14 November 2001. At Doha, there was further evidence of the ability of developing countries to influence trade outcomes. A clearer victory in agriculture and other areas was forthcoming. While the broad support for the successful anti-subsidy position in agriculture seemed a developing country achievement, the developing countries were a visible part of the alliance. The meeting accepted that special and differential treatment (allowing different policies by developing countries and requiring different policies towards them) would be "an integral part" of any final settlement, potentially better than the Uruguay Round, which had offered only minor adjustments to policy and non-obligatory concessions.

The Conference adopted a declaration to assist developing countries in implementing WTO agreements, covering issues related to agriculture, services, industrial tariffs, investment, and trade and competition policy. The declaration provides the mandate for negotiations on a range of subjects and other work, including issues concerning the implementation of the present agreements.
The declaration set 1 January 2005 as the date for completing all but two of the negotiations. Negotiations on the Dispute Settlement Understanding are to end in May 2003; those on a multilateral register of geographical indications for wines and spirits, by the next Ministerial Conference in 2003. Progress is to be reviewed at the Fifth Ministerial Conference in Cancun, Mexico. Doha also extended the time for least developed countries to comply with subsidy and intellectual property rules. These issues were accepted at Doha in spite of initial strong opposition by developed countries, indicating that developed countries thought they were a necessary part of any bargain. The Doha Round is widely acknowledged as a “development round” that promised to place development at the heart of trade negotiations and focused on issues on direct interest to developing countries.

WTO negotiations at Cancun, Mexico on September 10-14 2003 also collapsed amid deep divisions between the USA, EU and Japan on one side and the Group of 23 led by India, Brazil, South Africa and China, on the other (Web site). The two sides, already at odds on agricultural issues, deadlocked over proposals for WTO rules on investment, competition, trade facilitation and transparency in government procurement.

After the Cancun deadlock, WTO members in Geneva began efforts to put the negotiations and the rest of the work programme back on track. Work intensified in the first half of 2004, and after days of closed-door negotiations, a package of framework agreements was reached. It was the so-called “July package” (WTO July 2004) - the General Council’s post Cancun decision on the Doha Agenda work programme, agreed on 1 August 2004, containing frameworks and other agreements designed to focus the negotiations and raise them to a new level.

The rich countries had delivered a deeply unbalanced text as a “take or leave it” option. This had put developing countries in the unfair position of having to accept a bad deal or reject and get blamed by the USA and EU for failure. But the “development” aspect of the agenda had disappeared from view, leaving WTO business as usual in its wake. Not
single one of the more than 80 implementation issues raised by developing countries had been addressed.

On industrial tariffs, the July Package repeats proposals that were strongly rejected by developing countries in Cancun. These proposals to lower tariffs for industrial products will favour multinational companies that are already established in the international market. They will not help developing or least developed countries diversify and strengthen their industrial base.

The Sixth WTO Ministerial Conference was held in Hong Kong, China, 13–18 December 2005. Prior to the Conference, 70 participants from 16 Asian countries, representing migrant, trade, development, labour, women's and social action groups and networks, made a declaration, after their "Regional Conference on WTO, Development and Migration, that "We recall with pride the historic success achieved by the people's movements at Seattle and Cancun in derailing the Ministerial meetings of the WTO in 1999 and 2003 respectively. There is a real danger that negotiators will use the meetings of the WTO General Council in July and October 2005 to force a backdoor deal before the Hong Kong MC6, as they did in July 2004 in Geneva. We reject this framework that treats workers, women and migrants as tradable commodities. We reject the AoA framework that has caused the widespread collapse of rural economies, displacing communities and increasing forced internal and external migration". (Regional conference on WTO July 2005)

The Road to WTO Hong Kong Conference was bumpy, not smooth. The Conference began with a pessimistic note. The negotiations were within two frameworks: Doha ministerial declaration of November 2001 and the July Package which was an unbalanced compromise as it favored the developed countries and ignored most of the concerns of the developing countries. After the intense negotiations - and protests, the WTO claimed that a global trade deal was still possible by the end of this year. The summit declaration provided a rough plan for governments to conclude the current round of talks. There is
very little time left for governments to overcome the tensions of Hong Kong and agree a blue print within the dead line of a deal by the end of 2006.

