Associated Review - III

Sanitary and Phytosanitary Measures[1]

History of WTO-SPS

- The Bretton Wood Conference of July, 1944 at Bretton Woods, New Hampshire, proposed the creation of an International Trade Organisation (ITO) to establish rules and regulations for trade between countries.
- The ITO have complemented the other two organizations International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (known informally as the World Bank)
- Only one element of the ITO survived: the General Agreement on Tariffs and Trade (GATT).
- Seven rounds of negotiations occurred under GATT before the eighth round – the Uruguay Round- concluded in 1995 with the establishment of the World Trade Organization (WTO) at the GATT's replacement.
- The GATT principles and agreements were adopted by the WTO, which was charged with the administering and extending them.
- Uruguay round (8th round of GATT negotiations).
- Land mark round held for conversion of GATT to WTO.
- Represent milestone in multilateral trading system, because for the first time agriculture and food trade included under operationally effective rules.

World Trade Organizations

Location : Geneva, Switzerland

Established : 1 January 1995

[1] An article by Dr. S. Raghuvardhan Reddy, Vice Chancellor, ANGRAU, Hyderabad, presented at the Second National Conference on KVKs held at ANGRAU, Hyderabad from November 26-27th, 2006.

Created by : Uruguay Round negotiations (1986-94)

Membership : 149 countries (on 11 December 2005)

Functions:

- Administering WTO trade agreements
- Forum for trade negotiations
- Handling trade disputes
- Monitoring national trade policies
- Technical assistance and training for developing countries
- Cooperation with other international organizations
- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations.
- WTO agreements are negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments.
- The goal is to help producers of goods and services, exporters, and importers conduct their business

The following are the multilateral trade agreements signed by member countries under WTO

- General Agreement on Tariffs and Trade 1994
- Agreement on Agriculture (AOA)
- **Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)**
- Agreement on Textiles and Clothing

- Agreement on Technical Barriers to Trade (TBT)
- Agreement on Trade Related Investment Measures (TRIMS)
- Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994
- Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994
- Agreement on Pre-shipment Inspection (PSI)
- Agreement on Rules of Origin
- Agreement on Import Licensing Measures
- Agreement on Subsidies and Countervailing Measures
- Agreement on Safeguards.

History of WTO-SPS

During 1991 DG, GATT issued *Dunkel Draft, which included issues on SPS*

Significant areas completed under WTO was Sanitary (Human and Animal Health), and Phytosanitary (Plant Health) Agreement, which outlines disciplines and limits to protect human, animal and plant life and health from foreign pests, diseases and contaminants.

The agreement of SPS came into enforce from January, 1995

Regulations under the purview of the WTO-SPS Agreement include

The protection of animal or plant life or health within a territory from risks arising from the entry, establishment, or spread of pest, disease, disease-carrying organisms, or disease-causing organisms.

The protection of human or animal life or health within a territory from risks arising from additives, pesticide residues, contaminants, toxins, or disease-causing organisms in foods, beverages, or feedstuffs.

The protection of human life or health within a territory from risks arising from diseases carried by animals, plants, or products thereof, or from entry, establishment, or spread of pests.

The prevention or reduction of the risks of other damages within a territory from the entry, establishment, or spread of pests.

The Agreement on the Application of SPS contains 14 articles and three annexes

Article 1	General Provisions
Article 2	Basic Rights and Obligations
Article 3	Harmonization
Article 4	Equivalence
Article 5	Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection
Article 6	Adaptation to Regional Conditions, Including Pest or Disease Free Areas and Areas of Low Pest or Disease Prevalence
Article 7	Transparency
Article 8	Control, Inspection and Approval Procedures
Article 9	Technical Assistance
Article 10	Special and Differential Treatment
Article 11	Consultations and Dispute Settlement
Article 12	Administration

Article 13 Implementation

Article 14 Final Provisions

Basic concepts – SPS agreement

The WTO-SPS Agreement creates a framework for border protection and eradication measures while facilitating free trade. The Agreement is based on the following five general principles:

- *Harmonization*-encourages the adoption of measures that conform to international standards, guidelines, and/or recommendations of international agencies.
- *Equivalence*-mutual recognition of different but equivalent measures to achieve international standards.
- *Non-discriminatory*-treating imports no differently than domestic produce.
- *Transparency*-notifying trading partners of changes in their SPS measures, especially when the measures differ from international standards.
- *Regionalization*-allows continued exports from clean (disease-free) areas of affected countries.

