

11.1 WTO: An Introduction

The work on formulating an international trade policy was started during the post-world war-II when Breton Woods attempted to restructure international institutions in the areas of finance, trade and macro-economic stability. This has materialized with the setting up of World Trade Organization (WTO) in January 1995 at Geneva, Switzerland. The liberalized trade regime under WTO became operational with the Marrakesh Agreement, ratified in 1994 at the conclusion of Eighth/ Uruguay round of trade talks which began in 1982. India is one of the 136 member countries, which were signatories to the agreement that altered the whole framework of international trade. Three fourths of the member countries are developing countries and accounts for less than 30 percent of World Trade. WTO is an international organization dealing with the rules of trade across the nations. The focus is on how producers of goods and services, exporters and importers conduct their business. The WTO's overriding objective is to help international trade to flow smoothly, freely, fairly and predictably through:

- Administering Trade Agreements
- Acting as a forum for trade negotiation
- Settle trade disputes
- Reviewing National Trade Policies
- Assisting developing countries in trade policy issues through technical assistance and training programmes
- Cooperating with other international organizations.

Currently there are 150 countries (including recent entrants China and Taiwan) as members and there are 42 countries including Russia, Nepal, and Bhutan etc, which are in the queue for the WTO membership. The entire members make decisions by consensus. As World trade involves a number of complex transactions across national borders, more than one national law applies to the transaction. Therefore, there is a need for uniformity in laws on trade transactions, which in turn facilitate efficiency in trade.

11.2 The Basic Principles of WTO

11.2.1 Non - discrimination between countries: The most Favoured Nation (MFN) Treatment

The trading system should be without discrimination. A country should not discriminate between its trading partners. Most Favoured Nation (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 and services for all its trading partners who are the members of WTO. Therefore, under WTO each member treats all the other members equally as most favoured trading partners. However, there is an exception for the regional trade block like NAFTA, EEC, and SAFTA etc., to have a clause on each other treatment in trade. MFN exemptions can be applied to the 'services' sector in a country.

11.2.2 Non – discrimination within a country: National Treatment

Imported goods and services on entering the countries' border after fulfilling the requirements has to be treated on par with locally produced goods and services. The same rule should apply to foreign and domestic goods, services, trademarks, copyrights and patents.

11.2.3 Free Trade: Gradually through negotiations

Lowering trade barriers is one of the most obvious means of encouraging trade. The barriers are custom duties (or tariffs) and measures such as quantitative restrictions like import bans or quotas that restrict quantities selectively.

11.2.4 Predictability through Binding

Binding means, helpful legalities helps to predict the trade environment more precisely. The multilateral trading system is an attempt by the Governments to make the business environment stable and predictable. In WTO, when countries agree to open their markets for goods and services, they bind their commitments through ceilings on customs tariff rates.

11.2.5 Promoting Fair Competition

The WTO promises to provide open and fair competition. The tax reduction and elimination exercises go hand in hand. The net result is the domestically produced goods facing same environment regarding taxes and subsidies as those in other countries. The 'level playing field' between local and foreign goods encourages and fosters competition, efficiency and consumer choices.

11.2.6 Encouraging Development and Economic Reforms

It is a widely recognized fact that WTO favours development in developing countries. These countries need flexibility of time to implement the agreements and the agreement themselves inherit the earlier provisions of GATT that allow for specific assistance and trade concessions for developing countries.

11.3 Difference between GATT and WTO

- GATT was ad hoc and provisional. The WTO and its agreements are permanent with a sound legal basis.
- WTO has permanent memberships. GATT had "contracting parties" with official legal texts with no legal body or organization.
- GATT dealt with trade in goods. WTO covers service, intellectual property as well.

- Despite settlement, procedure is faster and more automatic in WTO than GATT.
- WTO more or less contains the GATT texts with certain modifications.

11.4 GATT/WTO – A Brief History

Sl. No.	Year/Date	Name of the Round/ Place	Major Decisions
1.	1947, October 30	Palais des Nations, Geneva	The birth of GATT, 23 nations including India, are the founder members of the GATT Agreements
2.	1948, January 01	Geneva	GATT entered into activities
3.	1948, February 28 to March 20	First Round Havana, Cuba	The first real business of contracting parties was conducted
4.	1949, April to August	Second Round, Annecy, France	The contracting parties exchange about 5,000 tariff concessions
5.	1950-51 September to April	Third Round, Torquay	The contracting parties exchanged some 87,700 tariff concessions. Four more countries acceded to GATT
6.	1956, May 21	Fourth Round, Geneva	Produced some US\$ 2.5 billion worth of tariff reductions
7.	1960, September 14	Fifth (Dillon) Round, Geneva	Negotiations with EEC member states for the creation of a single schedule of concessions for the community based on its Common External Tariff.
8.	1964, May 07	Sixth Round (Kennedy)	Meeting at the Ministerial level
9.	1965, February	Geneva	A new chapter added to the GATT, with developed countries according high priority to the reduction of trade barriers to the products of developing countries
10.	1967, June	Geneva	About 50 countries signed, the Kennedy Round's Final Act.

Sl. No.	Year/Date	Name of the Round/ Place	Major Decisions
11.	1973, September	Seventh Round, Tokyo	Some 99 countries participated in negotiating a comprehensive body of agreement covering both tariff and non-tariff matters
12.	1974, January 01	Geneva	Arrangement regarding international trade in textiles, otherwise known as the Multi Fibre Arrangement (MFA) entered into force
13.	1982, November	Eighth Round Uruguay	The work programme on which Ministers agree became the starting point for what was to become the Uruguay Round negotiating agenda
14.	1986, September	Punta del Este, Geneva	Adopted a Ministerial declaration, which contained the biggest negotiating mandate on trade ever agreed
15.	1988, October 05	Montreal, Canada	Mid-term review of Punta del Este declaration
16.	1990, December	Brussels	Ministerial Meeting did not achieve the expected success
17.	1993, December 15	Geneva, Switzerland	The final Act of the Uruguay Round signed by officials
18.	1994, April 15	Marrakesh, Morocco	The final Act of the Uruguay Round signed by Ministers
19.	1995, January 01	Marrakesh, Morocco	Conversion to World Trade Organization (WTO)
20.	1995, May 31	Geneva	WTO General Council approved by Headquarters. Agreement with the Swiss Confederation including the decision to locate the WTO in Geneva

Sl. No.	Year/Date	Name of the Round/ Place	Major Decisions
21.	1996, December 9-13	Singapore	The establishment of three working groups on trade and investment, trade and competition and transparency in government procurement, plus a mandate to conduct a study on trade facilitation
22.	1997, February 15	Geneva	Successful conclusion of negotiations on basic telecommunications services. Sixty-nine governments agreed to wide-ranging liberalization measures
23.	1997, March 26	Geneva	Forty governments agreed to cut customs duties on information technology products, beginning on 1st July 1997
24.	1999, November 30 to December 03	Seattle	Wide scale protest in Seattle against WTO on issue of labour and environment. The meeting took up new issues like labour, trade facilitation, investment, competition policy, agriculture subsidies, biotechnology, and market access. Negotiations collapse and meeting ended with a formal communiqué
25.	2000	Geneva	Agriculture : negotiations for continuing the process of substantial progressive reduction in support and protection
26.	2001, November	Doha, Qatar	Review on Agreement on Agriculture
27.	2004	Marakkesh, Morocco	Textiles and Clothing: review of the implementation of the agreement by 26 nations.

