

Institutional and Legal Framework of Food Safety Regulations in India

Country Paper of the Research Project

**“International Food Safety Regulations
and Processed Food Exports from Developing
Countries: A Comparative Study of India and Thailand”**

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Institutional and Legal Framework of Food Safety Regulations in India

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Units of Conversions

1 Lakh = 100,000

1 Crore = 1,00,00,000

1 Million = 10 lakh

1 Billion = 100 crores

1 US\$ = Rs 47.53 (2001-02)

Indian Financial Year = April-March

Glossary

AA:	Aquaculture Authority
ACIAR:	Australian Centre for International Agricultural Research
APEDA:	Agricultural and Processed Food Products Export Development Authority
AQIS:	Australian Quarantine and Inspection Services
BIS:	Bureau of Indian Standards
CCFS:	Central Committee of Food Safety
CCP:	Critical Control Point
CEPAC:	Central Fruit Products Advisory Committee
CIFTI:	Central Food Technological Research Institute
CII:	Confederation of Indian Industries
CRZ:	Coastal Regulation Zone
CWI:	Consignment wise Inspection
DMI:	Directorate of Marketing and Inspection
EIA's:	Export Inspection Agencies
EIC:	Export Inspection Council
EOU:	Export Oriented Units
ETP:	Effluent Treatment Plant
EXIM:	Export and Import Policy of India
F&FP:	Fish and Fishery Products
FDA:	Food and Drug Administration
FICCI:	Federation of Indian Chambers of Commerce and Industry
FSMSC:	Food Safety Management Systems based Certification
FYM:	Farm Yard Manure
GAP:	Good Agricultural Practices
GATT:	General Agreement on Tariffs and Trade
GMPs:	Good Manufacturing Practices
HACCP:	Hazard Analysis Critical Control Point
ICAR:	Indian Council of Agricultural Research
ICPM:	Interim Commission on Phytosanitary Measures
IPPC:	International Plant Protection Convention
IPQC:	Process Quality Control (IPQC) System
ISC:	International Standards Certification
ISIC:	International Standard Industrial Classification

ISO:	International Standards Organisation
JECFA:	Joint Expert Committee on Food Additives
OGL:	Open General License
OIE:	Office International des Epizooties
MFPI:	Ministry of Food Processing Industry
MFPO:	Meat Food Products Order
MMPO:	Milk & Milk Product Control Order
MPEDA:	Marine Products Export Development Authority
NAFED:	National Agricultural Co-operative Marketing Federation of India
NCRM:	National Research Centre for Mushroom
NEERI:	National Environmental Engineering Research Institute
NPPO:	National Plant Protection Organisation
NPR-PPMS:	Non-Product-Related Process and Production Methods
NSF:	National Sanitation Foundation
PFA:	Prevention of Food Adulteration Act
PPB:	Parts Per Billion
PPM:	Parts Per Million
QMS:	Quality Management Systems
RPPO:	Regional Plant Protection Organisation
SPS:	Sanitary and Phytosanitary Measures
SGS:	Societe Generale De Surveillance
TBT:	Technical Barriers to Trade
TRIMS:	Trade Related Investment Measures
USDA:	US Department of Agriculture
VAT:	Value Added Tax
WTO:	World Trade Organisation

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Institutional and Legal Framework of Food Safety Regulations in India

I. INTRODUCTION

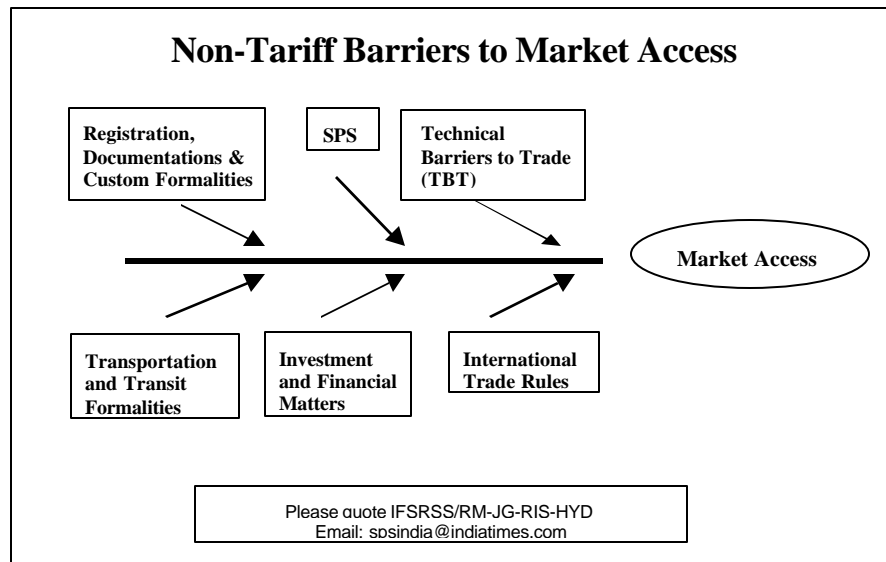
The multilateral trade agreements to be effective and functional enshrined in itself a robust institutional and legal framework. Since the agricultural sector for the first time was being brought under the Uruguay Round of negotiations, it was indeed a challenging task to make a blueprint for institutional and legal framework. The challenges became more complex with the realisation that a majority of the WTO members have a domestic economy that is predominantly driven by the agricultural sector and that the linking mechanism with the industrial processing sector on the one hand and the exports markets on the other was extremely weak or non-existent. The incorporation of food safety regulations as part of the broader Agreement, hence, is a welcome initiative. The sanitary and phytosanitary agreement concerns the application of food safety, animal and plant health regulations and is integrated with the agreement on agriculture.

The fear that the sanitary and phytosanitary (SPS) measures may be used for crafting trade distortion and used for protectionist ends, the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) came to lay added emphasis on institutional and legal mechanisms across a wide spectrum of WTO member countries.

Having recognised that many member countries would face exogenous roadblocks and hindrances on account of food science and food safety considerations among others, each Article of SPS Agreement and the Annex appears to suggest a foundation for formulation and application of regulatory mechanism within the national territorial boundaries. Therefore, issues of harmonization, equivalence, transparency, technical assistance and processes for dispute settlement have been specifically addressed albeit on the existing institutional and legal endowments in a member country.

Truly stating the primary objective of WTO Agreement being removal of market distorting measures and enhancing market access, the SPS Agreement is perceived to be one of the six non-tariff barriers to market access (Figure 1.1). Interestingly, each of the six measures has a unique institutional set-up in as much as the trade dimensions are concerned. Another modification to these set-ups would be stipulation of the domestic market regulatory measures.

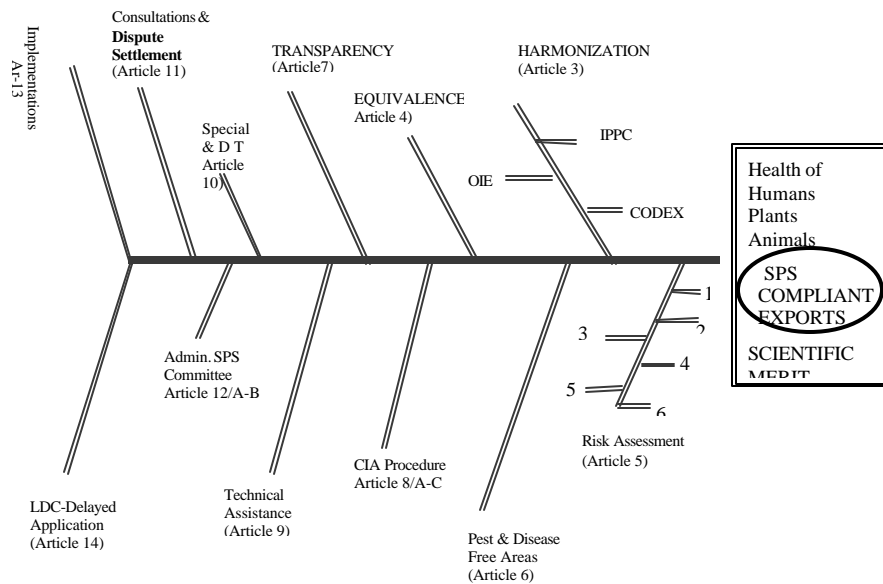
Figure 1.1



It has become mandatory to become SPS compliant if market access to many member countries are sought. Thus, various Articles of SPS Agreements come into force. A graphical representation however, is, provided in Figure 1.2 below. The finer details of these Articles will be discussed in subsequent sections.

Figure 1.2

WHAT IS SPS COMPLIANCE?



In what follows, however, a brief examination of the Export Import Policy of India is carried out. This has become imminent for two reasons. First, the institutional set-up is geared to the policy statement on exports and imports for a period of five years. Secondly, the currently valid/and applicable Exim Policy 2002-07 has invited a detailed request for consultations by the European Communities, among other WTO provisions, Articles 2,3,5,7 and 8 of SPS Agreement has been utilized by EC to make out a case of infringement against India.

Further discussions in Section II strives to situate the structure, functional dimensions and institutional set-up for becoming SPS compliant.

Section III takes a brief overview of the international institutional framework that closely and regularly interface with the domestic institutions.

In Section IV, a detailed examination of the implementation aspects of SPS Agreement is carried out for deriving learnings from grass roots level experiences. Needless to say the concluding observations are put together in Section V.

II. DOMESTIC INSTITUTIONS

II.1 Structure and Functional Dimensions

Export Import Policy of India

The domestic institutional framework is geared towards the EXIM Policy statements issued from time to time. This policy statement is issued by the Ministry of commerce. Notably, the international stipulations following WTO Agreement is co-ordinated by this Ministry for the country.

The Export and Import Policy (EXIM) of India is drawn up for a period of five years, with some changes being effected in an annual review in April and some other changes as and when necessitated. There is a negative list each for exports and imports comprising of prohibited, restricted (licensed) and canalised items. India's domestic environmental concerns (health and conservation related) and multilaterally agreed environmental measures are implemented through these lists. There are many export promotion measures built into the EXIM Policy, including the grant of special import licenses for firms having ISO certification. There is a separate chapter on quality, where ISO compliant firms are rewarded and quality complaints are addressed.

In the pre-reform period (pre 1990), a large portion of India's imports was subject to different types of import licenses. In the post-reform period the restricted regime of *license-raj* (i.e., quantitative restrictions) has been dismantled. Although the removal of quantitative restrictions was started by India on unilateral basis during early 90s, most of the QRs were removed during 1997-2001 as a part of dispute settlement proceeding of the WTO. At present, the imports of all commodities can be carried out under Open General License (OGL) or 'free' list. The latest EXIM policy announced in April 2002 also outline import policies regarding food safety standards, etc. The details are given in Annexure I.

Export of Indian agriculture and agriculture products were also subject to different licenses or restrictions till April 2002. Most of these restrictions have been waived under latest EXIM policy announced in April 2002. At present, there are only 3 or 4 items subject to export restriction.

Export Promotion Councils and certain (commodity) Boards and (export development) Authorities and (export promotion) zones are given a special status in the EXIM Policy. They grant membership to exporters based on which the exporters become eligible to get certain licenses and benefits, like duty free advance licenses for inputs for export production and benefits of deemed exports. Other relevant incentives include duty concession on import of capital goods used for export production, duty free imports for 100 per cent export oriented units (EOUs) and units in export processing zones (EPZs), some fast track mechanisms for import clearances and additional benefits for export and trading houses showing export performance beyond a certain threshold.

Rules and Regulations on Product Standards

The Ministry of Food and Consumer Affairs is the main Government agency dealing with product standards for consumption in the domestic market, although each Ministry/Department also has its own system of framing and notifying product standards. State Governments also have their own systems of adoption of standards, notably in the area of weights and measures. For the products under consideration in this research study, the main Rules and Regulations are contained in The Prevention of Food Adulteration Act, The Export Quality Control and Inspection Act and the regulations for spice quality.

A notable point in the product standardisation in India is that while the enforcement agencies have establishments to enforce these rules in domestic units, effective or not, there is little possibility of enforcing them on imported goods. One reason could be that the Indian consumer market was comparatively closed till recently, and very little imported goods came in. With the passage of time, it would be advisable for the concerned agencies to devise systems to enforce these rules on imported goods. Today, the imported goods seem to get even better than national treatment as they are seldom subjected to the same enforcement procedures as the domestic units producing like goods. It is understood that an exercise to review the packaging rules has been initiated by the Ministry of Food and Consumer Affairs in order to apply the same rules to imported goods as are applied to domestic goods.

Export Promotion Institutions

The Government has been laying emphasis on export promotion since late 1960s. One result of this emphasis has been proliferation of Export Promotion Councils and Authorities. These agencies have been

playing a twofold role for product promotion. The first role has been that of nodal agencies for disbursement of export subsidies, a function that has considerably declined after liberalisation and the removal of subsidies like the Cash Compensatory Scheme. The second role has been that of acting as the nodal point for interaction between the Industry and the Government. Some of these agencies, notably, Marine Product Export Development Authority (MPEDA) and Agriculture Produce Export Development Authority (APEDA) have been actively involved in implementation of policies relating to product standards, as we shall see in due course.

Standard Setting Bodies

The Bureau of Indian Standards (BIS) is the main Standard Setting body in India for all domestic market requirements. It sets voluntary standards that can be acquired to indicate the quality of the product by the use of "ISI" mark. However, BIS is also the guiding organisation behind most of the mandatory standards set by Government agencies. Notably, BIS is also the enquiry point of India under the WTO Agreement on Technical Barriers to Trade.