Ten Commandments in SPS

- Participation in relevant international organizations:OIE, IPPC and Codex Alimentarius
- Adaptation of laws, rules and standards to the terms of the SPS agreement
- Use of risk analysis studies
- Transparency of Information
- Reinforcement of export certification procedures
- Reinforcement of import inspection and quarantine procedures
- Modernization of laboratory services

- Strengthening the information, surveillance and alert service
- Modernization of procedures for registering and controlling agricultural chemicals and veterinary products
- Control and eradication of diseases and pests that hinder trade

WTO member countries are encouraged to use International Standards, guidelines and recommendations set by International Standard Setting agencies, where they exist

However, the SPS agreement

- Allows WTO member countries to set their own safety, animal & plant health standards-applied to the extent necessary.
- The regulations must be based on science.
- SPS regulations shall not be arbitrarily or unjustifiably discriminate between countries.

Milestones in evolution of Food Standards

Year	Milestone
Ancient Times	In Europe during middle ages, Individual Counties passed Laws Egyptians prescribed labeling from certain foods Roman had a well-organized food control systems
Early 1800s	Invention of Canning
Mid-1800s	First shipment of Bananas to Europe from Tropics
1800s	Adoption of first generation food laws and reliable methods gained credibility from food adulteration
Late 1800s	First International long-distance food transportation of frozen meat from Australia and New Zealand to UK
Early 1900s	Food Trade Associations facilitated Harmonized Standards
1903	International Diary Federation (IDF) developed International Standards for milk products

Milestones in evolution of Food Standards

During 1897-1911, standards and product descriptions for a wide variety of food were developed in the *Austro-Hungarian Empire* as the *Codex Alimentarius Austriacus*, from which the Codex Alimentarious has been named.

Year	Milestone and Trade Concerns
1945	FAO is founded with responsibilities of Food Standards
1948	WHO is founded with responsibilities covering
1949	Argentina proposes a regional Latin American Food Code
1950	Joint FAO/ WHO expert meeting on nutrition, food additives and related areas
1953	The world health assembly expressed concerns on use of chemicals in food as health problem
1954-58	Austria actively pursued the creation of a regional food code, Codex Alimentarius Europaeus, Codex Alimentarius
1960	First FAO regional conference for Europe endorsed the desirability of International Food Standards on the conference of FAO
1961	The Council of Codex Alimentarius Europaeus adopted a resolution proposing that its work on foods to be taken over by FAOThe ECE, OECD, the council of the Codex Alimentarius Europaeus established Codex AlimentariusThe FAO conference decided to establish Codex AlimentariusCommission (CAC)
1962	The joint FAO/ WHO Food Standards Conference requested the Codex Alimentarius Commission to implement a joint FAO/ WHO food standards programme
1963	The World Health Assembly approved establishment of the joint FAO/ WHO Programme on Food Standards and adopted the statues of the Codex Alimentarius Commission.

Food safety Standard setting agencies

- Codex Alimentarius Commission (CAC) is the International Food Safety Standards setting body within UN family, created in 1963 by FAO and WHO
- Main purpose: to protect health of consumers, ensuring fair practices in food trade, and promoting coordination of all food standards work undertaken by international government and non-government agencies.
- Cover all the main foods-processed/ semi-processed/ raw.
- Concern the hygienic and nutritional quality of food,
- Chemical contaminants (food additives, pesticide and veterinary drug residues, other contaminants), labeling and presentation, methods of sampling and risk analysis. CODEX standards are considered scientifically justified and are accepted as bench marks.

Animal Safety Standard setting agencies

- Its mission to guarantee the transparency of animal disease status worldwide.
- To collect, analyze and disseminate veterinary scientific information
- To provide expertise and promote international consensus for control of animal diseases.
- To guarantee the sanitary safety of world trade by developing rules for international trade in animals and animal products.

