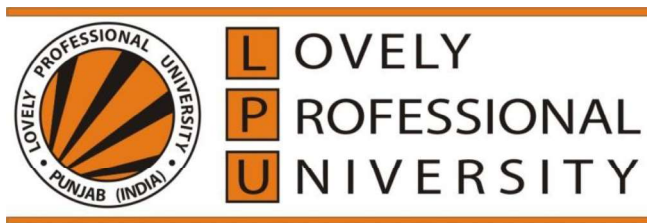


**TRADE PERFORMANCE AND COMPETITIVENESS: A STUDY
OF INDIA-ASEAN TRADE RELATIONS IN CONTEXT OF
LOOK EAST POLICY**

**A
Thesis**

Submitted to



**For the award of
DOCTOR OF PHILOSOPHY (Ph.D)
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**By
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**LOVELY FACULTY OF BUSINESS & ARTS
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PUNJAB

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DECLARATION

I hereby affirm that the work presented in this thesis is exclusively my own and there are no collaborators and that it does not contain any work for which a degree/diploma has been awarded by any other university/institution. A part of this work has already been published.

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CERTIFICATE

This is to certify that this thesis entitled, **TRADE PERFORMANCE AND COMPETITIVENESS: A STUDY OF INDIA-ASEAN TRADE RELATIONS IN CONTEXT OF LOOK EAST POLICY** embodies the work carried out by Ms. Namita Kaur herself under my supervision and that the thesis is worthy of consideration for the award of Ph.D. degree.

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ABSTRACT

During 1990s India pursued a more open and liberal trade-investment regime and her interest in collaborating with its Eastern and South-Eastern neighbors deepened. India and ASEAN member share a long colonial and cultural history, which over the years has helped shape economic and commercial relations between them. This partnership stimulated after the launch of India's 'Look East Policy' during 1990s, which later rechristened 'Act East' in 2015. ASEAN is a group of the developing countries of the world. They constitute 8.8 per cent of the world population, 7.0 per cent of the world trade, 3.6 per cent of the world GDP, and 3.0 per cent of world area. India-ASEAN relations have evolved over time. In 1992, India was Southeast Asian grouping's Sectoral Dialogue Partner which later graduated to Summit level partner in 2002. Further, ASEAN leaders agreed to transform ASEAN into an ASEAN Economic Community (AEC) by 2020.

India's trade relations with ASEAN has strengthened since 1991, as a part of 'Look East Policy'. Her complementary economic structure with ASEAN involves significant mutual gains. India's trade with ASEAN has increased from US\$ 1960 million in 1991 to US\$ 80724 million in 2017 with consistent unfavorable balance of payment in India's account. Increased trade volume along with hostile balance of payments clearly shows the robustness of ASEAN member countries vis-à-vis India's trade. It is worth to note that this trade imbalance is in context of goods only, but in case of services the situation is reverse. India's export with ASEAN grew by CAGR of 16.00 per cent and import grew by 19.9 per cent during 1991-2017. India's share in ASEAN trade was as low as 0.99 per cent in 1991 which rose to 6.12 per cent in 2017, but for the same period ASEAN share in India's trade was 5.26 per cent and 11.10 per cent respectively, which manifest the benefit of Look East Policy becoming visible. Within ASEAN, India exporting ties are more pervasive with Singapore, Indonesia, Malaysia and Vietnam. As regards to the direction of trade, major export partners of India were USA, UAE, and China, whereas ASEAN's export partners were China, USA, Japan and Hong Kong during 2017. 1991 the maximum share of export by India was of Pearls, precious stones, metals, coins, etc. which was reduced considerably by 2017 from 42.47 per cent it

was reduced to 3.51 per cent by 2017 respectively. On the contrary the share of items like Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes increased considerably. In 1991 the share of exports of these items was 2.49 per cent respectively which settled at 24.89 per cent respectively contributing the largest share of per centage. Export of items from Iron and steel sector has increased from 1.37 per cent in 1991 to 6.79 per cent in 2017 occupying the second highest export sector. The share of per centage of items of Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof have reduced from 1991 to 2017 i.e. from 6.65 per cent to 5.34 per cent respectively holding the third position in terms of export. During 1991-2017 the composition of India's export to ASEAN has diversified over the time and has been changing drastically. The overall export from India to ASEAN has decreased from 82.13 per cent share in 1991. The commodities which India import from ASEAN. Overall, India's import from ASEAN nations was of capital goods, which have not changed so far, rather India's import from ASEAN nations diversified over time, but her export remained concentrated to only few commodities. In 1991 the maximum imports were from Mineral and Mineral fuels i.e. 41.04 per cent and in 1995 it reduced to 12.95 per cent. On the contrast in 1995 the imports increased to 16.14 per cent in Animal or vegetable fats and oils and their cleavage products. Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof recorded per cent of imports from ASEAN by India. In 2010 the maximum imports by India were in Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof and Animal or vegetable fats and oils and their cleavage product which continued to be the same till 2017 with an addition of Electrical machinery and equipment and parts thereof. On the other hand, commodities like articles of iron and steel, copper and article thereof, optical, photographic, cinematographic, measuring, checking, precision, etc. apparatus mild down over the time.

Despite encouraging trade statistics still there exists some glaring gap or possible last opportunities between India and ASEAN members, as a few naming Singapore and Malaysia, are inching close to major trading partner with India among 10 member ASEAN community in last two decades. Trade issues along with geo political issues should be solved together to further strengthening the AIFTA. India should further

deepen her service sector presence in ASEAN and reap the benefit of liberal policy of ASEAN and should fervently follow the policy of “Act East.”. India is still considered a highly protected market and tariff rates are higher than international tariff standard. Since 1995 persistent efforts are on to bring down these rates and the tariffs are lowered down to great extent, and still there is room to reduce them further with mutual agreement.

Trends of exports and imports intensity was quite favorable for India-ASEAN trade, but were not equally dispersed, which shows India trade was not properly entwined within ASEAN nations and varied from country to country. But there are many points to ponder upon before arriving at some concrete conclusion, as these nations has few commonalities and large disparities exists as far as there social-economic status are concerned. Hence, there needs are also different. In nutshell, ASEAN markets are opening new opportunities for Indian products in future and a slow and steady approach will bring fruitful results in future. Interestingly, mutual trade intensity index always remained more than desired level as far as India ASEAN trade is concerned.

In context of export intensities, India’s export intensity vis-à-vis ASEAN has been very favorable and it has showing a sign of deepening export intensities over a period of time. In 1991, India’s export intensity stood at 121 against ASEAN and it touched 202 in 2014 and in 2018 it was 205, manifesting the growing trade reliance between India and ASEAN. India’s export intensity among ASEAN member countries was not evenly dispersed and still there is a room of export vis-à-vis Cambodia, Lao PDR, Philippines, and Thailand. India’s import intensity with ASEAN is not as promising as India’s export intensity was, it indicates that role of ASEAN members are biggest importer is yet to become a reality. India’s import intensity with Cambodia, Loa, Myanmar, Philippines and Vietnam is not convincing as yet despite having trade relations with these countries from last more than 25 years.

As regards to trade similarity, export similarity between India and ASEAN is not quoting any positive outlook as there is lot of dissimilarity in their export basket. Export similarity between India and ASEAN was 33.12 per cent in 1991 which rose

to 34.12 per cent in 2000 and despite having AIFTA it was 44.34 per cent in 2018. This is quite pervasive across the ASEN states. Unlike export pattern, the import pattern of India and ASEAN countries exhibited a high degree of similarity. India's traded goods at the aggregate level were not greatly similar to ASEAN countries and thus not very competitive in the global market.

India's export complementarity with ASEAN were lower than World, and matched up around 62.30 per cent in 2018. India's export complementarity varied across ASEAN states. It was almost 50.00 per cent with Lao, Myanmar, Singapore and Malaysia, indicating the existence of India's high trade potential with these ASEAN member countries. ASEAN export complementarity with India was higher than the World, and matched up around 61.20 per cent in 2018. In nutshell, the bilateral trade between India and ASEAN partner anchored largely on complementary products, though the extent of their prominence varied from country to country. Even with the expansion of trade as one important factor stood out that there is a huge scope for restructuring India-ASEAN trade in alignment with demand and supply conditions prevailing in the trading partner. For, several complementarity products were not traded at all between them, and wherever traded, their market presence was mostly insignificant.

The orientation of free trade agreement is not only allowing free movement of goods and services, but to augment competitiveness of trade among trading partners. While studying the competitiveness of trade among India and ASEAN, it was observed that India trade competitiveness has risen but only with few ASEAN countries only. Overall picture of India ASEAN trade at technology level classification pose some given insights, as far as trade competitiveness is concerned. But on the scratch deep at country level data trends are favoring India's decisions to look east. Technology level competitiveness has become favorable against Brunei; w here Competitively Positioned items rose to 190 from 59 commodities during two phases. Performance of Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive based product has improved. Technology level competitiveness has also improved against Cambodia, Lao PDR, Malaysia, Philippines, and Thailand. Not only technology based items

increased but Competitively Positioned items rose from 131 commodities in Phase 1 to 307 commodities in Phase 2. This enhancement was common across all technology based items be it Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers. Even Emerging Products (Tier II) showed promising result as EP (Tier II) rose to 205 products in Phase 2 on comparing with 72 products in Phase 1. Products from Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures technology classification showed their presence in Emerging Products (Tier II). India's competitiveness of technology based products also enhanced vis-s-vis Lao PDR and sizable amount of new products found place in Competitively Positioned items in Phase 2. Malaysia is one of the prime members of the ASEAN community and share a healthy trade share with India, as far as India-ASEAN trade is concerned. Indian technology based competitiveness has improved significantly. During Phase 1, 737 products were Competitively Positioned, which zoomed to 1652 products and Indian competitiveness improved across all technology based classification including Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers, Mineral fuels, Unclassified products. Apart from this Threatened Products also mellowed down but not so significant products were adding up in Emerging Products category but also similar trended posing a positive vibe emerged in case of weakened products. Overall, competitive analysis of India's trade with Malaysia, is posing a sanguine image and posting a positive vibe for Indian producers as far as Malaysian market is concerned. Similar trends were emerging from Philippines also, as Competitively Positioned product rose to 1128 in Phase 2 as compared to 8804 products in Phase1 but a mild growth found in Threatened Products category which is not a good sign.

Indian products also found a sizeable proportion in Competitively Positioned category in Thailand. But overall, Thailand presenting a mixed bag results while comparing two phases. When Competitively Positioned products increased, Threatened Products also increased but Weakly Positioned items fall down sharply.

India is facing trade competitiveness competition from Singapore and Vietnam though Singapore posing a mixed result where on one way CP items shoot up from 1378 commodities in Phase 1 to 1703 commodities in Phase 2, so does Threatened products which rose to 1413 in Phase 2 from 1002 commodities in Phase 1. Vietnam is appearing to be tough market as Competitively Positioned products fall down to 725 in Phase 2 from 100 products in Phase 1. Threatened Products rose to almost three times and Weakly Positioned products also grow.

Hence, overall on an average based India's trade competition has mellowed down but at country level barring Singapore and Vietnam, rest of the countries proving out to be a good market for Indian products as competitiveness has improved favorably. Emerging Products category also improved and Weakly Positioned products has been falling down. In a nutshell, competitiveness of Indian Products at technology based classification is presenting favorable signal barring few markets but these threat can offset by India's robust service sector. Study also recommend a list of commodities which are having good trade prospects, but so far not traded between them. The identified tradable commodities between India and ASEAN are those in which Revealed Comparative Advantage (RCA) and Revealed Import Dependence (RID) were more than one. The commodities in with India had RCA more than one and ASEAN had RID more than one during 2001-2015 on an average, and thus could be exported from India to ASEAN were bran, sharps and other residues of cereals, whether or not in the form of pellets, coriander seeds, seeds of fennel, juniper berries, ephedrine and its salts, oilcake and other solid residues, whether or not ground or in the form of pellets. Study also devote efforts at individual ASEAN country-wise level to identify commodities where either India should take benefits of either exporting or importing commodities.

Both India and ASEAN can reap enormous gains from mutual trade. They have actually benefited from trade with each other. top ten commodities which have the potential and also are actually being exported from India to ASEAN during 2001-2017 namely Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume, Aluminum, not alloyed, unwrought, Diamonds, worked, but not mounted or set (excluding industrial diamonds), Copper, refined, in

the form of cathodes and sections of cathodes etc. but there are other commodities like Frozen, boneless meat of bovine animals, Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns, etc which are being exported but they do not have the potential. On the contrary the commodities like Articles of jewellery and parts thereof, of precious metal other than silver, Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons, Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold), Motor cars and other motor vehicles principally designed for the transport of persons have the potential but are not being exported by India to ASEAN.

Study also revealed that commodities which have the potential and are actually exported by ASEAN to India or which are imported by India from ASEAN like Copper ores and concentrates, Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal), Petroleum oils and oils obtained from bituminous minerals, crude, Parts of telephone sets, telephones for cellular networks or for other wireless networks and but on the contrary there are commodities which do not have the potential but are actually exported by ASEAN to India like Crude palm oil, Palm oil and its fractions, whether or not refined (excluding chemically modified and crude), Petroleum oils and oils obtained from bituminous minerals, crude, Wire of refined copper, with a maximum cross-sectional dimension of ≤ 6 mm, Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Technically specified natural rubber "TSNR", Processing units for automatic data-processing machines, whether or not containing in the same, etc. Similarly there are also commodities which have the potential to be exported by ASEAN to India as there is requirement of these commodities in India but they are not exported by ASEAN like Monolithic integrated circuits, digital (excluding cards incorporating an electronic monolithic), Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes, Electronic micro assemblies made from discrete, active or both active and passive components, Natural gas liquefied, Electronic micro assemblies made from discrete, active or both active and passive components etc, Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled, etc.

Till 2017, India's actual export to ASEAN countries was just 12 per cent of their trade potential. Actual trade between India and ASEAN was of US\$ 3308 million against the trade potential of US\$ 28316 million during 2001-2017. In similar way, ASEAN actual export to India is just 11 per cent of their total trade between 2001-2017.

To understand the state of India-ASEAN trade, in addition to secondary data, a primary survey revealed many dimensions of AIFTA. Respondents were treating ASEAN as easy destination for trade and open and friendly trade policies. CLMV (Cambodia, Laos, Myanmar and Vietnam) countries were treated as tough countries to handle. Labour norms were mentioned major challenge followed by licensing process. Respondent's expectation from AIFTA includes avoidance of double taxation, relaxations of flexibility of rule of origin criteria, import duties should match up with Chinese counterpart. Study also suggested some policy intervention like both entities should exploit their trade potentialities, a strong policy intervention is required to boost trade with Malaysia, Indonesia, Myanmar, Thailand and Brunei in order to balance the mutual trade. In the same vain, these ASEAN countries should reciprocate. Commodities, not traded so far and in which India has great potential of exports to ASEAN are manmade staple fiber, tools, implements, cutlery of base metal, special woven or tufted fabric, lace, tapestry, tobacco and vegetables plaiting material, etc. India should pursue individual FTA with Indonesia along with AIFTA. The economic structure of both the countries is very much complementary which involves significant mutual gains. Further, mutual trade intensity between them has increased considerably over the period. A dedicated authority is required to monitor the infrastructure project related progress in North Eastern state of India, as this part of India will spearhead economic engagement with ASEAN countries. Apprehensions about possible deterioration in terms of trade of agriculture products, particularly plantation, tea, spices, coffee and rubber and possible gains to some segments of the manufacturing sectors in India. Therefore, it demands a policy to alleviating the burden falling on those adversely affected.