The Hong Kong “contest turned into a four-cornered one. With G-20 and G-33 on one side, the EU, the US and the least developed countries (LDCs) were the other three actors. As usual, developed countries started shedding crocodile tears for LDCs. A plethora of hollow promises in the form of “aid for trade”, duty free and quota free market access and many more aid offers were served to the LDCs. The main objective was to shift the focus away from the core agenda of trade liberalization as evident from the EU Trade Commissioner Mandelson’s statement that he was at the outer limit of his mandate and has nothing much to offer. The G-20 and G-33 on their part tried to be practical. They realized that it would be foolish to expect any ambitious result from Hong Kong given the prevailing divergence of opinions on agriculture.” (Pradeep S.Mehta and Pranav Kumar, 2006)

“The first ever joint G-20 and G-90 Ministerial level meeting took place on 16 December. Both the Indian Commerce Minister Kamal Nath and his Brazilian counterpart Celso Amorin were instrumental in building this grand alliance of 110 countries covering 4/5th of the humanity. This thwarted and called the bluff of the rich countries to lure the LDCs and divide the Southern unity. The G-110 meeting also proved that their unity at Cancun was not a fluke but it will sustain. Only after this, the focus of the negotiations was brought back to the main agenda resulting in the release of a revised text on 17th December and adoption of the final declaration on 18th December” (Pradeep S.Mehta and Pranav Kumar, 2006).

Indeed, one major point at Hong Kong was the role played by leading members of the G20 group, notably Brazil and India, both of whom reportedly helped to broker final agreement of the summit’s declaration. The rise of Brazil and India as necessary deal-makers marks a welcome power shift in a WTO traditionally dominated by the major industrial powers, offering the potential for a more democratic WTO and for developing country interests overall to be more effectively represented. (Jon Barnes 2006)
Speaking in Hong Kong on the opening day of the World Trade Conference, Nobel Prize winner and former Senior Vice-President of the World Bank, Joseph Stiglitz acknowledged that the WTO "sets up policies and makes decisions affecting almost everyone in the economic world," but that "people who are affected by the decisions everyday have no right to vote."(David Kootnikoff 2006) This "democratic deficiency" is a major cause for the volatile protests that accompany the WTO wherever it travels. As is so often the case, wherever the WTO touches down it manages to successfully divide communities. Hong Kong is no exception. The community is still digesting the events that occurred outside on the streets during the conference, not those that took place behind closed doors.(David Kootnikoff 2006)

1.7. WTO Agreements on Agriculture (AoA)

After the Uruguay Round negotiations, agricultural trade is now firmly within the multilateral trading system. The WTO Agricultural Agreement together with individual countries commitments to reduce export subsidies, domestic support and import duties on agricultural products formed a significant first step towards reforming agricultural trade. Agreement on agriculture forms a part of the Final Act of Uruguay Round of Multilateral Trade Negotiation, which was signed by the member countries in April 1994 at Marakkesh, in Morocco and came into force in January 1995. It is a set of rules that govern international agricultural development and policy. The purpose of it is to liberalize agricultural trade on a global level by curbing hopefully policies that have created distortions in agricultural production and trade. This will hopefully go a long way in fighting against poverty (Annual Report, IMF: 2003). Though there are many agreements under WTO regime, the Agreements on Agriculture (AoA) is of importance for agriculture based economies like India. The AoA is basically intended to liberalized world trade in agriculture and free it from Governmental measures that distort trade and lead to inefficiency. The commitment under the AoA may broadly be categorized into market access commitments, domestic support commitments and export subsidy commitments. These are frequently described as three pillars (Samiwalla, 2000) as presented in the flow chart below.
Flow-chart- 1.1. Pillars under AoA

In connection with these three pillars the issues which are obvious to come are considered.

- **Tariffication**: It is a conversion of all non-tariff barriers on trade such as import quotas into tariffs. Tariff bindings are to be reduced under this agreement. Tariff bidding is a commitment not to exceed a particular level of tariff. Developed countries were to reduce their tariff bindings over a period of six years (1995-2000). Developing countries are to reduce their bindings over a period of ten years (1995-2004). Least developed countries are exempted from tariff reduction.

- **Market Access**: Where tariff binding are too high, current market access has to be maintained as the amount of exports to other countries at preferential tariff rates. However, market access provisions do not apply when the commodity in question is a traditional staple in the diet of a developing country.