OIE has FOUR committees to develop standards viz.,

- International Animal Health Care Commission
- The Standards Commission
- The Foot and Mouth disease and other epizootics Commission
- The Fish disease Commission

Plant Safety Standard setting agencies

- PURPOSE: to secure a common and effective action to prevent the introduction/ spread of pests of plants/ plant products.
- To promote appropriate measures for their control.
- To provide information on Pest Risk Analysis (PRA) in Plant Health.
- To create standards for PRA for quarantine pests and non-quarantine pests
- SCOPE- fungi, bacteria, viruses, nematodes, insects and weeds.
- IPPC developed ISPM (International standard for Phytosanitary Measures) guidelines adopted in 1994, includes Pest categorization, economic impact and risk management.

Need to understand SPS

- For import / export of Food commodities (Raw/ semi-processed/ processed) (FOOD SAFETY)
- For import/ export of Plant(s) / Plant Materials (PLANT SAFETY)
- For import/ export of Animal(s)/ Animal Materials (ANIMAL SAFETY)

Food Safety (Food Exports and Imports)

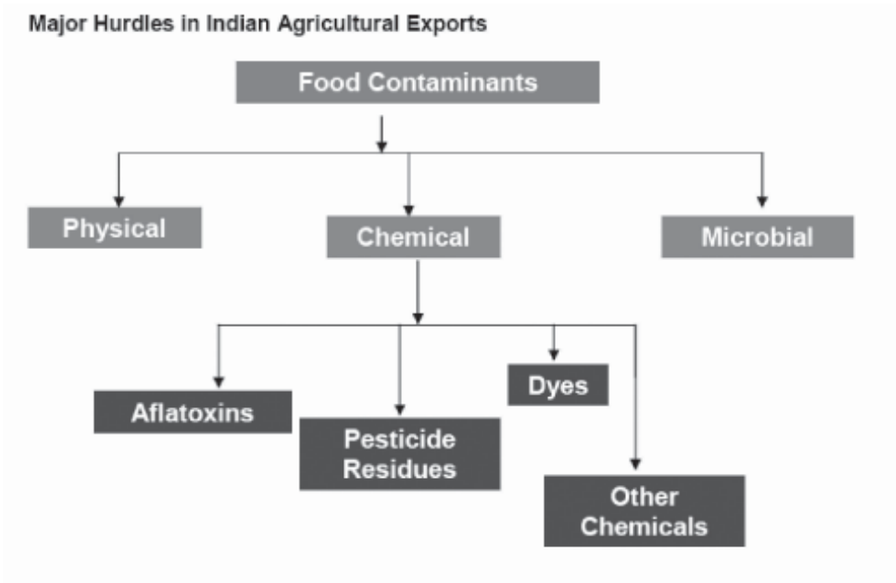
Growth in Agricultural Exports

Name of the Product	1990-91		1996-97		2000-01		2002-03		2004-05	
	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
Pulses	--	--	55	132	244	537	154	328	246	553
Rice-Basmati	527	440	523	1247	849	2155	772	1993	1126	2741
Rice-Other	--	--	1989	1924	682	777	2640	2175	3645	3899
Tea	202	1075	179	1037	187	1788	177	1637	194	1784
Coffee	86	253	163	1427	185	1985	188	1086	159	1008
Spices	100	233	222	1202	245	1617	267	1544	275	1794
Cashew	50	442	69	1285	89	2050	100	1700	157	2336
Fresh Fruits	--	--	--	244	--	386	--	784	--	811
Fresh Vegetables	--	--	--	334	--	457	--	954	--	813

Processed Vegetables	--	--	--	116	--	228	--	291	--	340
Processed Fruits	--	62	--	209	--	557	--	343	--	346
Meat & Preparations	--	141	--	709	--	1470	--	1714	--	1734
Marine Products	158	960	--	4007	502	6367	410	6106	380	5695
Poultry Products	--	--	--	--	--	105	--	254	--	257
TOTAL	--	6012	--	24161	--	28657	--	37266	--	39863
Share (%) In Total National Exports		18.5	--	20.0	--	14.2	--	12.7	--	11.2

Share of Agril. Exports in Total Exports from INDIA is gradually coming down over years