In the end, it can confidently be concluded that India need to pursue their Look East policy with vigor and should expand the horizon from trade orientation to geopolitical orientation and engage individual ASEAN member in a mutually beneficial

manner. It will require a herculean effort on the part of commercial diplomacy, coordination between business associations and diplomatic missions. India and ASEAN shared common history and culture, which could act as bridge for both. Both entities should pursue their economic goal to exploit emerging opportunities in trade in the light of new geo-economic scenario.

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LIST OF ABBREVIATIONS

AEC	— ASEAN Economic Community
AIFTA	— ASEAN India Free Trade Area
APEC	— Asia-Pacific Economic Cooperation
ASEAN	— Association of Southeast Asian nations
CAGR	— Compound Annual Growth Rate
CECA	— Comprehensive Economic Cooperation Agreement
CEPT	— Common Effective Preferential Tariff
CLMV	— Cambodia, Laos, Myanmar and Vietnam
CP	— Competitive Positioned
CSO	— Central Statistical Organization
CTSH	— Change in Tariff Sub Heading
CU	— Custom Union
DIS	— Distance
EII	— Export Intensity Index
EM (TI)	— Emerging Product Tier I
EM (TII)	— Emerging Product Tier II
FDI	— Foreign Direct Investment
FIEO	— Federation of Indian Exports Organizations
FTA	— Free Trade Area
GDP	— Gross Domestic Product
GOI	— Government of India
HS	— Harmonized System
HT	— High Technology
III	— Import Intensity Index

IMF	—	International Monetary Fund
LT	—	Low Technology
MEA	—	Ministry of External Affairs
MT	—	Medium Skill Technology
PTA	—	Preferential Trade Area
RB	—	Resource Based
RBI	—	Reserve Bank of India
RTA	—	Regional Trade Agreements
RTA	—	Regional Trade Agreement
SAARC	—	South Asia Association of Regional Cooperation
SAPTA	—	South Asia Preferential Trade Agreement
SIM	—	Similarity Index
SITC	—	Standard International Trade Classification
THI	—	Trade Intensity Index
TP	—	Threatened Product
UNCOMTRADE	—	United Nation Commodity Trade Statistics
UNCTAD	—	United Nations Conference on Trade and Development
UNDP	—	United Nation Development Program
UNESCO	—	United Nations Educational Scientific and Cultural Organization
UNO	—	United Nations Organization
WITS	—	World Integrated Trade System
WP	—	Weakly Positioned Product
WP (TI)	—	Weakly Positioned Product Tier I
WP (TII)	—	Weakly Positioned Product Tier II
WTO	—	World Trade Organization

CHAPTER – 1

INTRODUCTION

1.1 INTRODUCTION

In the early 1990s India's progression towards liberal trade-investment regime, generated its interest in cooperating with its South-Eastern and Eastern neighbors. Since independence, India and the Association of Southeast Asian Nations (ASEAN) nations shared cultural and colonial ties with each other. During the era of Nehru, several efforts were made by India to strengthen the close relations with Southeast Asian nations. The Conference on Indonesia organized in New Delhi in 1949 and the Bandung Conference in 1955 were few of the various initiatives started during that period. In any case, these endeavors neglected to strengthen the monetary, political or strategic alliance among India and ASEAN. This was mainly due to the supremacy of China in many Southeast Asian countries, which encouraged these nations to engage actively with China and, as a result, put aside Indian interests in the region. ASEAN is a fast expanding trade bloc in Asia with a growing economic power. Over the past decade, trade & investment relations have expanded between India & ASEAN.

Economic integration has assisted countries to focus on issues that encourage trade between various countries. Impact of economic integration on the countries is analyzed. The European Union and the various U.S Trade agreements are examples of how regional trade blocs operating among various countries. Regional trading agreements (RTAs) are frequently labelled into five categories, set out by the Balassa (1961):

- Preferential Trading Arrangement (PTAs)
- Free Trade Area (PTAs with zero internal tariffs)
- Custom Union (FTAs + common external trade policy)
- Common Market (CU + free movement of factors of production)
- Economic Unions (CM + common economic policies)

The five classifications are frequently treated as a sequencing design towards nearer coordination just as a scientific categorization of more profound and more profound combination. The defining feature of all of these RTAs is that trade among members is treated differently to trade with non-members.

ASEAN (Association of South-East Asian Nations) was established in August' 1967, in Thailand by signing Declaration with its five founder member countries named: Thailand, Indonesia, Malaysia, Singapore Philippines, & Brunei joining after her Independence in 1984. Vietnam became its member in 1995. In 1997 Laos & in April 1999 Myanmar also joined whereas later Cambodia became its member, with the objective of fortifying common empathy and collaboration. Currently there are total members nations forming ASEAN are ten. ASEAN is recognized for its varied multilingual & multicultural region along with its topographical characteristics. Alongside, ASEAN nations also share few common elements like less economic growth rate, high inflation rate, dearth of fundamental infrastructural amenities, high rate of population, mass poverty and lack of comprehensive surroundings for industrialization. Economies of nearly all ASEAN nations are predominantly agricultural although they are quite rich in natural resources, except Singapore and are also eager to influence a change in their economies from marketing to manufacturing. Nevertheless, the speed of development of their economies has so far been deferred. Factors like requirement of technology, foreign exchange and financial resources are obstructing the financial growth of the mentioned nations. As developing nations, they are anxious enough to collaborate with each other so that they can solve their problems of shortage, technological and industrial backwardness. These nations have very narrow regulations for controlling imports and generally price and quality are the determinants for fulfilling their import requirements.

1.2 INDIA'S LOOK EAST POLICY AND ITS RATIONALE

Look East Policy was launched in India in 1992, which was later transformed to 'Act East Policy', it ushered in an era of reviving its alliance between India and Southeast Asia. The strategic and the geo political importance of the ASEAN region had long ago been realized by Indian Policymakers. The Act East Policy was a step

ahead on focusing on strengthening relations through various economic and cultural exchanges. India has been associated with ASEAN at both regional and sub-regional levels as it has signed various economic cooperation agreements with its different members at individual level also. On 13th August 2009, India and the ASEAN have signed the Trade in Goods Agreement under the broader framework of Comprehensive Economic Cooperation Agreement (CECA). 1st August, 2011, The pact has become fully effective between all the ASEAN Member States and India. The agreement further boosted the bilateral trade and investment between two nations. In December, 2012 the negotiations on Agreement on Trade in Services and Agreement on Investment had also been concluded and the agreements were signed in 2013.

The guidelines governing the imports are restricted and allow the inward flow of the commodities as required on the basis of quality & price (www.ASEAN.org). ASEAN community are working primarily on following three objectives:

- To accelerate economic growth, social progress with cultural development in the region.
- To promote regional peace and stability along with the respect for justice and the rule of law.
- To promote dynamic collaboration and shared assistance on matters of joint interest.

Table 1.1: Associates of ASEAN

Founder Members	Joining Members	Economic Trade Partners	Seeking Closer Economic Ties
Singapore	Laos	Japan	USA
Malaysia	Cambodia	New-Zealand	Canada
Philippines	Myanmar	South Korea	Europe
Brunei	Vietnam	Australia	Chile
Indonesia		China	Argentina
		India	Pakistan
			Russia

(Source: Nielsen Global Consumer Confidence Survey, 2013)

Furthering the growth, ASEAN countries have most confident consumers in the world who have full faith in their economic progress. Top ten most confident nations such as Indonesia, India, Philippines, China, U.A.E., Brazil, Thailand, Hong Kong, Denmark, and Peru playing at two tiers. Founder members comprise the first tier who are the main drivers and policy makers. The second tier are the executors who adopt agreements/policies to set them in place and update their economies. ASEAN countries are not only have strong closer trading and economic links among themselves but they have strong economic ties with countries like Japan, New Zealand, South Korea, China, Australia and India and this grouping is also known as ASEAN+6. (Nielsen, 2014). The main economic scheme in ASEAN is ASEAN Free Trade Agreement (AFTA) which is implemented through the Common Effective Preferential Tariff (CEPT) Scheme.

On 25 January 2018, India and ASEAN observed 25 years of their Dialogue Partnership, 15 years of Summit Level interaction and 5 years of Strategic Partnership by undertaking a wide variety of over 60 dedicatory activities, both in India and through our Missions in ASEAN Member States, which concluded in the ASEAN-India Commemorative Summit on the theme "Shared Values, Common Destiny" in New Delhi. The Commemorative Summit was attended by the head of the nations from all the 10 ASEAN as invited by the Prime Minister of India Shri Narendra Modi. This was another step moving in the same direction for strengthening our association in the South East Asia to tap the resources and become major trading partner and make a prominent player. The heads of nations of ASEAN also embraced the 'ASEAN-India Vision Statement ' (<http://mea.gov.in/ASEANindia/20-years.htm>). The need of the hour is that Indian traders must identify the opportunities and realize their strength in the ASEAN market and to accordingly frame their strategies. Political, economic, and diplomatic integration between India with ASEAN will assist in benefitting the mutual goals leading to growth and development of the two entities and also for assessing the future potential. Indo ASEAN economic engagement should also be viewed from the forthcoming capacity of trade in sector of services and flow of investment alongside from a purely merchandise trade outlook.

1.3 KEY ECONOMIC INDICATORS OF INDIA & ASEAN COUNTRIES

In 2017, the total land Area of ASEAN Region is 4490212 (Sq Km). In 2017, the total Population of ASEAN region was 642,439.7 thousand with a gross domestic product (GDP) of 2,765,679 US \$ million. The annual population growth of ASEAN region was 1.3 per cent. In case of GDP per capita. Singapore accounted for highest i.e. US\$ 57,722 million in 2017, whereas Myanmar accounted least i.e. US\$ 1,229 million. Among the social indicators the annual population growth rate of a Cambodia is higher i.e 3.7 per cent followed by Lao to 2.0 per cent and least of Singapore up to 0.1 per cent. One of the most exposed commercial markets in the world is ASEAN, with total trade US\$ 2,555,073 million in total world trade in 2017. The total exports from ASEAN region to the world in 2017 was US\$ 1,313,567 million. The total import from ASEAN region from the world was US\$ 1,241,507 million. ASEAN retains age-old economic associations with countries namely, the People's Republic of China, United States, European Union, Australia, India, Japan, Republic of Korea, New Zealand, the, and is aggressively pursuing closer ties with the Latin America and Africa. The foreign direct investment inflow from ASEAN region in 2017 was US\$ 137,006 million. The development gaps generate differences in abilities of integration process among ASEAN members. The present situation of differences in key socio-economic indicators reflects gigantic imbalances in integration capacity of some ASEAN member countries. These imbalances are restricting ASEAN countries from becoming deeper and wider integrated entity. Potential benefits of India-ASEAN integration process could not be realized once due consideration is not given to socio-economic indicators among and within ASEAN nations. (Source: ASEAN.org.)

1.4 SCOPE OF THE STUDY AND OBJECTIVES

Although many research has been done on the trade relations between India and ASEAN countries but so far, no evident research has been conducted on the technological structure of India trade with ASEAN after Look East Policy.

- 1) Proposed topic will be applicable to national policy on trade related issues involving technology based trade, its performance and competitiveness.

- 2) Study will identify the trade possibilities at commodity level which will further contribute to industry.
- 3) Study will form a new classification system based on HS Coding, as previous studies were based on Standard International Trade Classification (SITC) Coding which generally used for academic purpose but have less relevance at ground level.

1.5 OBJECTIVES

- 1) To examine the trend and pattern of India's trade with ASEAN countries.
- 2) To examine the competitiveness of India's trade with ASEAN countries.
- 3) To examine the sectoral distribution of trade potentiality.
- 4) To study the challenges faced by the India's exporter while trading with ASEAN countries.

1.6 DATA BASE AND RESEARCH METHODOLOGY

Study will be based on primary as well as secondary data with the purpose to understand the trade potential and competitiveness of India's vis-à-vis ASEAN countries. Data is taken from the United Nations Commodity Trade Statistics Database (UN COMTRADE), comprising product line at 6-digit level of Harmonized System (HS) for 1991 to 2018 time span. Then data was decomposed into six categories as proposed by Basu (2011) by their level of skill based technology content. The categories of exports are used to compute different factor contents to indicate how countries are transiting from primary commodities to manufacturers- skill and technology content sectors. These skill and technology categories are as follows:

- 1) Non-fuel primary commodities
- 2) Resource intensive manufacturers
- 3) Low skill- and technology intensive manufacturers
- 4) Medium skill- and technology intensive manufacturers
- 5) High skill- and technology intensive manufacturers
- 6) Mineral fuels

The classification of skill and technology content of products at Harmonized System - 6 digit (see Appendix I) levels can be obtained from UNCTAD website (http://unctad.info/en/Trade-Analysis-Branch/Data-And-Statistics/Other_Databases/)

Apart from COMTRADE main source of data will be:

- 1) International Trade Statistical Year Book (various editions).
- 2) United Nations Commodity Trade Statistics Databases, United Nations
- 3) World Bank, Statistical Year Book of Asia and Pacific,
- 4) Direction of Trade Statistics Year Book, IMF.
- 5) Economic Survey of India.
- 6) Annual Reports of Ministry of Commerce.
- 7) Statistical Year Book of Asia and the Pacific, UN Publications.
- 8) Hand Book of International Trade and Development Statistics, UN Publications.
- 9) Various other books and periodicals.
- 10) World Trade Organization. etc.

Following Statistical techniques are used in this study: -

I. TRADE INTENSITY INDEX (TII)

TII elucidate the country's importance in world trade. TII defines whether the index value of trade between two countries or group of countries is greater or smaller than would be anticipated based on their significance in world trade. It is defined as the share of one country's exports going to a partner divided by the share of world exports to the partner.

It is calculated as:

$$T_{ij} = \frac{x_{ij} / X_{it}}{x_{wj} / X_{wt}}$$

where, x_{wj} and x_{ij} and are the values of country or group of countries i's exports and of world exports to country or group of countries j and where X_{it} and X_{wt} are country

or group of countries i 's total exports and total world exports, respectively. An index of more (less) than unity indicates a bilateral trade flow that is larger (smaller) than expected, given the partner country's significance in world trade.

Trade Intensity Index is further divided in to Export Intensity Index (EII) and Import Intensity Index (III) for looking the pattern of exports and Imports.

Following Kojima (1964) and Drysdale (1969), the index of trade intensity is restated as follows,

a) **Export Intensity Index is measured of country j 's trade with country i is as follows:**

$$X_{ji} = \left[\frac{\left(\frac{X_{ji}}{X_j} \right)}{\frac{M_i}{(M_g - M_j)}} \right] \times 100$$

Here X_{ji} = Export of country or group of countries j to country or group of countries i ; X_j = Global exports of country or group of countries j ; M_i = Global imports of country or group of countries i ; M_g = Total global imports; M_j = Global imports of country or group of countries j .

b) **Import intensity Index is measured of country j 's trade with country i is as follows:**

$$M_{ji} = \left[\frac{\left(\frac{M_{ji}}{M_j} \right)}{\frac{X_i}{(X_g - X_j)}} \right] \times 100$$

Here M_{ji} = Imports of country or group of countries j to country or group of countries i ; M_j = Global imports of country or group of countries j ; X_i = Global exports of country or group of countries i ; X_g = Total global exports; X_j = Global exports of country or group of countries j .