Enforcement Bodies

The Export Inspection Council (EIC) is the Chief enforcement body for exports, and the one relevant for our research study. The EIC was set up by the Government of India in order to ensure sound development of export trade of India through quality control and inspection. The EIC and its associated agencies are expected to:

- notify commodities, which will be subject to quality control and/or inspection prior to export.
- establish standards of quality for such notified commodities
- specify the type of quality control and/or inspection to be applied to such commodities.
- prohibit the export in the course of international trade of a notified commodity unless it is accompanied by a certificate issued indicating that it conforms to the standard specification applicable to it.

It also render services in the areas of:

- certification of quality of export commodities through installation of quality assurance systems (In-process Quality Control and Self-Certification) in the exporting units as well as consignment-wise inspection.
- certification of quality of food items for export through installation of Food Safety Management Systems in the food processing units as per international standards.
- issue of Certificates of Origin to exporters under various preferential tariff schemes for export products.
- laboratory testing.
- training and technical assistance to the industry in installation of Quality and Safety Management Systems based on principles of Hazard Analysis Critical Control Point (HACCP), ISO-9000 and other related areas.

Details on the above-mentioned and some other domestic agencies is given in Annexure II. Keeping in view the presence of a large number of agencies, an Integrated Food Law is being considered by the Government of India. Basic structure of this law is given in Annexure III.

Ministry of Food Processing Industries (MFPI)

Recognizing that a robust and dynamic food processing sector is to play a vital and stellar role in the new emerging global economy, all policies and plans for the food processing industries in the national interest is coordinated by the Ministry of Food Processing Industries. The Ministry was reconstituted in September 2001.

The MFPI through the Directorate of Fruit and Vegetable Product is responsible for implementation of Fruit Product Order (FPO) 1955 in India. The FPO 1955 derives its strength from Section 3 of the Essential Commodities Act 1955 to ensure that only hygienic and good quality food products are manufactured and sold in India.

The functioning of FPO, though with the MFPI, has an apex body called the Central Fruit Products Advisory Committee (CFPAC). CFPAC is constituted consisting of competent officials of concerned government departments, technical experts, representatives of Central Food Technology Research Institute, Bureau of Indian Standards, Fruit and Vegetable Producers and Processing Industry.

The MFPI being the nodal point, actively interfaces with various Ministries of the Government of India and State Governments. For export consignments, MFPI interacts with APEDA, MPEDA and EIC all these of the Commerce Ministry and other industry associations.¹ Thus, the coordination for effectively addressing the export obligations is performed by MFPI as also between food parks and agri-export zones.

MFPI is deeply involved in updating the Codex norms. In fact, MFPI is the Chairman of following five Shadow Committees of Codex Committees: Food Additives and Contaminants; Food Labeling; Processed Fruits and Vegetables; Cocoa and Chocolate Products and Mineral Water.

II.2 Relevant Legislations and Institutional Set-up

In the domestic market there are a number of legislations that becomes relevant to the food processing in its entire chain perhaps terminating at the global market. The most important legislative initiatives can be summarized as follows:

Ministry of Agriculture

- ⇒ Insecticide Act
- ⇒ Milk and Milk Product Control Order (MMPO)
- ⇒ Meat Food Product Order 1973

Ministry of Rural Development: Directorate of Marketing and Inspection (DMI)

- ⇒ Agricultural Produce (Grading and Marking) Act

Ministry of Health & Family Welfare

- ⇒ Prevention of Food Adulteration Act 1954

Ministry of Food Processing Industries

- ⇒ Fruits & Vegetable Products (Control) Order – FPO 1955

Ministry of Commerce

- ⇒ Export (Quality Control & Inspections) Act 1963

Ministry of Civil Supplies, Consumer Affairs and Public Distribution

- ⇒ Standards of Weights & Measures Act
- ⇒ Standards of Weights & Measures (Enforcement) Act
- ⇒ Solvent Extracted Oils, De-oiled Meal and Edible Flour Control Order, 1967
- ⇒ Vegetable Products Control Order, 1976
- ⇒ Bureau of Indian Standards (BIS) Act 1986

Ministry of Environment and Forests

- ⇒ Aquaculture Authority Notification 1997 & 2002
- ⇒ Environment (Protection) Act 1986, Environment (Protection) Third Amendment Rules, 2002
- ⇒ Coastal Regulation Zone – Notification 21 May 2002
- ⇒ Aquaculture Authority - Notification

Whereas salient features of most of the above mentioned legislations that have immediate relevance to the research study under consideration are given in Annexure II, it is important to highlight here that BIS and DMI are the two nodal agencies and legislative Acts that deal exclusively with voluntary standards of processed food products in the domestic market.

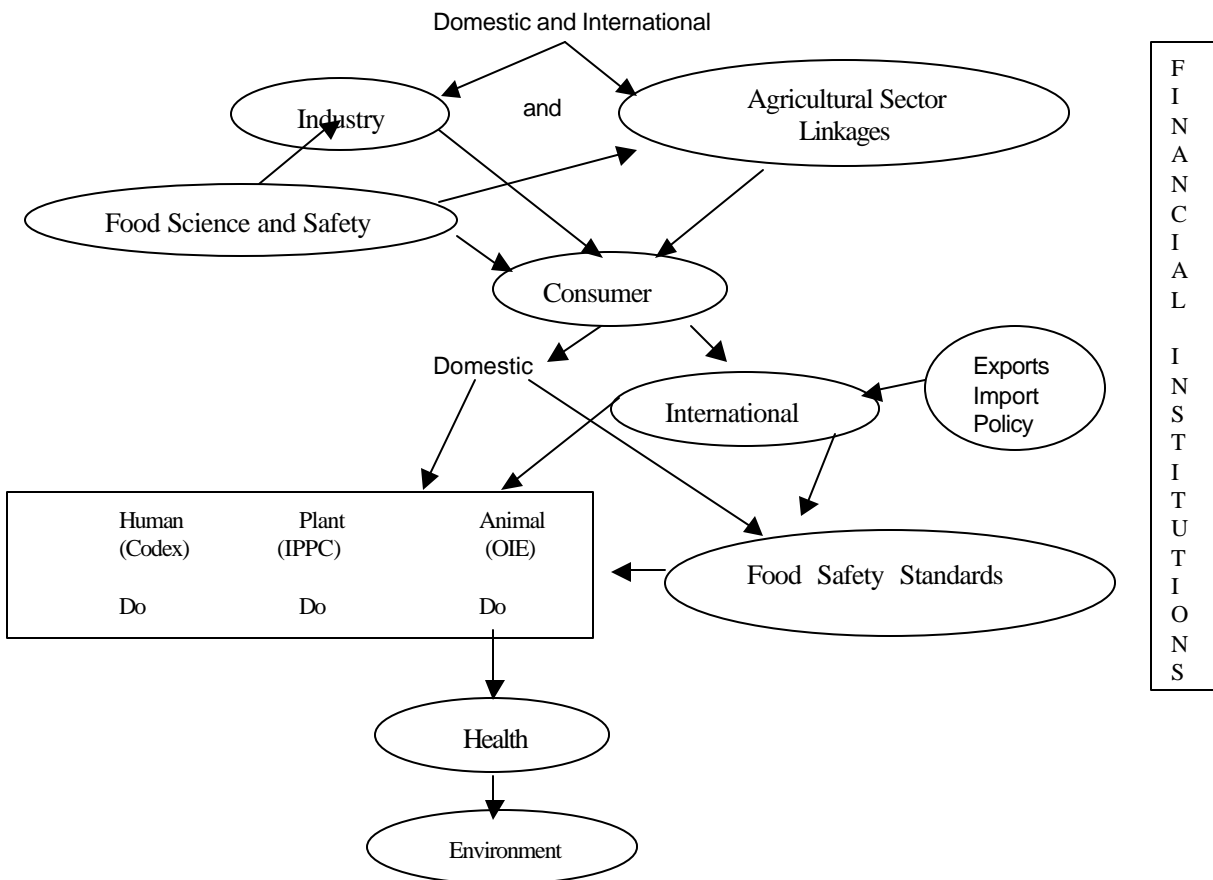
In the final analysis, it can be said that the domestic institutional mechanism is gearing up towards the international food safety standards. The “three sisters” of the international standards, namely Codex, IPPC and OIE are being addressed at various apex level institution. For example, the Central Committee of Food Safety (CCFS), a legal body under the Prevention of Food Adulteration (PFA) Act 1954, the Central Fruit Products Advisory Committee (CFPAC) and the concerned apex export promotion institutions under the Ministry of Commerce are regularly interacting to update and amend existing domestic food laws. The relevant processing industry specific association or Confederation has become an essential part of these interactions.

¹ For details see Mehta, Rajesh, M. Saqib, and J. George (2002) “Addressing Sanitary and Phytosanitary Agreement: A Case Study of Select Processed Food Products in India”, RIS-DP#39.

Be that as it may, the mandatory regulations have become a norm for all export bound commodity lines. In this respect, the Export Inspection Council (EIC) is the designated Competent Authority in India. All SPS compliant activities are generally handled by the autonomous institution under the Ministry of Commerce, EIC and details can be seen in Annexure IV.

To conclude, the domestic institutional and legal framework in India is evolving itself into a web of interlinkages. Be it the commercial interests or the health safety issues at the national level, a set of legal framework is already in place. In association with industry specific associations and commodity specific export promotion boards, financial and environmental issues too are being addressed. An overview of this complex interlinkages can be viewed in the accompanying Figure II.1 below.

Figure II.1: Linkages of Various Institutions in Food Processing



III. INTERNATIONAL INSTITUTIONS

World Trade Organisation

The General Agreement on Tariffs and Trade (GATT) has been the beacon of the multilateral trading system since 1948. Through the results of the Uruguay Round of multilateral trade negotiations, the World Trade Organisation (WTO) came into being in 1994 and came into force on 1/1/1995, subsuming GATT under it. Article XX allows member countries to deviate from their obligations under the Agreement inter-alia in the case of three types of trade measures. These are, measures necessary to protect human, animal or plant or life of health; measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption, and measures necessary to secure compliance with laws or regulations not otherwise inconsistent with GATT rules. However, such unilateral measures have to pass a composite trade test. This trade test has three components viz. no arbitrary discrimination, no unjustifiable discrimination and no disguised trade protection. It is often called the least trade restrictiveness test. Jurisprudence has shown that the second of these measures has become the most potent tool for taking GATT compliant unilateral trade measures pursuant to environmental objectives.

The Agreement on the application of sanitary and phytosanitary measures (SPS) is an elaboration of GATT rules as they relate to measures necessary to protect human, animal or plant or life of health. Under this Agreement, member countries are required to base their SPS measures on scientific principles and refrain from maintaining measures without sufficient scientific evidence. Exceptionally, measures could be taken without sound science provided they are provisionally adopted, additional sound science is sought and the measure reviewed within reasonable time based on risks that non-fulfilment may entail. This provision was tested in three WTO cases in recent times. Broadly speaking, the 'precautionary principle' was not allowed to be expanded beyond what is already available in this provision. Also, it was considered essential to consider the risks that non-fulfilment would entail in adjudging the compatibility of the measure with WTO rules. The Agreement encourages harmonisation of SPS measures and considers the standards set by three international standard setting bodies as acceptable standards. These are the Codex Alimentarius Commission, the International Office of Epizootic and the International Plant Protection Convention. Equivalence is encouraged and conformity assessment guidelines are laid down. Special and more favourable treatment provisions exist for developing countries, but in name only.

The Agreement on Technical Barriers to Trade (TBT) allows members to apply standards (both mandatory and voluntary) for protection of human health or safety, animal or plant or life of health, or the environment. This Agreement also requires sound science and fulfilment of the least trade restrictiveness test. Even voluntary standards (such as eco-labels) have to be followed a code of good practice based on the above principles. Rules are laid down for conformity assessment here also. The Agreement does not consider standards set by any particular international setting organisation as acceptable. In practice, however, ISO standards are considered compatible unless certain trade rules and certain jurisprudentially developed practices are not followed in setting them. For example, standards based on non-product related process and production methods and those differentiating between like products may not be acceptable.

International Standards Organisation (ISO)

ISO is the most important of international standard setting organisations. It is a world federation of 123 national standards bodies, an international non-governmental organisation with, however, a majority of its members coming from the public sector. Its core business is the development, approval and promulgation of consensus based international standards. Unlike WTO, however, majority vote is practised in this organisation.

ISO develops standards through 200 technical committees split into about 650 sub-committees and 2000 working groups. It also develops guide for standard setting. In preparing these, ISO interfaces with specific users of standards including those in the private sector. All its standards and guides are voluntary in nature. However, given its credibility as the most internationally accepted organisation, ISO standards have considerable trade affects due to their wide use in international trade. Therefore, those who can afford do apply for ISO certification. ISO certification is a costly process by Indian standards. It may take anything between rupees 100,000 to 500,000 to get certified, apart from the cost of maintaining the certificate. While ISO 9000 series is the general quality certification standard of ISO, there is an environmental management standard also, viz. ISO 14000 series. India has about 5000 ISO 9000 companies. About 100 companies have taken ISO 14000 certification.

Codex Alimentarius Commission

The Codex Alimentarius Commission, a UN body, compiles agreed-upon standards, guidelines and other recommendations into the Codex Alimentarius (the Codex Food Code). The CFC attempts to create harmonised standards. Prior to the SPS Agreement, the CFC could be adopted, applied and /or ignored at the discretion of a government. However, the CFC has now been adopted within the SPS Agreement as the benchmark. Thus, countries, not imposing standards higher than CFC standards have right to seek these standards for their imports. Codex Alimentarius has incorporated **HACCP** plans and principles as an integral part of the CFC. Volume V of the Food Code sets standards for number of specific fish and fish products.

