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NON-TARIFF BARRIERS AND INDIA'S EXPORTS: THE CASE OF ASEAN AND SRI LANKA

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JULY 2005

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Foreword

India is actively pursuing bilateral/regional Free Trade Agreements. While Free Trade Agreements would certainly imply a reduction in tariffs, the gains from such trade would be limited in the presence of non-tariff barriers. This study identifies non-tariff barriers (NTBs) faced by India's exports to ASEAN and Sri Lanka.. The study measures the incidence of non-tariff measures applicable to Indian exports and assesses the extent to which Indian exporters face NTBs through a survey of exporters.

The study finds that the incidence of non-tariff measures on India's exports to ASEAN and Sri Lanka has increased. The incidence is higher for India's exports to Indonesia, Philippines, Malaysia and Thailand than for exports to Singapore, Vietnam and Sri Lanka. At the firm level, most of the barriers were related to the application of measures on Technical Barriers to Trade and Sanitary and Phytosanitary Measures. The study points out that for some products (e.g., peanuts) standards amongst the ASEAN countries vary significantly making it difficult for Indian exporters to target the ASEAN market as a region. In meat products, importers made unreasonable demands for processes which discriminated against small and medium enterprises. The survey also indicated that there were barriers related to certification, registration and testing.

The study recommends Mutual Recognition Agreements between India and the ASEAN countries which would reduce transaction costs through duplication of testing and certification. The study also recommends domestic measures that should be implemented to meet standards related to the application of TBT and SPS measures.

The study is very timely, given that negotiations for the Indo-ASEAN FTA and the Indo-Sri Lanka Comprehensive Economic Partnership Agreements are ongoing. The study was supported by the Tariff Commission, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India.

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1. Introduction

1.1 Trading Arrangements with ASEAN and Sri Lanka

India is actively pursuing bilateral /regional free trade arrangements as part of its trade policy. India has signed a Free Trade Agreement (FTA) with Singapore and with Thailand in 2003. It has also simultaneously signed a Free Trade Agreement with ASEAN. India signed a bilateral Free Trade Agreement with Sri Lanka in 2000. It is currently in the process of extending the existing Free Trade Agreement that would address the anomalies in the existing agreement and also broaden the scope of the FTA by including trade in services. India and Sri Lanka are also Members of the South Asian Association for Regional Co-operation (SAARC) which envisages the formation of a South Asian Free Trade Arrangement by 2006.

How important are ASEAN and Sri Lanka in India's export basket? ASEAN has been a relatively small market for India. Since 1997-98 India's exports to ASEAN (six major countries) increased from US $ 2410 million to US $ 4518 in 2002-03. During this period India's exports to ASEAN almost doubled. However, the share of exports to ASEAN countries in India's total trade increased only marginally from 6.9% in 1997-98 to 8.6% in 2002-03. Each of the ASEAN countries accounts for a very small share of India's exports. In 2002-03, Vietnam had the smallest share of 0.6% while Singapore had the largest share of 2.7%. Sri Lanka's share in India's total exports has also increased only marginally from 1.4% in 1997-98 to 1.7% in 2002-03. (see Table 1)

While Free Trade Arrangements would certainly imply a reduction in tariffs, the gains from such trade would be limited in the presence of non-tariff barriers.

Table 1: India's Exports to Six Major ASEAN Countries and Sri Lanka from 1998-99 to 2002-03 (US $ million)

	India's Exports (US $ million)					
Country	**1997-98**	**1998-99**	**1999-00**	**2000-01**	**2001-02**	**2002-03**
Indonesia	437.3	185.3	325.6	399.8	533.7	826.1
Malaysia	490.0	321.7	447.1	608.2	773.7	749.4
Philippines	238.7	118.7	143.5	202.6	247.8	472.0
Singapore	774.5	517.5	672.7	877.1	972.3	1421.6
Thailand	342.9	321.0	449.6	530.1	633.1	711.2
Vietnam	126.6	125.4	154.4	225.9	218.2	337.4
Total (ASEAN 6)	**2410.0**	**1589.7**	**2192.9**	**2843.6**	**3378.8**	**4517.6**
Sri Lanka	489.2	437.1	499.3	640.1	630.9	921.0
Total (world)	34785.0	33218.7	36822.5	44560.3	43826.7	52719.4

1.2 Non-Tariff Measures

While market access would improve on account of reduction of import duties, it may be thwarted due to the application of non-tariff measures. It is important to define non-tariff barriers. Any restriction imposed on the free flow of trade is a trade barrier. Trade barriers can either be tariff barriers, that is levy of ordinary customs duties within the binding commitments undertaken by the concerned country in accordance with Article II of GATT or non tariff barriers, that is any trade barriers other than the tariff barriers.

Non-tariff barriers can take various forms. Broadly these can be categorised as under:

- Import Policy Barriers
- Standards, Testing, Labelling and Certification requirements
- Anti-dumping & Countervailing Measures
- Export Subsidies and Domestic Support
- Government procurement

i) Import Policy Barriers

One of the most commonly known non-tariff barriers is the prohibition or restrictions on imports maintained through the import licensing requirements. Article XI of the GATT Agreement requires Members not to impose any prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures. Any form of import licensing (other than an automatic license) is, therefore, to be considered as an import restriction. Certain restrictions on imports, however, can be imposed in accordance with various provisions of the GATT. These include restrictions on grounds of safety, security, health, public morals etc. Article XX of the GATT Agreement provides for certain general exceptions on grounds of protection of:

- public morals,
- human, animal or plant life or health,
- national treasures of artistic, historic or archaeological value etc.

These are however subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade. Similarly Article XXI of the GATT Agreement provides for certain security exceptions.

Import restrictions on some items on grounds of safety and security are being maintained generally by all the countries, and perhaps these cannot be considered as non-tariff barriers looking to the purpose for which the restrictions are imposed. Article XVIII (B) of the GATT allows import restrictions to be maintained on grounds of 'Balance of Payment' (BOP) problems.

Besides import licensing, import charges other than the customs tariffs and quantitative restrictions there are other forms in which import restrictions can be imposed through import policy. MFA quotas are one such example.

ii) Standards, Testing, Labelling & Certification Requirements

Prima-facie Standards, Testing, Labelling and Certification requirements are insisted upon for ensuring quality of goods seeking an access into the domestic markets but many countries use them as protectionist measures. The impact of these requirements is felt more by the purpose and the way in which these are used to regulate trade.

Two of the covered agreements under the WTO namely the Agreement on the Application of Sanitary & Phytosanitary Measures (SPM) and the Agreement on Technical Barriers to Trade (TBT), specifically deal with the trade related measures necessary to protect human, animal or plant life or health, to protect environment and to ensure quality of goods.

The SPM Agreement gives a right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health, provided:

- such measures are not inconsistent with the provisions of the Agreement;
- they are applied only to the extent necessary;
- they are based on scientific principles and are not maintained without sufficient scientific evidence;
- they do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail including between their own territory and that of other Members, and
- they are not applied in a manner which would constitute a restriction on international trade.

In regard to the determination of appropriate level of sanitary or phytosanitary protection, the Agreement requires the objective of minimising negative trade effects to be taken into account. Further, it permits introduction or maintenance of sanitary and phytosanitary measures resulting in higher level of sanitary and phytosanitary protection that would be achieved by measures based on the relevant international standards, guidelines or recommendations only if there is a scientific justification. However, where no such international standards, guidelines or recommendations exist or the content of a proposed sanitary or phytosanitary regulation is not substantially the same as the content of an international standard, guideline or recommendation and if the regulation may have a significant effect on trade of other Members a notice needs to be published at an early stage and a notification is required to be made of the products to be covered with an indication of the objective and rationale of the proposed regulation.

The TBT Agreement also contains similar provisions with regard to preparation, adoption and application of technical regulations for human, animal or plant safety, protection of environment and to ensure quality of goods.

Both the Agreements also envisage special and differential treatment to the developing country Members taking into account their special needs. However, the trade of developing country Members has often faced more restrictive treatment in the developed countries who have often raised barriers against developing countries on one pretext or the other.

Some of the non-tariff barriers falling in this category are ban on import of goods (textiles and leather) treated with azo-dyes and pentachlorophenol, ban on use of all hormones, natural and synthetic in livestock production for export of meat and meat products, stipulation regarding pesticides and chemicals residues in tea, rice and wheat etc., and requirement of on-board cold treatment for fruits and vegetables export.

iii) Anti-dumping & Countervailing Measures

Anti-dumping and countervailing measures are permitted to be taken by the WTO Agreements in specified situations to protect the domestic industry from serious injury arising from dumped or subsidised imports. The way these measures are used may, however, have a great impact on the exports from the targetted countries. If used as protectionist measurs, they may act as some of the most effective non-tariff barriers. The number of anti-dumping investigations in the recent past have increased manifolds. Not every investigation results in the finding of dumping and/or injury to the domestic industry.

But the period for which the investigations are on, and this period may be upto 18 months, the exports from the country investigated suffer severely. Anti-dumping and countervailing duties being product specific and source specific the importers well prefer switching over to other sources of supply.

