

**FOOD SAFETY ISSUES UNDER THE WTO
CHALLENGES FOR THE INDIAN FOOD PROCESSING INDUSTRY**

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Introduction

A largely agrarian economy like India can gain substantially from its high value food exports. A recent study of the industry shows that the total turnover of this sector is approximately INR 2500 billion (USD 69.4 billion). Out of this INR 800 billion (USD 22.2 billion) was on account of value-added exports¹. Efforts at increasing the export potential of these sectors would not only increase the exports from the country, but would also have multiplier effects on the overall growth of the economy.

Unlike most manufactured products, agricultural output requires additional care. Apart from the productivity and quality considerations at the production level, there are some necessary precautions that need to be taken when agricultural products are stored and transported. Absence of such cautious measures would have adverse effects on the quality of the product. They result in increased wastages and decrease the market value. Further, this holds true for both raw and processed food products. Thus it is in the interest of the producers as well as the exporters to ensure that certain hygienic and other safety conditions are met. With an increase in the levels of health-safety awareness among the citizens of both developing and developed countries, such practices become imperative for the suppliers of these products.

Recognizing the importance of the issue, each country has specified certain norms of processing, packaging and testing, and certain standards of quality that must be maintained. At the international level, WTO has specified some Sanitary and Phyto-Sanitary measures that need to be followed for international trade of food products. The SPS Agreement under the WTO seeks to lay down the minimum sanitary and phyto-sanitary standards that the member countries must achieve. This is to ensure the safety of life and health of humans, animals and plants.

Specification of certain minimum standard in the agreement implies that the countries have the freedom to set a higher standard if they can justify it. The only requirement is that the set standard should not be trade distortionary and should be scientifically achievable. The agreement also defines the process of imposition and the factors that must be taken into account before imposing any standard.²

¹ Source: Website of the Ministry of Food Processing Industry.

² As given in Article 2 of the SPS Agreement.

Though it may be difficult to deny the need of such standards, yet complaints are made regularly against the imposition of standards higher than the required level. Sometimes the compliance requirements are perceived as a trade barrier by the exporting countries, especially if they belong to the developing world. Attention is also drawn to the fact that many of the developing countries may not have the institutional capacity to meet the set standards. Another issue of conflict arises due to the multiplicity of standards, and the fact that different countries may impose different standards. This would require generation of information and awareness about these issues so that both the suppliers and the buyers can comply with these.

Historical Perspective to Food Safety Issues

The issue of Technical Barriers to Trade (TBT) came to forefront during the Tokyo Round (1973 to 1979) of multilateral negotiations. It was during this time that WTO members signed the TBT Agreement. The SPS Agreement came as the following step to the TBT agreement, with a more focused attention on food trade. This was signed during the Uruguay Round of WTO. The primary objective of the agreement was to safeguard plant and animal health via ensuring food safety. It was recognized that government in each country has the right to protect the health of animal, plant and human life. The methodology adopted for this was to regulate the technical requirements of production, inspection mechanisms and labelling of the food products. ‘Harmonization’ and ‘Transparency’ were to be the guiding principle of the agreement.

At the Mid-term review of the Uruguay Round, in December 1988, the priority areas of SPS were recognized as:

- International harmonization on the basis of the standards developed by the international organizations.
- Development of an effective notification process for national regulations.
- Setting up of a system for the bilateral resolution of disputes.
- Improvement of the dispute settlement process.
- Provision of the necessary input of scientific expertise and judgment, relying on relevant international organizations.

The agreement recognizes the need of member nations to impose sanitary and phyto-sanitary measures. At the same time it aims at ensuring “that these are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between members where the same conditions prevail, or a disguised restriction on international trade”³.

³ Quote from the Introduction to SPS Agreement, Provisions in general.

Agreements on Food Safety as Trade Barriers

Developing countries have for long maintained that these standards can be and are being used as trade barriers against them. This practice has an adverse impact on their exports. The most common complaint is that the standards are set very high, and often unreasonably so. It is in fact contended that the standards are strategically kept at high levels so that exports from the developing countries can be banned. For example many countries have very strict restrictions for presence of Alfatoxins⁴ in spices. In Belgium tolerance level is as low as zero. In Switzerland it is 1ppb⁵ and in Germany and Denmark it is 4ppb. The problem arises due to the fact that the climatic conditions in most spice growing countries are such that make spices vulnerable to the attack of fungus. These are mostly tropical countries where high temperature and humidity make it difficult for the producers to meet the specified norms.