HACCP

The Hazard Analysis Critical Control Point (HACCP) system is being increasingly used as a food safety system all over the developed world. HACCP is not the magic bullet that solves all food safety problems. It is, when properly applied, a set of preliminary steps and principles that gives a systematic method for identifying significant hazards and properly applying preventive measures so that food borne hazards are prevented, eliminated or reduced to an acceptable level. With emerging international and national agreement on HACCP principles, their application would create commonality of understanding of the development, implementation and maintenance of a food safety system. Having these commonly understood principles, many food processors, for example, require their suppliers to have a HACCP system for production of ingredients that they supply. Knowing that a source of food borne hazards can be from a particular point there will be more attention given to that for implementation of effective, documented systems that eliminate or reduce the likely occurrence of food borne hazards. Application of HACCP offers widely understood principles for identifying significant risks and their control.

HACCP does not cover only pathogenic bacteria. In applying HACCP, all food borne hazards are to be considered. There are a number of hazards that can originate during production. Some examples of food borne hazards that can originate during production include Biological -Salmonella, Campylobacter jejuni, E. coli, Listeria monocytogenes, Yersinia enterocolitica, Cryptosporidium parvum, and Trichinella; and some chemicals, particularly pesticides and drugs.

An important definition in HACCP is the one for Critical Control Point (CCP): a point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated, or reduced to an acceptable level. Therefore, if the identified food safety hazards are to be controlled through a HACCP system, there must be a step or steps in production where control can be applied and there must be an associated preventive measure.

It is essential that there be scientifically documented steps and preventive measures. If this criterion cannot be met, then a HACCP system cannot be developed. A HACCP system can only be developed through proper application of the preliminary steps and principles of HACCP. An essential prerequisite to HACCP is the adoption of Good Manufacturing Practices (GMPs). The biggest problem in HACCP Plans is the lack of true CCPs.

The issue is that biological hazards are much more difficult to deal with than most of the food processing. For example, we know that proper heating times and temperatures will kill E.coli; therefore, this can be a CCP. However, at present not enough is known about the sources and control of E.coli to be able to apply preventive measures. Hence, the emphasis on Good Agricultural Practices (GAP) as a precursor to the HACCP Plans.

Thus there is lack of knowledge and research at pre-processing stage. The research has not provided for reduction or elimination of these pathogens at pre-processing stage. There are possible interventions that could be considered as preventive measures on which a CCP could be based. However, these interventions need considerable research before they could be applied on a practical basis in a HACCP system for actual production. The recommended Seven-Step HACCP Plan is solely dependent on a serious review of the pre-requisite programmes made up of GAP and GMP.

Office International des Epizooties (OIE)

World Animal Health Organisation

The Office International des Epizooties (OIE) is an intergovernmental organisation created by an international agreement in 1924 for addressing issues relating to animal health. In the original agreement establishing OIE there were 28 European countries enrolled as members. Today, this organisation has about 155 members. The headquarter of the organisation is located in Paris.

There is a sliding scale of fees structured into six different categories. Members have the option to decide the category according to the size of their economy. There is one vote for each country and generally decisions are made through consensus.

An International Committee (IC) comprising permanent delegates appointed by the governments of the member-countries is the apex decision making body in OIE. The permanent delegates are expected to be animal health professionals in their country.

At the operational level, activities of OIE are conducted by a Central Bureau. The Chief Executive is called Director-General, who is appointed by the International Committee. The Central Bureau is the implementing wing for all resolutions of IC, the Regional Commissions and the Specialist Commissions. Depending upon the topical exigencies, OIE has provisions for Working Groups. Similarly, the standard-setting processes begin as and when a need is felt. Usually, the Central Bureau is the pivotal point in any exercise on the standard setting.

International Plant Protection Convention (IPPC)

The Director-General of FAO administers the multilateral treaty, International Plant Protection Convention (IPPC) (adopted in 1951) through the IPPC Secretariat located within FAO under the Plant Protection Service. The main thrust of IPPC is to provide a framework and forum for international co-operation, harmonisation and technical exchange in collaboration with the Regional Plant Protection Organisation (RPPOs) and the National Plant Protection Organisations (NPPOs). The focus is to provide scientific inputs to deliberations on global trade. The Convention has undergone a number of revisions. Notably, the more recent revisions incorporate the contemporary discourses on plant health in relation to the Uruguay Round Agreements.

In the field of international standards setting for phytosanitary measures, a global programme for harmonisation was finalised in 1992. However, the currently operative revision is the 1979 Convention, as the required 66 per cent approval of the contracting parties to the latest revisions of the Convention is not available yet.

The standard setting process is finally sent out to the contracting parties (members) by the Interim Commission on Phytosanitary Measures (ICPM). The main work, however, is carried out by the IPPC Secretariat in co-operation with NPPOs, RPPOs and expert Working Groups. There are three main stages in the standard setting exercise, namely, Draft, Consultation and Approval.

IPPC membership is open to all FAO member-governments and non-members that inform the Director-General about their governments willingness to approve the Convention. Certain interim measures have been put in place through RPPOs in the absence of the required proportion of approval to the 1997 revision to the Convention. The developing countries have a special focus in IPPC. Consequently, technical assistance has become the key element of IPPCs work programme.

IV. IMPLEMENTATION OF SPS AGREEMENT

The Article 13 of the SPS Agreement has made it obligatory for all member-countries to put in place a reasonable implementation strategy. Further, this implementation strategy at all levels of governance in the country has to be consistent with the provisions of the Agreement. Towards this end, the Indian government has taken appropriate steps since the multilateral agreement came into force.

IV.1 National Notification Authority and Enquiry Points

As laid out in the Transparency Clause (Article 7) and further elaborated in the Annex-B of SPS Agreement, the Trade Policy Division (TPD) in the Ministry of Commerce has been designated as the National Notification Authority (NNA) for the country. NNA in the Commerce Ministry is co-ordinating with different concerned Ministries and Department for appointment of Enquiry Points. However, for export-oriented units, mandatory stipulations are to be certified by the apex Export Inspection Council (EIC) or their regional offices and Export Inspection Agencies (EIAs).²

In addition, India has a permanent representative to WTO with an active interest in matters pertaining to agro-product trade issues. It is therefore expected that SPS Committee meetings would be attended by a representative from the Indian Mission Office in Geneva. Besides, technical expertise as and when required is addressed by composing an appropriate delegation for attending crucial meetings.

However, going by the emerging literature and discussion amongst various officials, the tenor of the discourse appears to centre around the legislative dimensions.³ There appears to be a need to bring in a more deeper and sustained participation from the scientific fraternity. The scientific fraternity, as is evident, belong to three distinct streams, namely human health, plant and animal health. Notably, scientific community of the country has been interacting with the international standards-setting organisation that is in the forefront and have found mention in SPS Agreement. These institutions are as follows: International Organisation for Standardisation (ISO); Codex Alimentarius Commission (Codex) that is jointly run by FAO and WHO; Office International des Epizooties (OIE) and International Plant Protection Convention (IPPC).

Since the WTO designated these international standards-setting organisations to act as benchmarks for international standards in their distinct specialised discipline, incorporation of such scientific inputs into trade related decision-making is indeed a challenge to be addressed by the developing countries in general and India, in particular.

The institutional mechanism thus is evolving itself to first understand and then confidently address myriad issues pertaining to trade effects of standards. In this direction, the first step is to design appropriate legislative mechanism.

This is facilitated by gaining access to the decision making body either as "observer" or "voting-member" Status. The next step as a continuum is to regularly attend the annual meetings where major decisions are discussed.

The next step is a pro-active effort demanding participation in technical committees and sub-committees in which standards are specifically discussed. The final two steps are participation in the administration of the organisation and scientifically influencing the discussions. Arguably, both these final steps are restrictive in the sense that they require a mature attempt. The developing countries, unfortunately deem it a greater challenge.

IV.2 SPS Committee Meetings in Geneva

Poor participation and absence of developing country specific discussion have been the hallmark of the first five years of the SPS Committee meetings. Given the technical nature of the discussion on the one hand and the legal nature of SPS agreement requiring administrative and legislative approval, on the other hand, it is not surprising at all to discover that sufficient information about the Indian participation in the SPS Committee meetings are hard to come by.

² Details are provided in Annexure II.

³ See Mehta, Rajesh and J. George (2002) International Food Safety Regulations and Food Exports: An Exploration into Research Agenda, Launching Workshop Proceedings: 1-53 for details.

However, going by the secondary level literature certain broad contours can possibly be drawn.⁴

Whereas contracting developing countries as a group form a sizeable block in terms of numbers in the SPS Committee or even in WTO, international standard setting organisations differ greatly in their approaches. This happens even though a number of such organisations come under the UN umbrella.

The prohibitive direct cost argument for non-participation, as a matter of fact, requires to be examined in greater details. This has become imperative since the UN bodies often put forth the same argument for “fiscal prudence” reasoning.

The provision of granting observer status to parastatal bodies or collectives of trade bodies from the developing countries is taken upon a “case to case” basis while the Permanent Observer Status is granted to IMF. Many issues follow out from such approvals granted by the SPS Committee.

The credit for scientific wisdom to IMF and the World Bank measured in terms of the Core Fund facility does not guarantee scientific rigour and directly address issues of variability in scientific inputs from the developing countries.

The poor communication and dissemination of scientific determinants of stringent and higher than international standards are yet another set of challenges that seriously questions the basic intentions of the developed countries.

In stark contrast to the developing countries participation in the SPS meetings in Geneva, the developed countries have been regular members to all meetings. Most OECD countries have always been represented.⁵ An analysis showed that upto 2001, the matters discussed indicated 27 related to food safety, 38 to animal health, 37 to plant health and 3 to other SPS issues. Thus, the agenda for discussion appeared too skewed in favour of the developed countries. Surely, attendance in the meetings of SPS Committees has its own compulsions.

Since the new order of trade requires planned and sustained exports, there is no gainsaying that quality consciousness and related technical competence especially in the food processing sector would show an ascendancy across the spectrum of ‘farm to table’. And hence ascendancy of “kitchen diplomacy” in the contemporary world scenario. The new trend in the “kitchen diplomacy” is being set by the “ready to eat” segment of the agribusiness. Against this backdrop the recent announcement in September 2002 about establishment of a new fund, namely, Standards and Trade Development Facility, by the World Bank and WTO and expectations of a wider support from other international standards setting institutions as well as G-8 countries assume importance for any discussion on SPS.

It is claimed that the new facility of fund will bring about a win-win outcome for developed and developing countries. A close look at the ground realities do indicate that this outcome will never be achieved since the developed countries keep shifting their standards higher and higher, albeit, under the legitimate clause of ‘scientific evidence’.

The developing countries have been strongly arguing, both at the Doha Ministerial Conference and afterwards, that in the area of sanitary and phytosanitary (SPS) measures, standards set in developed nations are trade distorting. For example, a cursory glance at any request for consultations filed by a developing nation with the dispute settlement board of WTO post-1996 clearly indicate SPS as a main cause of the plaint.

The SPS norms can be broadly looked at from three perspectives, namely, microbiological, physical and chemical to appreciate the economics of ground reality and therefore the significance for agenda setting at the SPS Committee meetings. This can at best be called the shifting (goal)-post syndrome. A few of recent controversy can be cited here to echo the shifting post syndrome. Following instances merely indicate tip of the iceberg. European countries banning import of fish from many African countries; seafood exports to EU from India and Thailand on grounds of drug residues; frequent raising/shifting of acceptable levels of chemical elements and foreign bodies in the food commodities; exceptionally high standard not based on any scientific evidence especially for the processed fruits and vegetables, etc. We also have instances in EU of 100 per cent testing of imports from selective countries while only a few sample testing is done for few countries. These restrictions not only push up the cost of exports, but also adversely impact on the competitiveness and

⁴ Notable amongst them are Henson, Spencer et.al. (2001) ‘Review of Developing Country Needs and Involvement in International Standards-Setting Bodies’ Centre for Food Economics Research, University of Reading; OECD (2002) “Sanitary and Phytosanitary Measures and Agricultural Trade: A Survey of issues and Concerns Raised in the WTOs SPS Committee”, Joint Working Party of Agriculture and Trade (JT00129244). COM/TD/AGR/WP(2002)21/Final.

⁵ OECD (2002) op.cit.

value-volume trade off amongst different product lines. Hence emergence of the developed countries as global leaders of agricultural trade and the need for ingenious SPS mechanism to stay as leaders. Such being the motivations participation in meetings by developing country members indeed would require to be addressed in a different manner.

A growing volume of international trade in agricultural products in the post-WTO period has made it abundantly clear to India that vulnerability to food based health problems, be it humans, plant or animal lives, is indeed serious. Therefore, for a “win-win outcome” in agricultural trade between rich and poor nations, the short to medium term temptations of the richer nations, namely, to prescribe more stringent standards on dubious scientific evidence must be avoided. The harmonization, equivalence and transparency principles enunciated in the SPS agreement has to be rescued from being merely slogans for rich nations.

IV.3 Technicalities of SPS

As has been examined in Section III above the scientific merit of the food safety standards has become the key operating word for the implementation of SPS Agreement. The scientific temper of the Agreement notwithstanding, the rigour and sensitivity levels of testing instruments and labelling requirements to trace the field/tank/farm of origin as well as precision farming approaches in the final analysis impose certain technical barriers that developing countries find hard to address.