In some cases the authorities apply innovative methods to prolong the investigation. A recent practice adopted by the European Commission is a case in example. The European Commission has terminated anti-dumping investigation following withdrawal of the complaint in two cases namely unbleached cotton fabrics from India and others (20th February 1996) and bed-linen from India and others (9th July, 1996), after nearly two years without concluding the investigation, and started fresh investigations immediately after the termination of the two investigations on 21st February, 1996 and 16th September 1996 respectively. It may be a matter of debate whether the European Commission was within their rights to do so but the impact of these decisions is grave on exports of these item from the concerned countries.

Another aspect concerns the quantum of duty levied. The WTO Agreements on Anti-dumping and Countervailing duties permit the importing countries to impose full margin of dumping and subsidisation as anti-dumping duty or countervailing duties but recommends levy of lesser amount as duty if such lesser amount is adequate to remove the injury to the domestic industry. In other words the Agreements recommend that the amount of duty imposed should be such as is adequate to remove the injury to the domestic industry as any amount in excess of that would only provide an undue protection to the domestic industry.

iv) Export Subsidies & Domestic Support

Both export subsidies and domestic support have a great bearing on the trade of other countries. While export subsidies tend to displace exports from other countries into the third country markets, the domestic support acts as a direct barrier against access to the domestic market. Generally the developing countries can hardly find resources to grant subsidies or domestic support. But developed countries like the Members of the European

Union and Japan have been heavily subsidising their agricultural sector through schemes like export refunds, production support system and other intervention measures.

Under the Common Agricultural Policy, the EU subsidises European farmers upto $4bn every year, which end up mostly into the pockets of rich land lords who really do not need it. In 1992, Ray MacSharry, EU's agriculture commissioner, calculated that 80% of the subsidies went to the richest 20% of farmers. For example, Queen Elizabeth receives annually $352,000 for her Sandringham estate, and her daughter Anne recieves $128,000 annually for her Gatcombe Park farm. Even Arab princes owning estates in UK are receiving these doles. Saudi Prince Khalid Abdullah al Saud claimed $192,000 for his country estate in Kent. (Asian Wall Street Journal, 11 December 1996).

Some of these measures include import quotas, licensing, exchange and other financial controls, prohibitions, discriminatory bilateral agreements, variable levies, advance deposit requirements, antidumping duties, subsidies and other aids, government procurement policies, government industrial policy and regional development measures, competition policies, immigration policies, customs procedures and administrative practices, technical barriers to trade, and sanitary and phytosanitary measures.

2. Context Of The Present Study

The objective of the present study is to identify non-tariff barriers in Sri Lanka and the ASEAN which constitute major impediments to India's exports. The study would also propose the manner in which such barriers could be dealt with within the FTA framework.

Some of these measures that are under consideration in the context of the present study have been analysed under two broad groups (i) the first relating to technical barriers to trade, and sanitary and phytosanitary measure such as product standards, process standards, certifications, registration and testing procedures, packaging, mark-up, labelling and language barriers environmental barriers; and (ii) the second group comprising of other non-tariff measures which includes import quotas, licensing, exchange and other financial controls, prohibitions, discriminatory bilateral agreements, variable levies, advance deposit requirements, antidumping duties, subsidies and other aids, government procurement policies, government industrial policy and regional development measures, competition policies, immigration policies, customs procedures and administrative practices. While the focus of the study will be largely on technical barriers to trade and sanitary and phytosanitary measures, care is taken to elicit information on the other barriers as well so that a wholistic approach to barriers to trade can be achieved.

So far research on non-tariff barriers faced by Indian exports has focussed on developed countries, namely, European Union and the USA. There has not been any study so far on non-tariff barriers faced by exporters exporting to ASEAN and Sri Lanka. This study aims at filling this lacuna.

To look into the issue of extent of non-tariff barriers faced by Indian exporters to the ASEAN and Sri Lanka, two approaches have been used (i) measuring the incidence non-tariff measures applicable to Indian exports by the countries specified in the study viz., ASEAN and Sri Lanka using secondary data and (ii) assessing the extent to which Indian exporters face NTBs through a survey of exporters. It is important to note that while the first approach we are looking at the import coverage ratio- the value of imports in a tariff line which are subjected to an NTM, in the second approach we are examining the pattern of NTMs (or protection) from the perspective of the exporter. In other words, while in the first approach we are measuring the extent of application of non-tariff measures, the second approach helps in identifying barriers faced in the application of such measures. The survey approach has been used to elicit information on - extent of non-tariff barriers faced by exporters, measures adopted by them to comply with standards and regulations and on expenses incurred to meet such standards and regulations. Further, in cases where NTBs have been identified, detailed case studies have been used to understand the nature and depth of the perceived NTBs by exporters.

3. Methodology

This section lays out the detailed methodology adopted for measuring the incidence of NTMs using secondary data. It also outlines the methodology adopted to undertake a primary survey to assess the extent of NTBs faced by Indian exporters while exporting to ASEAN and Sri Lanka.

3.1 Measuring Incidence of NTMs

The most conventional tool adopted for quantifying the incidence of NTMs is the frequency index which shows the number of tariff lines covered by some pre-selected group of the NTM. The key element of the index is a dummy variable that takes the value of unity if one or more index is applied to them. The natural extension of the index is import coverage index that weights the existing NTM structure on home country imports or world imports.

The frequency index can be computed as follows:

$$F_j= (\sum D_iN_i/N_i)*100$$

Where N_i is the transaction 'i', D_i is a dummy variable that takes the value if one or more NTB is applied to this transaction (or zero if otherwise) and N_i is the total number of transactions in the product groups. Thus F_j is a frequency index measure showing the percentage of transactions (i.e., imports of a tariff line product from a given country) A second index showing the share of total imports subject to NTMs can also be computed as follows:

$$C_j= (\sum D_iV_i/\sum V_i)*100$$

Where V_i represents the value of imports in tariff line item 'i' in the year under consideration, and D_i is a Dummy variable that takes a value of unity if an NTB is applied in that year and zero otherwise.

In the present study, two data bases have been used to extract the relevant data to compute the trade coverage index. The UNCTAD maintains an extensive database on the NTMs (TRAINS) applied by several countries. It also provides the frequency index at the 6 digit code level for each country. By way of illustration, consider a six digit code which comprises of four sub-headings that include separate lines for apples and bananas; grape and melon; oranges; and pineapples. An import license applies to apples and oranges, while an advance import deposit applies to grapes and melons. In this example the NYM incidence is 100% for the orange tariff line, since they are subject to licensing, 50% as only apples are affected by licensing, 0% for pineapples and 100% for grapes and melons. It is important to note that that the percentage term only indicates only the incidence and not the impact of NTM. Furthermore, given the number is calculated, it is dependent on the number of lines that are affected , not the number of measures.

The second database that has been used is the export data maintained by the DGCI&S, Government of India. Data on India's exports to ASEAN and Sri Lanka have been obtained from the DGCI&S which is available on the website of the Directorate General of Foreign Trade, India.

The coverage index has been computed by using the two series- NTM incidence from the TRAINS database and India's exports from the DGCI&S.

3.2 Extent of NTBs faced by Indian Exporters

To assess the extent of NTBs faced by Indian exporters, a primary survey has been carried out in several cities in India.

The methodology includes the following components:

1) Identification of products
2) selection of sample
3) questionnaire design

The details of the above mentioned steps are given below.

3.2.1 Identification of products

The study has identified products that are likely to face non-tariff barriers. The products have been identified on the basis of (i) survey of existing literature on NTBs faced by Indian exporters while exporting to EU, USA and Japan (ii) products in which developed countries such as USA have faced NTBs when exporting to ASEAN and Sri Lanka and (iii) products in which India has potential in exporting to ASEAN and Sri Lanka. An analysis of India's export to ASEAN and Sri Lanka was done using time series trade data from 1998-99 to 2002-03 from Directorate General of Commercial Intelligence and Statistics (DGCI & S) to identify products in which India has potential. Some sample firms were interviewed in order to confirm the viability of these product sectors and specific products therein. A range was selected containing products possibilities for market expansion and supply capacities. Care was taken to narrow down to a range that could give a representative sample of products having a commonality of problems. Using these criteria products for the present study were identified. Table 1 shows the relevant products in each of the ASEAN countries and in Sri Lanka.