The fact that these countries lack the resources for implementing the set standards is another cause for concern. Setting up new technology for meeting the standards may require large investment and recurrent costs. In most cases required better technology is not available domestically, and has to be imported from other countries. This is likely to have twin impact on the profitability of the firms. Firstly, their production costs may go up as process and product standards are complied with, reducing their profitability. In addition, increased costs would have a detrimental effect on their competitiveness in the foreign markets. In fact, the latter impact could be larger as the increase in production costs would be common for all markets. Firms will be forced to sell at a higher price even in those markets that don't require the specified high standards. Thus a firm trying to achieve higher standards set by one country may lose its markets in other countries due to reduced cost competitiveness.

On the other hand the countries imposing these standards maintain that they are necessary for the health of the residents and are technologically feasible. The spread of education and greater awareness level about health and hygiene in these countries has also resulted in public demand of better quality products. Availability of information on food-borne diseases and people infected by them also helps in raising the awareness level. This in turn builds a pressure on the governments to implement stricter laws and tighter regulatory regimes. Higher income levels in these countries imply that the consumers have the capacity to bear additional cost that has been incurred to maintain stricter standards. In fact, with an increase in the awareness and purchasing power, such demand for better quality products is on an increase even in the markets of the developing countries.

⁴ Alfatoxins are naturally occurring toxins that are metabolic byproducts of fungi, *Aspergillus flavus*, and *Aspergillus parasiticus*, which grow on many food crops under favorable conditions. It may have adverse impact on animal and human health with acute toxicological effects on such as liver damage and cancer.

⁵ Parts per billion.

Some of the apprehensions of the developed world regarding the quality of food exports from the developing countries are not entirely ill founded. The fact remains that the supply chain is indeed longer in the case of latter countries. This makes supervision of hygiene and other safety measures difficult. It implies that food may get adulterated or infected by pathogens at any level of the supply chain. Further, many of the units engaged in this sector are small and unorganized. Thus it is more likely that they lack the facilities and other resources to maintain proper food safety conditions. Add to this the poor infrastructure of the country, which increases the risk factor. Wastage of food due to lack of proper storage and transportation facilities is a common problem in many of these countries.

Thus there are some conflicts between the developing and the developed countries regarding the authenticity of standards that have been set. One argument that has been constantly made is that the developing countries should make efforts to upgrade their technology and enhance their capacities in order to comply with these standards. A greater capacity to export would result in sustainable and profitable trade opportunities. This would not only increase their competitiveness and trade, but would also enhance the overall growth potential of the economy. The counter argument forwarded has been that there is nothing stopping the importing countries from imposing even stricter conditions as no upper limit can be specified. Since these standards are being used as trade barriers, a higher standard would serve the same purpose. Thus the exporting country may not gain even if they implement new and better technology.

An example of this is the loss shrimp industry of Bangladesh had to bear because of the ban imposed by EU. A comprehensive study by Cato and Lima (1998)⁶ showed that the economic loss due to the ban was about USD 65.1 million. The entrepreneurs along with the government had invested about USD 18 million for operation of HACCP⁷ system. An additional maintenance cost of USD 2.4 million was being spent. Under these circumstances, the ban on the shrimp imports from Bangladesh was a big blow on these efforts.

The two kinds of arguments have time and again resulted in conflicts between the two sides. In this section we take a look at different categories of standards imposed and the possibilities of conflicts arising in each case:

(a) Product Related Standards

These are the restrictions imposed on the quality of a product. It includes the specific limits up to which the presence of microbes of other pathogens is allowed. The EU Commission in Brussels has specified the tolerance level and the testing procedures for Aflatoxin in Peanuts. The new procedures

⁶ Cato, J. C. and C.A. Lima dos Santos (1998) "European Union 1997 Seafood Safety Ban: The Economic Impact of Bangladesh Shrimp Processing", *Marine Resource Economics*. 13(3):215-227.

⁷ Hazard Analysis and Critical Control Point

are more rigorous than the previous ones and have resulted in large-scale rejection of the peanut export to EU. These new standards have been termed unjustified. An expert committee of FAO and WHO found that the health risks to consumers due to Aflatoxins are extremely low or negligible.

(b) Production Process Standards

EU countries lay a lot of emphasis on the production of the goods and not only on the end product. Thus many times they demand that proper conditions are maintained even when the goods are produced and not just during processing. For example, the quantity of pesticides that may be used in production of different crops is pre-specified. These requirements have adverse impact on the exports of goods like pulps, jams, jellies and other fruit based products. An example of process standard is the restriction imposed by EU which allows only for mechanical milking of cows. In India unorganized small units undertake production of milk. Thus it is very difficult to regulate them and to maintain the standards at their level. Instead care is taken at the 'entry-level' to ensure that contaminants are not present.