Risk Analysis is a technical area but the farmers have their own way of assessing it and thus have devised mitigating strategies. These strategies take different forms and diversified cropping pattern, mixed farming, fishing holidays, etc. are some of them that acquired “indigenous practices/knowledge” label. Perhaps, it has stood the scientific audit too. The technical rigour under SPS agreement requires adoption of HACCP routines. Practitioners of HACCP as examined earlier in one of the Sections demand documentation. A telling commentary on documentation can be seen in the following section.

The need for documentation is well recognised in Indian agriculture and allied discipline as it helps one out to fine tune the “package of practices” protocol.⁶ The fundamental question, however, for Indian producers aspiring to gain access to the international market is a question of not much significance. The reasons for such insignificance's is discussed below taking a few product specific instances.

IV.4 Product Specific Experience

The Indian experiences during the last five years in facing the SPS measures in their export consignments have been very varied. The product specific detentions by the US government show an interesting picture.⁷ However, details of product specific global experiences are briefly examined below.

IV.4.1 Poultry

About two years ago, India was de-listed from the list of approved countries in EU for the import of egg powders into EU for non-submission of Residue Monitoring Plan. It has been the strategy of EU countries to introduce newer, stricter residue limits every time they feel like restricting imports from developing countries like India. This can be illustrated with a few cases.

First, the issue of residue limits and the Residue Monitoring Plan itself has been used as an SPS measure very strongly by developed countries like EU and USA. India also suffer since no agency took the responsibility of preparing the Residue Monitoring Plan for animal products including egg powders and the matter was thrown from one Ministry/department to other. If this had been laid down clearly in the documents itself that who will do and implement, this matter could have been sorted out easily. Therefore, the issue of proper and good documentation comes out very strongly even in this case.

The second example of SPS measure which the developed countries are using is in the matter of granting equivalency to countries like India since we do not have a proper document and where some document exists, EU and USDA has just not bothered to grant equivalency to Indian standards for egg powders. Even after four years since having submitted the list of plants to be notified by EU they have not constituted a commission to inspect these plants in India, notify them and grant them equivalency.

⁶ For further details on documentation reference be made to Mehta, Rajesh and J. George (2002) op.cit

⁷ Details are discussed in Mehta, Rajesh and J. George (2003) 'Processed Food Products Export from India: An Exploration with SPS Regime', RIS Paper for the Joint ACIAR Research Project, March 14-17.

Thirdly, invariably the test certificates issued by Indian laboratories are not accepted in EU and other developed countries as these labs are not accredited to the labs of developed countries. Though, the Indian labs follow the same testing methods and protocol for testing the samples. Therefore, the certification issue is also being used as an SPS measure by other countries.

If we look into the US importation rules, it is inherently placed in their document that they can stop importation of poultry and poultry meat products from other countries on various grounds which are favourably placed in their hand and in their favour. The FSIS can suspend the eligibility of another country if it feels that an emerging sanitary measure is to be implemented to address a hazard that is so severe that no product can enter from a foreign establishment until a control is in place. In a second situation, if the other country does not provide satisfactory documentation of equivalent sanitary measure or if FSIS audit reveals that exporting country is not implementing a public health sanitary measure in the manner that FSIS determined to be equivalent, they can permanently stop eligibility of that country for export. They can further take action against a particular country if they feel that their products are adulterated or misbranded on on-site audit or because of Port of Entry re-inspection etc. These are the SPS measures in different garbs which are used and can be potentially used by the developed countries like USA for stopping exports from developing countries like India.

We should also keep in mind the environment and welfare issue adopted by EU. Legislation on Nitrate levels in Denmark and the growing trends towards organic production and their increasing cost on housing would further bring in new issues in the shape of SPS measures. In Germany, animal welfare is becoming an important issue and there is a general agreement to limit the bird density of broilers while small cages are to be banned and in future these rules are going to be stricter. After the BSE crises of late 2000, which damaged the reputation of EU's food and farming industry, Salmonella control in laying hens by costly vaccine has become a normal thing. In France, new manure disposal regulations and the traditional method of producing animals, slowly and at low density will be an important animal welfare issue for future. In Netherlands, high livestock density accompanied by tough regulations and manure disposal has resulted in eco-tax, which again has increased the cost of gas and electricity there. They are trying to bring in tougher rules on ammonia emission and current policy is to ban laying hen cages. There are Directives to regulate broiler bird densities and production.

Similar example can be given of Spain, Hungary and Poland where these issues are emerging and they will be used tomorrow in the shape of SPS measure against developing countries like India. It has been observed, that many a times, Certificate of Foot and Mouth disease and anti-radiation are being asked from Indian egg processors which has nothing to do with poultry production and even if there is an evidence of this disease in any part of the country, SPS Agreement clearly talks of disease-free zones, under Article 6, that clearly lays down that members shall take into account the level of prevalence of specific disease or pests, the existence of eradication or control program or proper criteria/guidelines which may be developed by relevant organisation. Finally, whereas Article 9 of the SPS Agreement talks of technical assistance or special and differential treatment to developing country members for phased introduction of SPS measures, these are not adhered to. Sometimes the non-availability of proper protocols, equipment and sampling procedures domestically also hampers the work of certification by the local testing labs.

Figure IV.1 and IV.2 present the structure of the supply chain for both types of birds, layers and broilers has been explained. It is very, very essential that this chain at each stage is maintained properly and health and hygiene requirements are met strictly, then only the food can be assumed as safe.

Poultry industry consist of both layers and broiler producing eggs, chicken meat and represents different stages starting from Great Grand Parents or Purelines which is followed by the next generation of Grand Parents and Parent Breeding Farm. Upto this stage, the science involved is pure genetics followed by very sound principles of management in poultry management. Hatchery is the hub area either of broiler or layer where sanitation and hygiene plays a very major and critical role. This is one area where lot of care has to be taken otherwise the chicks production from incubators and hatchers can catch different diseases which will not only affect the health of the birds but also can create food safety problems for the consumers. There is a very close inter-relationship between each stage of this chart and each link has to be protected from contamination. This chain can be in the form of vertical integration or independent companies can work in the production of purelines, great grand parents, parent stock. Similarly, independent companies can also work in the production of day-old chicks in their hatcheries, which can just be started by a parent-breeding farm. Food can be produced by the integrator himself as well as can be purchased from the farmers from outside sources in the form of broiler chicken and eggs.

In India, vertical integration has not taken its root very strongly and there are only a few companies, who are involved in all the activities of the supply chain in a typical integrated operation. Most of the poultry operations operated otherwise are run by independent producers of Grand Parents, Parents and there is a

large number of hatchery operators also. Similarly, poultry feed is produced by the integrator himself but at the same time there are many companies who are involved in the feed production. There are a large number of commercial farmers both for layers and broilers and further processing of chicken and eggs is still at a nascent stage. There are about half a dozen egg processing plants out of which three are operating presently and two of them are HACCP compliant meeting the international standards.

During 1996 all 6 plants were exporting egg products to EU and other developed countries. Due to instance of EU for a new residue limits of pesticides and instance for submission and execution of RMP by India as country; the export of egg powder declined significantly. In fact the capacity utilisation of all most all the units became negligible. In fact it led to the closure of 3 units. The export of egg powder has again picking up after 3 plants have got themselves equipped with higher standards. To adjust these plants to higher standard and HACCP compliance, each unit had to invest around Rs 1.5 to 2.00 crores and operating cost has also increased by around 1 per cent.

Similarly, further processing is being done by companies like Venky's (India) Limited who are also suppliers to multi-national food chains like Domino's, Pizza Hut, KFC and TGI Fridays etc. Such plants are meeting the international standards but about half a dozen plants are also in operation that are basically doing whole bird slaughter and processing. About 97% of the chicken is still sold live in Mandies and typically some of the mandies (market yards) like Gazipur of Delhi, where more than 2,00,000 birds are traded everyday. The broiler is still sold live and that too on score basis (20 number make one score). The layer farms, egg grading, washing and packaging has just started for export purposes. However, majority of the eggs are still sold in small numbers by small, small operators.

This complex situation of so many players in the chain and when you want a fully vertically integrated system in the country, the food safety becomes a major problem as there are so many handlers and these handlers are doing different jobs and many a times they may not be aware of the food safety requirements. Many companies operate from the primary breeding stage where rest of the chain is integrated and the control is centralised which may put them in an advantageous position in terms of food safety as compared with the companies that are not integrated and where separate and different companies are responsible for different steps in the chain, as is evident in India.

In countries like India, where live market still dominates and it is a major and significant outlet for chicken producers and marketers, the standards of food safety are little difficult to meet as the number of butchers and processors selling the same are very large and above all there are no documented guidelines available which are either voluntary or can be enforced. To achieve an acceptable level of confidence in the food safety, certain steps can be undertaken pertaining to risk assessment. These steps are variously defined to consist of stages, such as Good Manufacturing Practices (GMP); Quality Management Systems (QMS), HACCP, etc.

In India, there are different agencies that are dealing with the food safety of food products particularly that of poultry. Export Inspection Council (EIC) and its agencies under the Ministry of Commerce deal with the export of egg products and have also formulated standards for poultry meat and poultry products which are under notification (see Annexure IV). Directorate of Marketing and Inspection (DMI) in part deals with processed poultry products under Meat Food Products Order (MFPO) which is under the Ministry of Agriculture. Additionally, the Department of Animal Husbandry & Dairying also deals with meat and poultry products. Bureau of Indian Standards (BIS) has also formulated some rules, which are voluntary in nature. APEDA and EIC has taken lead in formulating Residue Monitoring Plan for the monitoring of residues of pesticides, antibiotic etc. in egg products and animal products. The PFA also deals with the food products under its Prevention of Food Adulteration Act.

All these measures/standards which should currently be in use in parts for domestic products and in parts for export really do not encompass all the products under one head as the standard formulating, implementing and monitoring agencies are separate. There are no standards at all for commercial bird producers and procedures for broilers and eggs. Similarly, India has not been able to do zoning of diseases wherein countries in EU, East Europe and South-East Asia requires a certificate that there is an absence of disease like Newcastle and absence of pesticides in the animal or egg products. Wherein some standards have been made by BIS, they have not been upgraded for years together. Wherever standards are available they are obsolete, out of place and do not meet the present requirements of international standards. However, the standards framed for export of poultry meat and egg powder do match with the international standards of EU and USDA. But the Government has not been able to get an equivalence for these standards from EU and USDA for the last three years.

Figure IV.1: Typical Structure of Broilers (Meat Type Birds) Industry and Different Stages of Supply Chain in India