Year	% share of Agri. Exports in total exports (value based)
1990-91	18.49
1991-92	17.80
1993-94	18.05
1996-97	20.33
1997-98	19.09
1999-00	15.91
2000-01	14.23
2002-03	13.58
2003-04	12.70
2004-05	11.20



Indian Agricultural Products rejected / Alert Notices issued by European countries

Month & Year	Importing Country	Agricultural Product	Reasons
July, 2000	Spain	Chilli	Cypermethrin
April, 2001	Germany	Curry Powder & Chilli Powder	Ethion, cypermethrin
May, 2001	UK	Grapes	Triazophos
June, 2001	Germany	Curry Powder	Cypermethrin and dicofol
November, 2001	Germany	Curry Powder	Cypermethrin Fenvalerate Phosphamidon
	Greece	Chilli Powder & Red Chilli	Ethion, triazophos, cypermethrin, chlorpyriphos

Indian Agricultural Products rejected / Alert Notices issued by European countries

Month & Year	Importing Country	Agricultural Product	Reasons
January, 2002	Greece	Crushed Chilli & Chilli Powder	Aflatoxins
March 2002	UK	Coriander	Rat Droppings
	Italy	Chillies	Aflatoxins
August 2002	UK	Curry Powder	Ethion
	Spain	Pepper	Aflatoxins
September, 2002	Italy	Herbal Products	Heavy Metals
December 2002	UK	Curry Powder	Salmonella
	The Netherlands	Chilli Powder	Aflatoxins

Indian Agricultural Products rejected / Alert Notices issued by European countries.

Month & Year	Importing Country	Agricultural Product	Reasons
January, 2003	Italy	Shelled sesame seeds	Salmonella Spp
February, 2003	Italy	Chilli Powder	Aflatoxin
	Italy	Chilli Powder	Aflatoxin
March, 2003	UK	Extra hot chilli	Aflatoxin
	UK	Dabur Honey	Streptomycin
	Italy	Nutmeg	Aflatoxin
April, 2003	UK	Grapes	Methomyl, acephate
Jan,2004	UK	Chilli Powder	Sudan Red-I
Feb,2004	UK	Chilli Powder	Sudan Dye
Oct, 2004	UK	Chilli Powder	Sudan Dye
Nov, 2004	UK	Chilli Powder	Sudan Red-I
Jan, 2005	UK	Chilli Powder	Sudan Red-I

US FDA rejects Agricultural Products from India during October 2006

Product	Reason
Creamy Peanut Butter	Aflatoxin
Papads (pepper, garlic, red chilli, rice, moong ,etc.), Tamarind Concentrate, Basmati Rice	Filthy
Mustard oil	Unsafe add
Fenugreek, Sambar Powder, Shreded Coconut, Asafoetida Powder, Cumin whole & powder, Black Pepper	Salmonella
Whole Green Chilli	Pesticides
Fennel	Colour

US FDA rejects Agricultural Products from India during September 2006

Product	Reason
Basmati Rice, Frozen Fish, Tamarind	Filthy
Fruit Mix Jam (HL), Fennel Seeds, Ginger Garlic Paste, Lemon Crush	Unsafe Colour
Garam Masala, Sambar Powder, Rasam Powder, Chilli Powder, Coriander Powder, Red Pepper, Turmeric Powder	Salmonella
Sesame Seeds	Pesticides

Indian Veterinary Products rejected / Alert Notices issued by European countries during Jan-July 2002

Month & Year	Importing Country	Agricultural Product	Reasons
Jan,2002	Italy	Frozen Cuttle Fish	Salmonella
Jan,2002	Norway	Frozen Surumi (Fish Paste)	Virio spp.
Feb, 2002	France	Frozen Tiger Shrimps	Salmonella
April,2002	France	Frozen Cuttle Fish	Salmonella
May, 2002	Holland	Frozen Toger Shrimp	Nitrofurans
June,2002	Spain	Peeled Prawns	Bacterial inhibitor
June,2002	Greece	Frozen Cuttle Fish	Salmonella
June,2002	Holland	Headless Shellon	Nitrofurans
June,2002	Holland	Shrimps	Chloramphenicol
June,2002	Spain	Peeled Shrimps	Chloramphenicol & antibiotics
July,2002	Spain	Peeled Shrimps	Bacterial inhibitor
July,2002	Spain	Frozen Shrimps	Antibiotic residues

Indian Veterinary Products rejected / Alert Notices issued by European countries during Jan-Mar, 2003.