(c) Testing Procedure Standards

Detailed and extensive tests are conducted on the food products before they are exported to other countries. The testing procedures as well as the kind of adulteration being tested for, vary from one agency to other. Problems arise when the domestic testing agencies declare the products fit for consumption, but those in other countries deny this claim. The fact that one of two reports is biased is a possibility, which can't be denied.

(d) Certification

The developed countries often demand that certain international standards are complied with. For this they demand certification from an independent agency. Conflicts in this case arise when one country refuses to identify a certifying agency of the other country. Under these circumstances, it is possible that a product may not be permitted in the foreign territory even if it satisfies all conditions.

Problem also arises due the vast differences in culture, food habits, products available, and access to technology and financial resources. All these along with climate of the area have effects on the quality of food products. In fact, even to specify some minimum standards for all products, in it self is a Herculean task. These minimum standards reflect the feasibility of implementation, which in turn is influenced by the above-mentioned factors. Further, the multiplicity of standards often results in differences in perception and thus in conflicts. Figure 1 lists some of the countries that have more number of complaints raised against them in an international dispute settlement body. The figure also gives the total number of such complaints made against them since 1995.

The role played by SPS Agreement in resolving these conflicts has been important, yet only partially successful. The Agreement aims at “minimizing the adverse effects that sanitary and phyto-sanitary regulations and barriers can have on trade in agriculture”. There has been an emphasis on greater harmonization and transparency. Harmonization here “refers to the establishment, recognition and application of common sanitary and phyto-sanitary measures by Members”. At the same time greater transparency requires that all the members be aware of the standards imposed by the other members. Thus it was obligatory for the members to declare their SPS measures. This clearly hasn’t been achieved.

The partial success of the Agreement has largely been due the complexity of issues involved. The market for agricultural commodities is in a state of flux. Rapidly evolving technology and diversity of available products make harmonization a difficult task. The right given to each country to set its own standards itself is contradictory to the principle of harmonization. Also there are differences in the interpretation of the Agreement by the Member countries, and in their ability to take advantage of the rights and responsibilities defined. On the issue of transparency, imperfect flow of information is the major deterrent. Box 1 gives the main points of the complaints made by Indian Government in WTO regarding the issues of Harmonization and Transparency in the SPS Agreement. Since the issues involved are related to health and safety of the residents, countries have a right to impose strict standards. Yet the fact remains that they ‘misuse’ this right.

Box 1: Main Points of Papers Submitted by India in the WTO committee on Issue of Harmonization and Transparency in the SPS Agreement⁸

(i) Harmonization

The SPS agreement doesn’t define in precise terms when a standard should be considered as an international standard. In the absence of a precise definition, a standard adopted by the standardizing bodies is deemed to be an “international standard”, even if only a limited number of countries may have participated in the technical work on developing the standard, and even if it may have been adopted, not by consensus, but by a slender majority vote.

Only a few developing countries are able to participate actively in the meetings of the technical committees. The majority of developing countries, even if present, are unable to participate effectively, since they are not backed by background research that is needed for the submission of the technical papers.

⁸ An Indian Embassy Document

Given the diverse conditions prevailing in the developed and the developing countries, it may be more appropriate to harmonize standards of a particular region where similar conditions prevail and where the population also has more or less similar immunity levels.

In India's view, the international standards formulation procedures followed by different international organizations should have uniformity. The International Organization for Standardization (ISO) and the Codex Alimentarius Commission (Codex) are following different standards formulation procedures.

For standards that are developed with a possible view of adopting them on a mandatory basis, a narrower definition could be adopted. Such a narrower definition could provide that for the purpose of the SPS Agreement, a standard, guideline or recommendation shall be considered mandatory only if an agreed minimum number of countries from different regions have participated in its formulation, and that it has been adopted by consensus.

(ii) Transparency

Issues of Transparency need to be considered from two broad aspects. First, as generally accepted, it is of vital importance to ensure that all Members are up to date in the fulfilment of their notification obligations with respect to the implementation of the Agreement. The second aspect from which transparency provisions need to be examined is in ensuring that the process of developing SPS measures is made as transparent as possible, especially in view of the potential that SPS measures have for affecting international trade.