Export and Import Intensity Index are calculated for India & ASEAN by obtaining associates score in the world trade. An index value of one country specifies that the

mutual trade is following the pattern of rest of the world and the value above one shows there is trade advantage between the nations.

Intensity of trade is affected by politico-historical links, economic complementarity, and geographical proximity. The index value zero denotes no trade association between the two partner countries. An export intensity of more (or less) than 100 indicated that country j is exporting more (or less) to country i than might be expected from the country's share in total global trade. Similarly, import intensity of more (or less) than 100 indicated that country j is importing more (or less) than might be expected from that country's share in total global trade.

II. EXPORT/IMPORT SIMILARITY INDEX

The countries have an infrequent pattern of export/import specialization relative to the rest of the world. Often, some product of trade typically manufactures, have grown further swiftly than the average of world export/import. It is not clear, however, to what extent these results reflect a common leaning among countries and to what extent the results are driven by the performance of individual countries. The export/import similarity index (XS) provides useful information on distinctive export/import patterns from country to country. It is defined as-

$$XS(j, k) = \text{sum} [\min (X_{ij}, X_{ik})]$$

Where, X_{ij} and X_{ik} are industry i 's export/import shares in country or group of countries j 's and country or group of countries k 's exports/imports. The index varies between zero & one, with zero indicating complete dissimilarity and 1 representing identical export/import composition.

III. TRADE COMPLEMENTARITY

The complementarity index measures the degree to which the export pattern of one country complements the import pattern of another. Higher the complementarity indicates more advantageous prospects for a successful trade arrangement. Changes over time explain whether the trade profiles are becoming more or less compatible. The sum of the absolute value of the difference between the import commodities shares and the export share of the countries under study, divided by two. The index

is converted to percentage and takes a value between 0 and 100, with zero indicating no complementarity and 100 indicating a perfect complementarity in import/export.

The TCI can be constructed between India and ASEAN countries as under:

$$TCI_{ikj} = 100 - \sum(|M_{ik} - X_{ij}| \div 2)$$

Here ikj = share of good i in all imports of country k (ASEAN countries), and = Share of good i in the global exports of country j (India).

IV. REVEALED COMPARATIVE ADVANTAGE

The competitiveness of country's export is measured by an improvised technique based on revealed comparative advantage (*RCA*) has used in the following way. The *RCA* index classifies trades as per their skill to strive within an explicit arcade. A high value of *RCA* index would direct comparative inter-industrial export expertise in a specialized sector. The *RCA* can be presented as:

$$RCA = \frac{\frac{X_{ia}}{X_{it}}}{\frac{X_{wa}}{X_{wt}}}$$

where, X_{ia} = export value commodity 'a' by country i ; X_{it} = total export value by country i ; X_{wa} = world exports value of commodity 'a' and X_{wt} = total world exports value. In general, higher *RCA* index value indicates a higher comparative advantage of a country in given commodity. It is important to note that *RCA* indices are quite robust and unaffected to changes in growth and trade cycle differences across trading countries. These changes effect the numerator and denominator in the *RCA* formula. Similarly, the indices are not sensitive to the market access barriers, against all exporters of a particular commodity. Yet, they are sensitive to market barriers of a particular country. *RCA* also helps researchers to located the products where either a country enjoying advantage or losing advantages and where does the potential lies as far as export competitiveness of a country is concerned. This can be achieved by categorizing a country's export structure, based upon HS 6-digit product lines into four product broader product groups based upon their relative *RCA* profile.

In the order of their relative comparative advantage position, these groups are:

Table 1.2 : Export Competitiveness Framework

Competitively Positioned (CP)	Threatened Products (TP)
<p>CP product RCA's >1 & show steady improvement over the period of time owing to promising trade conditions.</p>	<p>These product lines have RCA's >1, but the indices deteriorate over time due to an adverse trade conditions.</p>
<p>Criteria:</p> <ul style="list-style-type: none"> • RCA index is greater than one in the average time period of 2013-15 i.e. $RCA_i (\text{avg. 2013-15}) > 1$. • Difference between RCA index of product line "i" in average difference and its last three years average RCA's is positive, i.e., $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) > 0$ 	<p>Criteria:</p> <ul style="list-style-type: none"> • $RCA_i (\text{avg. 2013-15}) > 1$ for the concerned product line. • Difference between RCA of product line "i" in (RCAi) Average (2013-15) and its last average RCA's is negative, i.e., $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) < 0$
Emerging Products (EP)	Weakly Positioned (WP)
<p>These product lines exhibit RCA indices that are <1, but their relative global position in the exports market is improving. EP signal towards commodity with future export potential.</p>	<p>RCA indices of these product lines are <1 and deteriorating due to discouraging global and domestic reasons. WP items can further be divided in to two groups based on their comparative advantage. This group further divided into two groups based on their relative level of revealed comparative disadvantage.</p>
<p>Criteria: Tier I</p> <ul style="list-style-type: none"> • It includes those product line where, $RCA_i (\text{avg. 2013-15}) < 1$, but equals to or > 0.5 in the average period of 2013-15. • Difference between the RCA averages of 2013-15 and 2001-03 is positive for the concerned product lines i.e., $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) > 0$ 	<p>Criteria: Tier I</p> <ul style="list-style-type: none"> • $RCA_i (\text{avg. 2013-15}) < 1$, but equal to 0.5 or >0.5 in the same period. • Difference between the RCA average of 2013-15 and 2001-03 is negative for the concerned product line, i.e. $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) < 0$
<p>Criteria: Tier II</p> <ul style="list-style-type: none"> • It includes product line where, $RCA_i (\text{avg. 2013-15}) < 0.5$. • Difference between the RCA averages of 2013-15 and 2001-03 is positive for the concerned product line, i.e., $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) > 0$. 	<p>Criteria: Tier II</p> <ul style="list-style-type: none"> • It includes product line where, $RCA_i (\text{avg. 2013-15}) < 0.5$. • Difference between the RCA averages of 2013-15 and 2001-03 is positive for the concerned product line, i.e., $RCA_i (\text{avg. 2013-15}) - RCA_i (\text{avg. 2001-03}) < 0$

Framework helps us to identify the strength and weakness of India-ASEAN exports profile and also allow one to analyze the tendency of competitiveness. The data set used in this study is exports data (2001-2015) at HS 6-digit drawn from UNCOMTRADE. Data was analyzed using two different phases Phase I (Φ_1) [2001-03 and 2007-09], Phase I (Φ_2) [2007-09 and 2013-15] and Phase 3 (Θ) denoted overall phase covering time period.

V. REVEALED IMPORT DEPENDENCE (RID)

The index distinguishes the commodities, which have import dependence on the partner countries. The RID index also known as Revealed Comparative Disadvantage Index. The RID index will give us the commodity wise structure of imports in the countries. The RID is defined as commodity 'i's share in country's total imports vis-à-vis its share in total world imports. The RID index can be computed as follows :-

$$RID = \frac{M_{ia} / M_a}{M_{iw} / M_w}$$

where M_{ia} is equal to imports of commodity i from country a , M_a is equal to total imports of country a , M_{iw} is equal to total value of the world imports of commodity i and M_w is equal to total world imports. As in the case of RCA index, an RID index exceeding one suggests a strong dependence of the country on the import of a specific item in a reference period and vice-versa.

VI. TRADE POTENTIAL

Free trade between two countries or regions would provide maximum mutual gains from trade for participating countries, if these countries exhibit significant trade potential with each other. Therefore, it seems necessary to examine whether there is considerable trade potential between India and ASEAN. The potentialities of trade depend upon their capacity to meet each other's requirement. This has been done by comparing the import prices of various commodities from each other with the import prices of the same commodities from the rest of the world. Trade potentials have

been calculated by way of comparing the composition of India's global exports/imports and ASEAN's global imports/exports.

Trade data is obtained from International Trade Map. Potential trade for any commodity is given by $\text{Min}(\text{SE}, \text{MI}) - \text{ET}$ where SE, MI, and ET are supplier's global exports, receiver's global imports, and existing trade between the supplier and the receiver. This formula in effect creates a "trade possibility frontier", demonstrating the maximum levels of trade possible within each HS 6-digit product category. Trade data is obtained from International Trade Map.

The projections of export potential to each other have been made with the help of semi-log equation: -

$$\log Y_t = a_0 + a_1 X_t$$

Where Y_t is the level of imports/exports over the period of time, X_t index for time, a_1 trend growth rate of imports/exports, and a_0 constant or intercept.

Projections are based on the following assumptions:

- a) India could meet ASEAN's requirement either by diverting her exports or by increasing the production of those items. ASEAN countries were willing to meet her requirement from India.
- b) Relative price structure remains the same.
- c) The proportion of income being spent on the items representing import potentials remains the same.
- d) The growth rate of national income assumed to be constant.
- e) The Indian capacity and ASEAN countries requirement for those items would increase at the existing rate.
- f) The Indian export prices of those items from each other remain either competitive or favorable to world export prices.

Exponential growth model used for analysis of growth rate is of the following form.

$$\dot{Y} = ab^t e_t \quad \dots (1)$$

Where Y = Dependent variable for which growth rate is estimated; a = intercept;
 b =regression coefficient; t = time variable; e = error term

The compound growth rate was obtained for the logarithmic form of equation (1)

$$\log Y = \log a + t \cdot \log b \quad \dots (2)$$

Where $\log Y$ is natural logarithm of Y , $\log a$ and $\log b$ are similarly defined. The compound growth rate ' r ' computed by using the relationship

$$r = \{ \text{Anti log}(\log b) - 1 \} \times 100$$

$$\text{OR} \quad r = (b - 1) \times 100$$

$$\log b = \frac{\sum(t \log Y) - (\sum t \cdot \sum \log Y) / n}{\sum t^2 - (\sum t)^2 / n}$$

where, b = slope of semi-logarithmic trend; a = constant; r = growth rate and n is number of times points.

In depth analysis would help us to know that how many product line at 6-digit level are competitive. The HS classification is organized into 21 sections, which are subdivided into 97 chapters (see Appendix 2). (UNCTAD 1996).

VII. SURVEY METHODOLOGY

In order to capture the stake holders view on ASEAN-India Free Trade Agreement (AIFTA) primary data based on survey methodology was conducted. Respondents were the Indian exporters exporting to ASEAN countries only. To narrow down the list to Indian exporters exporting to a list was collected from Federation of Indian Exporters Organisation (FIEO) of 711 exporters and then 350 respondents were found those who are exporting to ASEAN states. An online survey was conducted with exporters, to collect the data and 112 successful responses (see Appendix IV) received based on questionnaire.

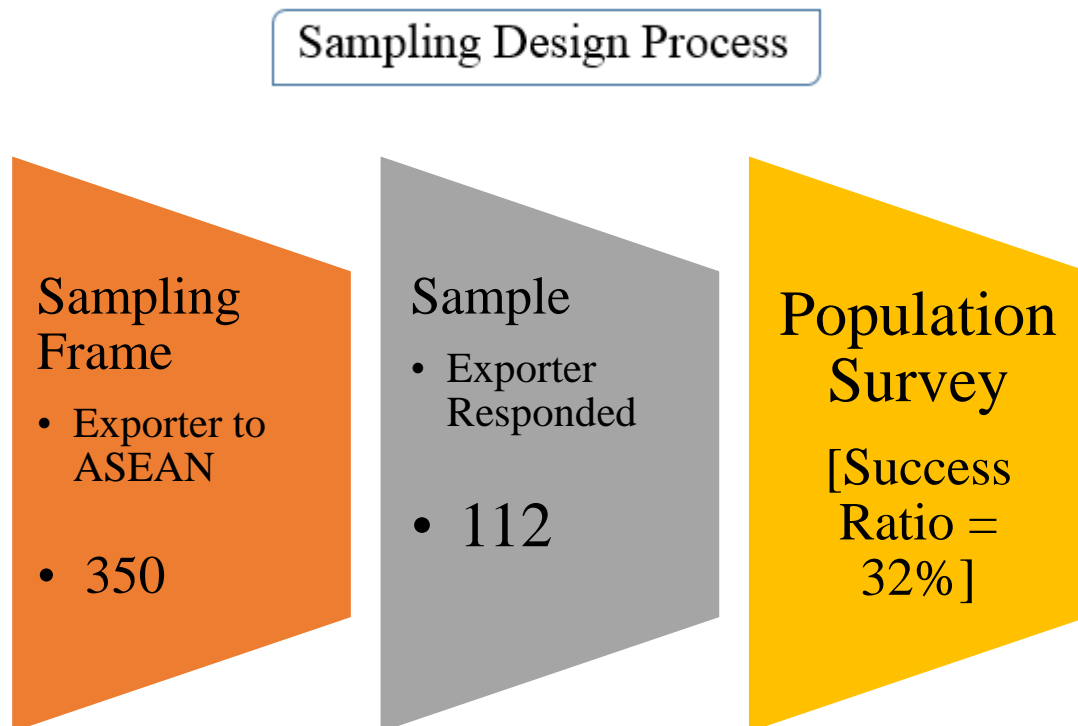


Fig. 1.1 : Sample Design Process

1.7 DESIGN OF STUDY

The study consists of seven chapters.

Chapter 1 is devoted to introduction, importance, objectives, data sources and research methodology chosen for topic.

Chapter 2 pertains to the review of literature on the study.

Chapter 3 deals with the trend and pattern of India's trade with ASEAN countries.

Chapter 4 pertains to export competitiveness between India and ASEAN by pertaining Revealed Comparative Advantages to identify items of trade between them.

Chapter 5 examine the sectoral distribution of trade potentiality

Chapter 6 focuses on challenges faced by the India's exporters while trading with ASEAN countries.

Chapter 7 relates to summary and conclusions of the study.

1.8 SUMMARY

In nutshell, it has been observed from the literature that India's Look East Policy has proved a right step in right direction in a world where attention on trade has been shifting from Western countries to Asia and more specifically to South East Asia. But for India winning friend in South Asia is equally a hard task to accomplish as China in entering into more lucrative trade deals with South Asian countries. Intra industry trade are the forte of South East Asian countries, especially ASEAN countries which are creating uphill task for India as performing trade agreement. Under the given circumstances, it become a challenging affair to maintain trade performance and competitiveness for India while dealing with ASEAN countries.