11.5 Areas handled by WTO

11.5.1 Agriculture

Disciplining the trade in agriculture has been agreed for a long time in GATT. Due to the huge subsidy component in agriculture and support by the developed countries and its repercussion on developing countries stretched the negotiations so long.

11.5.2 Sanitary and Phyto-Sanitary Measures (SPS)

SPS mainly deals with food safety, animal and plant health standards. In this regard WTO has not set standards. Instead, it encourages the member countries to set their own standards broadly based on international standards set by international organizations.

11.5.3 Technical Barriers of Trade (TBT)

TBT agreement deals with other technical standards to be allowed by the member countries. According to the agreement member countries need to consider the developing countries standards when they prepare their regulations.

11.5.4 Textiles and Clothing

Agreement on textiles and clothing presently covers under multi-fiber agreement. By 2004 the quota system was to be replaced by tariffs.

11.5.5 Anti-dumping, safeguards and countervailing duties

Under the Anti-dumping agreement, WTO members can restrict imports to protect their domestic industry by imposing dumping margin on imported products. On the other hand, the agreement on subsidies and countervailing measures empowers a member country to impose countervailing duty on subsidized imports.

11.5.6 Customs Valuation

The agreements on customs valuation obligate members to follow certain rules, while calculating the duty on imports.

11.5.7 Rules of Origin

Rules of origin are the criteria used to define where a product is made. They are linked to the application of trade measures such as quotas, preferential tariffs, anti-dumping actions and countervailing duties.

11.5.8 Services

Under the agreement of Trade in Services (GATS), WTO members have made commitments in their service sectors that they are willing to open to foreign competition. Banks, insurance firms, telecommunication companies, tour operators, noted chain and transport companies now enjoy the principles of free and fair trade that originally applied to trade in goods only.

11.6 Trade-Related Intellectual Property Rights (TRIPS)

The WTO's intellectual property agreement amounts to rules for and investment in ideas and creativity. The Member State now recognizes copy rights, trademarks, geographical names used to identify products, industrial designs, integrated circuit layout-designs and undisclosed information such as trade secrets should be protected when trade is involved.

11.6.1 Dispute Settlement

The WTO procedure for resolving trade quarrels under the dispute settlement understanding is vital for enforcing the rules and therefore ensures that trade flows smoothly. A country brings disputes, if their rights are being infringed. However, system encourages countries to settle the differences through consultation. Failing that, they can follow a carefully mapped out, stage-by-stage procedure that includes the possibility of ruling by a panel of experts, and chance to appeal against the ruling on legal grounds.

11.7 Trade-Related Investment Measures (TRIMS)

TRIMS mainly deal with foreign investment in terms of trading activities. Developing countries retains the flexibility to choose investment promotion policies, which the country consider necessary to fulfill their developmental needs.

11.7.1 Withdrawal Provision (Under Article XXXI)

Any country may withdraw from the WTO agreement any time if they wish. Simple thing the country has to do is to float an application. The withdrawal shall take place upon the expiration of six months from the day written notice was received by the Secretary General of the United Nations. India being one among the first 23 founder members of GATT, it is not wise for it to lose the initial advantage. India has an advantage of bilateral agreement automatically with other member countries of WTO.

11.8 Agreement on Agriculture (AoA)

The long-term objective is to establish a fair and market oriented agricultural trading system. The immediate action proposed is to initiate a reform process through the negotiation of commitments on a support and protection leading to substantial progressive reductions in agricultural support and protection and finally resulting in correcting and preventing restrictions and distortions in the world agricultural market.

The Agreement on Agriculture sets a perspective on reform process and outlines the modalities to be adopted while going further in this direction. The agreement also gives the nature of commitments and the thrust areas for reforms. Market access, domestic support and export competition are listed as main areas, where specific binding commitments have to be undertaken. It calls upon the developed country members to provide improved market access for products of specific interest to developing country members.

Overall, the results of the negotiations provide a frame work for the long-term reforms of agricultural trade and domestic policies over the years to come. It makes a decisive move towards

the objective of increased market orientation in agricultural trade. The rules governing agricultural trade are strengthened which will lead to improved predictability and stability for importing and exporting countries alike.

In this backdrop every State and Union territory in the country must prepare themselves to face the challenge and grab the opportunity in India's agricultural trade. It is necessary to watch this sector carefully both from the import and export front in order to protect the interest of domestic traders and producers, if necessary it is essential to fine tune the balance between domestic market, exportable surplus and imports. The act of such optimization, therefore involves a large number of issues that needs to be discussed.

11.9 Tariff Reduction

The newly committed tariffs and tariff quotas, covering all agricultural products, took effect in 1995. Uruguay round participants agreed that developed countries would cut the tariff-quotas by an average of 36 per cent in a phased manner over six years, while developing countries would make 24 percent cuts over ten years. Several developing countries also used the option of offering ceiling tariff rates in cases, where duties were not bound (i.e. committed under GATT or WTO regulation) before the Uruguay round. Least developed countries are not bound to affect any tariff cuts under the agreement.

For products whose non-tariff restrictions have been converted to tariffs, governments are allowed to take special emergency actions (safeguards) in order to prevent swiftly falling prices or surges in imports from hurting their farmers. But the agreement specifies when and how these emergency cautions can be introduced (for example, they cannot be used on imports within a tariff quota).

11.10 Special Safeguards (SSG)

The expectations are the possibilities of taking special safeguard action, and provisions, which allow "special treatment" for certain products. Under Special Safeguard (SSG) provisions, a WTO member can impose additional duty in excess of that committed in its national schedule on the imports of an agricultural product, which is designed in its schedule with the symbol 'SSG' and whose volume of imports during any year exceeds a trigger level. The SSG provisions cannot be invoked for products, which were terrified in pre WTO period.

11.11 Current and Minimum Access Commitments

For products covered by the tariffication process, the maintenance of current market access opportunities is provided for, supplemented by the establishment of minimum access tariff quota (at reduced tariff rates), where the current access is less than five per cent of domestic consumption. These minimum access tariff quotas are to start at three percent and are to be expanded to reach five percent at the end of the implementation period.