Very often the notifications of Members do not contain details regarding the methodology of risk assessment and the factors taken into account for determining the appropriate level of SPS protection.

Often, requests for detailed information are responded to after a considerable time has elapsed and often after the expiry of the time period for making comments, rendering the whole exercise futile.

Producers should be provided sufficient time to adapt to the new requirements of the importing countries. It is logical to assume that producers in the exporting countries would commence initiating such changes only after the consultation process has been exhausted and the concerned Member has indicated its intention to finally promulgate an SPS measure.

4. Food Safety and SPS Situation in India

In the recent past awareness regarding importance of health measures and fear of health hazard has shown a definite upward trend even in developing countries like India. As a result an elaborate system of inspection and certification has evolved over the years. This system becomes more rigorous if the

goods in question are to be sent to foreign markets. The required legal structure has been in place in India for a long time now.

There are some organizations concentrating their efforts towards formulation and implementation of SPS standards. These organizations have specified the norms to be followed by producers and exporters. In addition there are provisions for punishing the errant firms.

Box 2: Standard Setting Organisations in India

(i) Bureau of Indian Standards (BIS)

This is a premier organization for setting standards. So far it has set more than 17,000 standards. 150 of these are mandatory and others voluntary. The procedure adopted by BIS is same as in other countries. A suggestion coming from a consumer or an organization is considered by a committee for its viability, before formulation of a final draft. BIS provides various services to the firms. These include product certification, training on ISO 9000 and ISO 14000, list of Indian and international standards for different products and also some general information required by the firm.

(ii) Ministry of Food Processing Industry (MFI)

As the name suggests, this ministry formulates the procedures and standards for the food processing industries. Thus rules are put together regarding the following thrust areas:

- Material to be used for the machine and equipment that come in contact with food.
- Quality of water used for production and for other purposes like washing and cleaning.
- Requirements of in-house laboratories.
- Assessment of the quality by food technologists.
- Standards pertaining to chemical content, physical characteristics, contaminant levels, and additive levels allowed in food.

(iii) Export Inspection Council (EIC)

This is an apex agency that facilitates exports of SPS compliant commodities. It also gives advice to the government regarding measures to be taken for enforcement of quality control an inspection. Further, it also makes arrangement for pre-shipment inspection of commodities to ensure compliance of all specified standards. EIC provides three kinds of inspection and certification, the details of which are discussed later:

- Consignment-wise inspection.
- In-process quality control.

- Food safety management system based certification.

(iv) Codex Alimentarius

This is an international organization that brings together all the interested parties, scientists, technical experts, governments, consumers and industry representatives. The standards set by codex are becoming increasingly acceptable world over, and thus are used as a benchmark by the domestic organizations. They even play a vital role in trade negotiations and settling of disputes.

The organizations mentioned above are mainly responsible for setting up of standards and laws that the firms are expected to comply with. The government, on its part, has formulated a legal framework. Various laws define the norms that should be followed, agencies responsible for implementation and punishment to be given in case of default. *Food Products Orders, Milk Products Order, Essential Commodities and the Prevention of Food Adulteration Acts* are some of such laws that specify the bindings for the producers and sellers of foodstuff. These aim at regulating sanitary and hygienic conditions at all levels of supply chain, and lay down the minimum requirements for:

- Sanitary and hygienic conditions of premises, surrounding environment and personnel
- Water to be used for processing
- Machinery and equipment
- Product standards

Besides this, maximum limits of preservatives, additives and contaminants have also been specified for various products. Ministry of Food Processing Industries, Ministry of Agriculture and some other agencies are responsible for implementing these legislations. In fact this multiplicity of regulating agencies is one of the problems of implementation. The producers are not sure which institute to approach for guidelines, and which institute has the authority to conduct inspection. A repetition of the process by more than one agency would result in waste of time and resources.

The following box gives the list of legislations in place currently, and the institutions responsible for their implementation.