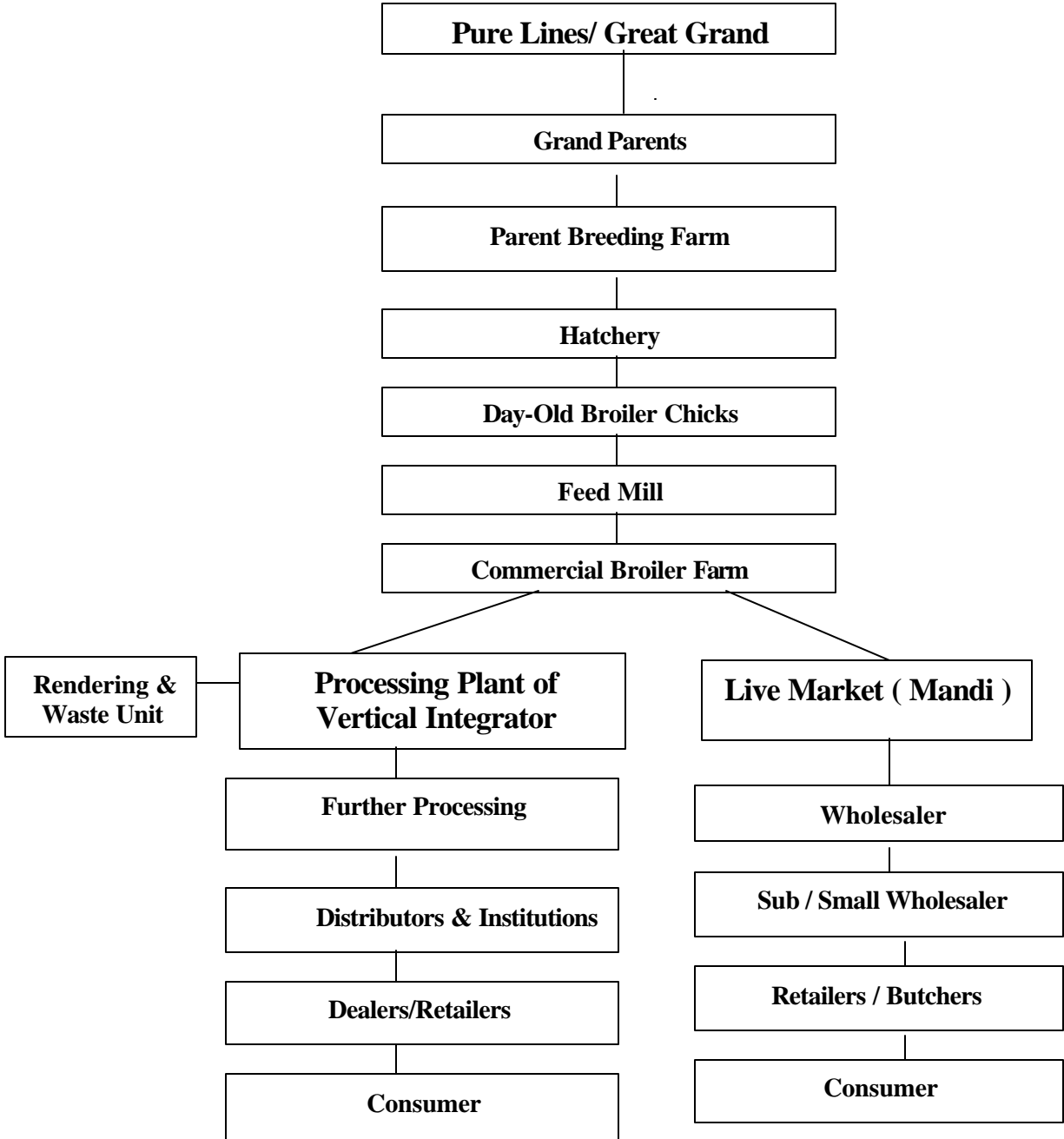
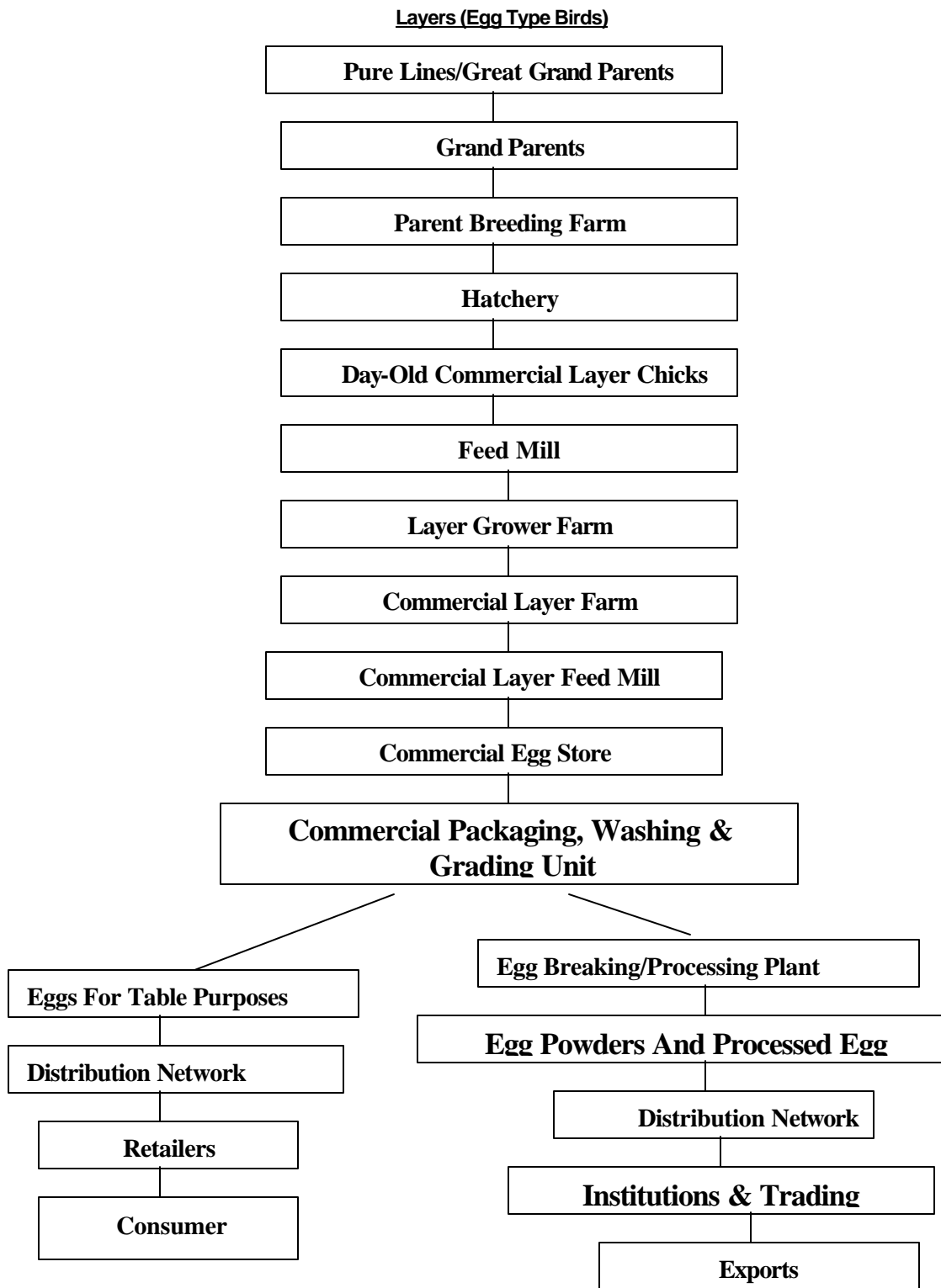


Figure IV.2: Typical Structure of Layers (Egg Type Birds) Industry and Different Stages of Supply Chain in India



IV.4.2 Shrimp

The marine product lines have been undergoing major upheavals due to SPS measures imposed by the EU. It has already been examined how marine exporters addressed this ban by EU.⁸ The main product line that we have chosen to explore in detail is the Shrimps. Shrimps have two very distinct characteristics in terms of production processes. These are aquaculture and sea catches.

The Shrimp exporters from India after the 1997 ban by EU are better prepared for the SPS regime. Even the certifying agency has geared itself for the stringent quality norms that has been imposed. The Australian Quarantine and Inspection Service (AQIS), the apex Australian import control agency recognised the Indian certifying agency. This implied that seafood consignments from India accompanied by EIC certificate is to undergo only random verification sampling not exceeding 5 per cent of the consignments and health certificates issued by EIC is to accepted.

The experience with quality compliance in the Shrimp exports can be looked at from three broad perspectives:

- (1) pre-processing including Shrimp aquaculture and handling of raw Shrimp like harvesting, sorting, etc.
- (2) processing issues where water quality, source of water for ice making, infrastructure and transportation utilities come in for sanctions.
- (3) Post-processing, including testing, packaging and marketing activities.

A reference to Annexure IV is sufficient to indicate that the legislative dimensions have been taken care of by the Indian government. The industry group on the other hand is attempting to gain EU compliance. Those, who made their plants EU approved, have been able to mop-up supplies from the catchment areas of those, who could not afford EU approval.

IV.4.3 Mango Pulp

The experience of fruit and fruit product exporters are different from the experiences of poultry products and Shrimp exporters. In the export business of Mango pulp a proactive role played by APEDA appeared to have helped the exporters. As we shall examine below implementation of HACCP was encouraged by the Ministry of Food Processing Industries in association with APEDA functionaries. Incidentally APEDA has taken firm export promotion steps for the sector that is in fact, extending the Indian brand equity enjoyed by the fresh Mango fruit in the market.

The compliance costs for implementing HACCP would have been prohibitive, had APEDA not come to their rescue with both financial and technical assistance. All the participating units in the Chittoor District have implemented HACCP. Five units were assessed and certified by International Standards Certification (ISC) South Asia Pvt. Ltd. during the 1998 mango season. Six units of Chittoor District and 6 units of Krishnagiri District were assessed during the 1999 mango season. The National Sanitation Foundation (NSF) has recommended all the participating units of Chittoor district for certification after the certification audit. A certification audit of all the 6 units in the Krishnagiri District was carried out by the Quality Assurance Service (Australia). All of these, interestingly, have been recommended for certification. Small units have not been able to benefit from APEDA's efforts. There have been problems in applying HACCP at the farm level because of the nature of farms and practices in India.

The quality norms under the Prevention of Food Adulteration Act (PFA) of India do not fully match with Codex. For example, PFA does not cover rules for the various tests for water as required under Codex. According to some small exporters, HACCP has not been followed in the pulp industry. There is a general awareness about HACCP, but they think it has not been passed as a law so far and they do not have to worry about it yet, especially because there is no consumer insistence in India for such standards. They admit that HACCP will certainly increase market accessibility, but they will have problems in adopting this. Some of the problems pointed out were:

- (a) Since orchards land holdings are small and contractors procure all the raw material, it will be impossible to keep records at the field level as required for HACCP. The general age of orchards ranges between 3- 100 years, so it will be difficult to establish control;
- (b) Since this industry is seasonal (3 months) it is not feasible to adopt these standards, and to retrain staff, as the units cannot keep permanent staff. Training new staff every year is also not possible;

⁸ Mehta, Rajesh and J. George (2003) op.cit.

- (c) It will be more viable for large plants or industrial houses, which deal in multiple products, work throughout the year and have their own orchards. But most of the units are small in this sector and HACCP will not suit them;
- (d) As far as financial aspect of HACCP compliance is concerned, units which are setting up now, will not have any problem. It does not cost much for new units, but the old units will have to revamp their infrastructure. It is a costly affair; according to rough estimates the cost for following HACCP will increase by 40 per cent;
- (e) Financial institutions do not fund HACCP activity;
- (f) Main markets for Mango Pulp are Gulf countries and they are only interested in cheap prices not HACCP; and
- (g) It costs money to get ISO certification. The cost may range between 1.5-2.5 lakhs for ISO audit. The surveillance audit is every six-month and it costs Rs. 10,000 per man-day.

Apart from HACCP, pesticide residue is one of the main quality issues that applies in the same way as it does in peanuts. The other quality issues are that Indian pulp is brown in colour, is supplied in punctured bags, poor quality of drums in which it is exported, feathering (peeling of the coat), rusting, metallic taste (tin taste) and damage to seam of the tin or drum. These are packaging issues and do not affect health. The reason for above packaging problem is the quality of packaging material available in the domestic market. The imported tin is good in quality but adds to the costs. According to exporters, they do not have the technology or the technology is costly and they do not have the economies of scale to meet the costs. They feel that packaging should not be considered a health hazard.

Testing is a major problem for these units. There are a number of institutions but these are spread all over the country are quite expensive. The Central Food Technological Research Institute (CFTRI) charges Rs.3000/- per test and Societe Generale De Surveillance (SGS) charges 0.27 per cent of f.o.b. value of the consignment. Laboratories in India are not equipped with equipment based on the new technology required for the complicated tests necessary to comply with HACCP. Foreign health authorities are moving from parts per million (ppm) to parts per billion (ppb). Indian laboratories are not equipped to do these tests. There are differences between the test results of India and those of Europe, allegedly due to the methods of testing, and not due to the objectives behind the tests. In Europe only natural food imports are encouraged, i.e. no sugar should be added. However, sugar is also a natural product but if sugar is added there is an increase of 13 per cent import duty. The duty is 6.5 per cent without sugar and 19.5 per cent with sugar. They add sugar themselves because they have a surplus of beat sugar, which is also subsidised in Europe. The buyers are interested to buy the pulp with sugar but are dissuaded by the higher duty levied. All the ex colonies of France, Portugal and Spain do not pay duty on food items. However, all ex-colonies of UK have to pay duty.

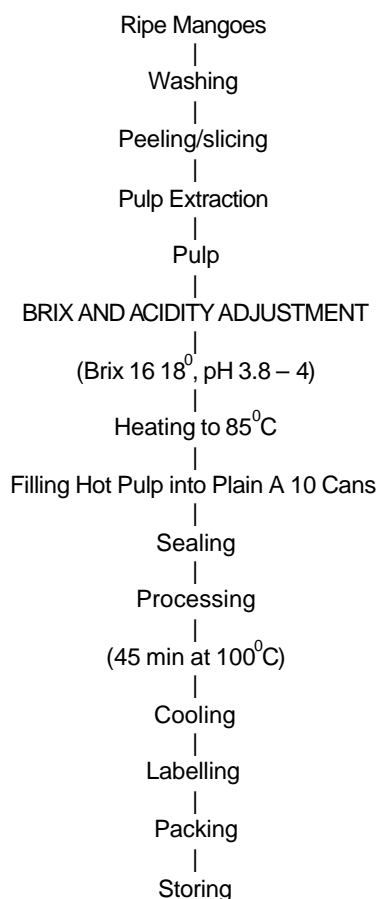
Successful exporters feel that the quality of Indian food has to be monitored for exports, and APEDA should introduce licensing. It will be very difficult to monitor implementation of norms if everybody is allowed to export. Small-scale units should not be encouraged to export because of their fling-by-night operations, according to them. The FPO has issued 4700 licenses for food processing units, out of which 21 are large units, 156 medium and the rest are small scale; 90 per cent of these units are making Mango pulp.

Exporters have fixed buyers for years'; therefore, their relationship is good. In the event of any trouble with the authorities on account of quality or any other reason most of the buyers are helpful in sorting out the problems at their end due to their stake in the clearance of consignments. The quality issue becomes a major hurdle when the buyers have an excess stock or the prices of the goods have fallen in the international market below the agreed/contracted price. In such cases, sometimes the exporters have to accept price discounts, especially because of the perishable nature of the goods.

The main issue to be appreciated here is the issue of processing industries where the time-temperature and moisture contents in the harvested fruits play a decisive role. Consider the following flow chart to appreciate the perspective of the industry following HACCP.

The point being made is that at each stage different food safety regulations come into reckoning that is not entirely in the control of the processor. A good agricultural practice protocol unfortunately does not hold any promise as the scale and intensity of mango cultivation is entirely different in India.