- **Export Competition**: In the area of export competition, countries are obliged to reduction commitments of their direct export subsidies. Developed countries are to reduce the volume of subsidized agricultural exports by 21 percent and the value of subsidies by 86 percent of the average base period 1986-89 within six years. Developing countries are to reduce the same by 14 percent and 24 percent respectively within ten years.
With respect to the export subsidy on agriculture we need to consider the financial supports extended to agricultural sectors as per advice and suggestions of WTO. This is described in the Flow-chart - 1.2 below.

Flow-chart- 1.2. Financial Supports to Agricultural Sectors

- **Aggregate Measure of Support (AMS):** It is the yearly support in monetary terms extended to agricultural sector. The AMS to Indian agriculture is still below 10 percent in terms of WTO stipulations.
- **Green Box Support:** This support is given as items which have minimal impact in trade, e.g. pest and disease control, market intelligence, infrastructural services relief from natural disaster, and buffer stock operations. It is an exempted support.
- **Blue Box Support:** The blue box is an exemption from the general rule that all subsidies linked to production must be reduced or kept within defined minimal levels. Countries using these subsidies say they distort trade less than alternative amber box subsidies. At present the blue box is a permanent provision of the agreement. Some
countries want it scrapped because the payments are only partly decoupled from production. Others say it is an important tool for supporting and reforming agriculture and for achieving certain “ness – trade” objectives.

- **Amber box**: All subsidies and other domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box. The total value of these measures must be reduced. The support is related to the developing countries and is exempted from reduction commitment under WTO.

  - Investment Subsidy to agricultural sector as farm development work.
  - Agricultural input services to low-income or resource poor farmers.

It is worthwhile to mention that the developed countries have not implemented fully their commitments for reducing domestic support. Rather agricultural subsidies have been increased during the post-WTO period.

**The important principles enshrined in the WTO constitutions**

**Trade without Discrimination**

Member countries cannot discriminate between their trading partners. Granting of a special favour (such as a lower customs duty rate for their products) would entitle all other WTO members for the same. This principle is known as most-favoured-nation (MFN) treatment. Members can give developing countries special access to their markets. Or countries can raise barriers against products that are considered to be traded unfairly from specific countries. In general MFN means that every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners – whether rich or poor, weak or strong.

**Treating Foreigners and Locals equally**

There should be an equal treatment to imported and locally-produced goods – at least after the foreign goods have entered the market. The same should apply to foreign and
domestic services, and to foreign and local trademarks, copyrights and patents. This principle is known as the "principle of national treatment".

**Towards a Freer Trade**

Lowering trade barriers is one of the most obvious means of encouraging trade. The barriers concerned include customs duties (or tariffs) and measures such as import barriers or quotas that restrict quantities selectively. From time to time other issues such as red tape and exchange rate prices have also been discussed.

**Promoting Fair Competition**

The WTO is sometimes described as a "free trade" institution, but that is not entirely accurate. The system does allow tariffs and in limited circumstances, other forms of Protections. More accurately, it is a system of rules dedicated to open, fair and undistorted competition.

**Agriculture under GATT**

Agriculture was a problem sector in the GATT for a long time. It was often said to have remained largely outside the disciplines governing international trade. However, this view was not quite correct in a legal sense, as the GATT always applied in full to agriculture as well: But it was true that in practice the agricultural policies of many countries had found ways to escape the disciplines that the GATT was meant to establish. The original General Agreement on Tariffs and Trade (GATT) 1947 applied to trade in agriculture also, but it allowed various exceptions to the rules on non-tariff measures and subsidies, which led to severe distortions in world agricultural trade.

The extensive subsidizations by the developed countries led to the distortion in the prices of agricultural commodities made the necessity for liberalizations in the world trade in agriculture. Because of extensive subsidizations by the developed countries the poor and developing countries like India were finding it difficult to have access to the markets of agricultural products in the developed and developing countries.
Till the WTO came into existence in 1995, international trade rules under the former General Agreement on Tariffs and Trade (GATT) were largely ineffective in disciplining agricultural trade. The 1986-1994 – Uruguay Round went a long way towards changing that and that made agricultural trade firmly within the WTO multilateral trading system. The Agricultural Agreement, together with individual countries commitments to reduce export subsidies, domestic support and import barriers on agricultural products were a significant first step towards reforming agricultural trade.