Box 3: Legislation and Institutional Setup⁹

Ministry of Agriculture

- Insecticide Act
- Milk and Milk Product Control Order

⁹ Presented by Rajesh Mehta and J George in a workshop on International Food Safety Regulations and Processed Food Exports

- Meat Food Product Order 1973

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

- Agriculture Produce (Grading and Marking Act)

Ministry of Health and Family Welfare

- Prevention of Food Adulteration Act 1954

Ministry of Food Processing Industries

- Fruit and Vegetables Product (Control) Order – FPO 1955

Ministry of Commerce

- Export (Quality Control and Inspection) Act 1963

Ministry of Civil Supplies, Consumer Affairs and Public Distribution

- Standards of Weights and Measures Act
- Standards of Weights and Measures (Enforcement) Act
- Solvent Extracted Oils, De-oiled Meal and Edible Flour Control Order 1967
- Vegetables Product Control Order 1976
- Bureau of Indian Standards Act 1986

Ministry of Environment and Forests

- Aquaculture Authority Notification 1997 and 2002
- Environment Protection Act 1986, Environment Protection (Third) Amendment Rule 2002
- Coastal Regulation Zone – Notification 2002

BIS and IEC are two organizations in India, responsible for inspection of food products. They follow internationally competent checking and certification procedures in order to grant certificates to firms against relevant standards. These organizations ensure that the support infrastructure is in place for them to be able to carry out the testing procedure efficiently. They have access to fully equipped laboratories that carry out the testing procedures. Testing is carried out for presence of microbes, pathogens, toxins, filth, pesticide residues etc. In addition there are provisions for training personnel making them capable of carrying out the necessary testing procedures. Also various schemes have been introduced, catering to the specific requirements of both exporters and importers.

These increased detentions and bans on Indian products by developed countries indicate that there is a need to upgrade the system of compliance with the specified sanitary and phyto-sanitary norms. Most of the exporting firms in India are following Codex standards. Yet they have to face losses due to detained or rejected shipments. One major cause of this is the lack of availability of correct and timely

information. There have been incidents where producers didn't have the time to comply with some standard, which was announced suddenly. For example, a consignment of 'egg powder' from India was rejected in EU. The reason given for this rejection by authorities in the destination country was the non-compliance with rule of '*Minimum Required Performance Limit (MRPL)*'. The ground reality was that the rule had been announced just before the date of the consignment reaching the importing country. No concession was made for the fact that the producer of the good in question did not have time margin so that the newly announced rule could be complied with.

Efforts of these organizations clearly don't suffice to address all issues concerning the food processing industry in India. The importance of role played by these agencies in enabling the producers to meet the health-safety standards can not be undermined. Yet there is a need to take some measures at administrative and diplomatic level. The role of the Central Government assumes importance at this point. Such a requirement arises when some of the countries impose trade barriers under the disguise of technical barriers (SPS Measures). Under these conditions government raises the issue at WTO, Dispute Settlement Bodies or at other international tribunals. An example of this would be when India made a complaint in WTO against the import duty restrictions on rice. These restrictions were introduced by European Commission through the Cumulative Recovery System (CRS). Indian government felt that these restrictions were violating Article 2 of SPS agreement. Article 2 specifies that SPS restrictions should not be used as a trade barrier. Another example could be where USA objected to certain restriction imposed by Japan on import of apples from USA. Japan was demanding that apples coming into its country should be free of a disease called 'fire blight'. USA was arguing that the consignment of apples being sent are 'mature and symptom less.' Thus it need not be checked. Japan on the other hand was claiming that the assessment system put in place by it checks even an accidental introduction of the disease.

India, like other developing countries tend to loose more in the dispute settlement process. Raising complaints against other countries will require additional resources. Further, resources are also required to prove, scientifically and legally, that the measures taken by other countries are against the principles of the agreement. As a result Indian government takes up the issue at an international front only if the stakes are high. Such an example is the complaint raised against the restrictions on import of basmati rice levied by European Commission.

Apart from raising this issue at international level, Indian government has also initiated some measures that will be counter to the policies being followed by the developed countries. India has come up with certain standards that imports in its territory should satisfy. A major step in this direction was the introduction of the Plant Quarantine Order 2003. This aims at regulating the imports of the food and related material from other countries. The order makes it mandatory for the imports to have phyto-sanitary certificates. In case such a certificate cannot be furnished, then the consignment

would be given clearance only after the local plant quarantine authority grants permission. The authority is given the right to subject the packaging material to treatment, if a need arises, at the expense of the importer.

Box 4: The Main Objectives of the Plant Quarantine Order

- To prohibit / regulate / restrict the import of plants / plant material, both for consumption and propagation.
- To prohibit / regulate the import of germplasm / GMOs / transgenic plant material for research purpose.
- To prohibit the import of deleterious weed species.
- To regulate the import of live insects / fungi and other microbial cultures / bio- control agents.
- To regulate imports of timber and bulk shipment of food grains.
- To regulate import of soil / peat of sphagnum-moss etc.