CHAPTER – 2

REVIEW OF LITERATURE

2.1 INTRODUCTION

India's Look East Policy, which is now known as "Act East policy" is the major factor for the focus on the India-ASEAN trade. Literature on India-ASEAN trade varied on opinion as far as the success of AIFTA way concerned. Initial reviews were of the opinion that India is benefitting from the trade of goods between two entities but some studies on service sectors reveals that the loss on goods can easily be offset by the gain of India service sector vis-à-vis ASEAN countries trade is concerned, as India is riding on comparative advantage in service sector against their ASEAN counterparts. The review of literature intends to find certain noteworthy interpretations regarding India-ASEAN FTA by unveiling the hidden complexities pertaining to the fundamental arguments and norms to reveal upon the fundamental concern of AIFTA and to draw the research gap to accomplish the research. Before pondering upon the trade relations between two countries or trading blocs, it is important to narrow down on literature creating basis of trading environment. What augurs trade between two entities? The answer suggested by Ansari and Singer (1988) was the technical gap between developing and developed countries, which further leads to disparities. Because of technology know-how developed countries are in a position to make rapid economic progress, while owing to lack of technology developing countries cannot sustain economic growth. The gravity of the gap solely depends upon the foreign sector, which is best estimated by substituting the domestic resources for the foreign resources. Developing trade between the developed and developing countries are likely to encourage global specialisation in line with the comparative advantage and legacies of the trading associates, and to increase employment revenues and to decrease the rate of investment in the developing countries. But adverse terms of trade can reverse this benefits in favour of developed countries. Here, it is worthwhile to conclude that the theory of comparative advantages has widened the gap between the developed and developing countries. The root cause of adverse terms of trade mainly exists due to their export of primary products and low productivity. Even Luxemburg (1951) interpreted the same

phenomenon with the pinch of socialism by dividing the world into capitalist and non-capitalist countries, where she argues that non-capitalist environment is necessary for the survival of capitalism. External trade took place between the unequal exchanges and she opined that capital accumulation cannot take place without unequal exchange. Her argument further explained the relations of non-capitalist and capitalist sectors depend upon the process of unequal exchange. Her views further refined by Emmanuel (1972), where he argued that in free trade, growing disparities among the developed and the developing nations is mainly due to the unequal exchange. According to him, the extent to unequal exchange of a country depends on the departure of wage rate and organic composition of capital from the world average. Large disparity in wages between the developed and developing countries was due to the international specialization. The disparity of wages and unequal exchange, as per Emmanuel, are positively related to each other. He concluded that if the developing countries develop trade among themselves, they would do better. Thus, the problem of unequal exchange will be solved as exchange will take place among equals. Nevertheless, the expansion of mutual economic relations among the developing countries is a long process. Unequal exchange remained a centre point for international trade. Amin (1976) divides capitalist world into the centre and periphery. In the periphery, the capitalist expansion is gridlocked by the additional competitive asset of the centre's industries and hence pre-capitalist development methods sustain there for a longer period of time. He further explained that capitalist development is a cumulative process at the centre. Amin analysed that unequal specialization arises due to early development of capitalism at the centre. He contends that the working of this unequal specialization in favour of the centre and against the periphery is the direct outcome of unequal exchange between them. Although Amin criticizes theory of unequal exchange theory given by Emmanuel on the ground that compensations are not self-administering factors rather just a self-sustaining process. Amin (1977) even denied that "the preparations traded on the planet advertise are explicit, that they have unchangeable use esteems." He assumes that world prices are determined by the price structure of the centre, subsequently he discounts unequal trade origination that low wages in the marginal make low costs of marginal items.

From historical discussion on the existence of trade and comparative specialization one can assumed that deterioration of terms of trade and unequal exchange between developed and developing countries are the generated of trade where external sector tries to act as leveller. These discussions also indicate towards the creation of dependency theory where developing countries are dependent of developed countries for technological upgradation. But it also suggests that under developed countries should trade among themselves to take the benefit of equal exchange rate as their alignment with developed countries will take long time to progress. The deterioration of terms of trade and unequal exchange are the main indicators of such a trend which is commonly prevailing among developing countries. India and ASEAN are developing countries and their cooperation is of importance in order to reduce their dependence on the developed world.

Regionalism in Southeast Asia has long history that dates back in the early 1960s. It is an established fact that political and security issues were addressed by ASEAN, rather than for economic cooperation. From its establishment in August, 1967, it took ASEAN nine years to lay the requisite political foundation for regional economic co-operation. Whereas, India's tryst with 'Look East Policy' proved to be an inevitable step to reduce the unequal exchanges between developed and developing countries. While studying the progress of India's Look East Policy, Haokip (2011) identified that in the in the post-cold war era, a vital foreign strategy initiative adopted by India launched by former Indian Prime Minister Mr. Narsimha Rao in 1991 with the objective of evolving political treaties, growing fiscal integration and building safety collaboration with the Southeast Asian nations was the Look East Policy. The policy found a noticeable swing in India's stand towards Southeast Asia in context of its strategic and economic reputation. Second phase began in 2003 extended the horizon of the Look East Policy from Australia and East Asia, with ASEAN as its vital entity. The new chapter thus marked a move and focussed from trade to extensive financial and safety collaboration, political partnership, and improve transport connectivity through rail and road links. Sundaram (2013) revealed that the implementation of the proposed plans and projects under the policy by India determines the victory of the Look East Policy and to give role to the North-eastern states for the execution of the same. India however

should become even more determined and capable in expanding its relations with the rest of Asia, and consolidate its abilities to overcome the challenges and to manage the global economic chaos.

A study on export potentialities of India with special reference to Asia and the Far East countries, was conducted by Satyanaryan (1986), where he opined that the growth of exports of a country depend upon the long term strategy adopted by the importing countries and he concluded that there is a vast potential of export between India and Asia including Far East countries. Ambatkar (2000) further elaborated that India endeavoured to boost trade and investment ties with few of the ASEAN nations during phase of 'Look East Policy'. He analysed that USA, Japan and China are significant trade associates for the ASEAN nations and for growing the trade with ASEAN countries India requires to adopt calculated planning on individual country basis by with regards to their dynamic economic parameters. Owing to China's role in ASEAN, Ambatkar (2000) found that investment co-operation between India and ASEAN states was not upto the desired level and he suggested that an open trade regime idea should be expedite by India to enhance more trade prospects. Kumar, et.al (2006) provides a comprehensive background along with the roadmap for the India-ASEAN relations to prosper. He suggested some methods through which the evolving partnership of ASEAN and India, can grow and explore common goals so that both can get optimum benefit from each other's potential and negotiate on better terms. A study by Seri (2004) argues that new opportunities can be explored for quicker and stable economic growth for contributing actors by regional cooperation. Although trade has been booming sans properly exploitation of trade potentials. The regional economy size will be enhanced by increased partnership between India and ASEAN, which later will generate improved conditions for competitive market arrangement and a bigger size of the market. India and ASEAN would benefit in maintaining a high development plan and attain their growth objectives by strong and constant collaboration between them. Zhang (2006) explains that trade relations among the two nations have passed through several stages; a rather distant association based on strategic alliances with each country separately. Look East Policy have helped to develop a solid foundation for the India- ASEAN relationship by making it a Sectoral dialogue, invigorated by the strong position holding nations

namely US & Japan, who were concerned with India's liberalisation process. The economic growth & development trade cooperation has been established and innovative collaboration arenas have supplemented the list.

Zhang suggested that the bilateral relations between India and Southeast Asia are being explained in such away giving the feeling of surplus redundancy. However, ASEAN countries have to maintain balance between the two main poles i.e. between India and Northeast Asia. It is important for India to be amalgamated in the 'New Asia', rather than hanging around at its boundary, as it has been continuing to do so till date. The regionalism is mainly withstood by ASEAN. Chanda and Sasidarn (2009) further reaffirm the point raised by Zhang by revealing that the possible explanation of Look East Policy of India along with the complementation of this interest by its Asian allies. They assess by studying at the outlook for impending PTAs by India and some concerns and benefits that should outline the future of regional initiatives of India to promise & recognise its, strategical and geo-political goals along with long term economic objectives.

A study by Asher, et. al. (2004) explains a wide array of complementary concerns amid India & ASEAN still not addressed in an appropriate manner. Mutual trust is a pivotal component in supporting the underlying forces of this evolving profitable association. Work stresses upon the fact that few substantial complementarities that are present between India and ASEAN can only be attained if conceptual and informational sections discover upcoming projections of ASEAN's commercial associations with India with an emphasis on probable advantages at both state and cluster level. The rise of ASEAN countries was also analysed by Sally and Sen (2005) where they studied the trends and patterns in ASEAN and summarized the main trade strategy parameters in ASEAN nations. Their study concluded that for ASEAN countries the main device of liberalization and regulatory reform has to be driven within itself, with government adopting autonomous methods as per the situations. Madaan (2005) observed that India's trade relations with ASEAN have strengthened since 1991. Her complementary economic structure with ASEAN involves significant mutual gains. The trade dependence between India and ASEAN countries has increased over the period. India's trade dependence on ASEAN was much more during 1995-2003. Her trade dependence was mainly on Singapore,

Malaysia, and Indonesia respectively. On the other hand, Myanmar, Malaysia, Indonesia and Singapore were respectively more dependent on India's trade during the era. India's trade intensity with ASEAN were more than her export intensities. Among the ten ASEAN countries, trade intensities of Myanmar, Malaysia, Singapore and Indonesia were at desirable level with India during this period. Asher and Palit (2008) explored India's Look East Policy. Economic engagement of India with Southeast Asia has grown at a faster pace since the early 1990's. In 1991-92 the trade in goods, between India and ASEAN was US\$ 2.3 bn, and it rose to US\$ 38.4 bn in 2007-08. In terms of commodity composition bilateral trade has been diversified which further recommends that speeding up in India-ASEAN trade accorded with the commencement of a robust phase of expansion for the global and the Indian economy as well. But apart from exploiting the economic benefits, India's engagement with ASEAN has dimension of forwarding her interest for the larger regional and geo-political perspective. Under preferential trade agreements and the trade-off, Chanda and Sasidaran (2009) have assessed the scope to which India has been able to comprehend its interest in this negotiation process which indicates India's future regional initiatives for assuring the attainment of its long term goals. Asher and Palit (2008) found that not only Indian trade with ASEAN has been increasing but also diversifying in terms of commodity composition. Even this point was supported by Madaan (2008) by suggesting to build a broader Asian Trade Bloc by including East Asia, ASEAN and SAARC as the sub regional blocs has not exploited the full trade potentials due to their limited complementarities and lower intra-regional trade. Although, Chongvilaivan (2008) asserted that India's intention to pave the way towards non-taxable trade with ASEAN countries was driven in fear and thought that she might "miss the globalization spree" & remember that she has to compete with China who intended to be a lead actor. Study highlighted certain very important dimensions including the questions whether India ASEAN FTA enhances the welfare for both the parties? Though, it was found that free trade may not always be beneficial for everyone. He briefed about action plan leading towards a successfully concluded FTA, which will result in bringing about considerable rate reductions on sensitive lists of India, i.e. from ninety to four per cent for refined palm oil, from 70 to 50 per cent for pepper, & from 80 to 37.5 per cent for crude palm oil and from 100 to 45 per cent from tea & coffee. Secondly, pacts like AIFTA

has often led to overlapping Rules of Origin (ROO), sometimes elusive or sometimes evident. Variation in ROOs may result in increasing administrative cost, adding regulatory complication and eventually becoming a non-tariff obstacle to trade. In such a situation both the entities i.e. India & ASEAN will not reap the fruits by additional reduction in tariffs. The ASEAN India Free Trade Agreement that successfully liberalize trade in service along with welfare will also open various business open doors for venturing in ASEAN countries to reinforce their intensity in the worldwide market by fragmenting their production and establishing industrial clusters. The fear of Chongviliavan's study appears to turn true in the study of Limaye (2008), which analysed that ASEAN exports to India are much higher than India's exports to ASEAN following an overall pattern in India's international trade, alongside that in spite of sign of development in India-ASEAN exchange, India is falling relentlessly behind China. Pal and Dasgupta (2009) studied the effect of goods agreement in trade between India-ASEAN is on light manufacturing sector, marine products and plantation sector of India. Study suggested that plantation sectors such as tea, spices, coffee and rubber would be affected adversely. The garments, auto components industries and marine products, textiles, are also likely to face hard competition in short term. In long term, there are inter-sectoral trade-offs as far as impact is concerned. Thus, the total welfare gain will crucially depend on the redistributive measures adopted by Government of India. A similar study by Veeramani and Saini (2011) in which the of the impact of AIFTA was quantitatively assessed on particular plantation commodities in India. The result recommended that AIFTA would pave the way to a substantial rise in such imports by India, which are driven mainly by trade creation rather than trade diversion. Analysis proved that India might bear a substantial loss of substantial loss of tariff revenue due to the tariff reductions. However, the profit in consumer surplus (due to decrease in domestic prices and the subsequent fall in dead-weight loss) would compensate the tariff revenue loss, resulting in a net welfare advantage. Another study on welfare aspect of AIFTA was conducted by Ahmed (2010) showed that India and ASEAN would benefit in terms of welfare while on the other side the terms of trade would deteriorate for India. The study revealed that, in case of India, significantly affected sectors were processed grain crops, food products, textiles and wearing apparel, light and heavy manufacturing sectors. There is expected to be increase in exports of

ASEAN in agricultural and fisheries products and processed food items which could have an adverse effect on wages and employment among the Indian working class. Study found that the present FTA would also affect the balance of trade of India badly. Ghuman and Madaan (2009) found that India's trade relations with ASEAN have strengthened since 1991. Her complementary economic structure with ASEAN involves mutual gains. The trade performance of India will increase with ASEAN was more than with the rest of world during post WTO period. The WTO displayed a higher destabilizing effect on exports by India to ASEAN as compared to its exports to the rest of world. Trade dependence between India and ASEAN was much more during 1995-2003. They suggested that India's policy of liberalization and openness has helped in strengthening India's trade ties with ASEAN. Sawyer et. Al (2010) described that swift growth of economies of Asian and their vital role in the global disintegration of production resulted in increase of the Intra Industry Trade and therefore it has added to its importance across Asia. Research examined the level of Intra Industry Trade for twenty-two countries of East, Southeast, South and Central Asia. Intra Industry Trade is measured as a multilateral trade-weighted index and is described for ten different categories of sectors. Adding further, the elements of Intra Industry Trade were examined by adopting Tobit regression model. The result indicates that ASEAN and the other high income nations in East Asia reveal the highest level of Intra Industry Trade index value, closely followed by China and India. The expenditure done on research and development, openness and higher share of manufactured exports resulted in promoting Intra Industry Trade, while geographical remoteness and the variance in economic size had a negative effect, especially for manufactured category of goods. The ASEAN free trade area was most prominently associated with IIT across all SITC categories. A positive influence on Intra Industry Trade in primary products was due to Central and South Asian regional trade agreement. Similar study by Mathad (2010) was conducted where he analysed that India and ASEAN trade in goods for the year 2007-08. It was observed that ASEAN trade area is intensely joined into the intra-trade rather as compared to inter-regional trade. India-ASEAN trade is very less & it seems like India does not hold a significant position while trading with ASEAN, which was an anti-thesis of Ghuman and Madaan (2010) study. Even study by FICCI-Deloitte (2011) proved Mathad apprehension wrong by concluding that India has high

relative advantage in sectors namely medical and pharmaceutical, chemicals, textiles, carpets and handicrafts, apparels and accessories items. The ASEAN counterpart has comparative advantage in machinery and appliances and electrical equipment. Bhattacharyya and Mandal (2014) studied that AIFTA will show high impact on intermediate goods (both adversely and favourably) as compared to the final goods. Other fascinating inferences include that major part of the industries are not affected by tariffs at all and for them the agreement had no importance. In reality, few products were falling in this group of goods. Although, high fares are levied with the passage of time, therefore imports have imparted a false signal to the elasticity of tariff which indicate that tariffs also determine their imports and there is no question of adding these products in the or sensitive list. Banik and Centrale (2014) analysed that India should cover services along with trade in goods. They also suggested that India should participate in the ASEAN production supply chain. Okabe et.al. (2014) by analysed that there is progressive and substantial trade creation effect from the tariff elimination by apply AIFTA on Intra-ASEAN trade. He adopted the gravity model to analyse his results old member of ASEAN countries is affected broadly by the trade creation as compared to the new member countries. Further, AIFTA has also contributed in improvising the trade values in the Intra-AFTA. Khurana and Nauriyal (2016) also attempted to deliver an understanding into the trade creation and trade diversion effects of AIFTA in goods. To observe the effects of the pact at a cumulative level the study assumed a theoretically consistent gravity model and used empirical vital measures such as ordinary least squares and the Poisson Quasi-Maximum Likelihood Estimator. The outcomes were that standard gravity variables are statistical significant and report anticipated signs, yet a decrease in flows of exports has been recorded which followed the implementation of the free trade agreement, resulting in pure trade diversion effects. But Bhattacharyya & Mandal (2016) did ex post effects of AIFTA and revealed that trade balance of India with ASEAN has declined and there is a no equivalence among expansion of trade and tariff reforms. Study further elaborated that the combined value of the net surplus with the government was positive up to 2012, after implying taxes on the gainers and subsidizing the losers but it become negative in 2013 and since then the trade with the rest of the world has fallen for both India as well as ASEAN due to worldwide recession. Study showed that surplus would