Table 2: **Products Identified for the Survey**

Commodity	Indonesia	Malaysia	Philippines	Singapore	Thailand	Sri Lanka
Rice	yes	-	-	-	-	yes
Wheat	yes	yes	yes	yes	-	yes
Iron/Steel	yes	yes	yes	yes	yes	yes
Soybean/Oils	yes	-	yes	yes	yes	yes
Groundnuts	yes	-	yes	-	yes	
Fabrics/Yarns/Woven	yes	yes	yes	yes	yes	yes
Organic Chemicals	yes	-	yes	yes	yes	-
Chemicals	yes	-	yes	-	yes	-
Leather	yes	yes	-	-	yes	-
Aluminum	yes	yes	-	yes	yes	-
Electronics	yes	-	yes	yes		-
Insecticides	-	-	yes	yes	yes	yes
Sugar	yes	yes	-	yes		yes
Pharmaceuticals	-	yes	yes	yes	yes	yes
Marine	-	yes	-	yes	yes	-
Nuts/cashew	-	yes	-	yes		-
Auto Components	-	yes	yes	-	yes	yes
Meat	-	yes	yes	-	-	-
Vegetables	-	yes	-	-	-	yes
Cosmetics	-	yes	-	-	-	-
Tea	-	-	-	-	-	yes

3.2.2 *Sample Selection*

The foremost step was to select firms that are exporting to the ASEAN countries and Sri Lanka. The relevant industry bodies such as Confederation of Indian Industry (CII), Federation of Indian Exporters' Organisation (FIEO), Federation of Indian Chambers of Commerce and Industry (FICCI) were identified as a starting point for the study. However, these industry bodies did not have firms classified by country. At the next stage, the relevant export promotion bodies were identified on the basis of product identified. These included –

Agricultural and Processed Food Products Export Development Authority APEDA (processed food), Marine Products Export Development Authority MPEDA (marine products), Automotive Components Manufacturers Association ACMA (auto components,), Electronic Components Industry Association ELCINA (electronic items), State Trading Corporation STC, Mineral and Metal Trading Corporation MMTC (minerals), Steel Authority of India Limited SAIL (steel), Indian Steel Alliance (ISA), Council for Leather Exports CLE (leather), Basic Chemicals Pharmaceuticals and Cosmetics Export Promotion Council CHEMEXIL, Solvent Extractors' Association of India, (vegetable oil). While some of the Councils such as APEDA, CLE, CHEMEXIL, MPEDA and ACMA were able to provide lists of exporters exporting to ASEAN and Sri Lanka, we were unable to get lists from the other Councils. To complete the listing of exporting firms, individual firms were contacted, so that those exporting to ASEAN and Sri Lanka were retained while the firms not doing so were eliminated. The final lists so prepared were then used for selection of firms in different cities. The cities covered are Delhi, Mumbai, Chennai , Bangalore, Hyderabad and Kolkata and Cochin. The number of firms to be covered in each of these cities was determined on the basis of the concentration of firms located in each of these cities.

The primary survey included 250 firms. The sample was not a random one. The criteria for selection of firms were based on the following

Firm size: The assumption is that size and turnover of a company will determine the compliance with a particular standard. Larger firms, presumably with greater resources, would be in a better position to comply with standards.

Foreign affiliation of firms: The hypothesis here is that a firm with foreign affiliation will have easy access to information regarding international standards and access to technology and resources to comply with these standards. By the same logic we will be able to identify barriers that firms not having any foreign affiliation face in meeting standards.

3.2.3 Questionnaire Design

Discussions with Councils such as MPEDA, APEDA, CLE, ISA, MMTC were carried out using an unstructured questionnaire. The broad issues covered in the questionnaire included problems in certification, inspection of plants and meeting product and process standards. Information was also elicited on standards set on factory design, labour code etc. Using the preliminary survey as a basis a detailed structured questionnaire was prepared keeping in mind the barriers outlined for the study. For instance for TBT and SPS measures the questionnaire was designed to seek information on whether the costs incurred by exporters in meeting standards are prohibitive. The questionnaire also investigated into problems related to border inspection, customs valuation and customs clearance. Information was also sought on whether standards set by importing countries (ASEAN and Sri Lanka) are exclusive to India and not applied to other exporting country. Also, the questionnaire was designed to elicit information from exporters on whether our domestic rules and infrastructure are adequate to be able to meet standards set by importing countries.

While care was taken to make the questionnaire as simple as possible, the survey technique applied was one where a closed ended questionnaire provided information on carefully defined parameters. At the same time in cases where there was evidence of the presence of non-tariff barriers, in-depth probing was done to understand the nature of the barrier. The two-pronged questionnaire approach which combined both a closed ended questionnaire and an open ended one to overcome the bias in the closed ended questionnaire. Our preliminary survey revealed that there was a tendency amongst exporters to overstate the extent of barriers even when there were no actual barriers. The detailed case studies have been used for drawing up policy recommendations.

4. Incidence Of NTMs: Secondary Data Approach

As mentioned in the section on methodology, the TRAINS database developed by UNCTAD and the DGCI&S database maintained by the Government of India have been used to analyse the extent of NTMs imposed by ASEAN and Sri Lanka. To enable comparisons of NTM frequency index and coverage index over time, computations have been done for two time periods namely 1997-98 and 2002-03. The analyses focuses on the pattern of frequency index for NTMs and Coverage Index for NTMs and it has changed during 1997-98 to 2002-03?

We have seen earlier (Table 1) that India's exports to ASEAN have increased from US $ 2410 in 1997-98 to US $ 4517.6 in 2002-03 while exports to Sri Lanka increased from US$ 489.2 to US$ 921 during the same period. Now, NTMs imposed by the importing countries only on those items that India exports are of relevance for analysis. Items that are not being exported, have been excluded. However, we need to keep in mind the fact that items are not being exported either because there is no demand or that the NTM is so severe that exporters cannot export. The number of items exported to each of the ASEAN countries and to Sri Lanka has increased during 1997-98 to 2002-3. (See Table 3 and Table 4). The number of items at the six digit level is important as it gives us the tariff lines on which importing countries can impose NTMs. Table 3 and Table 4 give the distribution of items in different ranges of the frequency index. Some interesting observations can be made:

(i) In both the years, a large proportion of items came in the category of zero NTMs. However, in 2002-03 the proportion of items under zero NTMs was lower in 2002-03 than in 1997-98.

(ii) In 1997-98 none of the items (or tariff lines) being exported to Indonesia, Singapore, Philippines, Thailand and Sri Lanka were subjected to any kind of NTMs. However, a small proportion of items exported to Malaysia and Vietnam, were subjected to NTMs (4 % and 7% of total items respectively). In 2002-03, 14% of items exported to Singapore, 11% of total items exported to Indonesia, 3% of items exported to Philippines, 12% of items exported to Malaysia, 26% of items exported to Thailand, 9% of items exported to Vietnam and 0.09% of exported items to Sri Lanka were subjected to NTMs. In other words, in 2002-03 India

Table 3: Frequency of NTMs faced by India's Exports in ASEAN and Sri Lanka in 1997-1998

	Number of Items (frequency) subjected to NTMs						
Range of FI* (%)	**Singapore**	**Indonesia**	**Philippines**	**Malaysia**	**Thailand**	**Vietnam**	**SL**
=0	1540	1160	675	1145	1266	389	1887
1 to <=25	0	0	0	3	0	0	0
26 to <=50	0	0	0	14	0	20	0
51 to <=75	0	0	0	3	0	0	0
76 to <100	0	0	0	8	0	0	0
=100	0	0	0	21	0	9	0
Proportion of items s.t. NTM (%)	0	0	0	4.1	0.0	6.9	0
No. of Items Exported	1540	1160	675	1194	1266	418	1887

Source: DGCI&S and UNCTAD TRAINS database.
* FI stands for frequency index

Table 4: Frequency of NTMs faced by India's Exports in ASEAN and Sri Lanka in 2002-2003

	Number of Items (frequency) subjected to NTMs						
Range of FI* (%)	**Singapore**	**Indonesia**	**Philippines**	**Malaysia**	**Thailand**	**Vietnam**	**SL**
= 0	1537	1018	735	1451	929	607	2128
1 to <= 25	0	4	0	13	0	0	0
26 to <= 50	26	5	13	33	103	39	1
51 to <= 75	0	4	1	9	1	1	0
76 to <100	0	1	0	5	0	0	0
=100	225	110	7	132	220	18	1
Proportion of items s.t. NTM	14.0	10.9	2.8	11.7	25.9	8.7	0.09
Total No. of Items Exported	1788	1142	756	1643	1253	665	2130

Source: DGCI&S and UNCTAD TRAINS database
* FI stands for frequency index

Next, we have computed the coverage index of NTMs. The methodology adopted has been mentioned earlier. Table 5 presents the Coverage Index for 1997-98 and 2002-03. It can be seen that In 1997-98 India's exports to Indonesia, Singapore, Philippines, Thailand and Sri Lanka were not subjected to any kind of NTMs. India's exports to Malaysia and Vietnam, were subjected to NTMs (6.6% and 3% of total exports respectively). In 2002-03, 9% of India's exports to Singapore, 29% of exports to Indonesia, 37% of exports to Philippines, 32% of exports to Malaysia, 25% of exports to Thailand, 4% of exports to Vietnam and 0.5% of exports to Sri Lanka were subjected to NTMs.

Table 5: Coverage Index in 1997-1998 and 2002-2003

	Total value of exports subject to NTMs in 1997-98 as a proportion of total value of exports in 1997-98	**Total value of exports subject to NTMs in 2002-038 as a proportion of total value of exports in 2002-03**
Singapore	0	8.7
Indonesia	0	28.8
Philippines	0	36.5
Malaysia	6.6	31.9
Thailand	0	24.5
Vietnam	3*	3.9
Sri Lanka	0	0.5

Source: DGFT (2002-2003), Export-Import Data Bank
TRAINS (UNCTAD), 2000;

Note: * For Vietnam NTM frequency was available for 1999 hence export data for 1999-2000 was used. For all other countries NTM frequency for most recent year from TRAINS (UNCTAD), 2000 has been used been used as weights to arrive at the Coverage Index.