11.12 Domestic Support

The main grievances about policies that support domestic prices of subsidized production in some other way, is that they encourage over-production. This squeezes out imports or leads to

export subsidies and hence low priced dumping on world market. The agricultural agreement distinguishes between support programmes that stimulate production directly, and those that are considered to have no direct effect.

The central thrust of the domestic support provisions of AoA is to encourage a further shift away from trade distorting measures and policies. The agreement particularly targets subsidies granted by governments to farmers to support price level with a view to keeping out imports. However, certain subsidies are allowed under the agreement, as they are not supposed to distort trade.

Provisions of the Agreement on domestic support measures have two main objectives:

- *to identify acceptable measures of support to farmers and*
- *to discipline trade distorting support to farmers.*

These commitments regarding domestic support are primarily aimed at containing the high levels of domestic agricultural support. This objective is to be achieved by quantification of domestic support, in the form of Aggregate Measure of Support (AMS) and then by progressive reduction of the AMS.

There are three categories of support measures that are subject to reduction under the Agreement. These three categories of exempt support measures are green, blue and amber box measures.

11.13 Green, Blue and Amber Box Measures

11.13.1 “Green Box” Measures

These are considered to have a minimum trade distorting impact. These include the following types of assistance:

- i. Government assistance on general services like research, pest and disease control, training, extension, and advisory services.
- ii. Public stock holding for food security purposes.
- iii. Domestic food aid.
- iv. Direct payment to producers, such as, governmental financial participation in income insurance and safety nets, relief from natural disasters, and payments under environmental assistance programmes.
- v. De-coupled income support.
- vi. Government financial participation in income insurance and income safety-net programmes.
- vii. Payments (made either directly or by way of government financial participation in crop insurance schemes) for relief from natural disasters.

- viii. Structural adjustment assistance provided through producer retirement programmes; resource retirement programmes; and investment aids.
- ix. Payments under environmental programmes.
- x. Payments under regional assistance programmes.

Special and Differential Treatment for developing countries:

- i. Investment subsidies which are generally available to agriculture in developing countries, and
- ii. Agricultural input services generally available to 'low income and resource poor producers' in developing countries.

11.13.2 "Blue Box" measures

These represent direct payments under production limiting programme. These are relevant from the point of view of developed countries alone.

11.13.3 "Amber Box" measures

These consist of those domestic supports to agriculture which are considered to be trade distorting. The Aggregate Measures of Support (AMS) quantifies these supports in two parts:

- Product specific subsidies, that is, the difference between the administered price (minimum support prices in India) and external reference prices.
- Non product specific subsidies, that is, subsidies on inputs such as fertilizers, electricity, irrigation etc.

The net AMS of exempted categories of support measures is subject to reduction commitments as under:

Domestic Support (Base 1986-88)	Developed Countries (1995-2000)*	Developing Countries (1995-2004)*
AMS	20%	13%

*Developed countries to meet the commitment of reducing their base year level AMS during 6 years and developing countries during 10 years.

Domestic support given to the agricultural sector within the specified de minimis level, that is, upto 10% of the total value of agricultural produce in developing countries and 5% in developed countries is allowed. In other words, AMS within this limit is not subject to any reduction commitment.

Also permitted, are certain direct payments to farmers where the farmers are required to limit production (sometimes called blue box measures), certain government assistance programmes to encourage agricultural and rural development in developing countries and other support in a small scale when compared with the total value of the product or products supported five percent and less in the case of developed countries and ten percent and less for developing countries, often called 'de minimis' support. The 'de minimis' levels at which support is regarded as having minimal effect are defined. These subsidies are allowed under the agreement and are exempt from reduction commitments. Amber box subsidies are considered to be trade distorting and therefore comes under programme reduction commitments.

11.14 Aggregate Measure of Support (AMS)

The amount of total subsidies, subject to reduction commitments given by government to its agriculture sector is measured in terms of Aggregate Measure of Support (AMS). It is calculated on a product-by-product basis using the difference between the average external reference prices for a product and its applied and administered price multiplied by the quantity of production. To compute AMS, non-product specific domestic subsidies are added to the total subsidies calculated on a product-by-product basis.

The initial AMS calculations were based on how much support of this kind were provided for the agricultural sector per year in the base year of 1986-88. Developed countries agreed to reduce their AMS by 20 percent in six years starting from 1995. Developing countries agreed to making 13.3 per cent cuts over ten years. Least developed countries were not required to make any reduction.

11.15 Export Subsidies

The agricultural agreement prohibits export subsidies on agricultural products unless the subsidies are specified in members' lists of commitments. Wherever they are listed, the agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of export that receive subsidies. Taking average for 1986-90 as the base level, developed countries agreed to cut the value of export subsidies by 36 per cent over six years starting in 1985, which was 24 per cent over ten years for developing countries. Apart, developed countries also agreed to reduce the subsidized exports by 21 per cent over the six years, which was 14 percent over 10 years for developing countries. Least developing countries do not need to make any cuts.

During the six years implementation period, developing countries are allowed under certain condition to use subsidies to reduce the costs of marketing and transporting. The agreement includes an understanding that certain actions available under subsidies agreements will not be applied with respective green box policies, domestic support and export subsidies maintained in conformity with commitments. The agreement has set up a committee that will monitor the implementation of commitments and follow up decisions.

The Export Subsidies are also subject to reduction commitments as under:

Export Subsidies (Base 1986-90)	Developed Countries (1995-2000)	Developing Countries (1995-2004)
Subsidy Value Subsidised quantities	36%21%	24%13%

Export subsidies of the kind listed in the Agreement which attract reduction commitments are non-existent in India.

The export subsidy subject to reduction commitment:

- Direct subsidies contingent on export performance
- Government export sales or stock disposals at prices below domestic market prices.
- Other payments on the export of an agricultural product that are financed by virtue of government action.
- Subsidies on agricultural products contingent on their incorporation in export products and
- Subsidies affecting marketing and transport costs of exports.

11.16 Sanitary and Phyto-Sanitary Measures (SPS)

The agreement on the application of SPS measures is closely linked with AoA. The agreement covers the application of sanitary and phyto-sanitary measures in other words food safety, animal and plant health regulations. In order to harmonize sanitary and phyto-sanitary measures on a wide basis as possible, members are encouraged to base their measures on international standards, guidelines and recommendations where they exist. However, members may maintain or introduce measures, which result in higher standards, if there is scientific justification or as consequences of consistent risk decision based on an appropriate risk assessment. The agreement spells out procedures and criteria for the assessment of risk and the determination of appropriate levels of SPS protection. It is expected that members would accept the sanitary and phyto-sanitary measures of others as equivalent if the exporting country demonstrates to the importing country that its measures achieve the importing country's appropriate level of health protection. The agreement includes provisions on control, inspection and approval procedures.