Gains in Store

As mentioned earlier in the paper, India has already reached the situation where it is the largest or one of the top producers in many different food categories. The sheer magnitudes of our landmass, population and other resources employed in agriculture and allied sector ensure that we achieve this distinction. Even though the efficiency conditions in Indian agriculture sector, at both primary and secondary levels, are much lower than those in many other countries, yet the large magnitude of the sector ensures that we enjoy economies of scale.

The cause of concern though is the fact that only a small part of these products are exported. For example in the year 2001-02, the total production of fruits and vegetables in country was worth INR 600520 million. In the same year we exported fruits and vegetables, including both raw and processed, worth INR 17658.8 million. This is only around 3 percent of the total production. During the same year the total output of dairy sector in the country was of INR 603400 million and the export worth INR 2079.6 million, less than 0.4% of the total production.¹⁰

The figures clearly reflect that there is a vast export potential that has not been utilized so far. This may broadly be attributed to two factors. First one is the large domestic demand for these goods. Though the total production of agricultural and allied sector is amongst the highest in world, the large population of the country implies that the per-head availability of these is very low. Thus there is some kind of social pressure on the government to ensure that large quantities of these products don't

¹⁰ The production figures have been taken from National Accounts Statistics, 2003. Export figures are from CMIE data set.

get exported. The second factor responsible for this trend has been the mindset of the government against the export of primary products. Policy makers, from the time of independence have given more importance to the export growth of manufactured products. Export of primary products generates lesser profit than the value added exports. Thus there was an emphasis towards replicating the growth path of presently developed countries wherein the focus shifts to export of manufactured goods as the economy develops. Agriculture on the other hand was expected to provide the backbone for this growth by supplying for basic requirements of those working in secondary sector. Both these factors resulted in a policy environment that laid lot of emphasis on growth of agricultural sector. They also aimed at providing support through subsidies, price support and credit availability. Yet any measures toward promotion of international trade of agricultural products were conspicuously absent.

Things have undergone a transformation in the recent past. There is clearly an understanding both at the level of producers as well as policy makers that agriculture exports can also be beneficial for the economy if some 'value addition' is done to them. It is this change in perception that has resulted in current emphasis on food processing industry. As a result exports of food products from India have shown an upward trend. This is evident from the figure 2. This is clearly indicative of the changing scenarios.

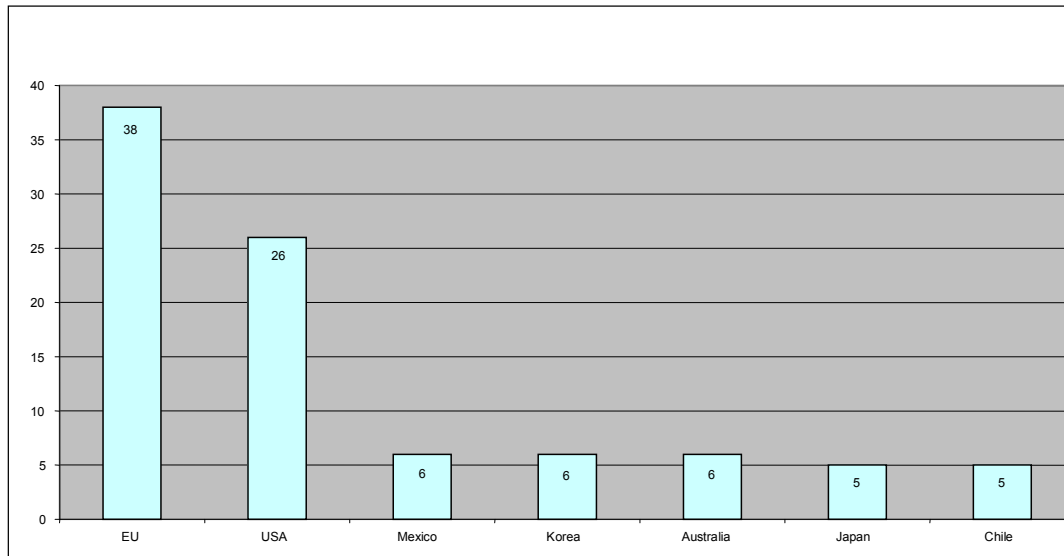
But we must not allow this upward trend to misguide us. It is equally important to take a look at the direction of this export. It is this direction that may play an important role in determining the future growth trends.