5. Characteristics Of The Sample Of Exporting Firms

To understand the extent of non-tariff barriers faced by Indian exporters a survey was conducted in several cities in India. A total of 250 firms were identified that were found to be importing to one or more ASEAN countries and to Sri Lanka (along with other countries. These firms were located in Chennai, Hyderabad, Bangalore, Calcutta, Delhi, Cochin and Mumbai. The survey covered exporters exporting to ASEAN and Sri Lanka. The details of the methodology and sampling frame have been outlined in the section on methodology. To analyse the results of the survey, we have first given details of the characteristics of the sample. The results of the survey are presented in Section VI and Section VII. The characteristics of the sample are described in terms of markets, product profile of exporting firms,

5.1 Markets

Firms in the sample were selected for the survey only if they were exporting to ASEAN and/or Sri Lanka. Most of the firms in the sample were found to be exporting to more than one country in the ASEAN region. There was also an overlap between firms that were exporting to both ASEAN and Sri Lanka. Also, 153 firms in the sample were found to be exporting to other countries in addition to exporting to ASEAN and Sri Lanka.

Table 6: Country-wise Distribution of Firms

Exporting countries	Number of Firms
Indonesia	57
Malaysia	95
Philippines	37
Singapore	84
Thailand	54
Vietnam	28
Sri Lanka	65
Others	153

Note: Firms exporting to more than one country were allowed multiple responses.

5.2 Product Profile of Exporting Firms

The sample selection process allowed a pre-selection of items (see Table). However, in the course of the survey we were able to broaden the scope of the products covered. Some items from the initial list had to be dropped as we were not able to identify firms that were exporting these products to ASEAN/Sri Lanka. The items that were included in the survey comprised of yarn/fabric/garments/textiles/silk, cosmetics(creams, shampoo, henna products), food/agro-products (meat, spices, tea), chemicals, leather, jute (bags), rice/wheat/pulses, electronics/ software, flowers/ fruits, steel/iron/aluminum, sanitaryware (granite/ glass/bricks), pharmaceuticals, jewelry, engineering goods (machinery/ tools/ valves), stationary items, hair, soybean/ oil, insecticide/ pesticide, tyres/ rubber/ plastics, laminated leaf spring, and some miscellaneous item.

Table 7: Product Profile of Exporting Firms

	Number of Firms	
Product	**ASEAN**	**Sri Lanka**
Yarn/ fabric/ garments/textiles/silk	47	30
Cosmetics (creams, shampoo, henna pdts)	17	10
Food/Agro Pdts (Meat, Spices, Tea, marine products)	32	8
Chemicals	26	16
Leather	18	1
Jute (Bags)	7	1
Rice/Wheat/Pulses	3	1
Electronics/ Software	11	4
Flowers/ Fruits	3	-
Steel/Iron/Aluminium	9	4
Sanitaryware (Granite/ Glass/Bricks)	9	4
Pharmaceuticals	15	5
Jewellery	3	-
Engg. Goods (Machinery/ Tools/ Valves)	17	10
Stationary Items	5	5
Hair	2	1
Soyabean/ Oil	4	3
Insecticide/ Pesticide	3	1
Tyres/ Rubber/ Plastics	5	4
Laminated Leaf spring	1	1
Others	13	7

5.3 Size of Firms

Most of the firms exporting to ASEAN and Sri Lanka were small firms. 131 firms out of a total of 225 exporting to ASEAN had exports of less than Rs. 20 million. Similarly of a total of 65 firms exporting to Sri Lanka 42 firms had exports of less than Rs. 20 million. This size distribution of firms was deliberate, as the purpose of the study was to highlight barriers faced by relatively small firms. The sample did include some large firms as well, such firms were included to see if large firms face relatively fewer barriers than small firms. The sample had a large number of manufacturing exporters - 219 out of 250 exporters were manufacturer exporters.

Table 8: Size Distribution of Firms

	Number of Firms in the Range of			
	<Rs. 20 mn	Rs 20 m to Rs 100 mn	> Rs. 100 mn	Total
ASEAN	159	35	31	225
Sri Lanka	49	9	7	65

5.4 Foreign Affiliation of Firms

The sample also covered some firms with foreign affiliation. 23 firms in the sample had some type of foreign affiliation- 14 foreign affiliated firms had joint ventures while five of these firms were either fully foreign owned or had a wholly owned subsidiary abroad. Eleven firms had a technology tie up with a foreign firm. Other types of foreign affiliation included trademarks, direct supply of plant, direct supply of material, training and licensing. The countries with whom firms had foreign affiliation were USA, Japan, UK, Nigeria, Mauritius, Netherlands, Malaysia, Singapore, China, Germany, Vienna and Israel. Of the 23 firms with foreign affiliation, 8 were affiliations with the USA.

Table 9: Type of Foreign Affiliation of Exporting Firms

Type of Affiliation	Number of Firms
Fully Foreign Owned/wholly owned subsidiary abroad	5
Joint Venture	14
Trademarks	1
Direct Supply of Plant	8
Direct Supply Material	3
Technology	11
Training	4
License	1

Note: Firms were allowed multiple responses.

6. Extent of NTBs Faced by Indian Exporters: Survey Findings

This section presents the survey findings on perception of exporters on extent of NTBs faced by them, the measures they adopt to meet standards and regulations and the expenses they incur to meet such standards and regulations using a closed ended questionnaire.

6.1 Extent of Non-tariff Barriers

Firms were asked whether they faced any type of barrier at all. Seventy-nine firms of a total of 250 opined that they faced some kind of barrier. The survey also revealed that only 32.6% of the firms with exports less than Rs. 20 million faced some kind of barrier. Amongst the larger firms with exports greater than Rs. 20 million, only 15.3% of the firms faced some kind of barrier. (see Table 10). The survey also showed that a smaller proportion of firms with foreign affiliation faced barriers than those that did not have foreign affiliation. (see Table 11).

Firms were asked about their perceptions on the extent of barriers ranging from 'not at all restrictive' to 'extremely restrictive' faced by them. (see Table 12). Some interesting observations can be made from the survey results. Except for Malaysia and Philippines where the level of restrictiveness was found to be moderately restrictive, in all other markets majority of the exporters felt that measures were not at all restrictive. Exporters in the sample did not have much information about the level of restrictiveness of trade measures imposed by the Vietnamese market.

The survey also tried to elicit perceptions on what type of barriers were faced by exporters. For this purpose the information on non-tariff measures was divided into two categories (i) Category I comprised of ban on imports, product standards, process standards packaging, labeling, border inspection and environmental regulation. (ii) Category II was termed 'other barriers' which included measures such as import quotas, licensing, exchange and other financial controls, prohibitions, discriminatory bilateral agreements, variable levies, advance deposit requirements, antidumping duties, subsidies and other aids, government procurement policies, government industrial policy and regional development measures, competition policies, immigration policies.

It is important to mention that the results need to be interpreted with caution as what is recorded in the survey is the perceptions of exporters. It may well be that a particular measure may simply be a 'perceived barrier' and may not actually be a barrier. Another point of caution is the fact that several exporters gave their perceptions on extent of barriers even if they were not exporting to a particularly country. Some of them also mentioned that they had not entered certain markets because of the perceived barriers.

Regarding the first category of barriers (See Table 13) in countries such as Indonesia, Malaysia, Singapore and Sri Lanka majority of the firms faced barriers related to product standards while majority of the firms exporting to Thailand and Vietnam found packaging requirements to be an imposing barrier. In the second category of barriers majority of the firms felt there were barriers related to banks and to competition. (see Table 14).

The survey was also designed to elicit information on whether firms exporting to ASEAN and Sri Lanka face discriminatory treatment vis-à-vis other competitors in these markets. Majority of the firms exporting to ASEAN and Sri Lanka disagreed that there was any kind of discrimination against them vis-à-vis other competitors. (See Table 15).