11.17 Subsidies and Countervailing Measures

The agreement contains a definition of subsidy and induces the concept of a 'specific' subsidy. The agreement establishes three categories of subsidies. 'Prohibited' subsidies are those contingents in law, upon export performances, upon the use of domestic over imported goods. Prohibited subsidies are subjected to new settlement procedures, and if it is found that the subsidy is indeed prohibited, it must be immediately withdrawn, if this is not done within the specified time period, the complaining member is authorized to take measures.

The second category is 'actionable' subsidy. The agreement stipulates that no member should cause, through the use of subsidies, adverse effects to the interests of other signatories i.e., injury to domestic industry of another signatory, multification or implement of benefits accruing directly or indirectly to other signatories under the General Agreement (in particular the benefits of bound tariff concessions), and serious prejudice to the interests of another member.

The third category involves 'non-actionable' subsidies, which could either be non-specific subsidies or specific subsidies or specific subsidies involving assistance to industrial research and pre-competitive development activity, assistance to disadvantaged region or certain type of assistance for adapting regulations. As this is lapsed and hence under renewal, the agreement also concerns the use of countervailing measures on subsidized imported goods. If the case is found genuine, then in addition to tariff, the country can also impose 'countervailing duty' (CVD) on the goods.

11.18 India's Agricultural Trade

Despite being an agrarian economy, where the agricultural sector provides employment to 65 percent of the population and contributes 25 percent to the GDP of the country, India has remained a marginal player in world agricultural trade. Currently, it has a share of less than 2 percent of the world market in agriculture. India is an importer of pulses, oilseeds and edible oils. The share of agricultural products including coffee, tea and fisheries in the total exports of India was around 14.6 percent in the year 1999-2000.

The post-Uruguay Round experience has been a mixed one for agricultural trade in India. While in certain cases, exports have increased and in others a decline has been registered. However, these cannot be attributed solely to the impact of the Agreement on Agriculture. An increase in traditional export items is largely due to the comparative advantage that India enjoys in production of certain items and because of a large number of ethnic Indians living abroad who have a preference for Indian products. The traditional item, which have registered an increases are rice, sesame seed, oil meals, etc. Other factors, which are acknowledged to have limited our exports are, infrastructure inadequacies as well as ad-hoc domestic and trade policies. Meeting the sanitary and phytosanitary requirements of most trading partners also call for substantial investment in developing quality standards and developing adequate infrastructure facilities.

Another emerging area, which poses a challenge, is trade in genetically modified agricultural products. While it is viewed by experts, as a panacea for food and nutritional security problems of the country, doubt-mongers feel that we may be led into uncharted territory, which is fraught with serious implications for health.

11.19 Removal of Quantitative Restrictions (QRs)

India has maintained QRs for Balance of Payments (BoP) reasons. Consequent to improvement in India's Balance of Payments position, the US contended that the QRs should be immediately removed and they resorted to the Dispute Settlement procedures of the WTO. India lost the dispute both at the panel and the Appellate Body level and consequently, as per the decision of the Dispute Settlement Body (DSB) of WTO, had to remove all the QRS that were maintained on

BoP grounds. As per the bilateral understanding with USA for the determination of a Reasonable Period of Time (RPT) for implementing the decision of DSB, India was required to remove all its QRs since the early 1990 as part of the reform process of economic liberalization. Thus, out of a total number of 10,202 tariff lines (at 10 digit level), 6161 lines were already made free by 1.4.1996. Similarly, in successive years more tariff lines were freed and at the time of losing its case in the WTO's Dispute Settlement Body in September 1999, India had QRs only on 1429 tariff line on BoP grounds.

Ever since, there have been apprehensions that removal of QRs would open the floodgates of imports, but these fears appear to be unfounded. Actual empirical data reveals that at the aggregate macro level, the removal of QRs has not altered either the overall rate of growth of imports or even their composition. The non-oil imports have so far (April-January, 2001) witnessed a negative growth of 8.16 per cent. India's import basket has not been significantly affected with the QR phase out. The top 20 product groups continue to constitute 86 to 88 per cent of total imports. The picture is not reversed even if we look at the data at the disaggregated micro level.

The removal of QRs need not be seen as a threat since it provides an opportunity for our farm sector to become competitive which in turn should lead to increased exports. Only 4 or 5 countries like Bangladesh, Pakistan, Nigeria and Tanzania out of 141 WTO member countries are presently maintaining QRs, and that too with a predetermined phase out period. The removal of QRS being an inevitable reality, we will have to convert this challenge into an opportunity for increasing our competitiveness and exports.

11.20 Strengthening of Monitoring Mechanism

Continuous monitoring of about 300 sensitive items is being done. An Inter Ministerial Committee has gone into the impact of QR removal and has suggested corrective measures. Based on the Inter Ministerial Committee discussions, recommendations were made to the Finance Ministry for raising the applied tariffs of certain sensitive items and accordingly the import duty on several sensitive items have been increased from time to time. The imports are being closely monitored and in cases where any injury has been caused due to unfair trade practices by the foreign exporters or due to import surge, anti dumping action or safeguard action have been taken as provided in the various WTO agreements to give necessary protection to the domestic producers.

11.21 Creation of a Level Playing Field for the Domestic Producers

With a view to see that domestic producers do not have to face unfair competition and a level playing field is created, in addition to tariff protection, all imports are subjected to domestic laws, rules, regulations, procedures, technical and sanitary and phyto-sanitary standards applicable to the domestic industry. In this connection, DGFT had issued orders in November 2000 that all packaged imported products will have to indicate the maximum retail price as per the provisions of the Weights and Measures Act and also for the 131 items for which the Bureau of Indian Standards (BIS) certification is compulsory, the foreign exporters will have to get themselves accredited with BIS.

Further, the following notifications are being issued by DGFT to create a level playing field for the domestic industry/ domestic producers:

- a. Import of tea waste is to be allowed only subject to fulfillment of conditions of the provisions of the Tea Waste (Control) Order, 1959.
- b. The import of alcoholic beverages will be subject to the compliance of various mandatory requirements as might have been stipulated by the various State governments.
- c. Import of all edible and food products as regards their quality and packaging requirements shall be subject to the conditions and the standards as might have been fixed under Prevention of Food Adulteration Act, 1954.
- d. All meat and poultry products will have to comply with the conditions regarding manufacture, slaughter, packing, labeling and quality conditions as laid down under Meat Food Products Order, 1973.
- e. Import of various edible products will be subject to the compliance of quality specifications, norms for packing, and limits of poisonous metals in fruit products and restrictions regarding use of food colours, preservatives and salts as have been prescribed in Fruit Products Order, 1955.
- f. Besides, for items such as sugar where the domestic producer has to give a particular percentage of levy to FCI or Government at a fixed price, the same requirement will have to be met in the case of imported items.
- g. Besides, Agriculture Ministry will make use of the provisions of the Plants, Fruits and Seeds (Regulation of Imports into India) Order, 1989 for ensuring that the foreign imported agricultural goods do not carry any pests or create any risks to human or animal life or plant health.