Figure IV.3: Flow Chart of Mango Processing Industry



The Ministry of Commerce takes interest in their operations, as they are responsible for trade promotion. But the problems faced by the exporters are quality or health related for which the Health Ministry should be involved. Even in business negotiations, the foreigners want an assurance from the Health Ministry, which is not easy to obtain. There is a need to create better policy coherence here. The Health Ministry is responsible for the development of Codex standards. The exporters feel that the Ministry could consult producers to their benefit while attending Codex meetings and formulating domestic standards. Food laws lay an emphasis on economic offences and not on safety. The basic thrust of food laws is thus misplaced so far as export promotion is concerned.

In the final analysis, the study clearly indicates the positive impact of affirmative action by an apex export agency like APEDA in enhancing quality export earnings.

IV.4 Mushrooms

Mushrooms are an enterprise with rich backward linkages in terms of employment generation without competing for the scarce arable land resource. In fact, Mushroom cultivation offers an opportunity to value add on biological coarse inedible resources with a little help from the scientific endeavour. A severe constraint in productivity is being experienced by most of the small growing units. Some of the bottlenecks identified during our preliminary interaction with the industry are discussed below.

Quotas on mushrooms are continuing from the past when the agriculture sector was not covered by GATT disciplines. The tariffication process built into the Agreement on Agriculture of the WTO is yet to result in quota free access of mushrooms to EU.

Multilateral efforts are required to expedite this process. Meanwhile, India needs to submit a representation to EU to have an exclusive quota fixed.

Although composting was accomplished by the grower, information on the raising of a healthy crop of mushrooms has been emerging as a major bottleneck. The grower would collect spawn from some source and not know about the growing parameters, nor was the modern cropping room available to him/her. So, this

method of growing in improvised cropping rooms continued till the late eighties for a majority of the growers in India, resulting in poor yields.

In the late eighties and early nineties, modern cultivation units were established with help from various companies in Europe, which were more interested in selling their machinery and in the establishment of the mushroom farms at their asking rate. This did help in the building of modern mushroom units but the big question was who would manage/run them. That is where the Indian industry took a beating and unit after unit failed to produce mushrooms on a scale of profitability. This is the period when sometime was taken to tune the production parameters till economic yields were obtainable by most of the units in India. By the time this was achieved, the international market came crashing down and the same impasse is still continuing.

V. CONCLUSION

A detailed analysis of the institutional and legal framework in India envisaged to usher in an efficient SPS regime in the post-WTO phase bring out more challenges in three distinct areas. First, is that the current emphasis on adjudicative and legislative roles for the legal professionals and bureaucrats perhaps is being overplayed at the WTO Secretariat. Whereas, it is recognised that under the nations sovereign governance framework three elements, namely, judiciary, legislative and executives have their roles and status clearly marked out. However, under the globalisation framework, the contemporary institutions require, perhaps, to take more seriously the trade issues with a long backward linkage chain. It is here in the backward loop where issues of sub-national governance come in for a critical appraisal. This is imminent because SPS affect India differently than is generally believed. Hence, by an overtly disproportionate attention to the legal text and institutional arrangements in the mold of "one size fits all" (OSFA) across the developing countries appears faulty.

The second area is the dovetailing of scientific knowledge with the existing institutions in the country with the trade concerns for facilitating processual inputs in the production stages. Given the base of scientific manpower in the country, this task is not at all daunting. Biological processes have a distinction that may not be easily accounted for in the industrial processing activities. Besides, the residual limits for pesticides/insecticides or presence of microorganism etc. do require a level of sensitivity of high precision. Such precision is to be made available by the instrumentation specialists and sectors that is not figuring in the core agenda. Incidentally, this sector is at the threshold level if food safety measures and regulations are to give the desired results. The Indian instrumentation sector in that sense is not in its infancy but requires encouragement and support.

The experiences of the "lab to land" and other reaching out initiatives of the scientist therefore begs for a relook in the present environment where GAP, GMP and HACCP lay a heavy emphasis on many disaggregated processes.

Thirdly, the dichotomised framework for domestic consumption and export market orientation in the food-processing sector is yielding to harmonisation efforts in many product lines. The process could be hastened if the legal and administrative mechanisms are fine tuned to appreciate the public-private partnership framework.

All products studied as typical cases in the paper underscore the importance of information that is credible and authentic. The wide variation in safety standards within the EU or frequently changing regulations without sufficient scientific probity brings to a naught the transparency, equivalence and harmonization troika of SPS Agreement.

Annexure I: Some Notes on Import Policy as Announced Under EXIM Policy, April 2002

1. Hazardous Waste is permitted for import against a licence for the purpose of processing and reuse.
2. Import of Beef in any form and import of products containing beef in any form is prohibited.
3. All consignments of edible oils and processed food products, imported in bulk, shall carry a declaration from the concerned exporter on the shipping documents that the consignment does not contain beef in any form. All consignments of edible products, imported in consumer packs, shall carry a declaration on the label of the package that the product does not contain beef in any form.
4. Import of meat and poultry products will be subject to the compliance of conditions regarding manufacture, slaughter, packing, labelling and quality conditions as laid down in Meat Food Products Order, 1973. All manufacturers of meat/poultry products exporting their goods to India shall be required to meet the sanitary and hygienic requirements as stipulated under Schedule-II of the aforementioned order. The imported product shall also comply with the specified packaging, labelling and quality standards as laid down in Schedule-IV of the order. Compliance of these conditions is to be ensured before allowing customs clearance of the consignments.
5. Import of all such edible/food products, domestic sale and manufacture of which are governed by Prevention of Food Adulteration Act, 1954, shall be subject to all the conditions laid down in the aforesaid Act. Import of all these products will have to comply with the quality and packaging requirements as laid down in the Act. Compliance of these conditions is to be ensured before allowing customs clearance of the consignment.
6. Import of all primary agricultural products will be subject to a Bio-Security & Sanitary-Phyto Sanitary import permit, to be issued by Department of Agriculture and Co-operation, as per conditions of Plants, Fruits and Seeds (Regulation of Import into India) Order, 1989. The permit will be based on Import Risk Analysis of the product, to be conducted on scientific principles, in accordance with the WTO Agreement on the Application of Sanitary and Phyto-sanitary measures. The Import Risk Analysis will be conducted based on various scientific principles, including inter alia,
 - (a) the type of pests etc. known to be associated with the particular product in the exporting country;
 - (b) the organism already established in India; and
 - (c) the potential impact of such organisms on India's international trade.
7. Import of tea waste is to be allowed only to the licence holders under the order issued by Tea Board.
8. Import of alcoholic beverages as classified under Chapter 22 of ITC(HS) Classifications of Export and Import Items, 1997-2002, shall be subject to compliance of various mandatory requirements as stipulated by various State Governments.
9. Import of all such edible/food products, domestic sale and manufacture of which are governed by Prevention of Food Adulteration Act, 1954 shall also be subject to the condition that, at the time of importation, the products are having a valid shelf life of not less than 60 per cent of its original shelf life. Shelf life of the product is to be calculated, based on the declaration given on the label of the product, regarding its date of manufacture and the due date for expiry.
10. Import of Meat and Meat Products of all kinds including fresh, chilled and frozen meat, tissue organs of poultry, pig, sheep, goat; egg and egg powder; milk and milk products; bovine, ovine and caprine embryos, ova or semen; and pet food products of animal origin shall be subject to a sanitary import permit to be issued by Department of Animal Husbandry and Dairying, Government of India, as per Section 3A of Live-stock Importation Act, 1898, as incorporated by Live Stock Importation (Amendment) Ordinance, 2001 dated 05.07.2001 and as notified on 07.07.2001
11. Import of Whale shark (*Rhincodon typus*) and parts and products of this species shall be restricted.

Annexure II: Present State of Current Food Safety Regulations in India with Special Reference to Processed Food Sector

India has plethora of laws regulating the food safety and other activities of food industry. Most of these laws restrict the functioning of trade industry in a competitive trade without attaching much importance to food safety standards. There is a multiplicity of agencies both for making as well as implementing the food safety standards which has resulted into a very loose system which is not at all coherent, integrated. It is very important for the decision-makers in India to recognise that presence of multiplicity of food laws in the country is not going to serve the purpose particularly in the international trade. In order to give a boost to the food industry the need of the hour is to harmonise not only the various food laws but also the agencies. According to apex industrial bodies there should be only one national food safety code, which should cover all aspects of Indian food safety under a unified system.

Recently, in the budget speech of Finance Minister, he had called for an effort to simplify these laws and bring them under one umbrella organisation. Accordingly, a group of Ministers has been set up to deliberate on this issue but nobody knows how long it is going to take and when this new national food safety code will see the light of the day.

What is more important today is to have a comprehensive, integrated food law which can not only take care of ensuring public health, safety but also specify quality norms for meeting the globally recognised standards. It may be kept in mind that whenever a country allows other country for exports, particularly, any foodstuff, they very closely look at the domestic standards of that country. Unfortunately, we do not have domestic standards in place, which also results in imports of third grade products from other countries. If enabling environment for rapid growth of food processing industry is to be created then the major challenges before the food industry today are availability of choices, threats of imports as a result of globalisation, rapid advances in science and technology, changing consumer preferences and concerns which can be addressed by a legal framework which would need simplification and amendments across Central, State and local legislation. The plethora of laws and multiple controls have led to a system, which is over-regulated and under-administered. It neither assures safety nor quality. Moreover, the documentation part is completely neglected. An urgent need for re-focussing our existing food laws and aligning them with the internationally prescribed for food trade widely followed in the world has been greatly felt. It has been now recognised that this would greatly enhance innovation and would also protect adequately the consumer.

The following are the Indian regulatory agencies dealing with the food safety issues in the domestic markets presently.

Prevention of Food Adulteration (PFA) Act, 1954

The most important regulation for ensuring food safety and quality in India continues to be out-dated – PFA, 1954. The objective of this Act is to formulate and monitor the standards of quality and purity. The provision of the Act are mandatory and contravention of the rules can theoretically lead to both fine and imprisonment. But this happens rarely in practice.

The Central Committee of Food Safety (CCFS) and Directorate General of Health Services, Ministry of Health and Family Welfare are the primary policy making bodies that advise Central and State Governments regarding the administration of the Act and developed standards relating to the Act. The State Governments and local bodies in Corporation and Municipalities implement the provisions of the Act. It is the responsibility of the Ministry of Health and Family Welfare to liaise with the national and international food quality control organisation, namely the Bureau of Indian Standards (BIS) which is associated with the certification of the processed food articles, the Directorate of Marketing and Inspection (DMI), the Ministry of Food Processing Industries as well as the Codex Alimentarius Commission. It also includes in its role the creation of consumer awareness, which is hardly evident.

The PFA lays emphasis on the prevention of adulteration of foods and is not comprehensive enough to deal with the contamination of food through the animal feed and the food chain. The apex industrial bodies like Confederation of Indian Industries (CII), Federation of Indian Chambers of Commerce and Industry (FICCI) and Central Food Technological Research Institute (CIFTRI) have very strongly called for a complete overhaul of PFA in order to harmonise it with the international standards set by the Codex Alimentarius Commission. Obviously, this demand from the food industry is to protect the health of the people but at the same time there is a concern that food safety standards by other countries are being used against India as non-tariff barriers to stop/restrict exports from India to the developed countries.

If we take a cursory look at the quality of food commodity being sold in the domestic market and PFA functionaries, who are more than 6000 Food Inspectors, the domestic market challenges towards food safety

standards come to the fore. These typical Food Inspectors very often have no scientific background, but orientation is towards legal technicalities. Any re-orientation of food laws may not have any incentive to perform their duties diligently and honestly. In theory, producers or traders who supply adulterated/contaminated produce can be taken to court and fined or imprisoned, if found guilty. But there are some problems in implementing the Act. It is a very long way from the central food laboratory to the court room and the whole Act is unable to guarantee food safety at one hand and it also does not restrict import of unhygienic, expired, badly labelled products from other countries. It is very important that the sampling procedure is standardised and it is transparent which does not happen in PFA. The procedure for formulation of standards should be participatory and all stake-holders should be consulted. With regard to certification the emphasis should be on process control rather than the final product inspection. The procedures for inspection and drawing samples should be laid down in accordance with the standards prescribed and should be in tune with the international practice.

Export Quality Control Inspection Act, 1963

Export Inspection Council (EIC), Ministry of Commerce is responsible for implementation of this Act under which the exportable commodities are notified for compulsory pre-shipment inspection. As regards export of egg powder, Government has framed rules called the "Export of Egg Products (Quality Control, Inspection & Monitoring) Rules, 1997 that are applicable for the export of egg powders to EU. It may be noted that these rules are basically a replica of EU Regulations. Under these rules quality assurance and monitoring system manual has been made under which Export Inspection Agencies (EIA's) have been designated as competent authorities for monitoring the egg products which are made for export purposes to EU. Presently, the egg powder plants in India are regulated through these rules and the egg powder is also exported according to these rules. The complete booklet published contains different sections which give details of the executive instructions and specifies as under :

"Prohibits the export of egg powders by a unit in the course of international trade which includes EU and United States unless it conforms to standards applicable to it and is accompanied by a certificate stating that such unit is approved and monitored by Export Inspection Agency establishment u/s 7(1) of the Export (Quality Control & Inspection) Act, 1963 (22 of 1963)". All the conditions have been published in the Gazette of India Extra-ordinary Part II Section 3, Sub-Section (ii) dated 23rd August, 1997. This booklet is a complete document, which is a replica of EU and United States standards for the same products and following has Chapters:

Chapter I : General conditions of Approval and Operations

Chapter II : Special conditions for the approval of establishment

Chapter III : Hygiene requirements relating to the premises, equipments and staff of establishment

Chapter IV : Requirements concerning eggs intended for manufacture of egg products

Chapter V : Special hygiene requirements for the manufacture of egg products

Chapter VI : Analytical specifications

Chapter VII : Health Control and Supervision of Production

Chapter VIII : Packaging of egg products

Chapter IX : Storage

Chapter X : Transport

Chapter XI : Marking of Egg Products

It also has Annexure I and II, which talks of residues, sampling strategy, frequency etc. In fact, Government of India has submitted a Residue Monitoring Plan to EU which otherwise is also a necessity to keep the name of India listed in the EU list of importers. This Residue Monitoring Plan gives details of various residues alongwith surveillance system to monitor the residues, name of approved labs, procedures for obtaining test services, nomination of National Reference Lab, responsibility of the nominated lab, evaluation of the report by National Reference Lab, description of pesticide residues limit, residue limits of pharmacological substances etc.

