

## Phyto-sanitary requirements under WTO regime\*

S. MUKHOPADHYAY

Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Kalyani 741252, Nadia, West Bengal

Trade is the primary vehicle of the international economy. It involves export and import of all types of commodities, raw materials and industrial products. Two major constraints are normally recognized that limit the unbound international trades. These are "Tariffs" and "Barriers". To regulate "Tariffs", a **General Agreement on Tariffs and Trade** (GATT) first became operative in 1947 involving only a few industrially advanced countries. But the "Barriers" persist, and the agricultural and allied products were not in the purview of this Agreement at that stage. In non-Member countries trades were mostly operative through bilateral agreements and the import decisions were absolute discretions of a particular country. With the rapid changes in the world economy and pressing necessity of the formulation of a dynamic global economy, a fresh GATT Agreement was made in 1994. This Agreement became the primary item of discussions in the Uruguay Round of Multinational Negotiations and led to the formation of **Multi-Trade Organization** (MTO). This Organization in 1995 was transformed into the **World Trade Organization** (WTO). The Articles of this Organization remove the "Barriers" and bring agricultural and allied products in the purview of the WTO.

International trade on agricultural and allied products involves risks of the spread of pests, pathogens, weeds, and also unwanted chemical residues having impacts on health of plants, animals and the environment. Each country has its own protection system to avoid such importation, the Rules and Regulations of Quarantines. But there was no harmony in the rules and regulations and their

implementation in different countries. There was no transparency in this regard. The WTO took a serious view to it and reaffirming that no Member should be prevented from adopting or enforcing measures necessary to protect human, animal and plant life or health, subject to the requirement that these measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between Members where the same conditions prevail or a disguised restriction on international trade. WTO made an Agreement on the Application of Sanitary and Phyto-sanitary (SPS) measures uniformly applicable to all the Member countries.

### Definition of sanitary and phyto-sanitary measures

WTO defined the *Sanitary* or *Phyto-sanitary* measure as any measure applied :

"(a) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease causing organisms ;

(b) to protect human and animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs ;

(c) to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests ; or

\* Sir E. J. Butter Memorial Lecture—delivered in the 46th Annual General Meeting of the Indian Mycological Society on 31st July, 2002.

(d) to prevent or limit of other damage within the territory of the Member from the entry, establishment or spread of pests''.

Sanitary and Phyto-sanitary measures include all relevant laws, decrees, regulations, requirements and procedures including *inter alia*, end product criteria, processes and production methods, testing, inspection, certification and approval procedures, quarantine treatments including relevant requirements associated with the transport of animals or plants or with the materials necessary for their survival during transport, provisions of relevant statistical methods, sampling procedures and method of risk assessment, and packaging and labeling requirements directly related to the food safety.

This Agreement consists of 14 Articles obligatory to all Members. These Articles includes : *General Provisions, Basic Rights and Obligations, Harmonization, Equivalence, Assessment of Risk and Determination of Appropriate level of Sanitary and Phyto-sanitary protection, Adaptation to regional conditions including Pest-, Disease- free Areas of low pest and disease prevalence, Transparency, Control, Inspection and Approval Procedures, Technical Assistance, Special and Differential Treatment, Consultation and Dispute Settlement, Administration, Implementation and Final Provisions.*

The WTO Agreements primarily direct the dynamism of the world trades overruling all barriers for inter-country exports and imports and establishing liberal competitive economy throughout the world. This Organization is fully aware of the hazards that such import and export promotion can jeopardize the importing countries unless the sanitation and phyto-sanitation aspects of the importing materials are properly looked into. In view of this requirement, the WTO made the Agreement so that harmonious approaches are made by each Member country to avoid unwanted hazards along with the imports. But the implementation of such approaches requires substantial backup of modern technologies which most of the developing countries do not have.

### **Pre-agreement status of sanitation and phyto-sanitation in different countries**

The term *Quarantine* normally covers Sanitation and Phyto-sanitation. Plant Protection and Quarantine (PPQ) is the umbrella term for the strategies undertaken for phytosanitation in different countries. It is basically a disease control strategy practiced primarily by government agencies usually at the national but also at the state or provincial levels. These agencies are empowered by rules and regulations promulgated by the government for the purpose of reducing the risks of inadvertently introducing hazardous pests, pathogens and chemicals from foreign areas. The legal basis is either legislation enacted by national and sometimes by state or provincial governments or enabling legislation that directs the Minister of Agriculture to issue necessary rules, orders, or directives. Some countries are bound by legislation enacted by regional parliaments representing groups of countries often make recommendations to their member countries, but those recommendations do not have any legal or binding status. The legal foundation of international plant quarantine matters is the International Plant Protection Convention (IPPC) of 1951 also known as Rome Convention. This Convention made a Treaty that is administered by the Food and Agricultural Organization (FAO) of the United Nations. Eightynine countries are signatories to the IPPC, and as such adhere to the standardized procedures and documentation those involve permits, phyto-sanitary certificates, and interception. Many other non-signatory nations follow the recommended standards and procedures (Khan, 1989).