As is evident from the figure above, a large chunk of India's food exports, namely 36%, are to the countries of Asia, excluding Middle East. Another 17% of the exports are for the Middle Eastern countries and 6% to African countries. Thus more than half of the food exports from India are going to developing countries. The importance of these markets surely cannot be denied. Yet these figures point towards a definite trend. It must be observed that these countries don't have very stringent SPS standards. Even the number of restrictions imposed is much less in these countries as compared to the developed world. On the other hand developed countries, like members of European Union, USA etc. are more demanding in terms of quality products.

Further opening of these markets for Indian food processing industry would certainly be beneficial in long run. This is because higher income levels in these countries would ensure that there is adequate demand for better quality products. It implies that Indian producers and exporters can hope to gain if they succeed in implementing the SPS requirements. Further in cases where these standards are being used as trade barriers, India would be in a position to challenge it in an international tribunal only if it can show that the specific standard is above the required level. This would be possible only if domestic standards are implemented more rigorously.

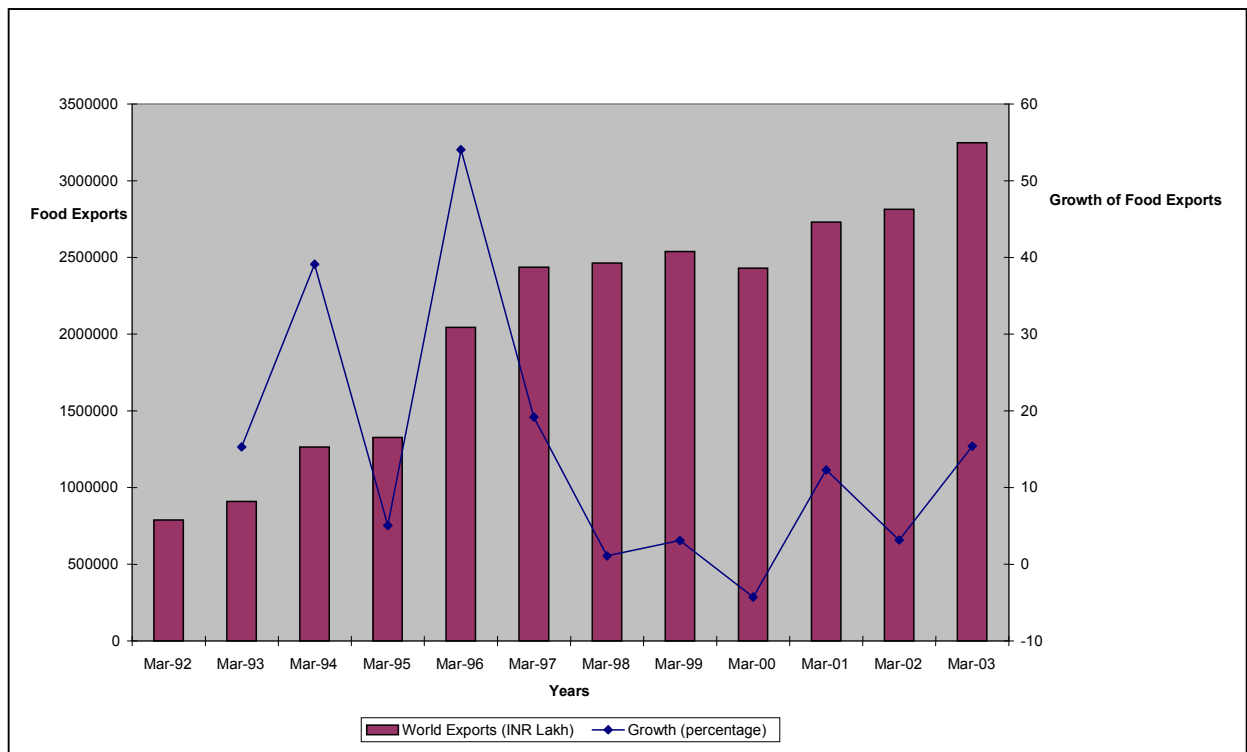
Thus there is a need to understand that the growth of this sector cannot be achieved only by having price-advantage, or through other support facilities like availability of credit, and better technology. Given the present international scenario it is imperative that there is awareness among the producers, exporters, policy makers and also the consumers, regarding the SPS issues. It is highly desirable that there is availability of complete information and a capacity to comply with the set standards. This would be necessary not only for improving the quality of our output and increasing its market value, but would also increase the welfare of all the stakeholders.