11.22 Assessment of the Impact of QR removal and available Trade Defense Measures

The QRs have been removed in stages for the last several years and in fact all the 1429 tariff lines on which QRs on BoP grounds were being maintained as notified to WTO in the year 1997, except for about 36 canalised tariff lines, have been freely importable from the SAARC countries since 1/8/1998. While the non-oil import figures for the period April-January 2001 have shown a negative growth of 8.16 percent, the exports during the April-January 2001 have growth at 20.7 per cent. Even at the micro level, it is seen that out of 714 tariff lines on which QRs were removed, 235 items were not imported at all during April-December, 2000 and overall only 12 percent growth in volume of imports has been observed for these 715 tariff lines during April-December, 2000. By and large, it is felt that the shifting of QRs is not going to disrupt the economic activity in any manner.

11.23 Capacity building and other corrective measures taken by the Government

The following are some of the measures taken by Government to build up the capacity of the farmers to face the challenges arising out of increased foreign competition in the wake of removal of QRs.

- a. A high level task force was been created to consider problems arising from economic liberalization and to suggest steps to safeguard the interest of farmers; to integrate the use of information technology; and to ensure effective risk management.
- b. A group of Ministers has been constituted in December 2000, to review the gamut of policies relating to incentives for increasing agricultural productivity and enhancing value addition; institutional arrangements to bring about greater price stability; and measures to build indigenous capacity to meet international competition and expand exports.
- c. Series of steps taken to increase farm credit. Kisan Credit Cards have been issued providing flexibility and security in the flow of credit.
- d. 50 percent subsidy is being given to the small and marginal farmers under the National Agriculture Insurance Scheme (NAIS).
- e. A tax holiday for 5 years and 30 per cent deduction of profits for the next 5 years for the enterprises engaged in the integrated business of handling, transportation and storage of food grains.

For about 15 sensitive tariff lines where we had historically bound ourselves at zero or very low rates, Government of India successfully completed GATT Article XXVII negotiations and were able to raise the bound rates for items such as rice, skimmed milk powder, maize, mustard oil, spelt wheat etc. Department of Commerce has also strengthened its Designated Authority for Anti Dumping and Countervailing Duties. As per the latest WTO data, India is second only to South Africa in the use of anti-dumping action. In the last few months, preliminary anti dumping duties have been imposed with a gap of only about 75 to 80 days from the date of investigation as against the statutory minimum period of 60 days.

11.24 Experience of implementation of AoA

Experience during the last years shows that the AoA has not brought about the anticipated deepening of world trade in agriculture or spatial redistribution of agriculture production or improved returns to farmers in developing countries or greater transparency in agricultural trade. It is evident that a good number of provisions of AoA lack the required degree of rigor or contain ambiguities leading to the possibilities of varying interpretations. It is well known that the advantage of the lack of vigor and ambiguities in the Agreement have been accruing to those very members who are mainly responsible for the distortions in the international trade in agriculture. For example, tariffs continue to be quite high on products of interest to developing countries like sugar, rice or dairy products, because commitments Under the AoA require reductions only on an un-weighted average basis.

11.25 State of Play

Several countries in their proposals to the WTO have highlighted their positions. As regards proposals submitted by the European Communities, Switzerland, Japan, Norway, etc. some amount of reluctance in liberalizing agriculture trade is evident. Their contention is that the Agreement on Agriculture prescribes the time for commencement of the negotiations and not its culmination. Another

aspect highlighted in these proposals is the concern relating to the multifunctional nature of agriculture as distinct from the food and livelihood security concerns of developing countries. US position is to call for tariff reductions from applied levels, eliminating export subsidies and providing transparent, predictable and timely decisions for trading in genetically modified products.

11.26 Implication on Indian Agriculture

Being under a balance of payments cover, India had been maintaining Quantitative Restrictions (QRs) and had not undertaken any commitments with regard to market access and this has been clearly stated in our schedule filed in WTO. The only commitment India had undertaken was to bind its primary agricultural products at 100 per cent. However, there are a few tariff lines, which had been bound at lower tariff levels in the earlier rounds of negotiations. Out of these tariff lines, the bound levels of 15 tariff lines, which include milk, skimmed milk powder, spelt wheat, maize, rice, millet, sorghum, rape and mustard oil, were raised through successful negotiations under GATT Article XXVIII in December 1999.

India does not provide any product specific support other than market price support. During the reference period (1986-89), the total product specific AMS was (-) Rs. 24,442 crores. Since product specific AMS is calculated by subtracting the international price (fixed at 1986-88), from the domestic price and then multiplying the resultant figure by the quantity of production eligible to receive the support, a negative figure would arise if international prices were higher than domestic prices, hence the negative figures of AMS. Non-product specific subsidy is calculated by taking into account subsidies given for fertilizers, water, seeds, credit and electricity. During the reference period, the total non-product specific AMS came to Rs. 4581 crores.

Since our total Product Specific AMS is negative, and that too by a huge magnitude, and the Non-Product specific AMS is also well within the de minimis level, the question of our undertaking any reduction commitments did not arise. As such, we have not undertaken any commitment in our schedule filed in WTO. Even the calculations for the marketing year 1995-96 show the product specific AMS figure as (-) 38.47 percent and non-product specific AMS as 7.52 percent of the Agri –GDP. This still keeps our aggregate AMS well below the de minimis level of 10 percent. Moreover, the explanatory note to the AMS notifications also indicated that non-product specific support figures did not exclude the input subsidies given to low income and resource poor farmers, which India is entitled to exclude from AMS calculations Article 6.2 of AoA.

In India, exporters of agricultural commodities do not get any direct subsidy. The only subsidies available to them are in the form of exemption of export profit from income tax under section 80-HHC of the income Tax Act which is also not one of the listed subsidies (even normal agricultural income is non taxable in India); and the subsidies on cost of freight on export shipments of certain products like fruits, vegetables and floricultural products.

The agreement on Agriculture does not in anyway, require us to reduce our existing subsidies for research, pest and disease control, marketing and promotion services and various infrastructural support services. It does not in any way affect our existing PDS. India has not taken any obligation for providing market access opportunities to other trading partners. We are free to follow our own agricultural policy and various domestic support programmes for our farmers.