**World Trade under GATT:** The rules for much of world trade was provided by the General Agreement on Tariffs and Trade from 1948-1994. The period witnessed highest growth rates in international commerce for almost half a century, the GATT's basic legal principles remained much as they were in 1948. There were additions in the forms of a section on development added in 1960's and “plurilateral” agreements (i.e. with voluntary membership) in the 1970’s and efforts to reduce tariffs further continued. Much of this was achieved through a series of multilateral negotiations known as “trade rounds” – the biggest leaps forward in internal trade liberalisation have come through these rounds, which were held the GATT.

The main concentration of the GATT in the initial years was on reducing tariffs, followed by the Kennedy Round in the mid-sixties brought about a GATT Anti-Dumping Agreement and a section on Development. The Tokyo Round during the seventies was the first major attempt to tackle trade barriers that do not take the form of tariffs, and to improve the system. The eighth, the Uruguay Round 1986-94, was the last and most extensive of all. It led to the WTO and a new set of agreements.

1.8. **WTO and Related Issues on Subsidies and Agriculture**

The WTO agreement on Agriculture stipulated that developed countries would reduce their subsidies by 20 per cent in six years and developing countries by 13 per cent. But in fact, today, developed countries tried to intervene this agreement by providing Green Box and Blue Box subsidies to support agriculture.
Green Box subsidies include the amounts spent on government services such as research, disease control, and infrastructure and food security. They also include payments made directly to farmers that do not stimulate production, such as certain forms of direct income support assistance to help farmers restructure agriculture and direct payment under environmental programmes.

Blue Box Subsidy are certain direct payments made to farmers to limit production and also to provide governmental assistance to encourage agriculture and rural development programmes.

1.9. WTO and Indian Agriculture

Since the founder member of the WTO, India is committed to implement various agreement and provisions pertaining to Agreement on Agriculture (AoA). India agriculture is surely going to be influence by WTO regime positively and negatively. Based on the available estimates of support to agriculture many experts are of the view that total aggregate measurement of support (AMS) would not affect Indian agriculture as the total Indian AMS is much below the stipulated limits (Bhalla, 1996; Gulati, 2000). Again certain studies (Parikh, 1998) find that as a result of India’s intervention in global rice market, global export prices would further fall and import prices would rise. This change both in export and import prices, likely to affect India adversely. Certain studies (Bhattacharya, 2000); (FAO, 1999) are apprehensive of food insecurity in many developing countries like India owing· to liberalization of agricultural trade under the WTO regime. However, there are some studies (Gulati, 1994); (Ballar, 1996), which support the view that India would gain from its participation in liberalized trade in agriculture. It seems that their conclusions are largely based on the expected rise in the prices of world agricultural commodities. Another study (Gill & Brar, 1996) concludes that the global competitiveness of Indian agriculture in general and that of Punjab agriculture in particular has been adversely affected under the liberalized trade regime.
Gulati (1998) in his studies found that globalization of the economy including agriculture offers an opportunity to correct the anti-agriculture bias in Indian trade policies that have been in existence since 1950s. His study further revealed that agriculture could move on to higher growth trajectory if supply side bottle necks are freed and protective cover is accorded to the poor. Bharadwaj, et al (1998) found that opening of the economy was likely to benefit the agriculture and agro-based industries.

1.10. The Need for the Present Study

Globalization of Indian agriculture means, exposure of Indian agriculture to international market forces through free exports and imports of agriculture and allied products. As a matter of fact, India is already committed to the globalization of agricultural sector. Globalization of the agricultural sector provides a lot of opportunities to share the international market as well as it exposes the agricultural sector to competition from foreign supplier in the domestic market and force the domestic production to adopt more efficient techniques of production. India is likely to benefit from the globalization of the agricultural sector. It is the opinion of many that exports from India are likely to increase significantly if the Government follows the policy of globalizing the Indian economy. The export of agriculture and allied products earn foreign exchange, provides much needed competition in products and helps to realize economies of scale, which helps the domestic consumers. Continuous and sustained export of agriculture and allied products encourages modernization of production and marketing.

As we are in the changing world as well as global trade agreement and development of institutions like the World Trade Organization (WTO), the emerging world trading system may claim to change the terms of trade in favour of agriculture and traded goods from India. The present study is undertaken to consider agricultural trade as the key sector to Indian economic development. The present study covers the periods before WTO and after WTO. That is, the period 1981 to 1995 covers pre-WTO period and the years 1995 onwards covers the period post-WTO.
1.11. The Objectives of the Present Study

To study the impact of WTO on Indian agricultural trade, we have proposed to study

- The impact of WTO on India's overall agricultural trade
- Impact of WTO on direction of India's agricultural trade
- Impact of WTO on composition of India's agricultural trade
- Impact of WTO on export promotion versus export substitution with respect to India's agricultural trade.