always have been positive for India if the global crunch had not been there and in that case they would have proposed two alternative policy situations where the surplus would always have been positive: an FTA with rest of the world and secondly a schedule where priority was given to tariff elastic goods. Renjini and Karu (2016) made an attempt to review the current scenario, composition, trade intensity value index and competitiveness advantage of agricultural trade between India and the ASEAN for the period of 1995-2014. The result revealed that, 30-40 per cent of imports and more than 10 per cent of exports were directed to the ASEAN in comparison to world. Vietnam and Indonesia were found to be major export destination and source of agricultural commodities respectively. The ASEAN continued to be the most preferred trading partner to India with a trade intensity index value of more than two for all the considered years. India had maintained higher trade intensity with Indonesia, Malaysia, Thailand, Vietnam and Myanmar compared to Brunei, Cambodia and Lao. India maintained competitiveness in marine products, spices, rice and oilcake meals over China, Australia and USA which are the major agricultural exporters to the ASEAN considered in the study. But China has emerged as a tough competitor to India in cotton, fruits, vegetable and coffee in the ASEAN market that calls attention to the need of expanding the competitiveness of the agricultural supplies. Ranjini et al. (2017) analysed bilateral trade is influenced by the trade potential between India and ASEAN countries partner's income and free trade agreement. The study exhibited that India has exceeded the trade potential with Cambodia, Indonesia, Malaysia, Myanmar and Vietnam, while there the trade potential with Brunei, Lao, Philippines, Singapore and Thailand is yet to be tapped. The study stresses the significance of procedures of trade facilitation required to boost up the trade with the ASEAN. The agricultural trade between two entities is increasing compared to global trade. ASEAN stand as a major exporter of agricultural commodities to India in Asia. India has considerable export potential in the region. It was analysed that cotton, rice, tea and oil cake meals have relatively higher comparative advantage index. While studying the India's export competitiveness in the light of Look East Policy Sarin (2017) found that competitiveness of Indian export facing challenges and as far as competitiveness is concerned India is still lagging behind Asian tigers. A similar study by Kaur and Sarin (2017) on India's export competitiveness of agriculture products from 2001-

15, elucidate that India's agriculture export to ASEAN lacking diversification and a little change was found for India's agri export as far as comparative advantage and competitiveness is concerned. Although Das (2018), tried to suggest ways and means to improve India's trade with ASEAN which includes large potential efforts to improve ease of doing business in India, fast registration of businesses, cutting bureaucratic red tape to woo foreign investors. Study mentioned ASEAN-India economic relations have significant room to grow in light of the global trade turmoil, service sector potential and people to people contacts. Trung et al. (2018) analysed bilateral trade of Vietnam and to estimate its advantage of trade efficiency before and after the free trade agreements (FTAs) with China and India entered into force by using the techniques of stochastic frontier estimation for the gravity model in his study. The results from based on the time period of year between 2000 and 2015 revealed that the there was a positive impact of AIFTA on Vietnam's bilateral trade flows however there were negative effects on Vietnam's exports but noton imports after the entry into force of the ASEAN-China Free Trade Agreement (ACFTA) and FTAs has suggestively reduced the cost of trade over time, and these impacts on imports by Vietnam are much higher as compared to the exports done by Vietnam.

Hence, from above literature it was observed that Look East Policy of India was well calculative and apt step to evolve deep and long lasting ties with Southeast Asia, where China already have strong footprints. Many perceived LEP as geo political affirmation of India's lacking less economic benefits. Some found that initially LEP is not generating much economic fruit but patience will definitely bring the desired results. On economic front early studies on AIFTA was apprehensive about economic gains in goods but are positive on desired results in services with India export to ASEAN. On agriculture front, India is battling against their counterparts in ASEAN, which pose a daunting challenges to policy makers as India still predominately an agrarian economy. In recent studies it was found that the effects of Trade creation are superseding than that of trade diversion. A few literatures available as far as measuring trade potential and trade competitiveness is concerned and present study will try to bridge the gap on this important aspect of AIFTA.

CHAPTER – 3
TREND AND PATTERN OF INDIA’S TRADE WITH ASEAN
COUNTRIES

3.1 AN OVERVIEW

Today ASEAN a dynamic, swiftly growing regional group that strives to efficiently manage both its diversity and growth. Trade is a major priority and a vital engine for growth in the region. ASEAN economies have the unprecedented trade to GDP ratio in the developing world. Similar to ASEAN economy, India has also achieved a place of eminence at the global stage. India’s trade with ASEAN was obliged by many factors such as fall of Soviet Union, advent of Globalization, upswing of People’s Republic of China (PRC) etc. (Desai, 2017). India's closeness to southeast countries could give her the major advantage of low cargo cost and improve her trade scenarios in this region. India also comprehended the standing of regional economic co-operation. In fact, both can develop advantage from each other by mutual co-operation. India has a significant stake in the economic development of the ASEAN (ASEAN.org). Trade openness is not common among ASEAN countries and India, the disparities among ASEAN nations, trade invest flow it clearly indicates that policy measures need to be reworked focusing on India-ASEAN free trade area. Big trade gaps among ASEAN nations lead to disabilities in integration among ASEAN nations.

In this chapter we discussed that the trade policy paradigm shifted from western dependence to looking east. ASEAN was the obvious choice as the ASEAN countries could supply much needed raw material to India and in lieu of that, India could supply finished goods, technical knowhow and consultancy services.

The synergy between India and ASEAN could easily be gauged through Table 3.1, which explained that the total land area of ASEAN is 1.5 times bigger than India, but India is hosting 2.1 times larger population than ASEAN. Although glaring disparities does exist among ASEAN which indicates developmental gaps between ASEAN countries but collectively ASEAN is far better than India.

Table 3.1: Key Economic Indicators of ASEAN Member States (2018)

Country	Total land area	Total population	Gross Domestic Product (at current prices)	Gross Domestic Product Per Capita (at current prices)	International Merchandise Trade			FDI inflow
	km ²	Thousand	US\$ million	US\$ PPP	Exports	Imports	Total trade	US\$ mn
					US\$ PPP	US\$ mn	US\$ mn	US\$ mn
Brunei	5,765	429	12,212	74,914	4,761	3,088	7,849	460
Cambodia	181,035	15,717.70	22,340	4,104	2,555	3,296	5,851	2,732
Indonesia	1,913,579	262,223.40	1,013,926	12,349	168,811	156,986	325,796	23,064
Lao PDR	236,800	6,752.80	17,090	7,332	3,607	4,779	8,387	1,695
Malaysia	331,388	32,049.70	317,042	29,236	217,839	195,149	412,988	9,447
Myanmar	676,576	53,397.80	65,607	6,070	13,865	19,247	33,112	4,341
Philippines	300,000	104,921.40	313,875	8,359	68,251	107,879	176,130	10,049
Singapore	719	5,612.30	323,954	93,920	383,252	317,693	700,946	62,017
Thailand	513,120	67,653.20	455,704	18,231	236,694	222,763	459,458	9,101
Viet Nam	331,231	93,682.40	223,927	7,027	213,931	210,626	424,557	14,100
ASEAN	4,490,212	642,439.70	2,765,679	12,361	1,313,567	1,241,507	2,555,073	137,006
INDIA	2,973,190	1342512.7	2,597,491	7056	27950	41930	69890	37768

(Source: World Bank, www.dataworldbank.org, National Accounts Section, United Nations Statistics Division, Key Indicators for Asia and Pacific, 2018, Asian Development Bank, Manila. <http://unstats.un.org/unsd/demographic/products/socind>)

On an aggregate basis, the economic performance of ASEAN and India GDP at current prices are approximately on even platform but in trade indicators ASEAN collectively outsmarting India as ASEAN total merchandise exports for the year 2018 was 47 times of India and imports was almost 30 times more than India. As far as total trade is concerned, ASEAN total trade is 37 times more than India, such a trade performance clearly elucidates the fact that the ASEAN countries are playing a pivotal role in global supply chain, whereas India's performance on trade fronts is standing nowhere as compared to ASEAN. Inflow of foreign direct investment (FDI) of ASEAN is 3.62 times better than India. Notwithstanding the overall performance of ASEAN over India but with ASEAN the contribution of economies like Indonesia, Philippines, Singapore and Thailand superseding the rest of ASEAN economies but as far as total trade is concerned ASEAN nations are providing a unique example of showcasing export oriented economies. So, Table 3.1 suggest that the key indicator level ASEAN enjoying a favorable turf vis a vis India on negotiation table.

3.2 TRADE AT BILATERAL LEVEL

India-ASEAN trade and investment relations have been growing steadily, with ASEAN being India's fourth largest trading partner.

Table 3.2 depicts the volume of bilateral trade between India and ASEAN during 1991 to 2017. India's trade with ASEAN has increased from US\$ 1960 million in 1991 to US\$ 80724 million in 2017. India-ASEAN total trade volume during year 2010 was about 41 times more than the trade volume during 1991, which further cemented the rationality of looking east. The imports of India when trading with ASEAN are more than exports. The imports in 2017 are US\$ 45313 million and exports are US\$ 35411 million. Except 1991, 1992, and 1993, India had net trade deficit with ASEAN in the last two and half decade (approx.). In 1998 and 1999 the differences between exports and imports was huge but it started to improve after 2001 constantly although the balance of trade was negative as imports were more than export.

Table 3.2: India's Trade with ASEAN countries during 1991-2017**(US \$ million)**

Year	Export	Import	Trade	Balance of Trade
1991	1020	939	1960	81
1992	1257	1151	2408	105
1993	1607	1009	2616	597
1994	1827	1869	3697	-42
1995	2577	2579	5156	-1
1996	2701	2932	5633	-231
1997	2464	3392	5856	-928
1998	1901	4321	6222	-2421
1999	2470	5113	7582	-2643
2000	2800	4299	7099	-1500
2001	3367	4345	7712	-979
2002	4503	4807	9311	-304
2003	5072	6687	11759	-1615
2004	7552	8550	16102	-998
2005	10286	10632	20918	-346
2006	12369	16301	28670	-3931
2007	13824	21031	34855	-7207
2008	17407	26698	44106	-9291
2009	19925	23968	43893	-4043
2010	22958	29640	52599	-6682
2011	34498	40331	74829	-5834
2012	32295	42737	75032	-10443
2013	37885	42308	80193	-4423
2014	31294	44457	75751	-13163
2015	26428	41516	67944	-15088
2016	26,381	38222	64603	-11841
2017	35411	45313	80724	-9902

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

- a) Even during the global recession period generally started from 2007 found no trait of slowing down international trade between India and ASEAN region. During the period of 2007 till 2011, India's export to ASEAN also showed upward trend which indicate that a diversified destination of exports certainly can save a nation of global trade related exigencies and fortified the support of Look East Policy.
- b) Table 3.3 further explaining the table 3.2 in context of India's trade balance vis-a vis each ASEAN nation. The trade balance was favourable with countries namely Philippines, Singapore, Vietnam and Cambodia where exports by India to these countries are more than imports (1991-2017). India recorded trade surplus Vietnam (US\$ 3972.36 million), and the Philippines (US\$ 873.24 million), Singapore (US\$ 4350.04 million) and Cambodia (US\$ 229.66 million) in 2017. Nonetheless, a number of growth drivers suggest a major and continuous growth in two-way trade and investment, helped by the conclusion of the India-ASEAN Trade in Services and Investment Agreements. Indian investment is chiefly in the areas of textiles, garments, IT& ITes, Steel, Airports, Chemicals, Automobiles and Pharmaceuticals. Still, the trade deficits with the other ASEAN states were so large that it is more than counterbalance the surpluses with the other ASEAN nations. At the aggregate level, therefore, India had a trade deficit with ASEAN of US\$ 1499.61 million in 2000 which was bridged till 2005 but after that it again had started to become adverse. In 2012 the trade balance doubled in negative to US\$ -10442.96 million. Although, India's trade deficit with ASEAN swelled up enormously which obtained a figure of US\$ - 9239.07 million in 2017. Although among ASEAN nations, India had biggest trade deficit was with Indonesia accounting to US\$ - 12467 million, followed by Malaysia US\$ -3364.20 million for the year 2017.

Table 3.3: India's Trade Balance with ASEAN member nations during 1991-2017

(US \$ million)

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	ASEAN
1991	0.45	0.02	79.75	0.04	-188.3	-47.38	32.91	78.42	150.25	-25.52	80.63
1992	0.55	-4.50	87.73	0.04	-227.43	-121.68	50.13	150.62	218.22	-48.34	105.34
1993	0.42	1.42	115.28	0.24	-0.79	-99.73	52.29	244.07	300.03	-15.82	597.41
1994	2.28	-1.37	-38.9	0.13	-202.1	-104.12	87.75	-34.95	234.97	14.5	-41.81
1995	7.18	1.79	200.31	0.31	-504.87	-131.9	122.37	-101.41	302.17	102.61	-1.43
1996	6.00	1.58	-4.92	0.37	-571.62	-131.91	167.19	-70.39	249.97	122.29	-231.44
1997	2.23	1.43	-293.27	0.29	-687.25	-174.39	215.75	-225.94	116.73	116.66	-927.76
1998	3.21	3.26	-644.42	1.24	-1288.25	-143.81	81.41	-598.35	47.53	117.48	-2420.7
1999	1.19	7.65	-639.3	1.40	-1585.93	-138.25	87.82	-643.99	122.53	143.71	-2643.17
2000	2.87	6.62	-595.47	3.51	-780.08	-135.31	105.94	-475.56	186.02	181.85	-1499.61
2001	1.91	9.43	-490.11	5.77	-364.21	-292.76	154.04	-377.33	173.70	200.58	-978.96
2002	4.33	16.29	-493.64	1.96	-587.72	-278.92	334.53	46.70	376.10	276.39	-303.98
2003	4.52	19.96	-840.15	0.31	-1101.20	-283.62	212.41	-165.12	192.53	345.28	-1615.08

Contd.