11.27 The Agreement on Agriculture (AOA): Summary of Salient features

The Agreement on Agriculture (AoA) forms a part of the Final Act of the Uruguay Round of Multilateral Trade Negotiations. The AoA was signed by the member countries in April, 1994 at Marrakesh, Morocco and came into force on the 1st January, 1995. The long term objective of the Agreement “is to establish a fair and market oriented agricultural trading system and that a reform process should be initiated through the negotiation of commitments on support and protection and through the negotiation of commitments on support and protection and through the establishment of strengthened and more operationally effective GATT rules and disciplines”. It has been further stated that “the long term objective is to provide 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.”

The Agreement incorporates three broad areas of commitments from Member states, namely:

1. Market access i.e. the disciplines on import restraints and tariffs;
2. Domestic support, i.e. subsidies by Governments to domestic producers, and
3. Export subsidies.

11.28 Market Access

On market access, the Agreement primarily envisages tariffication of all non-tariff barriers. In other words, non- tariff barriers such as, quantitative restrictions (quota, import restrictions through permits, import licensing etc.) are to be replaced by tariffs to provide the same level of protection and thereafter progressive reduction of the tariff levels is to be made.

The reduction commitments on import tariffs are as under.

Tariffs (Base: 1986-88)	Developed Countries (1995-2000)*	Developing Countries (1995-2004)*
Average cut for all agri. products	36%	24%
Minimum cut per product line	15%	10%

*Developed countries to meet the reduction commitments during 6 years and developing countries during 10 years.

11.29 India's Commitments

Being under a balance of payments cover, India had been maintaining Quantitative Restrictions (QRs) and had not undertaken any commitments with regard to market access and this has been clearly stated in our schedule filed in WTO. The only commitment India had undertaken was to bind its primary agricultural products at 100%; processed foods at 150% and edible oils at 300%. However, there are a few tariff lines, which had been bound at lower tariff levels in the earlier

rounds of negotiations. Out of these tariff lines, the bound levels of 15 tariff lines, which include milk, skimmed milk, powder, spelt wheat, maize, rice, millet, sorghum, rape, mustard oil, were raised through successful negotiations under GATT Article XXVIII in December, 1999.

India does not provide any product specific support other than market price support. Since products specific AMS is calculated by subtracting the international price (fixed at 1986-88 levels) from the domestic price and then multiplying the resultant figure by the quantity of production eligible to receive the support, a negative figure would arise if international prices were higher than domestic prices. During the base period, except for tobacco and sugarcane, international prices of all products were higher than the domestic prices, hence the product specific support under AMS was negative for India.

Moreover, the explanatory note to the AMS notifications also indicated that non-product specific support figures did not exclude the input subsidies given to low income and resource poor farmers, which India is entitled to exclude from AMS calculations under Art. 6.2 of AoA. Therefore, India is under no obligation to reduce domestic support currently extended to the agricultural sector.

11.30 Trade Defence Measures available and Action Taken

The various trade defence measures compatible to WTO are available to guard the domestic market and producers against import surges and dumping. Besides, several other actions have also been taken to strengthen the trade defence mechanism. The important measures as under:

- The imports are being closely monitored and in cases where any injury has been caused to the domestic producer or any serious injury has been apprehended due to unfair trade practices by the foreign exporters or due to import surge, anti dumping action or safeguard action can be taken as provided in the various WTO agreements to give necessary protection to the domestic producers.
- Anti dumping, anti subsidy countervailing duty or safeguard action as provided under various WTO agreements can be taken under certain circumstances.
- Article XX or XXI of GATT providing for general exception and on national security considerations respectively can be invoked to put QRs on any item as could be justified under these Articles of GATT.
- Department of Commerce has also strengthened its Designated Authority for Anti Dumping and Countervailing Duties. In the last few months, preliminary anti dumping duties have been imposed with a gap of only about 75 to 80 days from the date of investigation as against the statutory minimum period of 60 days.
- The time gap in the collection of import data, which used to be about 10 months in the Director General of Commerce Information and Statutes (DGCI &S) office, has been brought down to less than 3 months and efforts are being made to ensure that import data are available within a period of less than 30 days.

- Continuous monitoring of import about 300 sensitive items and monitoring of the impact of QR removal is done to enable the initiation of corrective measures as and when necessary.
- With a view to see that domestic producers do not have to face unfair competition and a level playing field is created, in addition to tariff protection, all imports are subjected to domestic laws, rules, regulations, procedures, technical and sanitary and phytosanitary standards applicable to the domestic industry.

11.31 Negotiations on Agreement on Agriculture

As mandated under Article 20 of the Agreement on Agriculture (AoA), the negotiations for further progressive liberalization to establish a fair and market oriented agricultural trading system have begun from 1st January, 2000. These discussions are taking place in Special Sessions of the WTO Committee on Agriculture.

11.32 India's proposals for the Negotiations

Based on the inputs received from the consultations held with various stakeholders, India's objectives in the negotiations are:

- a) To protect its food and livelihood security concerns and to protect all domestic policy measures taken for poverty alleviation, rural development and rural employment.
- b) To create opportunities for expansion of agricultural exports by securing meaningful market access in developed countries.

Indian proposals submitted to WTO on 15.01.2001 can be broadly classified into the following 2 categories:

- i. Increasing the flexibility enjoyed by developing countries for providing domestic support to the agriculture sector under the special and differential provisions as also further strengthening of trade defence mechanisms with a view to ensuring the food security and to take care of livelihood concerns.
- ii. Demanding of substantial and meaningful reductions in tariffs including elimination of peak tariff and tariff escalation, substantial reductions in domestic support and elimination of export subsidies by the developed countries so as to get meaningful market access opportunities.

11.33 Competiveness of Indian Agriculture

- Liberalization of world trade in agriculture has opened up new vistas of growth. India has a competitive advantage in several commodities for agricultural exports because of near self-sufficiency of inputs, relatively low labour costs and diverse agro-climatic conditions. Increasing the level of productivity to internationally competitive levels is one of the major challenges, which the country is facing today consequent upon dismantling of quantitative restrictions on imports, as per the WTO Agreement on

Agriculture. A regionally differentiated strategy, taking into account the agronomic, climatic and environmental conditions, is therefore sought to be pursued to realize the full potential of yield in every region.