1.11.1. The Impact of WTO on Overall India's Agricultural Trade

The overall Indian agricultural trade relates to the size of international transactions. Since a large number of agricultural commodities enter in international markets, and their aggregate can be found only by finding their money value, the volume of trade can be measured by finding its value. The trend in the volume of agricultural trade helps to identify the basic forces that may be operating at different periods in the economy. Only the changes in the value of agricultural trade cannot be a genuine guide to find out changes, hence it is necessary to find the changes in the value of agricultural trade by relating them to variables like share of agricultural exports and imports in Gross Domestic Products (GDP) and share of export and import in world trade. Clearly, however, the appropriate share of exports in output under an efficient allocation of resources will be less than in smaller economies (O Krueger 1995).

The share of exports and imports of agriculture and allied products in GDP indicates the degree of outward orientation and openness to agriculture in regard to the trade activity. This share reflects in a broader way the nature of agricultural strategies adopted in the country. The ratio of agricultural exports to GDP could be interpreted also to the main supply capacity of economy in regard to agricultural exports. It can be called as average propensity to export. The similar ratio between agricultural imports and GDP gives the
average propensity to import. The share of agricultural exports in the world trade indicates the importance of the country as a nation in the world agricultural economy.

It also gives us an idea of the market thrust that the country is able to realize for agricultural commodities in the presence of various competitors for agricultural goods in the world market. Any change in this ratio will indicate the shift in the position in the comparative advantages of the country. Further, it is also possible to know the relation between terms of trade with regard to agricultural trade by comparing the changes in the value of agricultural exports to the changes in the value of agricultural imports. Terms of trade is the term at which the agricultural exports exchange for agricultural imports. If the exports value of agricultural allied products in terms of agricultural imports value shows an increase, the terms of trade with regard to agricultural trade are said to be favorable. Favorable terms of agricultural trade imply that for a given value of agricultural exports the country can produce more of imports. On the other hand, if the terms of trade are unfavorable a country has to give up more agricultural exports to produce a given volume of agricultural imports.

This objective of the impact of WTO on overall India’s agricultural trade we would like to find out the impact of WTO on Indian agricultural trade in the pre and post WTO situations, the trend and growth of export and import of agricultural and allied products, structural shift due to WTO, we would alike to also find out the significance of structural shifts in using recursive residual procedures and we shall also try to explain why the structural shift has occurred and we will also find out the import demand functions and export demand functions by using semi-logarithmic linear and quadratic model.

To find out the impact of WTO on Overall India’s Agricultural Trade we would like to find out the effect of WTO on openness of trade, agricultural trade linked with India’s economy in the context of WTO and the determinants of structural and trend in India’s agricultural trade.
1.11.2. Impact of WTO on Direction of India’s Agricultural Trade

Direction of agricultural trade indicates the structure and level of agricultural centered economic development of a country. As a country develops and its trade gets diversified, it has to seek new outlets for its exports. Its horizon of choice in terms of imports also gets widened. The country begins to trade increasingly with a large number of countries. In this regard we could ask whether there has been a concentration or dispersion of the markets for India’s agricultural exports and sources of supply of agricultural imports. It is in terms of these components we are going to study the direction of India’s agricultural trade during the pre and post WTO periods i.e. 1981-2007.

In our analysis of the impact of WTO on direction of India’s agricultural trade we shall analyze WTO and change in the direction of India’s imports of agricultural and allied products, structural shift in the direction of India’s imports of agricultural and allied products and shifts in the relative importance of importable zones for agriculture and allied products. We shall also see direction of India’s exports of agricultural and allied products, structural shifts in the direction of agricultural and allied products and shifts in the relative importance of exportable zones for agricultural and allied products from India during WTO. As far as possible we shall try to account for the observed trends and changes.