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	ASEAN
2004	4.50	16.52	-1222.07	0.86	-1174.28	-297.99	182.07	924.30	106.66	461.64	-997.78
2005	3.56	20.93	-1628.88	6.47	-1292.22	-371.92	278.91	2268.14	-137.33	506.09	-346.25
2006	-181.26	46.61	-1740.64	1.99	-3324.56	-578.61	388.07	942.69	-199.82	714.27	-3931.27
2007	-225.28	43.58	-2962.15	2.86	-3875.30	-646.31	397.88	-511.54	-519.03	1088.34	-7206.95
2008	-308.71	49.58	-3772.02	4.07	-4426.98	-668.93	527.39	-1477.21	-659.51	1441.00	-9291.33
2009	-463.74	37.82	-4596.65	26.73	-1465.56	-973.64	354.35	2712.27	-1065.08	1390.59	-4042.90
2010	-185.89	53.41	-5138.25	-11.94	-2440.59	-849.57	407.16	1803.09	-1801.24	1482.08	-6681.73
2011	165.68	81.16	-7564.42	-56.20	-5307.41	-806.19	556.34	7472.18	-2287.64	1912.25	-5834.25
2012	-905.86	99.96	-8046.37	-116.42	-6702.90	-819.33	625.06	5755.38	-2045.15	1712.68	-10442.96
2013	-725.81	123.97	-9426.15	-50.02	-3833.92	-623.37	1060.28	7162.39	-1271.63	3160.95	-4423.32
2014	-900.17	137.64	-10740.12	3.99	-6286.27	-524.22	1036.22	2607.20	-2242.42	3744.83	-13163.33
2015	-577.39	102.36	-11033.15	-91.69	-4667.86	-156.33	786.16	409.09	-2536.58	2677.12	-15088.27
2016	-424.51	660.70	-9057.76	-148.48	-4464.70	56.24	998.42	635.38	-2353.99	2852.05	-11246.66
2017	-543.84	721.85	-12467.00	-224.99	-3364.20	319.15	873.24	4350.04	-2875.68	3972.36	-9239.07
Total	-5231.59	2259.66	-92952.72	-637.17	-60716.49	-9024.80	10176.08	32880.16	-17217.69	28647.91	-111816.62

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Although, India's bore trade deficit with ASEAN nation in goods only, but if one perceives the India- ASEAN free trade agreement it also covered a wide range of services and investment, through which India can easily compensate the trade deficit by gaining more market access in ASEAN region.

Table 3.4: Compound Annual Growth Rates of India's Trade with ASEAN countries
(Per cent)

Country	Exports (1991-2017)	Imports (1991-2017)
Brunei	17.89	37.37
Cambodia	38.55	–
Indonesia	16.07	22.53
Lao PDR	26.99	–
Malaysia	13.04	12.27
Myanmar	23.15	10.39
Philippines	15.62	12.24
Singapore	14.33	12.36
Thailand	17.26	19.84
Vietnam	26.94	18.92
ASEAN	16.00	19.32

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

India's trading ties with ASEAN has been growing since 1991 albeit no so equal with all ASEAN members. But it is obvious that a positive growth is there to stay as the table 3.4 elucidating that India's export has increased with 16.00 per cent compounded annually. Export with Cambodia, Lao PDR and Myanmar grew by 38.55, 26.99 and 23.15 per cent respectively during 1991-2017 period. Export growth with Brunei, Indonesia, and Thailand was also very encouraging and above average showing a favorable import growth figures towards India, which explains a lot about the India- ASEAN trading ties which was envisioned through Look East Policy.

Table 3.5: Share of India in ASEAN trade during 1991-2017**(Per cent)**

Year	Share of India in ASEAN export (%)	Share of India in ASEAN import (%)	Share of India in ASEAN trade (%)
1991	0.91	1.07	0.99
1992	0.86	0.76	0.81
1993	0.79	0.89	0.84
1994	0.91	0.79	0.85
1995	1.10	0.78	0.93
1996	1.27	1.11	1.19
1997	1.31	0.94	1.12
1998	1.68	0.75	1.25
1999	1.69	0.78	1.27
2000	1.59	0.91	1.28
2001	0.87	1.29	2.16
2002	1.12	1.35	2.47
2003	1.08	1.68	2.76
2004	1.33	1.71	3.04
2005	1.60	1.84	3.43
2006	1.62	2.46	4.08
2007	1.64	2.80	4.43
2008	2.01	2.87	4.89
2009	2.25	3.33	5.58
2010	2.18	3.12	5.30
2011	2.79	3.53	6.33
2012	2.60	3.54	6.14
2013	3.01	3.44	6.45
2014	2.45	3.67	6.11
2015	2.30	3.88	6.18
2016	2.30	3.52	5.81
2017	2.61	3.52	6.12

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.5 elaborates the contribution of ASEAN in India's trade during 1991-2017. India's trade with ASEAN countries has been increasing steadily since 1991. The table reveals that India's share in ASEAN trade for exports is less as compared to imports. Although the export share has been increasing. On the contrary the imports share is also increasing. The trade between India and ASEAN is increasing which is a symbol that there is a growing alliance between India & ASEAN nations over the years.

In 1991, share of India in ASEAN export was 0.91 per cent and in import is 1.07 per cent. In 2000 the exports increased to 1.59 per cent and ASEAN imports decreased to 0.91 per cent. In 2011 the ASEAN export to India was 2.79 per cent and import from India was 3.53 per cent. The share of India in ASEAN exports is 2.61 per cent and for ASEAN imports from India is 3.52 per cent in 2017.

Table 3.6 shows that India's share in ASEAN export is growing ever since. Same is true with the India's share in ASEAN imports, but ASEAN countries export more to India than India imports from ASEAN countries. India should have a vital a strong relation with ASEAN is vital for majorly five reasons, as follows :- 1) Cost of production is quite low in CLMV Countries, it indicates that Indian companies can gain considerably by investing in such countries. 2) Investing in these zones meant a large market for industries of India. Combined GDP of ASEAN region is \$2.7 trillion. 3) Indian firms can escape protectionist measures targeted against their exports if they start exporting from ASEAN region.4) Investing in these regions will also comfort some of India's energy necessities, supporting the Indian to access to minerals and inexpensive foreign energy (oil and power) from CLMV countries. 5) Participating in the South-east Asian production network will allow India to proliferate its manufacturing base, in addition of generating jobs opportunities for the youth. ASEAN share in India's trade have almost become double over the period of 1991 to 2010. (See Table 3.6) ASEAN trade share was 5.26 per cent during 1991, with India, which touched about 9.44 per cent in 2010, and rose to 11.10 per cent in 2017, reflecting growing importance of Indo-ASEAN trade ties.

Table 3.6: Share of ASEAN in India's trade during 1991-2017**(Per cent)**

Year	ASEAN share in India's import	ASEAN share in India's export	ASEAN share in India's trade
1991	5.70	4.82	5.26
1992	6.74	4.71	5.73
1993	7.65	4.33	5.99
1994	7.31	6.52	6.92
1995	8.61	7.05	7.83
1996	8.67	7.50	8.08
1997	7.09	8.19	7.64
1998	4.91	10.19	7.55
1999	6.07	10.22	8.15
2000	6.28	8.12	7.20
2001	7.56	8.58	8.07
2002	8.99	8.37	8.68
2003	8.54	9.23	8.89
2004	9.95	8.64	9.29
2005	10.25	7.55	8.90
2006	10.21	9.15	9.68
2007	9.48	9.62	9.55
2008	10.69	8.46	9.57
2009	10.13	9.00	9.56
2010	10.42	8.47	9.44
2011	11.44	8.72	10.08
2012	11.15	8.74	9.95
2013	11.25	9.08	10.17
2014	9.86	9.68	9.77
2015	10.00	10.62	10.31
2016	10.10	10.70	10.40
2017	12.00	10.20	11.10

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

In fact, India's capacity to satisfy the import requirements of ASEAN countries is far less as ASEAN global import requirements were much greater than India's global exports. So far, ASEAN emerged as a net beneficiary of India-ASEAN trade ties. ASEAN countries export more to India than India imports from ASEAN countries. During 2011, for the first time it touched double digit and settled at 10.08 per cent, which manifest the growing trading ties between India and ASEAN countries owing to the "Look East Policy". In 2017, ASEAN share in India's export is 10.20 per cent and in import is 12 per cent. This signifies the shift in India's trade direction, where South-East Asia, especially ASEAN countries are becoming major trading partners of India, which is totally different from the past, where India's major trading partners were the countries from West. The figures reveal the fact that during last three decades share of India in ASEAN countries merchandise trade has increased, but it has been less as compared to that of China and Japan. This shift has been more prominent in the case of imports. India runs a large and rising trade deficit vis-à-vis ASEAN nations.

The Table 3.7 depicts the role of India-ASEAN countries in world trade. ASEAN share in World's export and import have been hovering between 5 per cent to 8 per cent since 1991. In 1991 the share was 8.2 per cent which reduced to 5.9 per cent till 2008 and after that the share started increasing. In 2009 it increased to 6.1 per cent and rose till 7.5 per cent in 2017 but share of India in world's export and import has been almost the same till 2004. The percentage share of India's in world trade is increasing from 2005 i.e. 2.3 per cent and rose to 4.2 per cent in 2017.

India's import has always been more than India's export; this fact can also be substantiated with India's share in world's import. Trade intensity of India in ASEAN nations has suddenly declined. Economies of ASEAN are more open in comparison of economy of India.

Table 3.7: Share of India - ASEAN Trade in World Trade during 1991-2017**(Per cent)**

Year	ASEAN Share in value in World's export (%)	ASEAN Share in value in World's import (%)	India Share in value in World's export (%)	India Share in value in World's import (%)	ASEAN Share in World Trade (%)	India Share in World Trade (%)
1991	7.9	8.4	0.9	1.0	8.2	1.9
1992	7.1	7.4	0.8	1.0	7.2	1.8
1993	7.0	7.2	0.8	0.8	7.1	1.6
1994	6.5	6.6	0.7	0.8	6.5	1.5
1995	6.3	6.6	0.7	0.8	6.4	1.4
1996	6.6	7.1	0.7	0.8	6.8	1.4
1997	6.7	6.7	0.7	0.8	6.7	1.5
1998	6.2	5.0	0.6	0.8	5.6	1.5
1999	6.4	5.1	0.7	0.9	5.8	1.6
2000	6.9	5.8	0.7	0.8	6.3	1.5
2001	5.5	5.3	0.7	0.8	5.8	1.5
2002	5.5	5.4	0.8	0.9	5.8	1.7
2003	5.3	5.2	0.8	0.9	5.7	1.7
2004	5.5	5.3	0.8	1.1	5.8	1.9
2005	5.6	5.5	1.0	1.3	5.8	2.3
2006	5.5	5.4	1.0	1.6	5.9	2.6
2007	5.5	5.3	1.1	1.5	5.7	2.6
2008	5.8	5.7	1.1	1.9	5.9	3.0
2009	5.8	5.7	1.4	2.1	6.1	3.5
2010	6.3	6.2	1.5	2.3	6.6	3.8
2011	6.3	6.2	1.7	2.5	6.5	4.2
2012	6.5	6.5	1.6	2.6	6.6	4.2
2013	6.5	6.5	1.8	2.5	6.6	4.3
2014	6.4	6.4	1.7	2.4	6.6	4.1
2015	6.5	6.4	1.6	2.4	6.7	4.0
2016	6.8	6.7	1.6	2.2	6.9	3.8
2017	7.3	7.2	1.7	2.5	7.5	4.2

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.8: Country Wise India's Import from ASEAN from 1991-2017**(Per cent)**

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	0.01	0.50	7.16	0.00	41.63	5.45	3.35	33.12	5.19	4.09
1992	0.00	0.00	5.82	0.00	38.17	11.25	0.95	31.85	5.66	5.88
1993	0.00	0.00	11.85	0.00	24.58	12.01	0.59	40.96	5.67	4.34
1994	0.01	0.11	16.94	0.00	26.14	6.78	0.63	37.86	9.18	2.36
1995	0.00	0.01	17.84	0.00	34.78	6.28	0.83	33.09	6.57	0.6
1996	0.00	0.00	20.35	0.00	37.60	6.04	0.56	28.67	6.72	0.06
1997	0.00	0.04	21.54	0.00	34.71	6.60	0.68	29.5	6.67	0.26
1998	0.00	0.06	19.20	0.00	37.25	4.02	0.86	32.06	6.33	0.21
1999	0.00	0.00	18.86	0.00	39.81	3.37	1.11	30.18	6.45	0.23
2000	0.00	0.03	22.93	0.00	30.49	4.15	1.59	32.60	7.89	0.31
2001	0.01	0.03	22.25	0.00	26.52	8.06	1.79	31.18	9.77	0.40
2002	0.01	0.01	26.28	0.00	27.68	7.34	2.76	27.74	7.59	0.58
2003	0.01	0.00	28.11	0.00	28.33	5.39	1.67	27.92	8.06	0.50
2004	0.01	0.00	28.39	0.00	25.90	4.80	2.12	29.15	8.77	0.86
2005	0.01	0.00	28.39	0.00	22.91	4.60	1.91	29.72	11.25	1.20

Contd.

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2006	1.38	0.01	22.15	0.00	28.56	4.31	1.28	31.81	9.51	0.98
2007	1.11	0.01	23.02	0.00	27.22	3.85	0.83	32.82	10.42	0.73
2008	1.22	0.02	24.09	0.00	27.95	3.39	0.85	31.11	9.98	1.39
2009	2.04	0.02	31.71	0.00	20.82	4.93	1.43	25.62	11.58	1.85
2010	0.70	0.03	32.71	0.07	20.23	3.79	1.33	24.50	13.3	3.35
2011	1.75	0.02	34.62	0.17	22.58	3.13	1.12	20.22	12.53	3.85
2012	2.20	0.02	32.92	0.34	24.55	3.15	1.16	18.24	12.87	4.55
2013	1.81	0.03	35.42	0.26	22.05	3.23	0.97	16.61	12.94	6.68
2014	2.12	0.04	34.16	0.13	24.58	3.13	0.90	15.90	12.78	6.26
2015	1.46	0.10	33.49	0.34	23.03	2.45	1.25	17.81	13.61	6.46
2016	1.21	0.11	31.89	0.45	22.64	2.84	1.24	17.58	13.91	8.13
2017	1.31	0.11	35.83	0.55	19.65	1.63	1.57	15.97	14.25	9.14
TOTAL	18.38	1.31	667.92	2.31	760.36	135.97	35.33	743.79	259.45	75.25

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

ASEAN contribution to world trade is far more than India's contribution. This highlights the fact that ASEAN economies are sounder than India. On trading front in India many specializations occur in those articles for which the demand in the world expands at a faster pace, hinting to the possibility of an rise in India's share in the world trade in the years to come. In order to increase international trade benefits, India should pay attention to pave the way for concluding the multilateral trade liberalization under WTO's Doha round trade negotiations.(Ohlan, 2012).

Table 3.8 demonstrates the import share by India from by ASEAN nations individually. On an aggregate level India's import from the Philippines was not only small in magnitude i.e. 35.33 per cent but showed wide fluctuations. Share of India's import from Malaysia further reduced to 19.65 per cent and 15.97 per cent from Singapore in 2017. On the other hand the percentage of import by India increased from countries like Thailand. In 1991 the imports from Thailand was 5.19 per cent to 14.25 per cent in 2017. The countries like Brunei, Cambodia, Lao PDR and Philippines the share of imports was very almost the same from 1991 to 2017 and were among the emerging nations. Vietnam and Thailand reformed its economic policies in such a way that its exports to other countries including India increased. Indonesia, Singapore, Thailand and Malaysia emerged as highest exporters to India among ASEAN nations becoming the developing nations. In 1991 the highest number of imports done by India were from Malaysia i.e. 41.63 per cent and Singapore amounting to 33.12 per cent and least number of imports were done from Brunei and Lao PDR. With the years, imports from Indonesia increased from in 1991 is 7.16 per cent to 22.25 per cent in 2011 and 35.83 per cent in 2017. On the contrary the per cent share of Malaysia reduced to 26.52 in 2001 and Singapore also reduced to 31.18 per cent which further reduced with the passing of years. Indonesia was the only ASEAN states that almost continuously improved its share and become the third important ASEAN supplier.