- Given the constraint of limited arable land, increase in increase in production has to be from productivity enhancement through water shed development, land improvement programmes, and expansion of irrigation infrastructure. Input resources has to receive highest priority, so that cropping intensity can be increased. Sustainability issues need to be addressed on priority through frontline research and delivery programmes. Restoration of the health of soils fatigued by toxic residues of indiscriminate use of chemicals and water, optimal use of energy, bio diversity systems are equally crucial.
- The competitive advantage in itself is a relative concept and it depends upon the relative changes in the international market. If the international market is having distortions due to unreasonable support given by the countries to their domestic produce, the efficiency of agriculture produce comes under severe stress thus the competitive advantage is a dynamic phenomenon and is dependent on endogenous and exogenous parameters. In a study done by NCAER, the dynamics of competitive advantage was measured in terms of nominal protection coefficient, which is the ratio of border price and the domestic price. Due to dearest trend of prices in the international market the competitiveness of Indian produce has suffered during the decade. Hence, it is all the more imperative to evolve concrete strategies to make Indian agriculture competitive and enhance its efficiency.

11.34 Coping Strategies

It is expected that the Trade liberalization as a result of WTO-Agreement on Agriculture (AoA) would bring about a structural change in the global agricultural trade and a less distorted trading regime in which more efficient agricultural producers would stand to benefit. The National Agriculture Policy has identified various thrust areas primarily for accelerated sustainable growth of agriculture. This in turn addresses the issue of long term efficiency of Indian Agriculture. Enhancement of efficiency of Indian Agriculture would improve competitiveness in the International market resulting in greater market access for our agricultural produce. This would necessitate a focused agenda for reforms and enhancing efficiency of Indian Agriculture. The salient aspects of the same are:

- Support in the areas of research, extension, water and land management, infrastructure, post-harvest management, rural credit and agricultural risk management to sustain the growth and attain competitiveness.
- Investment in irrigation, watershed development, power and rural infrastructure.
- Re-organise production and export efforts on the basis of specific products in identified geographical areas with the tenet of comparative advantage. Encompass all areas from production to post harvest management, quality standards, processing, storage, transport and marketing activities. Setting up of facilities for grading, sorting and other post harvest technologies.

- Convert India's low use of agro chemicals into an opportunity.
- Compliance with international quality including hygiene and safety standards.
- Standards by Codex Alimentarius and declaration of pest free areas for education and training on post harvest management and exportability of products.
- Establish a credible system of registration of accredited laboratories for quality certification.
- Redefining role of Agricultural Produce Marketing Centre (APMC) in a more competitive environment, integrate existing agricultural markets through information access, reduce the price spread, reduce trade barriers.
- Better network of existing institutions using more affordable technology, with the priority on coverage and local participation.
- Rationalisation of statutory levies.
- Improve credit, insurance and cooperative institutions.

11.35 Policy Thrust for Structural Reform, National Agriculture Policy

Policy thrust is needed for structural reform and national agricultural policy. These include:

- Enhancing comparative advantage
- Productivity acceleration
- Efficient use of inputs and their assured availability
- Diversification

11.36 DUS test guidelines for Protection of Plant Varieties and Farmers' Rights Act

India did not have any legislation on protection of plant varieties till recently. The commercial varieties were therefore freely available for research, seed production and cultivation. During 2001, significant developments have taken place with respect to the realization of the rights of breeders, farmers and local communities. The Protection of Plant Varieties and Farmers' Rights Act (PPV & FRA) was passed by the Indian Government, in tune with the WTO resolution.

11.37 The main objectives of the PPVFR Act

- To recognize and protect the rights of farmers in respect of the contribution made at any time of conserving, improving and making available plant genetic resources for the development of new plant varieties.
- To accelerate agricultural development in the country, protect plant breeders' rights; stimulate investment for research and development in public/ private sector for development of plant variety.

- Facilitate the growth of seed industry, which will ensure the availability of high quality seeds and planting materials to the farmers.

The act is published in the News letter of Seed Association of India. The act has eleven chapters and divides in to 97 clauses.

11.38 Salient features of the PPVFR Act

The Central Government shall establish an authority to be known as the **Protection of Plant Varieties and Farmers' Right Authority**. It shall consists of a chairperson and fifteen members as representatives of different concerned ministries and departments, seed industry, farmers organization, tribal communities and State level Women's organizations etc.

The act allows registration of new plant varieties that includes essentially derived varieties, extant varieties, or farmers' varieties provided they are novel and conform to the criteria of distinctiveness, uniformity and stability (Section 15, PPV and FR Act).

According to Section 15 of the act '**novelty**' means commercial novelty, i.e. the propagated or harvested material of the variety should not have been sold or otherwise disposed off earlier than one year in India, or outside India, not earlier than four years before the date of filing such applications.

'**Distinctiveness**' means that a variety is clearly distinguishable by at least one essential characteristic from any other variety whose existence is a matter of common knowledge.

'**Uniformity**' implies that the variety should be sufficiently uniform in its essential characteristics subject to variation as expected from features of its propagation.

'**Stability**' requires that the essential characteristics remain unchanged after repeated propagation. The new varieties will be subjected to DUS testing by the PPVFR Authority. The authority shall develop and publish in its journal, guidelines for DUS tests for each crop. (Section 29(9), PPVFR Rules).

11.39 Protection of Extant Varieties

The varieties which have been released during the last 15 years can be protected. The Registrar shall register every extant variety within three years from the date of notification under the Act, with respect to the genera and species eligible for registration subject to conformity to the criteria of distinctiveness, uniformity and stability as laid down under the legislation (Section 24, PPVFR Rules)

11.40 Farmers' Rights

Notwithstanding anything contained in this Act,

- (i) A farmer who has bred or developed a new variety shall be entitled for registration and other protection in like manner as a breeder of a variety under this Act;
- (ii) The farmers' variety shall be entitled for registration if the application contains declarations as specified in clause (h) of sub-section (1) of section 18;

- (iii) A farmer who is engaged in the conservation of genetic resources of land races and wild relatives of economic plants and their improvement through selection and preservation shall be entitled in the prescribed manner for recognition and reward from the Gene Fund;
- (iv) Provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act.

Explanation.

1. For the purposes of clause (iv), “branded seed” means any seed put in a package or any other container and labeled in a manner indicating that such seed is of a variety protected under this Act.
2. Where any propagating material of a variety registered under this Act has been sold to a farmer or a group of farmers or any organisation of farmers, the breeder of such variety shall disclose to the farmer or a group of farmers or the organisation of farmers, as the case may be, the expected performance under given conditions, and if such propagating material fails to provide such performance under such given conditions, the farmer or the group of farmers or the organisation of farmers, as the case may be, may claim compensation in the prescribed manner before the Authority and the Authority, after giving notice to the breeder of the variety and after providing him an opportunity to file opposition in the prescribed manner and after hearing the parties, it may direct the breeder of the variety to pay such compensation as it deems fit, to the farmer or the group of farmers or the organisation of farmers, as the case may be.