Month & Year	Importing Country	Agricultural Product	Reasons
Jan, 2003	Italy	Frozen Cephalopod Molluscs	E. Coli
Jan, 2003	Spain	Frozen Peeled Red Prawn	Mesophilic aerobic bacteria
Jan, 2003	Italy	Frozen dentex fillets	Vibrio spp
Feb, 2003	Italy	Frozen blanched shrimps	Bacterial inhibitors
Feb, 2003	Italy	Frozen blanched shrimps	Do
Feb, 2003	Italy	Frozen shrimps	Do
Feb, 2003	Italy	Frozen shrimps	Do
Feb, 2003	Germany	Shrimp tails	Nitrofurans
March,2003	Spain	Frozen Squid	Cadmium
March,2003	Italy	Frozen Fish Products	Aminoglycosides
March,2003	Greece	Frozen Octopus	Cadmium
March,2003	Norway	Baracuda Steaks	Vibrio spp.

In recent months Indian supermarket shelves have started displaying a variety of imported foods.

- Cheese from Switzerland
- Apples from Australia
- Kiwi fruit from New Zealand
- Biscuits from Thailand
- Chocolates from Brazil, the list is growing by the day.

These imports have been allowed as part of fulfilling India's commitment to World Trade Organization under its Agreement on Agriculture (AoA) to improve market access for foreign foods, but the monitoring at entry points for the quality checks is questionable in the absence of accredited labs for analysis of food contaminants.

Science behind the problems…..

Example: Pesticide Residues standards (MRLs/ Tolerance levels) for

ACEPHATE as per PFA (Prevention of Food Adulteration) Act and rules, 1954

ACEPHATE is registered for use as per Insecticide Act, 1969

Registered for : Cotton, Safflower

Not Registered : Chillies, Brinjal, Cabbage, Cauliflower, Apple, Castor, Mango, Tomato, Potato, Grapes, Okra, Onion, Mustard, Paddy and many other crops.

Hence, Tolerance levels/ MRLs are set for Safflower Seed, and Cotton Seed.

But, in fact the ACEPHATE is being recommended for the control of sap sucking pests in most crops. So, the immediate requirement is to REGISTER the ACEPHATE in CROPS as per the recommendation of ICAR/SAUs based on the bio-efficacy studies, and to set the MRLs on those crops.

CODEX MRLs for ACEPHATE are set for Cauliflowers, Artichoke, Broccoli, and Soybean dry

Example: Pesticide Residues standards (MRLs/ Tolerance levels) for MANGO as per PFA (prevention of Food Adulteration) Act and rules, 1954

Pesticide Registered for use as per insecticide Act, 1969 are 8. But, Tolerance levels/ MRLs are not set for most of these Pesticides on Mango/ Mango products (Raw/ semi-processed/ processed)

Pesticides	MRL	Pesticides	MRL	Pesticides	MRL	Pesticides	MRL
Ethephon		Sulphur	NR	Malathion	4.0	Diazinon	
Dimetohate	2.0	Dinocap		Hexaconazole		Tridemorph	0.05
Carbendazim	2.0	Benomyl	2.0				

Many other pesticides are recommended as per ICAR/ SAUs, are to be included as per Insecticide Act, and MRLs are to be set as per PFA Act/As per CODEX, MRLs are set for 7 pesticides. Tolerance levels for Semi-processed/ processed foods are not set, and is the urgent need to protect our food exports.

India has number of food quality regulations under various ministries, but the coordination for harmonization is questionable!