Table 3.9: India's share in ASEAN export-country wise during 1991-2017

(Per cent)

Period	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	0.06	0.00	14.41	0.00	19.88	0.38	6.31	38.19	19.51	1.27
1992	0.04	0.02	11.08	0.00	15.18	0.56	4.37	47.07	20.29	1.39
1993	0.02	0.08	13.81	0.01	14.54	1.27	3.42	44.2	21.00	1.65
1994	0.12	0.04	14.42	0.01	14.88	1.18	5.17	40.01	21.12	3.04
1995	0.26	0.08	24.19	0.01	14.36	1.1	5.27	32.92	17.27	4.54
1996	0.21	0.05	20.39	0.01	18.3	1.56	6.33	33.68	15.40	4.07
1997	0.09	0.12	17.74	0.01	19.88	2.00	9.69	31.42	13.91	5.14
1998	0.20	0.35	11.38	0.08	19.73	1.85	7.28	31.75	19.69	7.69
1999	0.06	0.35	14.49	0.06	20.04	1.53	6.44	30.00	20.16	6.93
2000	0.11	0.30	14.67	0.13	19.95	1.62	6.55	29.58	19.74	7.34
2001	0.07	0.32	14.38	0.17	23.77	1.74	6.99	27.93	18.05	6.57
2002	0.10	0.38	17.09	0.04	16.49	1.64	10.38	30.65	16.46	6.76
2003	0.10	0.40	20.50	0.01	15.64	1.51	6.39	33.56	14.43	7.47

Contd.

Period	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2004	0.07	0.22	15.96	0.01	13.77	1.49	4.81	45.24	11.35	7.08
2005	0.04	0.21	13.51	0.06	11.12	1.14	4.69	52.77	10.30	6.16
2006	0.36	0.39	15.12	0.02	10.76	1.00	4.83	49.54	10.92	7.07
2007	0.06	0.32	13.59	0.02	13.38	1.18	4.13	46.22	12.10	8.98
2008	0.09	0.28	13.68	0.02	15.61	1.22	3.89	45.56	10.32	9.33
2009	0.14	0.23	16.78	0.15	19.69	1.16	3.90	38.15	9.56	10.24
2010	0.09	0.27	19.85	0.04	15.49	1.19	3.49	39.49	9.32	10.78
2011	2.52	0.26	18.55	0.04	11.01	1.32	2.92	45.30	8.02	10.05
2012	0.10	0.34	18.65	0.08	11.74	1.63	3.47	41.97	10.70	11.33
2013	0.11	0.36	14.67	0.16	14.51	1.96	3.88	37.45	11.10	15.80
2014	0.14	0.49	14.20	0.20	14.83	2.78	4.59	30.92	10.99	20.86
2015	0.11	0.55	10.86	0.19	18.51	3.25	4.94	29.53	11.78	20.27
2016	0.14	0.41	11.87	0.09	15.88	4.33	5.59	27.88	11.23	22.58
2017	0.14	0.34	10.63	0.07	15.66	3.00	4.47	32.64	10.13	22.92

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.9 explains the country-wise share of India in ASEAN's exports during 1991-2017. Table suggests that overall the India's export to ASEAN is also concentrated to few major ASEAN countries only namely Singapore with the highest share of exports followed by Malaysia. The percentage of exports to Vietnam increased over a period of time 1.27 per cent in 1991 to 6.27 per cent in 2001 and rose to 22.92 per cent in 2017. However in 2017, Vietnam occupied the second position followed by Singapore and Malaysia on the third position. Brunei, Cambodia and Lao PDR imported a very less share from India.

However countries like Philippines, Indonesia, and Myanmar possessed stagnant share over a period of time from 1991- 2017. The share of exports of Thailand reduced from 19.51 per cent recorded in 1991 to 10.13 per cent in 2017. In nutshell, we can conclude that a shift in direction of trade has been taking place, for India as well as ASEAN. It is observed that there is shift in India's direction of foreign trade in the post-liberalization period. USA became India's top exporter. The major shift which is found is the growing importance of developing countries especially the East Asian Economies. This fact can also be found in ASEAN's trade pattern. It also revealed from the above discussion that despite significant growth in bilateral trade in the last decade, India is still an insignificant trading partner for the ASEAN. To conclude, within ASEAN region, trade with India showed a high degree of geographical concentration. India's export to ASEAN were geographically almost same as its import from them. However, the studies based on trade & development and investment patterns between different nations indicate that there is huge potential for business between India and ASEAN nations. If India and ASEAN are able to implement policy changes in line with other trade blocs and are successful in removing the trade and investment barriers, this will result in significant increase in the trade between India and the ASEAN countries, as experienced by other trading blocs.

Table 3.10: Composition of India Exports to ASEAN during 1991-2017

(Per cent)

S.No	Item	1991	1995	2000	2005	2010	2015	2016	2017
1	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	2.49	1.00	6.22	14.34	39.96	15.40	16.39	24.89
2	Meat and edible meat offal	2.78	2.38	3.91	2.57	1.94	10.37	10.06	8.51
3	Iron and steel	1.37	7.43	3.94	6.73	2.66	2.00	2.92	6.79
4	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	6.65	8.37	13.46	4.80	4.82	5.83	6.59	5.34
5	Organic chemicals	2.58	5.98	9.18	8.30	5.49	4.29	4.44	3.89
6	Vehicles other than railway or tramway rolling-stock	1.37	1.29	0.70	1.80	2.92	4.10	3.85	3.64
7	Pearls, precious stones, metals, coins, etc.	42.47	14.3	10.38	25.28	5.89	3.86	4.38	3.51
8	Electrical machinery and equipment and parts thereof;	1.79	5.92	5.01	5.34	6.79	3.17	3.17	2.95
9	Pharmaceutical products	0.21	0.26	1.51	1.69	1.52	2.73	2.83	2.28
10	Cotton	6.27	3.12	3.67	1.20	1.68	2.34	2.16	2.20
11	Coffee, tea, mate and spices	0.58	0.76	0.78	0.54	0.93	1.86	2.22	2.06
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants;	0.32	1.45	1.71	1.20	1.26	2.42	2.66	1.78

Contd.

S.No	Item	1991	1995	2000	2005	2010	2015	2016	2017
13	Aluminium and articles thereof	3.14	5.44	4.84	2.61	1.35	1.10	1.48	1.69
14	Copper and articles thereof	0.26	0.76	0.48	2.45	1.71	2.10	2.29	1.66
15	Miscellaneous chemical products	0.16	0.64	1.51	1.78	1.01	1.34	1.24	1.11
16	Residues and waste from the food industries; prepared animal fodder	4.64	8.77	7.24	2.67	1.70	1.04	0.80	0.99
17	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter	1.39	1.33	1.50	0.96	0.90	1.15	1.24	0.98
18	Plastics and articles thereof	0.31	1.14	1.77	1.61	1.11	1.28	1.24	0.97
19	Edible vegetables and certain roots and tubers	1.96	2.50	1.04	0.70	0.95	0.63	0.65	0.53
20	Cereals	1.39	2.31	0.53	0.66	1.19	0.84	0.48	0.40
	TOTAL	82.13	75.15	82.13	75.15	82.13	75.15	82.13	75.15

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.10 elaborates the in 1991 the maximum share of export by India was of Pearls, precious stones, metals, coins, etc which was reduced considerably by 2017 from 42.47 per cent it was reduced to 3.51 per cent by 2017 respectively. On the contrary the share of items like Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes increased considerably. In 1991 the percentage of exports of these items was 2.49 per cent respectively which settled at 24.89 per cent respectively contributing the largest share of percentage. The second highest export was of Meat and edible meat offal which increased from 1991 to 2016 to 10.37 per cent but in 2017 it decreased to 8.5 per cent. Export of items from Iron and steel sector has increased from 1.37 per cent in 1991 to 6.79 per cent in 2017 occupying the third highest export sector. The share of percentage of items of Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof have reduced from 1991 to 2017 i.e. from 6.65 per cent to 5.34 per cent respectively holding the fourth position in terms of export. During 1991-2017 the composition of India's export to ASEAN has diversified over the time and has been changing drastically. The overall export from India to ASEAN has decreased from 82.13 per cent share in 1991.

Although it rose in 2005 and was stable till 2010 but again in 2015 it experienced a downfall to 67.83 per cent. Post year 2015, in order to improve the economic scenario policy changes were introduced and the exports again started to increase.

Table 3.11 reveals that the commodities which India import from ASEAN. Overall, India's import from ASEAN nations was of capital goods, which have not changed so far, rather India's import from ASEAN nations diversified over time, but her export remained concentrated to only few commodities. In 1991 the maximum imports were from Mineral and Mineral fuels i.e. 41.04 per cent and in 1995 it reduced to 12.95 per cent.. On the contrast in 1995 the imports increased to 16.14 per cent in Animal or vegetable fats and oils and their cleavage products and in 2017 possessing 11.73 per cent. Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof recorded 8.12 per cent of imports from ASEAN by India.

Table 3.11: Composition of India Import from ASEAN during 1991-2017

(Per cent)

S.No	Item	1991	1995	2000	2005	2010	2015	2016	2017
1	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	41.04	12.95	15.69	18.93	19.01	21.21	20.19	20.05
2	Animal or vegetable fats and oils and their cleavage products;	5.67	16.14	16.62	8.35	15.40	10.36	11.45	11.73
3	Electrical machinery and equipment and parts thereof	6.28	14.26	11.62	12.29	12.39	10.36	11.45	11.73
4	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	8.87	12.89	20.66	15.67	14.56	9.18	8.77	8.12
5	Organic chemicals	1.31	4.63	3.74	5.69	5.79	5.40	4.78	5.57
6	Plastics and articles thereof	2.32	3.08	2.28	3.56	3.93	4.22	4.45	4.50
7	Copper and articles thereof	2.94	0.14	0.67	0.54	0.57	1.54	2.17	3.05
8	Rubber and articles thereof	1.44	3.18	0.56	0.96	2.11	2.38	2.54	2.50
9	Iron and steel	0.73	0.72	0.77	1.58	1.10	2.25	1.94	2.36
10	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	2.43	3.38	1.31	1.04	1.13	2.02	1.66	2.27
11	Miscellaneous chemical products	0.74	0.55	2.68	1.61	1.34	1.50	2.11	2.13
12	Ores, slag and ash	0.31	0.27	1.35	4.59	2.76	2.14	1.72	2.08

Contd.

S.No	Item	1991	1995	2000	2005	2010	2015	2016	2017
13	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	2.06	2.21	1.85	2.03	1.96	1.55	1.67	2.00
14	Wood and articles of wood; wood charcoal	3.93	1.35	1.95	2.03	2.40	2.33	2.20	1.78
15	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.33	0.57	0.71	1.04	1.02	1.45	1.51	1.55
16	Edible vegetables and certain roots and tubers	0.63	0.06	0.11	0.01	1.67	2.10	2.18	1.18
17	Aluminium and articles thereof	0.34	1.04	0.46	0.69	0.61	0.90	1.03	1.17
18	Articles of iron or steel	0.88	0.57	0.29	0.59	0.72	0.87	1.06	0.88
19	Nickel and articles thereof	0.73	0.14	0.47	0.38	0.60	1.19	0.04	0.02
20	Sugars and sugar confectionery	0.59	2.01	0.04	0.35	0.56	0.01	0.01	0.01
	Total	83.57	80.47	83.83	81.93	89.63	83.00	82.90	84.70

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

In 2010 the maximum imports by India were in Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof, various shifts were witnessed whereas the share in Animal or vegetable fats & oils and their cleavage products continued to be the same till 2017 with an addition of Electrical machinery and equipment and parts thereof, both the sectors possessing same per cent share of 11.73 per cent in 2017 whereas commodities copper and article thereof, optical, photographic, cinematographic, measuring, iron and steel, checking, precision, etc. apparatus have decreased over the time.

Table 3.12: Direction of India's Export during 1991-2017

(Per cent)

S. No	Country	1991	1995	2000	2005	2010	2015	2016	2017
1	USA	14.7	17.4	22.0	16.5	10.7	15.2	16.1	15.6
2	United Arab Emirates	2.4	4.5	5.7	8.4	12.4	11.3	11.5	10.1
3	China, Hong Kong SAR	3.3	5.7	6.5	4.4	4.3	4.6	5.1	5.1
4	China	0.1	1.1	1.7	7.2	7.9	3.6	3.4	4.2
5	Singapore	2.1	2.8	1.9	5.4	4.1	3	2.8	3.9
6	United Kingdom	6.5	6.3	5.2	4.9	2.9	3.4	3.3	3
7	Germany	0.0	6.2	4.3	3.5	2.7	2.7	2.8	2.8
8	Bangladesh	1.7	3.3	1.8	1.7	1.4	2.1	2.2	2.4
9	Belgium	3.9	3.5	3.4	2.8	2.3	1.9	2.1	2.1
10	Italy	3.1	3.2	3.0	2.5	1.9	1.6	1.7	1.9
11	Malaysia	0.8	1.2	1.3	1.1	1.6	1.9	1.6	1.9
12	Netherlands	2.0	2.4	2.0	2.4	3.0	1.8	1.9	1.8
13	Saudi Arabia	1.3	1.5	1.9	1.7	2.0	2.6	1.9	1.8
14	France	2.4	2.4	2.3	2.0	2.2	1.8	1.9	1.7
15	Japan	9.3	7.0	4.3	2.4	2.2	1.7	1.5	1.5
16	Rep. of Korea	1.0	1.4	1.0	1.5	1.6	1.4	1.3	1.5
17	Sri Lanka	0.7	1.3	1.4	1.9	1.5	2.1	1.6	1.5
18	South Africa	0.0	0.0	0.7	1.4	1.7	1.4	1.2	1.4
19	Indonesia	0.6	2.1	0.9	1.4	2.1	1.1	1.2	1.3
20	Brazil	0.1	0.3	0.5	1.0	1.7	1.2	0.9	1.0

(Source: IMF Direction of Trade Statistics (various issues))

Table 3.12 demonstrates the direction of India's export for the period 1991-2017. It is observed from the table that USA was our major partner, as far as India's export was concerned, but in the subsequent years UAE emerged as a major trading partner of India, dethroned USA by attracting 12.44 per cent of total Indian export in the year 2010. But again USA regained its position and major export partner of India with a share of 16.1 in 2016 and 15.6 per cent in 2017 followed by UAE at 11.5 per cent in 2016 and 10.5 per cent in 2017. China, which become India's third largest destination of exports also shared the same story. Share of ASEAN countries in India's direction of export has also increased, predominately, Singapore, Indonesia and Malaysia. India's export to Singapore was 2.1 per cent of total export in 1991, which doubled to 4.1 per cent in 2010 and 3.9 per cent in 2017. Indonesia had only 0.60 per cent imports from India's total export, but in 2010, India's export to Indonesia hovered around 2.1 per cent. Malaysia is second to one among the ASEAN countries, whose import from India has increased. India's used to export only 0.83 per cent of her total export to Indonesia, but in 2010, this share rose to 1.61 per cent and 1.91 per cent in 2017.

These shifts in trade paradigm with time could have been the result of India's Look East Policy, but primarily USA, UAE, China are the major export destination of India.