11.40.1 Comments

Any farmer who has bred or developed a new variety shall be entitled for registration and other protection in the like manner as a breeder of a variety, the farmers' variety shall be entitled for registration. Any farmer who is engaged in the conservation of genetic resources of land races and wild relatives of economic plants and their improvement through selection and preservation shall be entitled of reorganization and reward from the Gene Fund. He shall be deemed to be entitled to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under this Act.

11.41 Rights of Communities

1. Any person, group of persons (whether actively engaged in farming or not) or any governmental or non-governmental organisation may, on behalf of any village or local community in India, file in any centre notified, with the previous approval of the Central Government by the Authority in the Official Gazette, any claim attributable to the contribution of the people of that village or local community, as the case may be, in the evolution of any variety for the purpose of staking a claim on behalf of such village or local community.
2. Where any claim is made under sub-section (1), the centre notified under that sub-section may verify the claim made by such person or group of persons or such

governmental or non-governmental organisation in such manner as it deems fit and if it is satisfied that such village or local community has contributed significantly to the evolution of the variety which has been registered under this Act, it shall report its findings to the Authority.

3. When the Authority, on a report under sub-section (2) is satisfied, after such enquiry as it may deem fit, that the variety with which the report is related has been registered under the provisions of this Act, it may issue notice in the prescribed manner to the breeder of that variety and after providing opportunity to such breeder to file objection in the prescribed manner and of being heard, it may subject to any limit notified by the Central Government, by order, grant such sum of compensation to be paid to a person or group of persons or governmental or non-governmental organisation which has made claim under sub-section (1), as it may deem fit.
4. Any compensation granted under sub-section (3) shall be deposited by the breeder of the variety in the Gene Fund.
5. The compensation granted under sub-section (3) shall be deemed to be an arrear of land revenue and shall be recoverable by the Authority accordingly.

11.42 Protection of innocent infringement

Notwithstanding anything contained in this Act,

- i) A right established under this Act shall not be deemed to be infringed by a farmer who at the time of such infringement was not aware of the existence of such right; and
- ii) A relief which a court may grant in any suit for infringement referred to in section 65 shall not be granted by such court, nor any cognizance of any offence under this Act shall be taken, for such infringement by any court, that at the time of the infringement he was not aware of the existence of the right so infringed.

11.43 Authorization of farmers' variety

Notwithstanding anything contained in sub-section (6) of section 23 and section 28, where an essentially derived variety is derived from a farmers' variety, the authorization under sub-section (2) of section 28 shall not be given by the breeder of such farmers' variety except with the consent of the farmers or group of farmers or community of farmers who have made contribution in the preservation or development of such variety.

11.43.1 Exemption from fees

A farmer or group of farmers or village community shall not be liable to pay any fee in any proceeding before the Authority or Registrar or the Tribunal or the High Court under this Act or the rules made there under.

Explanation: For the purposes of this section, "fee for any proceeding" includes any fee.

11.44 Gene Fund

- (1) Central Government shall constitute a Fund to be called the National Gene Fund and there shall be credited thereto:
 - a) The benefit sharing received in the prescribed manner from the breeder of a variety or an essentially derived variety registered under this Act, or propagation material of such variety or essentially derived variety, as the case may be;
 - b) The annual fee payable to the Authority by way of royalty under sub-section (1) of section 35;
 - c) The compensation deposited in the Gene Fund under sub-section (4) of section 41;
 - d) The contribution from any national and international organisation and other resources;
- (2) The Gene Fund shall, in the prescribed manner, be applied for meeting:
 - a) Any amount to be paid by way of benefit sharing under sub-section (5) of section 26;
 - b) The compensation payable under sub-section (3) of section 41;
 - c) The expenditure for supporting the conservation and sustainable use of genetic resources including in-situ and ex-situ collections and for strengthening the capability of the Panchayat in carrying out such conservation and sustainable use;
 - d) The expenditure of the schemes relating to benefit sharing framed under section 46.

11.44.1 Duration of Protection

The registration shall be valid for 18 years for trees and vines and will be reviewed after nine years if found fit will be extended for the remaining period.

11.45 Requirement of DUS testings

1. Guidelines.
2. Database of extants/ notified varieties.
3. Selection of DUS test centre.
4. Pure seed of extant/ notified varieties and then safe storage.
5. Software for database/ analysis.

6. Awareness/ capacity building.

11.46 Some important definitions

11.46.1 Variety

A plant grouping except microorganisms within a single botanical taxon of the lowest known rank, which can be

- i) Defined by the expression of the characteristic resulting from a given genotype of a plant of that plant grouping.
- ii) Distinguished from any other plant grouping by expression of at least one of the said characteristics; and
- iii) Considered as a unit with regard to its stability for being propagated, which remains unchanged after such propagation and includes propagating material of such variety, extant variety, transgenic variety, farmers' variety and essentially derived variety.

11.46.2 Farmer

Any person who:

- i) Cultivates crops by cultivating the land himself, or
- ii) Cultivates crops by directly supervising the cultivation of land through any other person, or
- iii) Conserves and preserves severally or jointly with any person any wild varieties or traditional varieties or adds value to such wild species or traditional varieties through selection and identification of their useful properties.

11.46.3 Extant variety

A variety available in India which is:

- i) Notified under Section 5 of Seeds Act, 1966 or
- ii) Farmers' variety or
- iii) A variety about which there is a common knowledge or
- iv) Any other variety which is in public domain.

11.46.4 Farmers' variety

- i) A variety that has been traditionally cultivated and evolved by the farmers in their fields.
- ii) Is a wild relative or land race of a variety about which farmers possess common knowledge.

11.46.5 Farmers' Rights

- i) The PPV & FRA, 2001, provides certain rights to the farmers, to save, use, sow, re-sow, exchange, share and sell his farm produce including that of the registered variety except that he cannot make and market it as branded seed with packing label, etc. that is demanded by the market.
- ii) Farmers who develop new variety of plants like any other plant breeder can apply their material for registration by DUS testing procedures.

11.46.6 Researchers' Rights

- i) Can use any of the variety registered under this act by any person using such variety for conducting experiment or research.
- ii) The use of a variety by any person as an initial source variety for the purpose of creating other varieties.
- iii) Authorization of the breeder of a registered variety is required where repeated use of such variety as parental line is done for commercial production of other new developed variety.

11.46.7 Essentially Derived Variety (EDV)

- i) EDV is predominantly derived from another variety or initial variety; or from a variety that is derived from the initial variety, retaining the expression of the essential characteristics that result from the combination of genotypes of the initial variety and is clearly distinguishable from the initial variety except for differences that result from the act of derivation, confirms to the initial variety.
- ii) The plant variety developed from an initial variety through transgenic approach, backcross derivative, mutants, chimera, somaclonal variants, and chimera and alike can come under the EDV.