Table 10: Firms Facing Non-tariff Barriers by Size

	Exports< Rs. 20 mn.		**Exports> Rs. 20 mn.**	
	Number of firms	**Percent of firms**	**Number of firms**	**Percent of firms**
Facing some type of Barrier	58	32.6%	11	15.3%
Do not face any Barrier	120	67.4%	61	84.7 %
Total	178	100.0 %	72	100.0 %

Table 11: Firms Facing Non-tariff barriers by Foreign Affiliation

	With Foreign Affiliation		Without Foreign Affiliation	
	Number of firms	Percent of firms	Number of firms	Percent of firms
Facing some type of Barrier	3	13.0 %	58	25.6 %
Do not face any Barrier	20	87.0%	169	74.4 %
Total	23	100.0	227	100.0

Table 12: Number of Firms by Level of Trade Restrictiveness of Non-tariff Measures

Country	Not at All restrictive	Moderately restrictive	Extremely restrictive	Do not know	Total
Indonesia	42	23	5	17	87
Malaysia	26	47	8	11	92
Philipines	19	24	1	23	67
Singapore	61	41	5	13	120
Thailand	33	27	4	17	81
Vietnam	21	17	4	27	69
Sri Lanka	49	48	3	9	109
Other Countries	52	60	20	4	136

Table 13: Perceived Barriers by Exporters (Number of Firms)

	Total ban	Product Std.	Process Std.	Packaging	Labeling	Border Inspection	Env. Reg.
Indonesia	2	8	3	5	1	1	1
Malaysia	1	43	21	22	11	8	4
Philippines	0	5	6	6	6	2	1
Singapore	2	38	6	29	2	11	9
Thailand	1	13	9	15	14	6	4
Vietnam	0	4	4	7	4	2	0
Sri Lanka	1	16	8	15	8	5	3
Others	7	54	32	46	40	17	19

Table 14: Number of Firms Facing Other Type of Barriers

Type of Barriers	Number of firms
Import quota	6
Licensing	4
Exchange and other financial controls	20
Prohibitions	4
Discriminatory bilateral agreement	2
Variable levies	7
Advance deposit requirement	2
Antidumping duties	7
Subsidies and other aids	7
Govt procurement policies	3
Govt industrial policy and regional dev measures	6
Competition	15
Immigration	0

Table 15: Proportion of Firms Facing Discriminatory Treatment vis-à-vis other Markets in Importing Country

Discrimination				
Country	Number of Firms Agree	Number of Firms Disagree	Number of Firms Do not Know	Total
Indonesia	8	42	12	62
Malaysia	12	73	13	98
Philippines	5	22	17	44
Singapore	8	67	18	93
Thailand	3	49	8	60
Vietnam	2	21	9	32
Sri Lanka	6	49	12	67
Others	18	92	14	124

6.2 Measures to Comply with Standards and Regulations

With increasing demands on standards and regulations by importing countries, exporters have to take certain measures that would enable them to meet such standards and regulations. Firstly it is important for firms to have access to information on changing standards and regulations. The survey showed that majority of the buyers depended on the foreign buyer for information on changing standards and regulations. Interestingly, the government played a more active role than industry association in disseminating relevant information to exporters. (see Table 16).

Firms have to adhere to various safety standards so that they are able to meet standards set by importing countries. Majority of the firms in the sample were following ISO 9000 standard. (see Table 17). Only a few of them were HACCP compliant. Most of the firms had in-house testing facilities. (see Table 18).

Table 16: Source of Information on Changing Standards and Regulations in Importing Country

Source of information	Number of Firms
Industry associations	31
Government agency	48
Foreign affiliates	3
Foreign Buyer	191

Table 17: Number of Firms Adhering to Safety Standards

Type of Safety Standard	Number of firms
Codex	0
HACCP	20
ISO9000	56
Others	15

Table 18: Number of Firms Undergoing Testing Procedures

Testing	Number of firms
In-house	114
Outside	29
Both	24

6.3 Expenses Incurred to Meet Standards and Regulations

Meeting standards and regulations set by importing countries could lead to exorbitant costs for exporters, sometimes making it unviable for them to undertake exports. Firms were asked to state the expenses that they incur to comply with standards and regulations. Majority of the firms exporting to each of the ASEAN countries and to Sri Lanka stated that they incurred expenses between zero and 5% of total sales revenue to meet standards and regulations indicating that expenses incurred by exporters are reasonable. (See Table 19).

A country can incur significant 'costs of compliance' whenever changes are made in international standards or those of their trading partners. Costs of compliance with standards can be in the form of expenses on sanitation, manufacturing facilities, testing facilities or increased office expenses. The survey revealed that majority of the firms had to incur increased expenditure in the last five years on manufacturing facilities. (see Table 20)

Table 19: Number of Firms incurring Expenses (as percent of sales revenue) to Comply with Standards and Regulations

Country	0-5%	5-10%	10-15%	15-25%	25-40%	40-50%	Total
ASEAN	123	42	31	8	17	4	225
Sri Lanka	57	5	2	0	0	1	65
Others	99	22	9	7	7	9	153

Table 20: Proportion of firms facing a Change in Expenditure on Standard and Regulation Compliance

	Change in expenditure in last 5 Years (Number of firms)			
Equipment	Increase	Decrease	Unchanged	Total
Sanitation	17	0	6	23
Manufacturing	22	2	6	30
Testing	19	2	10	31
Office	11	2	6	19

7. Extent of NTBs Faced By Indian Exporters: Case Study Approach

The case studies have been used to understand the barriers under two broad categories - the first comprised of product related barriers, process related barriers, barriers with respect to certifications, registration and testing procedures, barriers related to packaging , markup and labelling and environmental barriers. The second category was termed 'other barriers' which included measures such as import quotas, licensing, exchange and other financial controls, prohibitions, discriminatory bilateral agreements, variable levies, advance deposit requirements, antidumping duties, subsidies and other aids, government procurement policies, government industrial policy and regional development measures, competition policies, immigration policies. In addition some firms pointed out barriers they were facing that could not be classified according to the UNCTAD classification of NTMs, but nevertheless appeared to be trade barriers. In addition some firms pointed out constraints that they faced while exporting which are briefly mentioned.

7.1 Category I Barriers

7.1.1 Barriers Related to Product Standards

Barriers related to product standards are the main concern of India's export today. The potential to use product standards as hidden trade barriers is immense. If even a small part of this potential is allowed to be exploited, the implementation of the free trade regime could become dominated by protectionists and those who would welcome trade retaliation and counter retaliation. However, transparency and harmonisation of standards could become trade facilitators in addition to providing technical quality and safety parameters.

[Rice]: In India there about 600 varieties of rice are grown. These include both basmati and non- basmati rice. During the survey it was seen that there are wide variations in the specifications by importers on the percentage of broken rice, both in case of basmati and non basmati rice. For example, Indonesia imports 25% broken non – basmati rice unlike other ASEAN countries like Malaysia and Singapore that import 20% broken (non-basmati) rice. Sri Lanka, accepts up to 100% broken rice (non-basmati).

This indicates that there is a multiplicity of product standards even among ASEAN countries and it becomes very difficult for exporters to meet individual country demands. Thus harmonisation of standards is very important to begin with.

[Peanuts]: Aflatoxin contamination of groundnut is a widespread problem in most groundnut-producing countries. It is a type of a fungus which is a natural syndrome for any groundnut farmed under rain fed conditions. The Aflatoxin contamination does not affect crop productivity but it makes the produce unfit for consumption as toxins are injurious to health. Most countries specify the Aflatoxin limit for the exports of groundnut. At present the permissible limit of Aflatoxin for groundnuts in the European union is 2 ppb whereas in case of the ASEAN countries like Malaysia and Indonesia the limits stands at 5ppb. Quite interestingly the survey revealed that Singapore has put a stipulation of 0% Aflatoxin (below the traceable limits) for any import of groundnut in the country. Now given the present agricultural scenario[1] of the country, exporters from India consider the Aflotixin levels specified by Singapore as a non tariff barrier.

The above is a clear case of setting up a standard without any scientific justification and risk assessment which is advocated in the SPS Agreement. Countries are using the liberty of adopting higher standards in SPS Agreement as non tariff barriers to protect their interests. Exporting countries should take this up as bilaterally for future trade negotiations.

[Yarn]: Importers insist on special qualities of yarn which pose a constraint to Indian exporters. Importers from Thailand are demanding fire retardant yarn. However, in India it is very difficult to guarantee **fire retardant yarn** as most of the Indian mills do not manufacture such yarn. This type of yarn is more expensive than the normal yarn but the importer is willing to pay the required amount. Indian exporters lack thecapacity and technology to meet such specifications of yarn. There is only one mill in India (In Kolkata) which has the required technology and infrastructure to meet the buyers specifications. The mill does not have the capacity to suffice international demand of fire retardant yarn, hence we loose out on clients.

This does not indicate the prevalence of an NTB but is a clear case of lack of technology and capacity. The Government of India should help industry to upgrade the technology and capacity building.

[Capsules]: In the pharmaceutical health industry, gelatin is used to make the shells of hard and soft capsules for medicines, dietary/health supplements, syrups, etc. It is highly

[1] Other exporting countries are more capital intensive in their farming process and the Aflotoxin level checks for them is easier in comparison to Indian farmers. Moreover, the weather conditions in India are adverse for required level of Aflatoxin compared to other exporting countries.

digestible and serves as a natural protective coating for medication. Gelatin forms thermally reversible gels with water, and the gel melting temperature (<35°C) is below body temperature, which gives gelatin products unique organoleptic properties and flavour release. This type of gelatin is derived from animal hide and bone, hence there are problems with regard to kosher and Halal status.

It was found in the course of the survey that for exports of capsules to ASEAN countries such as Indonesia, Malaysia and Thailand the exporter needs to procure the Halal certificate from the Government of India (Ministry of health) mentioning that the gelatin is derived from Halal animal. While the time and cost involved in obtaining such certification is not much, it is an irritant for exporters, as it is required only for three ASEAN countries. One way to overcome this irritant is to accept the certification for Halal only once and not repeatedly for every consignment.