Government of India through Ministry of Commerce and Export Inspection Council had applied for equivalency for these standards with the EU Commission and it is over three years now but so far equivalency has not been granted and Indian plants have not been notified by the EU Commission pertaining to egg powder products.

Similarly, Government of India through Export Inspection Council are also in the process of notifying order on fresh poultry meat and poultry meat products which also specifies and lays down draft rules for export of fresh poultry meat and poultry meat products under Quality Control, Inspection and Monitoring Rules, 2002 which will be applicable for the inspection and monitoring of fresh poultry meat and poultry meat products prior to export.

In this proposal fresh poultry meat and poultry meat products including meat which is vacuum wrapped or wrapped in controlled atmosphere, which has not undergone any preserving process other than chilling or freezing; poultry meat products which are further processed by means of drawing, curing, smoking, cooking, frying, seasoning, flavouring or by any other method of processing. It is understood that preliminary notification of these draft standards has been issued and final notification is expected anytime. These standards also are a replica of EU and USDA standards and have the following annexures :

Annexure I : General conditions for the approval of establishments

Annexure II : Special conditions for the approval of poultry slaughter houses.

Annexure III : Special conditions for the approval of cold-stores.

Annexure IV : Hygiene of staff and premises and equipment in the establishment

Annexure V : Pre-slaughter health inspection

Annexure VI : Hygiene requirement for slaughtering and handling of poultry meat

Annexure VII : Post-mortem Health inspection

Annexure VIII : Decision of the Official veterinarian at the post-mortem inspection

Annexure IX : Provisions concerning meat intended for cutting

Annexure X : Health monitoring of cut poultry meat and poultry stored meat

Annexure XI : Health marking

Annexure XII : Storage

Annexure XIII: Wrapping and Packaging of poultry meat

Annexure XIV : Transport

Annexure XV : Professional qualifications of Plant Technologists

Annexure XVI : Description of poultry from where fresh meat is obtained

Annexure XVII : Model Health Attestation

Annexure XVIII : Model Health Certificate for fresh poultry meat

It may not be out of place to mention that there is one more exercise going on to frame standards for the export of table eggs and for that purpose USDA Regulations of FSIS has been taken as a base but this matter is still under process. For some latest updates on Notifications reference to Annexure IV may please be made.

Meat Products Control Order, 1973

These is one more agency which talks of controlling meat food products which falls under Ministry of Agriculture and has been issued in the Extra-Ordinary Gazette Part II Section 3 Sub-Section (ii) of dated 28th March, 1973. The name of this order is Meat Products Control Order, 1973, which came into force from 15/7/75. This order also covers some part of meat including poultry meat. The licensing authority under this order is the Agriculture Marketing Advisor to the Government of India. Similarly, the Bureau of Indian

Standards (BIS) who are completely voluntary has also formulated certain standards, which again remains a half-hearted approach for the standardisation of the food safety rules. For other food products there are orders like Milk and Milk products Order, 1992, Solvent Extracted Oil, De-Oiled Meal and Edible Flour Control Order, Vegetable Oil Products control Order, Compulsory Compliance Legislation and Food Products Order.

Food Testing Labs

There are 72 food labs under the administrative control of Central and State Governments as well as local bodies.

Central Food Labs : Four Central Food Labs have been established under PFA Act to serve as Appellate Labs. Here samples of food articles taken by Food Inspectors from State and Local levels are tested. Two of these labs, the Food Research and Standardisation Labs, Ghaziabad and Central Food Lab, Kolkata are under the administrative control of the Directorate General of Health Services. The other two, Central Food Lab (CFL), Pune and Food Central Lab, Mysore are under the administrative control of Government of Maharashtra and Council of Scientific and Industrial Research. In addition to this, there are 84 State Food Labs and one-third are under the administrative control of local bodies. Some labs under EIC and BIS are also operating. Presently, there is no national apex lab that can offer entire range of testing services and results of which cannot be challenged by the labs and the buyers in developed countries. Moreover, these labs also lack in infrastructure except the CFTRI lab at Mysore.

Insufficient capacity – inadequate training : Another important lacunae in the food quality assurance system, if we can call it a system, is lack of proper training facilities in the area of food safety and testing despite the fact that we have a large human resource available with us. The training given to Food Inspectors is minimal, highly inadequate and it is not relevant in the present scenario of globalisation. Out of the 150 Universities and colleges teaching agriculture and health, only few offer courses related to food safety and quality. Even their food safety and quality forms a very small component of training provided as a part of the nutrition course in home science or food technology department. The only mentionable source of training in food quality control is provided by the organisations like CFTRI, Mysore and CFL, Kolkata etc.

Voluntary Standards

Bureau of Indian Standards : As mentioned earlier BIS developed standards for most processed foods that are domestically traded in India. In general these standards cover raw material permitted and their quality parameters, hygiene conditions under which the products must be manufactured and meet the packaging and labelling requirements. Producers who comply with BIS standards can obtain the ISI mark. The BIS has four regional offices and its Head Quarter is in Delhi.

Directorate of Marketing & Inspection(DMI) : DMI enforces the agriculture produce (Grading and Marketing) Act, 1937. Under this Act, grade standards are prescribed for agriculture and allied commodities. Grading is voluntary and manufacturers who comply with the standards laid down by DMI are allowed to put Agmark labels on their products.

Ministry of Environment and Forest : Ministry of Environment and Forest has introduced Ecomark criteria for certain food items such as edible oil, tea, coffee, baby foods and preserved food and vegetables. The criteria are in accordance with PFA, as in the case of BIS standards, Ecomark is voluntary standard and not a mandatory one. The Compound Livestock and Food Manufacturers Association of India, which also manufactures animal and poultry feed has also laid down, certain standards for its own members for the manufacture of compounded cattle and poultry feed. They have also installed certain labs for testing Aflatoxin and other toxins. In the private sector, particularly in poultry, there are labs like Poultry Diagnostic Research Centre which are having excellent facilities for testing the samples, particularly on residues and micro-organisms etc. These labs also have been recognised by organisations like APEDA for testing the residues of pesticides and antibiotic.

Annexure III: Basic Structure of The Integrated Food Law being Considered by the Government

THE FOOD ACT

Objective

“To provide safe and wholesome food to the consumers and to create an enabling environment for value addition to primary agricultural produce, to bring innovation and creativity, and rapid development of food processing industries in an integrated manner, ensuring a high degree of objectivity and transparency”.

Structure

This is a single Integrated Food Law, which is self-contained and complete.

This Act to cover all articles of food or drink for human consumption except drugs, tobacco, alcoholic beverages and natural agricultural/horticulture/marine produce. (measures to regulate the natural agricultural/horticultural/marine produce need to be notified separately).

Food Regulatory Authority of India (FRAI)

- (a) An autonomous “Food Regulatory Authority of India “to be set up, to coordinate and supervise the implementation of the Food Act, to formulate rules and procedures, and to amend, add or delete any of the same as may be required from time to time in fulfillment of the objectives of The Food Act. To recommend to the Govt. on related issues.
- (b) All current Laws governing food to be converged into this Food Act. This will include:
 - (1) The Prevention of Food Adulteration Act, 1954, PFA Rules, 1955. All the State amendments and orders relating to the same.
 - (2) All orders under the Essential Commodities Act and other statutes pertaining to food standards, quality, safety, packaging, mandatory certification etc. including FPO, MMPO, MFPO, VOP, SEO, and others.
 - (3) Suitable amendments be made to the Agmark and BIS to remove mandatory certification in relation to Food Articles from these.
 - (4) This Act will contain all necessary legal provisions regarding labeling requirements. Hence, the provisions of such Acts as the Standards of Weights & Measures Act, 1976, the related Packaged Commodities Rules, 1977, the Standards of Weights & Measures (Enforcement) Act, 1985 and Infant Milk Substitutes and Feeding Bottles Act so far as they pertain to food articles shall be specifically converged into the Food Act.
- (c) FRAI shall call for views from the aggrieved industry.
- (d) FRAI will set up systems and infrastructure, curriculum, schedules etc. for the periodic training and development of all personnel involved in the Food Safety Administration (FSA) and different segments of the food chain.
- (e) The FRAI will notify standards of Food based on the recommendation of CFS.
- (f) FRAI will notify a list of registered independent certifying agencies for food quality assurance systems based on the recommendations of CFS.
- (g) The FRAI will notify a list of accredited laboratories based on the recommendations of CFS.
- (h) The FRAI will encourage adoption of food quality assurance systems such as GHP, GMP and HACCP by different classes of the food industry.

Council of Food Standards(CFS)

- (a) A unified and comprehensive system of laying Food Standards to be established under an autonomous body having close and adequate participation of govt., industry, consumers & technical institutions to be called the “Council of Food Standards”.
- (b) The CFS to lay 'Mandatory Minimum Food Safety Standards' and to amend, add, or delete any of the same as may be required from time to time, based on sound scientific principles and technological developments and to make recommendations to the FRAI.

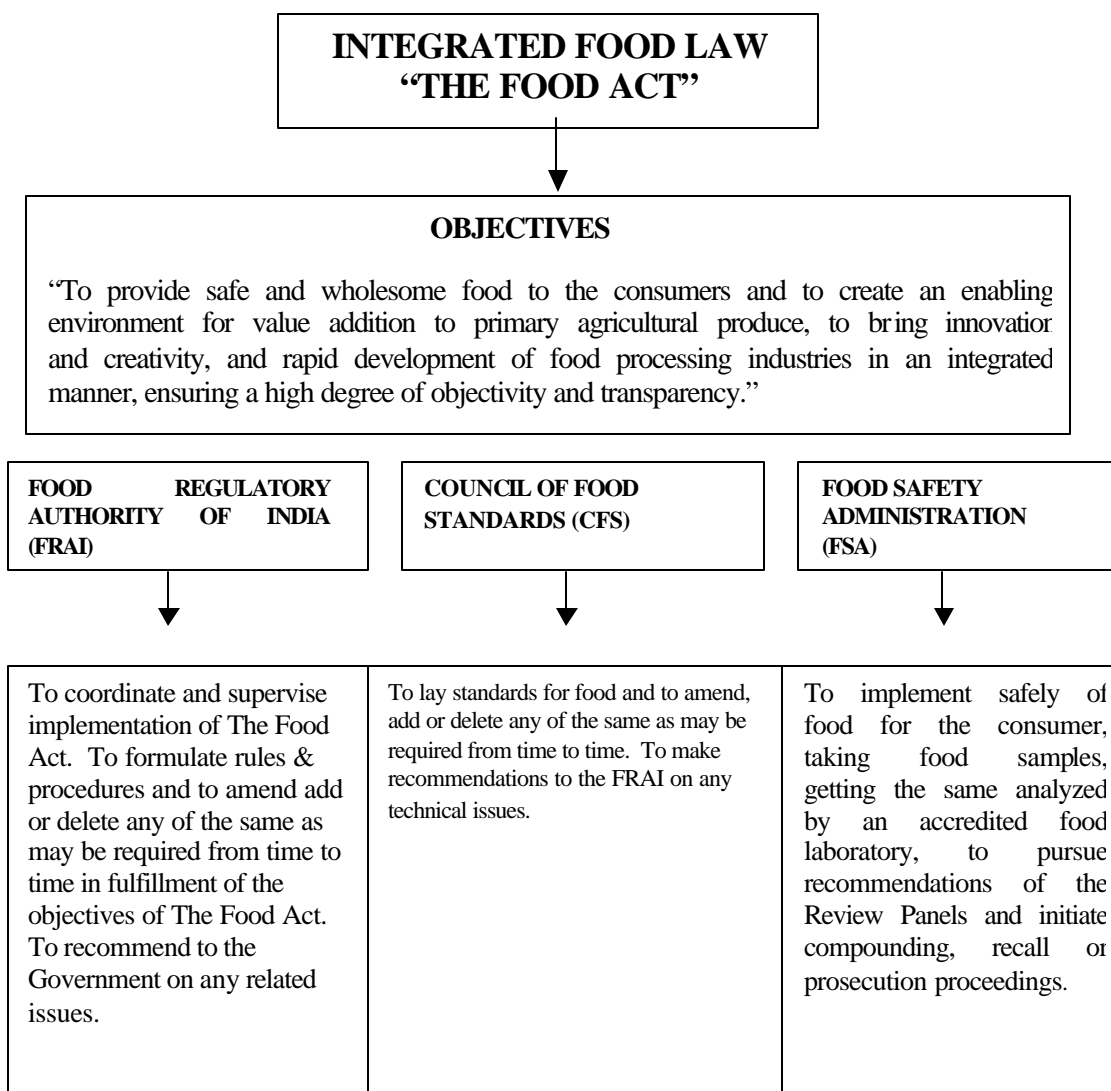
- (i) CFS to lay the 'Mandatory Minimum Food Safety Standards' that are horizontal in nature (i.e. not prescriptive) to facilitate innovation.
 - (ii) CFS may lay essential compositional standards (vertical standards) for certain selected foods, in such cases the essential minimal parameters may be laid down.
- (c) Food Additives permitted specifically or included in a category "general standard for Food Additives" (GSFA) provided under Codex to be allowed unless specifically considered undesirable on the basis of sound scientific principles.
 - (d) CFS will also be responsible for representing India in all the deliberations in the Codex.
 - (e) The CFS will lay down norms for adoption of minimal food quality assurance system by different segments of the food chain and further lay down the criteria for registration of independent certifying agencies to certify industries that follow food quality assurance systems such as GHP, GMP & HACCP, as may be required having regard to the nature of the food article, and recommend names of such agencies for registration to FRAI.