Characteristics of these Regulations are :

1. *Specify prohibitions, exclusions, or other Regulatory actions ;*
2. *Require import permits for the entry of named non-prohibited articles, and allow entry, without permits of other lower risk named articles ;*
3. *Allow entry, under a special permit, of prohibited items whose importation under specified safeguards is approved for scientific purposes ;*

4. *Require phyto-sanitary certificates ; and depending on permit specifications, require added declarations on certificates ;*
5. *Stipulate inspection upon arrival ;*
6. *Prescribe treatment at origin, during transit, or upon arrival ;*
7. *Prescribe post-entry greenhouse growing, field isolation, or other safeguards after entry.*

#### **Development of the application of SPS measures**

After the establishment of the IPPC, series of changes took place on the perception of the SPS. These have been summarized as follows (NAAS, 2001) :

**1974-79** : Inclusion of SPS concerns for food safety and health of humans, animals, and plants in the Agreements on the Technical Barriers of the Trade (TBT) during the Tokyo Round.

**1986** : Call for increased discipline in Agricultural Trade including SPS measures as per the *Punta del Este Declaration*, which launched the Uruguay Round in September 1986.

**1988** : Mid-Term Review of the Uruguay Round in which the following priority areas related to the SPS measures were identified : (a) harmonization of the SPS measures on the basis of the International Standards, (b) transparency through effective notification of national Regulations, and (c) improvement in the dispute settlement process including bilateral resolution of dispute and scientific support

**1990** : Foundation of the working group on SPS Regulations. Inclusion of SPS measures in a separate draft Agreement.

**1991** : The Director General of the GATT issued "Dunkel Draft". This Draft included SPS issues. The final text of the Agreement on the Application of SPS measures was approved at the end of the Uruguay Round in 1994.

**1993** : A Secretariat of the IPPC was established which started the Standard setting process related to the SPS measures.

**1995** : Establishment of a Dispute Settlement

Mechanism under the WTO that provides for mutually acceptable solutions or adoption of a panel/Appellate Body ruling by the Dispute Settlement Body (DSB).

**2000** : SPS Committee completes draft on the risk consistency. The draft provides guidelines (not legally binding) on levels of health protection.

**2000** : Finalization of the United Nations' Agreement concerning trade in genetically modified organisms (GMOs).

#### **Indian scenario**

The first recorded plant quarantine measure in India dates back to 1906 when the Government of India directed that all cotton imported from the New World should only be admitted after fumigation at the port of entry to avoid the introduction of Mexican boll weevil (Rajak, 1988). An Act was promulgated called DIP Act (against Destructive Insects Pests) in 1914 which have been amended 10 times within 2000. Significant Amendment was made in 1984 bringing plants including bulbs, tubers, rhizomes, corms, cuttings, buddings, grafts, layers, suckers, roots, flowers, etc, fruits and seeds under the purview of the existing Act. The DIP Act was initially enforced by the Customs Department. Subsequently in 1946 a separate Directorate of Plant Protection, Quarantine and Storage was established under the Ministry of Agriculture to deal with the quarantine operations. India is a Member of the IPPC and is to pursue the measures recommended by this International Organization. The Directorate regulates 9 seaports, 10 airports, and 7 land frontiers. Three National Institutions are empowered to act as official quarantine agencies. These are National Bureau of Plant Genetic Resources (NBPGR), Forest Research Institute (FRI), and Botanical Survey of India (BSI).

Although the Act is operative but import of contaminants remains unabated. During 1930s San Joce Scale (*Quadrastpidiotus perniciosus* Comst.), a pest of apple seems to have been introduced to apple orchards of Himachal Pradesh, Jammu & Kashmir and Uttar Pradesh. The woolly aphis (*Eriosoma lanigerum* Hasum) of apple has also been intro-