7.1.2 Barriers Related to Process Standards

Many countries link up quality of the product with production processes also. Thus, what is under surveillance, is not just the end - product but also the process of production of end - product. In India, where most primary production takes place at very unorganised, small - scale units, such primary-level quality assurances are hard to give. PPMs is a major issue between Indian exporters and importing countries. The exporting country contention is that the importing countries should be bothered about quality of the final product not the manufacturing process. It is because every country has different natural resources and method of production. The importing countries method of production cannot be applied in importing countries. Thus Indian exporters face lot of barriers on PPM account.

[Meat] For example, Philippines and Malaysia, in addition to specifications on the meat portion have brought out another regulation, which states that, any exporter interested in exporting to these countries must have an integrated slaughterhouse of his own which should be HACCP certified. An integrated slaughterhouse would include slaughtering, cutting into pieces and packaging facilities failing which they are not eligible to export. With this requirement the Indian exporter loses out on two counts. Firstly, to set up an integrated slaughter house (with HACCP certification) in India an exporter would have to incur a cost around Rs. 20 million. Secondly, even if he is able to set up an integrated plant, getting a license to set up such a plant is extremely difficult. Not only are there multiple agencies involved but since slaughtering has a religious connotation, getting a license becomes doubly difficult.

Yet another barrier has been identified through a case study. Import of Indian meat is banned in Singapore and Indonesia. Indonesia has banned the Indian meat on the pretext of the foot and mouth disease prevalent in India. Even after numerous certificates and declaration from the Ministry of Health, Indian meat is banned in these countries on a false allegation of foot and mouth disease. Indian exporters export frozen de-boned and de-glanded meat to countries in the Middle East and South East Asia (Philippines and Malaysia), as per the guidelines stipulated by the OIE (Office International des Epizooties[2]).

In spite of obtaining all the relevant certifications, Indian exporters are often held on various grounds such as ill-maintained and unhygienic slaughtered houses. The grounds they hold are ill defined and change every time with orders. Hence the volatility of the norms actually causes Indian exporters to lose out on orders many a times.

[Yarn]: In case of the cotton yarn, the products are classified on the basis of counts. Typically the higher count is of superior quality. Coarse yarn (less than 17s) is used for low cost fabric, industrial garments etc. Medium quality yarn (20-40s) is used for shirting, knitting and other textiles. Super fine yarn (40s and above) is used for premium shirting and other sophisticated fabrics. As 40s is premium quality yarn, it is widely exported all across the globe.

In this scenario, the importers from Singapore demand 50s yarn (finer quality yarn) which is mush more costly making it uneconomical for Indian exporters. The only difference between the 40s and 50s is with respect to the thickness of the yarn. The more the number, the finer is the yarn.

[2] The OIE is an intergovernmental organization created by the International Agreement of 25 January 1924.

Apart from the thickness of yarn some countries also specify the number of twists per meter. The number of twists indicates the strength of yarn. 70 twists per meter is the standard size which is used for production. But countries like Indonesia, Philippines ask for 90 twists per meter and many Gulf countries demand for 110 twists per meter. The number of twists the more is the strength of yarn. Very often it becomes difficult to cater to the varied demands of the buyers the production is mostly of standard yarn which is 70 twists per meter.

This is clearly not a case of non-tariff barrier, but it reflects the capacity and technological constraint faced by Indian exporters to meet demand from foreign markets. Steps need to be taken by both industry and Government to address the issue.

7.1.3 Barriers Related to Certifications, Registrations and Testing Procedures:

Testing Certification and Registration procedures are part of international trade. They act as a safety measures in trade. However over bearing use of these can act like NTBs. Some of our surveyed companies encountered these kind of barriers.

Barriers Related to Certification

[Jute] exporters exporting to ASEAN countries faced minor irritants. IJIRA (Indian Jute Industries Research Association)[3] certificate is one certification, which is recognised and accepted by many of the importers. The exporters exporting to these countries need to undertake the tests and have to supply the certificate during the trade process. Due to this the exporters lose out time and money. Though the amount is not exorbitant but it is an irritant.

[3] Indian Jute Industries Research Association [IJIRA] was established in 1937, the first co-operative R & D organization rendering services to the Indian Jute Industry. IJIRA offers quality assurance services for various chemical inputs and chemically processed textiles, their certification for export quality jute product is accredited globally, IJIRA has sophisticated state of art labs to test dyes, chemicals, and auxiliaries for jute. Tests for checking the properties of jute is done by this organization. They do various tests like Grist (Count), Strength, Twist , Imperfections, Knots / 100 yards. Imperfection tests are done to check the thickness and thinness of yarn.

[Transformers] being an electrical good requires various tests and certifications to support the quality of the product. Most importing countries demand the ISO certification, which is an internationally renowned quality certificate. In the course of the survey it was found that very often importers ask for different types of certificates. This poses as a major barrier as the exporter exporting his products needs to get the quality certificate from different agencies for the same products. This not only complicates the system but also demands a lot of time. For instance, for exporting transformers to Sri Lanka the exporters require the KEMA[4] certificate (stating that the product is of ISO standards) even though he has his product certified by several reputed third-party inspection agencies like Crown Agents, ISO 9001:2000, Lloyds, Bureau Veritas, S.G.S. Robert, W. Hunt Company, BSI Inspectorate, Griffith UK, OMIC Japan, Tubescope Vecto GmbH Germany etc. Yet, while exporting to Sri Lanka importers demand the KEMA certificate. The exporter cannot export to Sri Lanka without procuring this certificate. Even though obtaining this certificate is not very complex or expensive, it demands lot of time and effort, which is an irritant to exporters.

Barriers Related to Registration

[**Hot and cold rolled coil]** imported into Thailand requires a registration with the customs of Thailand. This registration is required each time a consignment is sent to Thailand. In order to register with the customs the exporter has to send various documents like plant information, production flowchart, quality system, and other firm details. The cost for this registration is not high but the time involved in getting the registration done could take anything between 2 weeks to 2 months.

[Pesticides]: Similar to the hard and the cold coils, the countries exporting pesticides to Vietnam have to get their products registered with the Ministry of

[4] **KEMA:** Established in 1927, KEMA is a commercial enterprise, specializing in high-grade technical consultancy, inspection, testing and certification. KEMA has a high-end reputation as a test house for the famous Dutch KEMA-KEUR and tens of other quality marks. KEMA offers you the option of combining the certification of management systems. It offers a combination of the ISO 9001:2000 Quality System with the Environmental Management Certification.

Agriculture.[5] In addition, importers often ask for confidential information like manufacturing process, machinery and other processes involved in manufacturing the product. The exporters are unwilling to export in cases where such business information is required by the importing country.

[Cosmetics] During the course of the survey it was found that Sri Lanka specifies registration of cosmetics in their country even if the Indian exporter has registration in India. Thus each time the exporter has to export to Sri Lanka he has to register the product with the State Pharmaceutical Corporation of Sri Lanka, Ministry of Health of Sri Lanka. The exporter has to send the analytical report of the tests carried out in India .along with the samples to Sri Lankan importers. These samples again undergo various tests in Sri Lanka after which the certificate of registration is rewarded. This registration is specific to Sri Lanka and is not a mandatory procedure for exports to other countries. Hence, this aggravates the agony of the exporter especially while exporting to Sri Lanka

[Bulk Drugs]: Similar to the case of cosmetics, the imports of bulk drugs by Vietnam also requires registration with the Government of Vietnam. The registration is done by the importers who ask for information on manufacturing process, the raw material mixture and other important and confidential information, which the Indian exporter is reluctant to supply.

[Mango pulp]: In case of mango pulp most importing countries have standard specifications but in order to export to Sri Lanka, Indian exporters are required to obtain a Health certificate from the Ministry of Health of Sri Lanka. However for the other countries they also accept the certificate from the Government of India (Ministry of Health). In addition, the exporter also needs to get a thread bare analysis done. This test is conducted in order to specify the exact contents of the product. This test is conducted over a period of 2 days and costs about Rs.5000- Rs.7000 per consignment. According to the exporters it is a test, which they do, and they integrate this in the cost of the products.

[5] The Ministry of Agriculture and Rural Development (MARD) in Vietnam is responsible for approving pesticides to be registered in Vietnam on the basis of recommendations made by the Advisory Committee for Pesticide.

[Mango pulp/ Fruit pulp]: All edible products to be exported to Malaysia must be supported by the Halal certificate.[6] Although the cost for obtaining this certificate is not high it is a requirement imposed only by Malaysia and no other country. The exporter needs to certify that the product does not contain any animal products or derivatives. The test is required since gelatine is often used as a thickener for mango pulp. Even though getting the certificate is not difficult, it is definitely an irritant for the importer.

[Textile products]: Textile products require quality certification for exports. Most importing countries accept the quality certification from ISO and Bureau Veritas. However, Sri Lanka asks for certification from its own agencies like Sri Lanka Standards Institution (SLSI).[7] This is a problem for Indian exporters as they have to get this certificate and incur the cost and the time even though they have an ISO certificate from a recognised agency in India. Hence, exporters exporting to Sri Lanka have to get the additional certificate, without which export is not possible.