1.11.3. The Impact of WTO on the Composition of India’s Agricultural Trade

By composition of agricultural trade we mean the composition of agricultural exports and imports. An examination of the composition of agricultural trade enables us to analyze the progress of the country and the rate and speed of structural changes operating it. What is the degree of concentration in the composition of export and imports? Has there been any change in the degree of concentration over time? Is there any shift in the shares of total exports and imports of agricultural goods?
By identifying commodities which have the greatest positive impact on the agricultural exports we can conclude that high share in the total agricultural exports implies that the commodity has a high influence in exports, high rate of growth implies that the commodity has a good potential in the world markets and low variability implies that the commodity has a certain amount of stability over the years. The same way we can find for commodities imported.

In our analysis of the impact of WTO on composition of India’s agricultural trade we shall look into WTO and change in the composition of imports of agricultural and allied products, structural shifts in the imports of agricultural and allied products and shifts in the relative importance of importable commodities in the composition of India’s imports of agricultural and allied products and with regard to export, we shall look into WTO and change in the composition of exports of agricultural and allied products, structural shifts in the exports of agricultural and allied products and shifts in the relative importance of exportable commodities in the composition of India’s exports of agricultural and allied products.

1.11.4. The Impact of WTO on Export Promotion Versus Import Substitution with respect to India’s Agricultural Trade

Increasing production on a sustained basis to raise exportable surplus after containing the domestic needs and quality improvements through proper processing are among the major essential conditions for export promotion of agricultural production. Export promotion is a multidimensional activity. Such export promotion measures adopted by the Government have embraced a number of areas such as production of export, quality control, packaging, export credit and finance, export incentiveness and assistance.

The term “Outward – Oriented”, “Export Promotions”, “Export Substitution “and “Export led Growth” have all been used interchangeably to describe the policies adopted in the successful exporting countries (O Krueger, 1990).
Export promotion helps in earning foreign exchange and to an extent provides additional demand for the domestically produced goods. Though through specialization and greater production, this strategy also contributes to domestic growth we would like to analyze the impact of WTO on export promotion in respect to India’s agricultural trade.

Import substitution implies indigenous production of raw materials, intermediate goods and final consumer and capital goods that had hitherto been imported. The progress of import substitution in the country has been quite satisfactory. In the sphere of consumer goods we have the capacity to produce exportable surplus and are able to compete efficiently in the international market. In order to be self reliant in vital sectors, India for long since the beginning of planning and till the early 1990s has followed the strategy of replacing many imports by domestic production. Since import substitution aims at saving foreign exchange and the reduction in the import meant less expenditure on the imports thus foreign exchange available will enable the economy to use in other important sectors. Keeping the above in view, we would like to study WTO and its impact on India’s practice of export promotion versus import substitution with reference to agricultural trade.

I.12. Plan of Our Study

The study entitled The Impact of WTO on Indian Agricultural Trade: A Study of Pre and Post WTO Situations is to analyze the likely impact of WTO on overall India’s agricultural trade, in direction of India’s agricultural trade, composition of India’s agricultural trade and the impact of WTO on export promotion versus import substitution with respect to India’s agricultural trade.

It is an attempt to understand the implication of multilateral trade liberalization on Indian agriculture. In particular, the research is to examine how the participation of India in WTO – a full and liberalized trade regime would affect the agricultural trade. The necessity to do this study comes from the fact that agriculture constitutes one of the
largest sectors of the Indian economy, which contributes about 26 per cent of the total GDP of India and provides employment to almost 59 per cent of India's total work force.

It is often said trade liberalization in agriculture has inherent benefits for the developing countries since they enjoy a comparative advantage in agriculture. Nevertheless, in a competitive world characterized by rapid technologies advance, the benefits of trade liberalization in agriculture to country's like India would essentially depend on the relative competitiveness of agriculture. Benefits to India liberalizing its agricultural trade depends on the extent multilateral trade negotiations can bring about trade liberalizations, eliminate excessive domestic and export subsidies by the developed countries and provide market access in particular to the developed countries markets.

We shall discuss in our analysis the above issues and some other important issues with regard to agricultural trade. The plan of our study begins with introduction to the topic and the part of the introduction is devoted to objectives of the study. In the second chapter, we shall critically analyze some of the empirical and theoretical studies done on the topic. In the third chapter we shall present the econometric model methodology and data in the fourth and the fifth chapters, we shall present the empirical analysis of the objectives taken for study and in the final chapter we shall present the findings, policy measures and conclusion.

1.13. Conclusion

In the introductory chapter there have been attempts to group some ideas about the topic for the study, importance of the topic and what we want to achieve in this study. In the next chapter we shall discuss some of the empirical and theoretical work done by the researchers on the topic.