duced from abroad. It is presumed that potato tuber moth (*Gnorimoschema operculella* Zell.) was introduced to India from Italy. Fluted scale (*Icerya purchasi* Mask.) was introduced from Australia through Sri Lanka. Giant African snail (*Achatina fulica* Bowditch) was introduced to India from East Africa. Coffee rust was introduced from Sri Lanka. Fire blight (*Erwinia amylovora* Burrill) of pear and other pomes was introduced from England in 1940. Late blight of potato (*Phytophthora infestans* Mont de Bary) of potato was introduced from Europe. Flag smut (*Urocystis tritici* Koern) of wheat was introduced from Australia. Rubber mildew (*Oidium* sp.) was introduced from Malaysia in 1938. Black rot of crucifers (*Xanthomonas campestris* (Pamm). Dows. is believed to have been introduced from Holland and other European countries. Bunchy top of banana was introduced from Sri Lanka in 1940. Wart disease of potato was introduced from Holland. Golden nematode attacking potato has also been introduced through import of seed potatoes. It is believed that banana mosaic and apple scab have been imported from other countries. In addition to pests and diseases, a large number of weeds such as *Argemone maxicana* L. (Mexican prickly poppy), *Lantana camara* L. (lantana), *Eichhornia crassipes* Solms. (water hyacinth), *Avena fatua* L. (wild oat), *Phalaris minor* L. (canary grass), *Parthenium hysterophorous* L. (carrot weed or Congress grass), *Salvinia molesta* Aublet (water fern), etc. have been imported from time to time. All these pests, diseases and weeds are now threatening the respective crops in different parts of the country, and some of them also are affecting the public health (Joshi, 1989).

### Tasks ahead

National Academy of Agricultural Sciences, India constituted a Consultative Committee in 2000 to formulate proper policy to execute the SPS of the WTO Agreement under Indian condition and made specific recommendations in this regard (NAAS, 2001). The SPS as stipulated by the WTO has very precise items. These items perhaps do not remain confined only to the Regulatory measures but also brought the SPS to the production gates. Now we are concerned with both imports and exports. First of all, there should be internally accepted Standards

to declare the status of risks. Such standards are also to be maintained in the marketing systems at home.

WTO Agreement recommends the use of methods of analysis and sampling, and the codes and guidelines of hygienic practice as in *Codex Alimentarius* for food safety related to food additives, veterinary drugs and pesticide residues. *Codex Alimentarius* is a product of the *Codex Alimentarius* Commission (CAC) which is a joint FAO/WHO Commission with a membership of over 160 countries. The *Codex* prepared by this Commission includes nearly 5000 standards. India is a passive member of this Commission. This country is yet to have its own Uniform National Standards applicable to its own regional conditions and its relative match with the standards prescribed in the *Codex Alimentarius*.

The IPPC Secretariat is to prepare international standards for phyto-sanitary measures. India is also to develop its own standards and to determine their equivalence to the International Standards and Standards determined by other countries. Moreover there are several items on which IPCC is yet to work out such as GMOs and Tissue culture plants. The tasks of the phyto-sanitary measures as stipulated by the WTO are very extensive. These are very hard to operate particularly in all the developing countries including India. The immediate tasks are to identify quarantine pests, diseases and weeds and the risks involved with their spread.

It is to have elaborate infrastructures for inspection and certification. It is also to work for certification of materials for export, identify pests and disease-free areas for cultivation of specific exportable crops, development of Standards of importable and exportable items and determine their equivalence and to make the people aware of all these requirements for any export and import. As the economy of the country is gradually becoming export oriented, the producers are to be made fully conversant with the transparency of the phyto-sanitary measures. This is particularly required for imports as well. In case of any interception, the importing country is to declare the market position of the reasons(s) for interception.

To keep on the line of the WTO, the Directorate is to have extensive database on pests, diseases and weeds, machineries or networking for regular monitoring of their status, network of properly equipped and manned detection centers including viruses, viroids, phytoplasmas, spiroplasmas, vascular borne bacteria, pesticide residues and other chemical contaminants. There should be strong information receiving and transmission linkages between the entry points, databases, detection centers at regional and national level and also at the international level. Question may arise whether a Directorate with limited administrative power, scanty technical personnel, extremely limited financial, organizational and management resources can do justice to meet the WTO requirements for sanitation and phyto-sanitation. It is essential to promote the Directorate to an Independent Commission giving full financial support, technical personnel and other relevant powers to organize the proper development and management umbrella to materialize the WTO require-

ments on sanitary and phyto-sanitary measures for proper international equivalence.

## REFERENCES

- Anonymous (2001). Sanitary and Phyto-sanitary agreement of the World Trade Organization-Advantage India. National Academy of Agricultural Sciences (NAAS), India, Policy Paper 12, pp.13.
- GATT Agreements, Final Text of Uruguay Round 1994. MVIRDC, World Trade Center, Mumbai.
- Joshi, N. C. (1989) Plant Quarantine in India. In : Rev. Trop. Pl. Path 6 (ed. S. P. Raychaudhuri and J. P. Verma). Today & Tomorrow's Printers & Publishers, New Delhi : 181-200.
- Khan, R. P. (1989). Plant Quarantine as a disease control strategy. In : Rev. Trop. Pl. Path 6 (ed. SP Raychaudhuri and J. P. Verma). Today & Tomorrow's Printers & Publishers, New Delhi : 151-180.
- Rajak, R. L. (1988). Plant Protection : Past forty years : an overview. Forty years of Plant Protection in India 1946-1986 (ed. Bap Reddy). Plant Protection Association of India, Hyderabad : 9-16.