Barriers Related to Testing:

[Pharmaceuticals]: For pharmaceuticals there are various laboratories in India that conduct tests. The National Accreditation Board For Testing and Calibration is a recognised laboratory whose certificate is accepted by over 57 countries. However, for

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6 A Halal certificate issued by the Board is an assurance that a particular product has been thoroughly investigated and found to conform to Islamic Dietary Laws and therefore is suitable for consumption by Muslims. Products that are Halal certified are monitored according to the Islamic Dietary Laws for the entire period of certification. Products certified as by the Board can utilize the Products submitted for Halal certification are investigated and vetted by the authentication department. As part of the investigation process all the ingredients and all aspects of the manufacturing / processing of the product are looked at carefully. The slaughter-house (Abattoir) where the animals are slaughtered ritually according to the Islamic Law (Zibh) should obtain a Halal Certificate. This can be arranged by allowing an Inspector (an Imam or a responsible person from the local Muslim community) to witness, approve and tag each and every animal slaughtered for Muslim consumers at the premises. All the preparation, processing and manufacturing equipment (e.g. cutting equipment, mixing equipment, containers, utensils and other related equipment) must be free from non-Halal products.

7 **:** Sri Lanka Standards Institution (SLSI) is the National Standards Body of Sri Lanka, established under the Bureau of Ceylon. The Institution functions under the Ministry of Small and Medium Enterprise Development and is governed by a Council.

exports to Thailand the exporters need to conduct a bio-equivalent study.[8] This is a very time consuming process and it takes around 6-12 months to obtain the report. The entire study costs about Rs. 5 - 10 lakhs. This makes export to Thailand almost impossible and many of the Indian exporters refrain from exporting to Thailand and look for other markets.

[Pesticides and fine chemicals]: Pesticides and chemicals if consumed by humans/animals may prove fatal. In order to test the level of toxicity in a pesticide or chemical a toxicity test is conducted.[9] The test is conducted over a period of time and can sometimes take up to 2 years. Vietnam and Philippines require the exporter to submit the chemistry of the product and reports of the toxicity test. In addition, the product has to be first tested on animals to make sure that there are no harmful side effects. The toxicity test is asked for only by countries like Vietnam and Philippines and not by other countries. Exporters find the time period of two years too long and the cost involved makes business unviable in these countries.

[Sanitary ware]: In case of sanitary ware products Indian exporters have to undertake various tests. Especially in the case of Malaysia, Indian exporters have to undergo a quality test in the importing country. These tests are done to test the standardization of dimensions (variation in dimensions) and the water absorption capacity. Such tests are conducted over a period of 6 months, which unnecessarily delays exports.

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8 A bioequivalent study is an internationally and scientifically accepted method of comparing two drugs to determine whether they have the same therapeutic effect. Bioequivalence studies are conducted for oral solid drug products which are the same in active ingredient, dosage form, therapeutic indication and dosage regimen with a product already approved but differing in strength. The objective of the study is to assure the bioequivalence between products with different strengths when the same doses are administered.

9 Toxicity refers to the ability of a poison to produce adverse effects. Most toxic effects are reversible and do not cause permanent damage if prompt medical treatment is sought. Some poisons, however, cause irreversible (permanent) damage**.** All new pesticides are tested to establish the type of toxicity and the dose necessary to produce a measurable toxic reaction. Toxicity testing is extensive (involving many phases) and therefore, expensive. Humans, obviously, cannot be used as test animals so toxicity testing is done with animals**.**Toxicity is usually divided into two types, acute or chronic, based on the number of exposures to a poison and the time it takes for toxic symptoms to develop. Acute toxicity is due to short-term exposure and happens within a relatively short period of time, whereas chronic exposure is due to repeated or long-term exposure and happens over a longer period.

[Leather]: In case of leather exports, Indonesia asks for a veterinary certificate[10] from exporters. This certificate is mandatory for exports to Indonesia. Although, there is no extra cost incurred to procure this certificate, every time the exporter sends a consignment he needs to attach the certificates which is a hassle and an irritant for the exporter.

7.1.4 Packaging, Mark-up, Labelling and Language Barriers

Packaging

[Yarn]: In case of yarn there are specific packaging requirements in Thailand and Vietnam. The importers from these two countries impose a specification for the exporters to pack the yarns in cones. Moreover they specify that the weight each cone should not exceed 1.5kg. For Indian exporters it is a major impediment as they incur a much higher labour cost and waste capacity within the container due to the increased number of cones.

[Sanitary ware]: As sanitary ware is fragile, extra care is taken in packaging of these products. They are usually packed in straw to insulate them from shock and impact. But Sri Lanka does not accept products packed in straws. They demand that such products be packed in 5-ply corrugated boxes. India does not manufacture enough 5-ply corrugated boxes to meet the existing demand. The prices are too high compared to the other countries. This actually increases the costs of the packaging and affects the product pricing in the international market.

[Tyres]: In case of the tyres, buyers from Myanmar ask for a special kind of packaging. whereby tubes should be put inside the tyres and poly wrapped. Big sized tyres should be packed with thick plastic sheets while small size tyres should be packed in thin sheets. In the tyre industry it was found that some companies have standardised their packaging to world standards and face no problem at all. However, for others such requirements were a major irritant.

[10] Veterinary certificate is issued by any Government veterinary doctor after checking the leather. The doctor takes a sample from the leather and tests whether the leather contains any animal part besides sheep or goat. The veterinary certificate is asked for by buyers from Indonesia.

[Soil testing equipments]: In case of the equipment industry, packaging should be such that the product does not get damaged during transportation or storage. Soil testing equipments are usually packaged in thermocol and then in cardboard boxes (double packaging). This is an accepted international practice. Interestingly in case of Malaysia, exporters are required to pack their products in thermocol and then in wooden boxes instead of cardboard boxes. This not only leads to extra costs for the exporter but also means that the exporter has to maintain a new line of packaging. Overall it increases the packaging cost by almost 2%. Due to this, many of the Indian exporters restrict themselves from trading with Malaysia. This is a clear case of a non tariff barrier caused due to packaging specifications.

[Pharmaceutical formulations] In case of the ethical pharmaceutical formulations, Vietnam importers specify to have Alu-Alu packaging which is a double foil blister packaging, and acts primarily as a tamper proof seal. These packaging acts as a shield to duplication. Alu-Alu packaging has U.S. F.D.A. approval. This is not a major barrier in trade but a specification in packaging which requires additional planning, and costs for Indian exporters.

[Bamboo baskets] India is exporting various food products to different countries in the world. Although all countries have uniform packaging requirements, some countries demand special packaging. Malaysia and Singapore demand packaging of tamarind and onion products in bamboo baskets. They demand for this kind of packaging because it is environment friendly. As result the Indian exporter incurs 10% extra cost which makes their products economically unviable in the international market. This is a non-tariff barrier.

[Dyes]: Normally the packaging for powder dyes is done in polythene and liquid is in plastic bottles which is then put in metallic drums for export. This type of packaging is done for U.S and European countries. Indonesia requires paper and high density polyethylene drums packaging for dyes. To pack the dyes in the Indonesian format, Indian exporters incur 2-3% additional cost in packaging. This makes the product less competitive in the international market and is a non-tariff barrier.

Labelling

Halal logo: Countries such as Malaysia demand the Halal logo on products like toothpastes. This is to certify that the products do not contain pork derivatives. The animal derivatives used are as per Halal specification. To meet these requirements, exporters are compelled to do a special line of printing, which increases the cost of exporting. This is a clear case on a non tariff barrier.

Bulk drugs need to be registered in the importing country. But while exporting to Philippines and Thailand **each** product pack, individually, should have the registration number mentioned on it. The samples are sent to these countries and the agents get the products registered with the government of the importing countries. Exporters have to incur additional costs and time to get the registration number and then print them on the products. In addition exporters give bribes to get these certificates, which again increases the cost to a considerable amount.

In the survey it was also found that for marine product exports to Indonesia there were strict food labelling law that require labels written only in Bhasa Indonesian on all consumer products.

7.1.5 Environmental Barriers

In case of the non processed foods like onions and tamarind it was found that Malaysian buyers prefer packaging in bamboo baskets on the pretext that bamboo baskets are considered environmentally friendly. Exporters incur incremental cost for such specification

7.2 Category II Barriers

This section deals with case studies related to barriers such as exchange and other financial controls, import quota, licensing, prohibitions, discriminatory bilateral treatment, variable levies, advance deposit requirements, anti-dumping duties, subsidies and other aids, government procurement policies, government industrial policies and regional development measures, and competition policy.

Even though exporters indicated that they did face non-tariff barriers (Category II, See Table) , in the detailed case studies we could not find enough evidence of these type of barriers. Some of the barriers, that could be identified are listed below.

Import quota: Import trade quota is a trade barrier that sets the maximum quantity (quantitative restriction) or value of a commodity allowed to enter a country during a specified time period. It was observed during the course of the study that certain countries like Vietnam impose a quota on the imports of some products like auto components. Exporters find it difficult to plan production till they get their quotas.