Food Safety Administration (FSA)

- (a) To define an effective system of 'Food Safety Administration (FSA) to be run under the overall supervision of the FRAI, with necessary help from the State Governments (being a subject on the Concurrent List, field implementation to be through State Governments).
- (b) The FSA will implement safety of food for the consumer.
- (c) Certified Food Unit means a unit certified by any of the registered certifying agencies as being compliant with the minimal food quality assurance system as specified.
- (d) For certified Food Unit, the independent certifying agency shall follow a standardized procedure of regular inspections of certified units, regular feedback to the unit, and suggest improvements to ensure compliance.
- (e) Once the unit is certified the State Food Authority shall grant a license.
- (f) For certified Food Unit the Food Officers may also conduct, in case necessary, administrative sampling of food, regular feedback to the unit. In the event of repeated defaults in compliance, to recommend action to the State Food Authority.
- (g) For uncertified units, the State Food Authority to follow a standardized procedure of licensing, regular inspections of licensed units in the relevant jurisdictions, administrative sampling of food regular feedback to the unit and suggest improvements to ensure compliance. In the event of repeated defaults in compliance, to recommend action to the State Food Authority.
- (h) The State Food Authority will monitor compliance of this Act and the regulations made under it in respect of food available in the market, through Food Officers appointed for designated local areas.
- (i) All samples to be collected as per standardized sampling procedures and the testing of such food samples will be conducted as per notified methods and by an accredited food laboratory.
- (j) Pursuant to the testing results, in case a need arises to take action, the food officer (presently Food Inspector) will submit a report along with the test results to the State Food Authority, with a copy to the manufacturer or vendor, within 10 days of the receipt of the test report. The State Review Panel constituted by the State Food Authority will examine the report and, in case action is proposed to be taken against the manufacturer take the following steps:
 - 1) Call for a report from the jurisdictional licensing authority regarding the systems and processes followed by the unit and copies of last two inspection reports. However, in the case of certified units the said report would be requisitioned from the certifying agency or the manufacturer/vendor.
 - 2) Issue a show-cause to the manufacturer.
 - 3) Afford an opportunity of being heard to the manufacturer.
 - 4) Consider the action appropriate to the facts and circumstances.
- (k) The State Review Panel will be a body set up by the State Food Authority in accordance with the norms laid down by FRAI and will consist of 5 members drawn from the State judiciary, Food Industry, Consumers and eminent Food Technologists. The State Food Authority may set up more than one State Review Panel in case required.
- (l) To provide appropriate systems to ensure a high level of neutrality, and transparency in the Accreditation of testing laboratories by NABL (National Accreditation Board of Laboratories of the

Department of Science & Technology). A Manual of 'Standard Testing Practice' to be published and tolerance limits of test procedures to be specified. Testing labs to give analysis and calculation sheet along with test results.

- (m) To incorporate grading of violations in order to enhance objectivity, strengthen credibility of the system and avoid harassment & exploitation in the field. Distinction to be laid down between labeling deficiencies, sub-standard product, and adulteration. This will help in quick disposal of petty violations with sufficient economic disincentives and caution, while allowing the system to focus on the serious violations with stronger punishments.
- (n) The State Review Committee set up in each state/UT shall examine the test results and make recommendation for appropriate compounding, recall or prosecution proceedings, depending upon the nature & level of nonconformance found in the food sample.
- (o) This Act to lay the procedure regarding acceptance of imported foods on the basis of equivalence. The procedure should ensure that a non compliant & expired product does not gain entry, and at the same time allow good quality established products without hindrance.



Annexure IV: About EIC (Source: www.eicindia.org/eic/about-main.htm)

Introduction

The Export Inspection Council (EIC) was set up by the Government of India under Section 3 of the Export (Quality Control and Inspection) Act, 1963 (22 of 1963), in order to ensure sound development of export trade of India through Quality Control and Inspection and for matters connected thereof.

EIC is an advisory body to the Central Government, which is empowered under the Act to:

Notify commodities which will be subject to quality control and/ or inspection prior to export,

Establish standards of quality for such notified commodities, and

Specify the type of quality control and / or inspection to be applied to such commodities.

Besides its advisory role, the Export Inspection Council, also exercises technical and administrative control over the five Export Inspection Agencies (EIAs), one each at Chennai, Delhi, Kochi, Kolkata and Mumbai established by the Ministry of Commerce, Government of India, under Section 7 of the Act for the purpose of implementing the various measures and policies formulated by the Export Inspection Council of India.

Export Inspection Council, either directly or through Export Inspection Agencies, its field organisation renders services in the areas of:

Certification of quality of export commodities through installation of quality assurance systems (In-process Quality Control and Self-Certification) in the exporting units as well as consignment wise inspection.

Certification of quality of food items for export through installation of Food safety Management System in the food processing units.

Issue of Certificates of origin to exporters under various preferential tariff schemes for export products.

Organisation Setup

Under the Export Quality Control & Inspection Act, 1963, the Council, which is constituted by the Central Government, is the apex body, and has powers to constitute specialist committees to assist it in discharge of its functions. Accordingly, the Council has constituted Administrative Committee to advise it on administrative matters and a Technical Committee to advise it on technical matters. Besides, it has created some Standing Committees in specific technical areas as given below :

International Recognition

Under the provisions of WTO Agreements, especially the SPS Agreement, several of India's trading partners have imposed import control systems based on international standards, particularly in food sector. These Agreements also provide for recognition of the export certification system of member trading partners provided it meets the requirements of their import control. EIC, as the official export certification body of India, has initiated dialogue with several of India's trading partners seeking recognition of its certification.

Presently, EIC's certification is recognised in the following areas:

- (1) **Basmati Rice by European Commission** (for Certificates of Authenticity).
- (2) **Black Pepper by United States Food & Drug Administration (USFDA)** (as per which, any consignment of black pepper from India, not accompanied by EIA's certificate, is detained on arrival in USA)
- (3) **Fish & Fishery Products by European Commission** (as per which, the processing units are specifically approved for export to European Union and the names of approved units sent to the European Commission for formal notification, after which they can export to EU countries)

- (4) **Fish and Fishery Products** by **Australian Quarantine & Inspection Service (AQIS)** Australia's **official import control agency** (as per which seafood consignments from India accompanied by EIC's certificates will undergo only random verification sampling not exceeding 5% of the consignments and health certificates issued by EIC will be accepted)

Notifications

Cashew Kernels

Notification No. 782 dated 1st March, 1986

Notification No. 783 dated 1st March, 1986

Appendix

Annexure-I

Annexure-II

Basmati Rice

Notification No. 2538 dated 14th September, 1990

Notification no. 67, dated 23th January 2003

Notification no. 68, dated 23rd January 2003

Black Pepper

Notification No. 1311 dated 22nd April, 1991

Notification No. 245 dated 7th March, 1988

Bivalve Molluscs

Notification No. 1054 dated 1st October 2002

Fish and Fishery Products

Notification No. 729 dated 21st August 1995

Schedule - I

Appendix to schedule - I

Notification no. 730 dated 21st August, 1995

Annexure-I Conditions applicable to factory vessels

Annexure-II Requirements during and after landing

Annexure III General conditions relating to premises, buildings & equipments

Annexure-IV Fishery products on shore

Annexure-V Health control and monitoring of production conditions

Annexure-VI Packaging

Annexure-VII Identification Marks

Annexure-VIII Storage and Transportation

Annexure-IX "Own checks" guidelines

Appendix- I Identification of Critical Points

Appendix- II Establishment and implementation of monitoring & checking critical points

Appendix- III Verification of own-checks system

S.O 731(E).

S.O 732(E).

S.O 733(E).

Dried Fish

Notification 1

Notification 2

Dried Fish maws

Notification No. 2876 dated 28th August 2002

Notification No. 2877 dated 28th August 2002

Honey

Order (New Delhi, 4th March, 2002) SO 276-(E)

Order (New Delhi, 4th March, 2002) SO 277-(E)

Live Fish

Order (New Delhi, the 1st May 2002)

Schedule-I

Notification (New Delhi the 1st May, 2002)

Maximum Residual Limits

Order no. 528 dated 10th July 2002

Order no. 722 dated 17th May 2002

Milk & Milk Products

Notification no. 2719 dated 28th November 2000

Notification no. 2720 dated 28th November 2000

Eggs & Poultry Products

Government of India New Delhi, The 12th January 1993

Government of India New Delhi, The 17th February 1993

Notification No. 2077 dated 4th August, 1997

Notification No. 2078 dated 4th August, 1997

Annexure-I

Annexure-II

Annexure-III

Annexure-IV

Annexure-V

Annexure-VI

Annexure-VII

Annexure-VIII

Annexure-IX

Annexure-X

Annexure-XI

Annexure-XII

Annexure-XIII

Annexure-XIV

Order no. 1377 dated 30th December 2002

Order no. 1378 dated 30th December 2002

About the Aquaculture Authority

In pursuance of the directives of the Supreme Court relating to the setting up of the shrimp aquaculture farms, the Aquaculture Authority has been set up under Section 3 (3) of the Environment (Protection) Act, 1986 to perform the functions indicated in the Supreme Court Judgement delivered on 11 December 1996 in Writ Petition No 561(C) of 1994.

The Aquaculture Authority was set up vide Ministry of Environment and Forests' Notification SO 88 (E) dated 6 February 1997 and is functioning under the administrative control of the Government of India in the Ministry of Agriculture with its Headquarters located at Chennai. The Authority is being headed by Justice G Ramanujam, a retired Judge of Madras High Court with experts drawn from the fields of aquaculture, pollution control and environment protection and representatives from the Ministry of Agriculture, Ministry of Commerce and the Ministry of Environment and Forests as Members. Dr Y S Yadava is the Member Secretary of the Authority.

The Secretariat of the Authority is located at Shastri Bhavan Annexe (*Second Floor*), 26, Haddows Road, Chennai - 600 006, Tamil Nadu, India
Tel:# 91-44-8216552; Fax:# 91-44-8216552; Email: aquaauth@vsnl.net

Functions of the Aquaculture Authority

The functions of the Aquaculture Authority are enshrined in the Notification of S O 88 (E) dated 6 February 1997 and subsequently amended vide notification S O 421 (E) dated 20 May 1997 of the Ministry of Environment and Forests. The functions of the Authority are as follows:

- I. To exercise the powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and for taking measures with respect to matters referred to in clauses (v), (vi), (vii), (viii), (ix) and (xiii) of subsection (2) of Section 3 of the said Act.
- II. To ensure that no shrimp culture pond can be constructed (or) set up within Coastal Regulation Zone and up to 1 000 m of Chilka lake and Pulicat Lake (including bird sanctuaries namely Yadurapattu and Nelapattu).
- III. To ensure and give approval to the farmers who are operating traditional and improved traditional systems of aquaculture for adopting improved technology for increased production.
- IV. To ensure that the agricultural lands, salt pan lands, mangroves, wet lands, forest lands, land for village common purposes and the land meant for public purposes shall not be used (or) converted for construction of shrimp culture ponds.
- V. To implement the "Precautionary Principle" and the "Polluter Pays Principle" in coastal shrimp aquaculture activities by adopting the procedure described in the Supreme Court Order dated 11 December 1996 passed in Writ Petition(Civil) No 561 of 1994.
- VI. To regulate and give the necessary approvals/ authorisation for shrimp activities outside Coastal Regulation Zone areas and 1000 m from the Pulicat lake and Chilkalake.
- VII. To frame scheme/schemes in consultation with expert bodies like National Environmental Engineering Research Institute, Central Pollution Control Board, respective State Pollution Control Board for reverting the damages caused to the ecology and environment by pollution in coastal States/ Union Territories.
- VIII. To ensure the payment of compensation to the workmen employed in the shrimp culture industries as per the procedure laid down in the Supreme Court Order dated 11 December 1996 passed in Writ Petition (Civil) No 561 of 1994.
- IX. To comply with the relevant orders issued by the concerned High Courts and Supreme Court from time to time.
- X. To deal with any other relevant environment issues pertaining to coastal areas with respect to shrimp culture farming, including those which may be referred to it by the Central Government in the Ministry of Environment and Forests.

For discharging the above functions, the Aquaculture Authority has constituted State Level Committees (SLCs) and District Level Committees (DLCs) under the chairpersonship of Secretary-in-Charge of Fisheries and the District Collector/ Deputy Commissioner respectively. The composition of the SLCs and DLCs is as shown in the flow chart.

The applications submitted by the shrimp farmers are received by the DLCs and after scrutiny and verification of the information and field level inspections, wherever necessary, are forwarded to the SLCs for consideration. The applications after recommendation of the SLC are forwarded to the Aquaculture Authority for consideration for issue of approvals.