Regulation	Ministries Involved
Essential Commodities Act 1955	**Ministry of Food and Civil Supplies** *(Solvent extracted oils, De-oiled meal and edible flour control order 1967)-Mandatory inspection* **Ministry of Food Processing Industries** *(Fruit product order, 1955)-Mandatory inspection* **Ministry of Agriculture** *(Meat food product orders 1973)-Mandatory inspection*
Standards& weight measures Act 1976	**Ministry of food and civil supplies** *(SWM rules 1977) Packed food stuffs must adhere to quality declaration*
Agricultural Produce Act 1937	**Ministry of Agriculture –** *AGMARK standard for raw, semi-processed products- Mandatory for export*
Prevention of Food Adulteration (PFA) Act 1954	**Ministry of Health and Family Welfare** *(Protect customer against inferior quality of food and food adulteration*
CODEX stel 1954 (not a law)	**Ministry of Health and Family Welfare** *(endorsed by WTO under SPS and TBT)-Defacto mandatory*
Export (Quality control and inspection) Act 1963	**Ministry of commerce** *(pre-shipment inspection mandatory)*
Bureau of Indian Standards 1986	**Ministry of consumer affairs** *(HACCP 9000 certification) Voluntary Inspection*

Plant Safety Plant Quarantine

Destructive Insects and Pests Act (DIP Act)

Under the Directorate of Plant Protection, Quarantine and shortage, under Ministry of Agriculture

- Passed in India 1914 for the purpose of Quarantine
- Revised and corrected 8 times during 1930-1967
- New Plant Quarantine Order 2003

Examples of plant diseases introduced into India

Disease	Introduced from	Year
Leaf rust of Coffee	Sri Lanka	1879
Late blight of Potato	UK	1883
Flag smut of Wheat	Australia	1906
Powdery mildew of Cucurbits	Sri Lanka	1910
Downy mildew of Grapes	US & Europe	1910
Downy mildew of Maize	Java	1912
Paddy blast	S.E. Asia	1918
Black root of Crucifers	Java	1929
Powdery mildew of Rubber	Malaya	1938
Black shank of Tobacco	Holland	1938
Bunchy top of Banana	Sri Lanka	1940
Hairy root of Apple (viral)	England	1940
Wart of Potato	Netherlands	1953
Onion smut	Europe	1958
Bacterial leaf blight of Paddy	Philippines	1959
Golden nematode of Potato	Europe	1961

Examples of Insect Pests introduced into India

Name of the Insect Pest	Scientific Name
Subabul psyllid	*Heteropsylla cubana*
American Serpentine leaf miner	*Liriomyza trifolii*
Coffee berry borer	*Hypothenemus hampei*
Spiralling white fly	*Aleurodicus disperses*
Coconut mite	*Aceria quadrasticus*
San Jose Scale in Apple	
Potato tuber moth	*Phthorimaea operculella*
Cottony Cushiony Scale in Citrus	*Icerya purchasi*
White Wooly aphid in Sugar cane	*Ceratoyacuna lanigera*

Examples of Weeds introduced into India

Name of the Weed	Year
Opuntia spp.	1795
Chromelaena odorata	1800
Lantana camara	1809
Eicchornia crassipes	1895
Ageratum adenophora	1920
Mikania micrantha	1940
Salvinia molesta	1950
Parthenium hysterophorus	1950

Pests intercepted in India by NBPGR

During 1986-2003, a total of 8034 accessions of different oilseed germplasm was imported from 48 countries all over the world as per the database developed at NBPGR, New Delhi. Quarantine pests such as *Peronospora manshurica* in soybean, *Ralstonia solanacearum* in groundnut, peanut stripe virus in groundnut and soybean were intercepted. Pathogens of unknown quarantine significance viz., *Burkholderia cepacia* (Bacterium), and *Panogrolaimus spp.* (Nematode) on sunflower were also intercepted in germplasm from USA (Chakrabarty et al., 2004).

Pests intercepted in India by NBPGR

During 2003, out of 1,42,170 exotic samples of various crops on examination revealed that 621 samples were found infested with insect and mite pests including 134 with hidden infestation (Kavita Gupta et al., 2005).

Pest	Host	Source
Acanthoscelides obtectus (x)	*Phaseolus vulgaris*	Columbia
Bruchidius sp (x)	*Trifolium alexandrinum*	USA
Bruchidius atrolinwatus (x)(*)	*Vigna unguiculata*	Nigeria
Bruchus dentipes (x) (*)	*Vicia faba*	Syria
Bruchus pisorum (x)	*Pisum sativum*	Bulgaria, Eritrea
Bruchus lentis (x)	*Lens culinaris*	Syria
Callobruchus analis (x)	*V. unguiculata*	Nigeria
C. chinensis (x)	*V. faba, V. unguiculata*	Nigeria
C. Maculatus (x)	*V. unguiculata*	Nigeria

(*x*) : Pests detected through X-ray radiography
(*) : Pests not yet reported in India

New Plant Quarantine Order 2003

New Plant Quarantine Order 2003 reflects the primary plant quarantine concerns of the Government of India.