Licensing*:* Licensing is a means to control imports, depending on compliance with specific criteria, used by various countries to safeguard their domestic industry. These schemes can be applied for a variety of purposes, according to both economic and non-economic regulatory goals.

Although products like pharmaceuticals and pesticides are subjected to mandatory licensing in all countries, Myanmar demands licensing of tyres as well. In order to export tyres to Myanmar the exporter needs to get registered with the Directorate of Trade. This registration allows the exporters to export their products freely to Myanmar. Similarly, the exports of isolators and valves are subject to licensing in Vietnam. This is undertaken as importers are allowed to import materials, equipment and machinery for the purpose of establishing their own production lines and producing goods in accordance with their investment licenses. The importers are not allowed to import goods for trading purposes.

Prohibition*:* We could also find some cases where prohibition is a major non tariff measures taken by the domestic government to safeguard imports. Prohibition can be selective with respect to commodities and countries of origin/ destination, it includes embargoes and may carry legal sanctions. Prohibition is sometimes in the form of intrinsic specification of the products. We have discussed in detail about this in the next section.

In the course of the study we came across certain products which are subjected to import ban in certain countries. Import of Indian livestock / meat is subjected to ban in Singapore and Indonesia. Indian meat is prohibited in the above mentioned countries on account of being infected with foot and mouth disease. Also, the Indian slaughter houses are considered to be unhygienic and ill- maintained which further aggravates the agony that Indian exporters are currently facing.

Discriminatory Bilateral Agreement are preferential trading arrangements that may be selective by commodity and country and includes preferential sourcing arrangements.

In the course of the survy it was found that exporters exporting autocompnents to Vietnam faced difficulties in customs valuation. Veitnam customs do not apply transaction value to imports form India. The exporters pointed out that Vietnam is obliged to apply transaction value for imports from the U.S. and no administrative fees is charged by customs authorities in connection with importing or exporting exceeding the actual cost of service provided. Vietnam has also committed to apply the transaction value to imports from ASEAN countries. Such Agreements place Indian exporters at a disadvantage.

Customs Classification Procedures: Countries are required to use internationally harmonised methods of classification rather than than national methods of custom classification. Very often classification of items is done indiscriminately posing as a non-tariff barrier. Countries mis-classify items which leads to higher duty levies. In case of jute products it was seen that special duty was being levied depending upon the type of product mentioned on the consignment. On the export of "Jute Bags" to Malaysia a duty of 10% was levied however on the export of "Jute Shopping Bag" a duty of 25% was being levied. Both the products are exactly the same and do not differ from each other in any aspect. Exporters often have to pay bribes in order to get the item classified in a manner that it would attract lower customs duties.

Anti-dumping duties: Dumping is said to occur when the goods are exported by a country to another country at a price lower than its normal value. In our survey there was no evidence of any anti-dumping cases. However, the Ministry of Commerce, Government of India, Annual Report indicates that Indonesia has initiated 6 cases against India in products such as ampicillian, black carbon, hot rolled coils, pthalic anhydride, ferro manganese and silicon manganese and wire rods. None of the other ASEAN countries or Sri Lanka has initiated any anti-dumping cases against India.

7.3 Other Barriers and Constraints

Some barriers could find an indirect relevance to the study. For instance, many buyers in Sri Lanka demand under invoicing in order to save themselves from import duties. This causes exporters undue harassment.

Also Indian banks like the State Bank of India do not confirm the Letter of credit issued by Banks of Thailand and most banks of Vietnam. Due to this, the exporter has to take all the risk of default by the bank. Sometimes it may happen that these banks may not pay the Indian exporter.

Due to non-confirmation of the Letter of Credit the exporters are not able to take orders. On the other hand, some of the private banks like Citibank, HSBC do confirm the Letter of Credit.

Some exporters have also faced problems with some of the banks in Brunei and Cambodia which issue false Letter of Credit because such banks in reality do not exist. Therefore, the Indian banks generally do not confirm the Letter of Credit issued by the banks of these countries.

In the course of the survey several exporters opined that they faced hindrances in exporting their products. Exporters felt that the Indian Government did not provide enough subsidies. Other countries provide far greater subsidies which places Indian export products at a disadvantage. In particular exporters feel that the withdrawal of the DEPB scheme is likely to affect Indian exports adversely. Also, export procedures are very lengthy and cumbersome leading to huge transaction costs in terms both time and money. Bribes are rampant at lower levels of government officials adding further to transaction costs. India does not have a hub port and transhipment of products through a hub port often delays exports. Basic infrastructure facilities like logistics are subjected to strikes and lockouts due to poor labour laws. Exporters face problems due to lack of prompt and accurate changes in government policy from time to time. The Indian Government does not take enough initiative to promote Indian goods abroad.

It may be reiterated that these are constraints that were pointed out by the exporters in the course of the survey.

8. Summary and Policy Implications

This study makes an attempt at pointing out the non-tariff barriers that Indian exporters face while exporting to ASEAN and Sri Lanka. Using secondary data the study finds that the incidence of non-tariff measures imposed by ASEAN and Sri Lanka has increased during 1997-98 to 2002-03. In 1997-98 India's exports to Indonesia, Singapore, Philippines, Thailand and Sri Lanka were not subjected to any kind of NTMs while only a small proportion of exports to Malaysia (6.6%) and Vietnam (3%), were subjected to NTMs. By 2002-03, there was an increase the proportion of exports subject to NTMs. Thus, in 2002-03, 9% of India's exports to Singapore, 29% of exports to Indonesia, 37% of exports to Philippines, 32% of exports to Malaysia, 25% of exports to Thailand, 4% of exports to Vietnam and 0.5% of exports to Sri Lanka were subjected to NTMs.

The survey indicates that Indian exporters are facing some non-tariff barriers while exporting to ASEAN and to Sri Lanka. The survey revealed that 32% of the firms indicated that they faced some kind of barrier. Further the survey revealed that a larger proportion of smaller firms (exports less than Rs. 20 million) faced non-tariff barriers than larger firms. Similarly, a smaller proportion of firms with foreign affiliation faced some kind of barrier compared to those firms that had a foreign affiliation. Except for Malaysia and Philippines where the level of restrictiveness was found to be moderately restrictive, in all other markets majority of the exporters felt that non-tariff measures were not at all restrictive.

Regarding the first category of barriers, in countries such as Indonesia, Malaysia, Singapore and Sri Lanka majority of the firms faced barriers related to product standards while majority of the firms exporting to Thailand and Vietnam found packaging requirements to be an imposing barrier. In the second category of barriers majority of the firms felt there were barriers related to banks and competition. The survey revealed that most of the barriers faced were related to technical barriers to trade and sanitary and phytosanitary measures; Catogory II barriers were not of much importance to exporters. There was also lack of knowledge on the part of the exporters regarding Category II barriers. For instance, several firms were facing competition from Chinese goods in the ASEAN market. Firms tended to perceive this as barrier, which, in the context of our present study is not a barrier. The survey results need to be interpreted with caution. Firms tended to exaggerate the extent of barriers that they perceive, hence the survey results seem to be an over-statement of the extent of barriers. Detailed case studies show that the extent of barriers faced by firms is less than what they perceive to be a barrier. The case studies give important indications for policy. The study points out that within ASEAN countries there are different standards. In some countries standards are very high and unreasonable e.g, aflotoxin level in peanuts in Singapore. Thus it makes it difficult for Indian exporters to target the ASEAN market as a region. Exporters have to comply with different standards in different markets, which have similar needs. Exporters have also pointed out that these higher product standards were not required for intra regional trade. It was also seen that importers made unreasonable demands for processes e.g., HACCP certification and own slaughterhouse. These kinds of barriers are set up without keeping in mind the domestic manufacturing practices in the exporting market. In India the meat trade is carried out by small and medium enterprises and there are community slaughterhouses. Thus it is very difficult for the meat traders to have their own slaughterhouses. Although the exporter gets a HACCP certificate from the community slaughterhouse from where he procures the product it is not acceptable to the importer. This is a major trade barrier and it discriminates against small and medium exporters. Thus these non-product related Product and Processing Measures need to be tackled by the government. The case studies also show that there are some barriers related to certification, registration and testing. Government should try to work out Mutual Recognition Agreements with ASEAN countries to reduce the need of such requirements.

More importantly, to be able to meet standards and regulations we need to 'set our own house in order'. There are several domestic and technological constraints which need to be addressed at our end. Some of the companies do not have basic technology even for standardized products, and they perceive it as a non-tariff barrier e.g., yarn. Also there is a multiplicity of standards within India. There are various organisations involved in standard setting and implementation who lack co-ordination amongst themselves. Such conditions make it difficult for exporters to export a standardised product. There is also lack of information about foreign standards among Indian exporters, particularly on changing standards. Advance information on changing standards can equip exporters to meet standards. A plethora of other factors such as local taxes, domestic infrastructure, complex and lengthy procedures, inspector raj, etc., add to the cost of compliance of international standards making it difficult for Indian exporters.