Figure 1: Country-Wise Number of Complaints



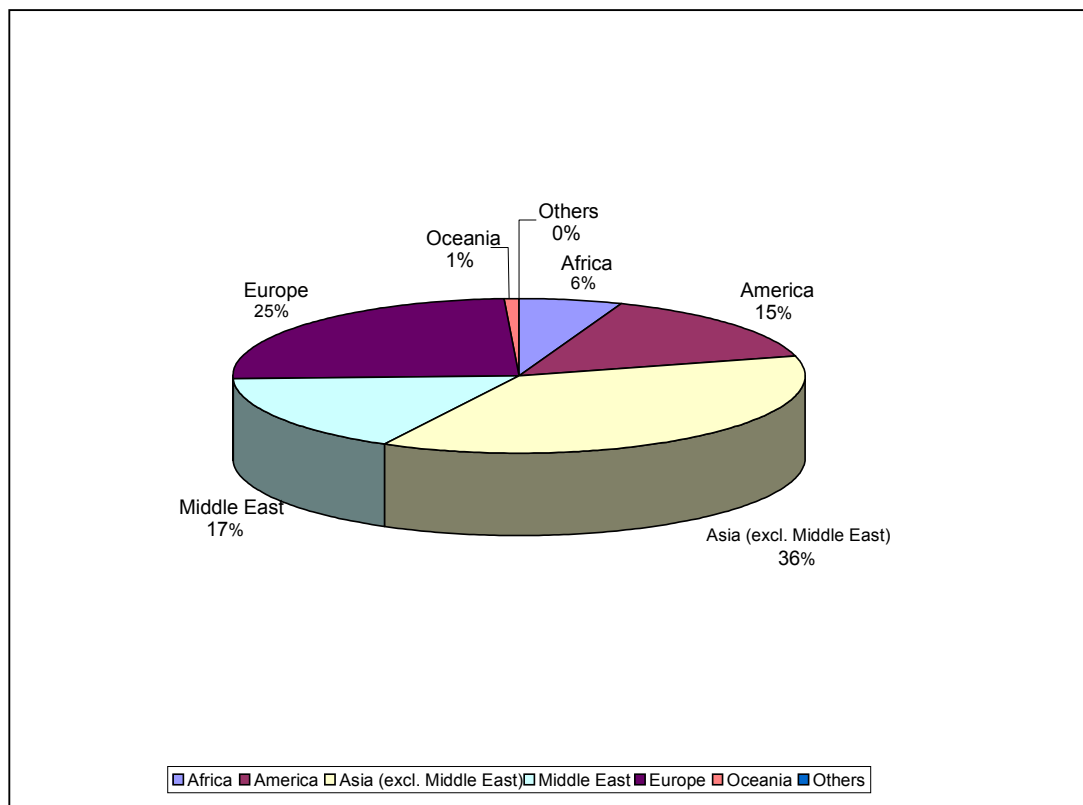
Source: Complaints made under WTO, Analysis: IDF

Figure 2: Food Product Exports by India



Source: The Ministry of Food Processing Industries, Analysis: IDF

Figure 3: Country-wise share in Total Food Exports



Source: The CMIE data set, Analysis: IDF

Table 1: Reasons for Rejection of Shipments

Causes Of Detentions	Number of Shipments
Filthy	256
Unapproved: Net Drug Without Approval	174
Salmonella	161
Not Listed	107
Mfrhaccp	88
No Pma / Pdp	87
List Ingre	78
Nutrition Label	72
Lack N/C	51
Pesticides	43
Unsafe Add	37
Unsafe Col	35
Direction: How To Use Etc.	28

Agr Rx	24
Color Lblg	17
Dr Qualitic	16
Drug Name	16
Registered	16
Insanitary	15
Lack Firm: Names Etc.	13
No 510(K)	12
Saccharin	12
Cosmet Lblg	11
False	11
Usual Name	11
Labeling	10
Cstic Lblg	8
Flavr Lblg	8
Cosm Color	7
Newvet Dr	7
Inconspicu	6
Rx Legent	6
Dietrylbl	5
Foreign Ob	5
Need Fce	4
Container	3
De Impgmp	3
Holes	3
Poisonous	3
Preserve Lbl	3
Rx Compound	3
Col Added	2
Juice %	2
Personalrx	2
Under Prc	2
Antibiotic	1
Bacteria	1
Health C	1

Impthaccp	1
No English	1
No Process	1
No Register	1
Soaked Wet	1
Warnings	1
Yellow H5	1

Source: Rajesh Mehta and J George (2003) , “Processed Food Product Exports from India: An Exploration with the SPS Regime”, Joint research Project of Australian National University, University of Melbourne, Research and Information System (India), Thammasat University (Thailand)