These are;

1. To prevent the introduction and spread of exotic pests that are destructive to the country by regulating the import of plants and plant products through adequate policy and statutory measures

2. To support India's agricultural exports through credible export certification.

3. To facilitate safe global trade in agriculture by assisting producers, exporters and importers and by providing technically comprehensive and credible phytosanitary certification.

Pest risk analysis plays a key role in the new Order for plant quarantine in India. A major feature of the plan is the establishment of a national pest risk analysis unit. Thirty –six commodities were selected for which a pest database is under development.

SPS Implementation Problems

Major external factors with respect to SPS measures affecting Indian Exports are

- Lack of transparency in the design and implementation in the importing country

- Stringency of measures/ inadequate use of pest risk assessment
- Lack of awareness or access to information on the part of the exporter as well as importer
- Compliance cost
- Insufficient domestic infrastructure
- Legal factors
- Insufficient access to technology
- Insufficient supply of environmental friendly inputs, prescribed chemicals

Implementation problems

If we do not comply with SPS, we face non-tariff barriers to trade

Export of fish

As per Codex Alimentarius Commision (CAC), HACCP system is mandatory for food processing units. EU banned import of Indian fish from Gujarat companies, which did not follow HACCP. To be competitive Indian seafood processors spending lot of money to implement HACCP through foreign consultancy.

Export of Peanuts

As per CAC, aflatoxin content permissible is 15 ppb, while Indian laws permit 30 ppb. But, European Commission (EC) has fixed up aflatoxin standard of 4ppb, preventing Indian exports to EU.

Implementation problems

If we do not comply with SPS, we face non-tariff barriers to trade

Export of Chilli

Chilli products rejected by Europeans countries due to pesticide residues in chilli and grapes, simply not due to that the residues are above set limits, but because of lack of limits for the pesticides on these crops as per the PFA Act of India.

Export of Milk Products

Milk from India contains lead residues, which falls under stricter regulation of western countries while cadmium is a major contaminant in western countries is not under regulations.

In India 0.2 ppm lead content is permissible, International limit is 0.02ppm.

What we need to meet the challenges……..

- Buildinb Infrastructure – in relation to Quarantine measures. Food safety and Pest risk analysis.
- National Standards – Harmonization, and setting standards for all possible contaminats in all raw/ semi-processed/ processed foods.
- Accreditation – of all quality control labs involved in export/ imports, certification, production houses, processing firms, and standard setting state labs, pest risk analysis labs.
- Coordination – between all standard setting departments/ agencies working under various ministries of holistic approach.
- Regional cooperation – multilateral cooperation with respect to SPS measures, and harmonization of standards among ASEAN, SAARC countries.
- Nodal agency – single window to provide database, information regarding all aspects related to SPS for importers, exporters, growers, processors, and all stake holders.
- Education – Education on Good Agricultural Practices (GAP), Good Laboratory Practices (GLP), Good Manufacturing Practices (GMP) for stake holders

- Capacity building – in areas of understanding WTO, SPS, Legal issues of SPS, Food Safety, Risk Analysis, Diagnosis etc.

- Fund exploration – from WTO and World Bank from New Fund under STDR (*Standards and Trade Development Facilities*)

Role of Extension Specialists in this direction

- Training of farmers and entrepreneurs on export quality standards and phytosanitary requirements.

- Training on FAQ (Fair Average Quality) Standards- ANGRAU developed FAQs for Rice, Maize and Pulses.

- Market intelligence through information technology – Cyber extension

- Non-degree training to middle level extension functionaries to improve their Technical and Professional knowledge in skills.

- Educate the farming community and the industry, the anticipated implications of the agreements and lend a helping hand in building confidence and converting the so-called threats into opportunities in the global trade.