Table 3.13 elaborate the direction of India's import for the period 1991-2017. China has emerged as biggest importer for India. Import from USA and Japan has increased significantly from 1995 and 2000. India's import from USA was meagerly 0.1 per cent of the total import, increased to 19 per cent in 2000 and in 2010 it settled to 5.5 per cent and 5.4 per cent in 2017. UAE exports in India's total import stood at 1.0 per cent in 1995 and 3.6 per cent in 2005 which further rose to 5.2 per cent in 2017 nearing to that of USA. Although Indonesia has significantly increased its exports to India with 3.7 per cent comprising itself in top five countries exporting to India.

Table 3.13: Direction of India's Import during 1991-2017**(Per cent)**

S.No.	Country/Region	1991	1995	2000	2005	2010	2015	2016	2017
1	China	7.5	2.8	3.9	7.2	11.8	15.8	17	16.2
2	USA	0.1	18.1	19.0	5.9	5.5	5.2	5.7	5.4
3	United Arab Emirates	0.8	1.0	0.8	3.6	8.8	5.2	5.4	5.2
4	Switzerland	0.5	0.4	0.4	5.0	6.3	5.4	4.2	4.6
5	Indonesia	0.4	0.6	0.8	2.1	2.8	3.6	3.4	3.7
6	Rep. of Korea	1.3	3.1	3.6	3.1	2.8	3.3	3.4	3.6
7	Australia	0.4	1.8	2.5	3.5	3.4	2.4	2.4	3.2
8	Germany	3.1	3.2	2.8	3.9	3.3	3.0	3.2	2.9
9	China, Hong Kong SAR	10.7	6.3	5.4	1.5	2.2	1.5	2	2.5
10	Iran	6.3	1.2	1.5	0.5	3.2	1.6	2.3	2.5
11	Japan	3.2	13.7	13.3	2.6	2.4	2.5	2.7	2.4
12	Malaysia	5.8	8.6	7.5	1.7	1.7	2.4	2.4	2.0
13	Singapore	1.1	9.1	8.2	2.2	2.1	1.9	1.9	1.6
14	Thailand	0.0	3.5	2.9	0.8	1.1	1.4	1.5	1.5
15	France	1.6	1.4	1.2	1.6	1.1	0.8	0.9	1.1
16	United Kingdom	0.1	3.0	3.0	3.1	1.5	1.4	1.1	1.0
17	Viet Nam	0.0	1.0	0.9	0.1	0.3	0.7	0.9	0.9
18	Netherlands	0.3	2.8	3.7	0.7	0.6	0.5	0.5	0.5
19	Philippines	2.1	1.2	1.8	0.1	0.1	0.1	0.1	0.2
20	Panama	0.4	0.3	0.3	0.1	0.1	0.0	0.0	0.0

(Source: IMF Direction of Trade Statistics (various issues))

In total import of India, Singapore share was 1.11 per cent in 1991, in 1995 it touches to 9.1 per cent and in 2010 it was 2.1 per cent which further reduced to 1.6 per cent in 2017. Import from Malaysia showed a consistent trend, the share was 5.82 per cent in 1991, which rise to 7.5 per cent in 2000. Later it reduced to 1.7 per cent in 2010 and 2 per cent in 2017. Apart from that India's importing partners list includes Republic of Korea, Australia, Iran, Thailand, Netherlands, Germany, United Kingdom, France, UAE, Switzerland, etc.

Table 3.14: Direction of ASEAN's Exports during 1991-2017**(Per cent)**

S. No.	Country / Region	1991	1995	2000	2005	2010	2015	2016	2017
1	China	1.92	2.76	3.85	8.10	10.82	12.21	12.48	14.77
2	USA	18.97	18.12	19.04	14.53	9.63	10.93	11.51	11.01
3	Japan	18.44	13.73	13.29	10.96	9.52	8.79	8.35	7.87
4	China, Hong Kong SAR	4.59	6.35	5.41	6.47	7.28	6.60	6.88	6.50
5	Malaysia	5.90	8.58	7.51	6.68	6.30	5.25	4.99	4.84
6	Singapore	7.87	9.08	8.23	6.53	5.71	4.91	4.73	4.43
7	Rep. of Korea	3.27	3.07	3.64	3.77	4.19	3.93	3.98	4.24
8	Indonesia	0.38	0.61	0.83	4.71	4.61	4.08	3.90	3.56
9	Thailand	3.60	3.55	2.86	3.31	3.29	3.57	3.45	3.44
10	India	1.30	1.15	1.54	2.25	3.51	3.47	3.27	3.35
11	Germany	3.97	3.19	2.84	2.44	2.21	2.31	2.40	2.61
12	Australia	1.96	1.84	2.46	3.39	3.53	3.08	2.87	2.56
13	Viet Nam	0.00	0.96	0.92	1.39	1.87	2.56	2.71	2.55
14	Netherlands	2.86	2.79	3.72	3.09	2.32	2.31	2.42	2.33
15	Philippines	1.07	1.23	1.78	1.63	1.93	1.87	2.07	2.01
16	United Arab Emirates	0.80	1.04	0.79	1.22	1.22	1.66	1.49	1.58
17	United Kingdom	3.28	3.00	2.98	2.25	1.54	1.47	1.49	1.34
18	France	1.62	1.45	1.24	1.30	1.23	0.97	0.99	1.14
19	Switzerland	0.49	0.36	0.38	0.28	0.83	0.54	1.09	0.82
20	Panama	0.38	0.32	0.34	0.34	0.79	0.54	0.49	0.42
	Total	82.68	83.16	83.65	84.64	82.31	81.05	81.55	81.36

(Source: IMF Direction of Trade Statistics (various issues))

Table 3.14 shows a tilt in ASEAN countries export towards China. Share of ASEAN's exports towards China was only 1.92 per cent in 1991, which rose meagerly to 3.85 per cent in 2000, but it rose by 5.6 times during 2010, reaches to 10.82 per cent and 14.88 per cent in 2017. Similarly, during these years the direction

of ASEAN's countries exports towards USA, which was the major export destination of ASEAN during 1991, has declined drastically. 18.97 per cent of total ASEAN exports was towards USA, which slide down to 9.63 per cent and 11.01 per cent in 2017 becoming as the second largest export destination of ASEAN. Japan also shares the same story, from 2nd largest export destination of ASEAN in 1991 it slide down to 3rd largest destination since 2005 till 2017. Japan and USA shares in ASEAN's export have become almost half since 1991. This shows a unique phenomenon of rise of China as a world economic powerhouse and her interdependence of ASEAN's countries. ASEAN's countries export towards India had also showed promising signs. From 1991 to 2017, ASEAN's export towards India increased phenomenally. Export by ASEAN to other countries namely are Malaysia, Singapore, Indonesia, Korea, etc, to conclude, exports by ASEAN nations from other countries across the globe have showed consistency since 1991 till 2017.

Table 3.15 depicts that imports by ASEAN nations from other countries across the globe have increased since 1991 from 76 per cent to 83 per cent in 2017. The highest number of imports in 1991 were done by Japan having a 23.93 per cent rising to 25.04 per cent in 1995 but from year 2000 onwards it started decreasing to 12.31 per cent in 2010 and 8.54 per cent in 2017. USA which was the second largest exporter to ASEAN nations. In 1991 the per cent share of exports by USA were 14.31 per cent which decreased in 2010 to 8.82 per cent and in 2017 it was 7.12 per cent. China was dominating country with the years passing by it gained its importance. The per cent share of china in 1991 was 3.04 per cent and it rose to 13.35 per cent in 2010 and in 2017 it became the largest exporter to ASEAN nations with a share of 20.60 per cent of the over-all ASEAN imports. However republic of Korea has become the third largest exporter to ASEAN superseding USA. In 1991 the share of per cent by republic of Korea was 3.14 per cent, rising to 6 per cent in 2000 and 7.64 per cent in 2017.

India's trade with ASEAN has increased over a period of time. The imports of India from ASEAN are more than the exports by India to ASEAN nations.

The ASEAN India free trade agreement fully entered into force in 2015. ASEAN is India's fourth largest trading partner and India is ASEAN's eight trading partner

Table 3.15: Direction of ASEAN's Imports during 1991-2017**(Per cent)**

S.No.	Country/Region	1991	1995	2000	2005	2010	2015	2016	2017
1	China	3.04	2.99	4.97	10.55	13.35	20.04	20.68	20.60
2	Japan	23.93	25.04	19.27	14.05	12.31	9.19	9.76	8.54
3	Korea, Republic of	3.14	4.32	4.78	4.71	6.00	6.89	7.24	7.64
4	USA	14.31	14.24	14.18	10.54	8.82	7.83	7.45	7.12
5	Malaysia	6.70	7.44	7.98	7.29	6.61	5.73	5.57	5.59
6	Singapore	5.60	5.16	6.64	6.47	5.96	5.68	4.81	5.52
7	Thailand	1.74	2.94	3.51	4.18	4.49	4.39	4.70	4.71
8	Indonesia	0.35	0.60	1.39	3.50	3.86	3.30	3.35	3.35
9	India	0.88	0.82	0.91	1.49	2.09	1.80	1.92	2.52
10	Germany	0.08	4.58	3.00	3.09	2.76	2.77	2.63	2.46
11	Hong- Kong, China	2.14	2.17	2.52	2.18	1.43	1.20	1.31	2.05
12	Australia	2.76	2.32	2.17	2.09	2.01	1.81	1.83	2.01
13	United Arab Emirates	1.28	0.71	1.29	1.66	2.06	2.02	1.68	1.83
14	Saudi Arabia	2.87	1.77	2.42	3.37	2.77	1.95	1.90	1.82
15	Switzerland	1.35	1.37	1.23	1.12	1.34	1.11	1.42	1.63
16	France	2.30	2.61	1.50	1.54	1.47	1.48	1.60	1.56
17	Viet Nam	0.00	0.25	0.60	0.91	0.96	1.72	1.78	1.56
18	Philippines	0.43	0.71	1.82	1.77	1.74	0.94	1.01	1.00
19	United Kingdom	3.31	2.51	1.75	1.42	1.18	1.11	1.04	0.98
20	Russian Federation	0.00	0.70	0.38	0.69	1.00	0.88	0.66	0.86
	Total	76.22	83.23	82.30	82.65	82.20	81.83	82.34	83.34

(Source: IMF Direction of Trade Statistics (various issues))

3.3 TRADE INTENSITY BETWEEN INDIA AND ASEAN

Trade intensity is the ratio of share of a trading partner to a country/region's total trade and the share to country/region's total trade and the world trade share with the same trading partner. The natural trading partner theory reveals that the countries with close geographical parameters tend to have more trade with its neighbors as they share close proximities.

It is revealed from Table 3.16 that export intensity index of India with ASEAN is above unity for many years. It implies the exports of India are now shifting towards ASEAN region. ASEAN nations being geographically closer to India make her eligible for natural trading partner. In 1991, India's export intensity index with ASEAN was 121, which is higher than one, indicating a high Indian export orientation towards ASEAN countries. But this trend is not equally applicable to ASEAN countries individually. Among all ASEAN nations, India enjoys favorable export intensity with Indonesia, Malaysia, Myanmar, Singapore and Vietnam. Singapore and Indonesia are one of the favorable export destinations of India in ASEAN countries. On the other side nations like Brunei, Lao PDR and Cambodia are less preferred export destinations for India. On comparing the export intensity index is less than one from 1991 to 1995. Although export intensity is less than one for Lao PDR followed by Brunei and then Cambodia. The percentage of Lao PDR was less till 1999, although it drastically rose 121 in 2000 but again declined to 89 in 2001 and went further beyond in the following years. However, a low export destination of India towards Myanmar was during these periods. Thereafter, EII picked momentum and touched 405, the highest in 2005, ever since; it is hovering around 240, indicating a growing interest of Indian export towards Myanmar. For Singapore, Myanmar and Indonesia the export intensity was near about in the range of 250 after 2012 to 2018 approximately followed by Vietnam, Malaysia, Philippines with an average pf export intensity index of 150 approximately.

Table 3.16: India's Export Intensity Index with ASEAN during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	121	7	6	145	5	124	77	99	121	120	136
1992	128	7	5	122	4	130	86	94	144	130	101
1993	129	2	6	149	6	100	221	44	160	140	77
1994	118	8	24	161	1	75	302	73	137	134	105
1995	117	27	21	231	9	78	166	70	118	117	163
1996	127	25	14	245	12	99	309	81	129	107	179
1997	114	15	28	180	9	101	296	88	109	100	169
1998	110	25	58	183	27	100	261	70	98	128	181
1999	111	22	74	186	29	100	228	57	95	143	204
2000	112	30	59	169	121	104	261	61	97	133	220
2001	140	26	72	210	89	151	325	82	118	152	206
2002	159	35	96	284	39	124	338	134	149	150	215
2003	167	33	87	236	12	122	361	100	198	145	208
2004	183	39	64	219	27	117	405	91	276	119	200

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2005	186	237	62	181	45	111	366	95	308	106	202
2006	186	98	89	220	21	99	373	95	289	116	215
2007	186	45	81	185	17	140	309	83	274	121	218
2008	184	59	58	165	29	177	303	84	261	112	205
2009	180	79	49	205	60	196	244	88	229	101	181
2010	164	50	41	214	17	138	202	68	228	88	181
2011	183	89	45	216	20	114	218	66	292	94	170
2012	193	90	55	197	29	153	255	78	257	103	191
2013	198	93	50	199	31	156	244	77	253	100	186
2014	202	100	48	206	31	151	233	75	252	97	182
2015	206	102	48	207	26	142	230	73	256	96	182
2016	208	104	49	205	27	143	236	74	262	98	182
2017	212	109	50	203	29	149	240	75	256	99	184
2018	205	102	49	204	29	148	237	75	256	98	183

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.17 explains import intensity index of India with ASEAN countries. Overall, India's Import Index with ASEAN countries has remained more than one, indicating a high import orientation of India from ASEAN countries. The nations from which major imports are done by India are Indonesia, Malaysia and Singapore. In case of Brunei the III was less in 1991 which increased constantly reaching to 344 in 2001 and 212 in 2018. The III with Indonesia was 35 in 1991 which rose to 366 in 2003 and was stable to near to 290 from 2013 to 2018. Imports from Singapore were above 150 from 2008 and above 100 with Thailand from 2003 till 2018. But III as far as from Cambodia, Lao, Philippines, Myanmar and Vietnam was not very significant. The above trading ties with ASEAN are improving but has remained almost concentrated to only few ASEAN nations, which encourage us to believe that there is vast potential exists between India and ASEAN trade which is not exploited well so far.

The overall trade intensity of India with the ASEAN nations shows a comparatively higher degree of intensity for the entire period of study. The Trade Intensity Index (TII) of India with ASEAN recorded an outstanding rise from the value of 115 in 1991 to 156 in 2003 and being stable 152 since 2016 till 2018. (See Table 3.18). ASEAN became an important potential trade partner of India as compared to other regions. It is also noticeable that India's export to and imports from ASEAN in absolute terms has also increased. The India –ASEAN FTA reduced tariff barriers to trade between India and the ASEAN countries have comprised detailed provisions for trade in services and facilitation in investment. Even during 1997 and 1998 Asian crisis the trade intensity of India with ASEAN was not much impacted. India and ASEAN represent fast moving economies.

Table 3.17: India's Import Intensity Index with ASEAN during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	167	N.A.	N.A.	35	N.A.	170	162	35	310	40	46
1992	153	1	257	36	N.A.	188	246	16	261	36	118
1993	121	N.A.	106	42	N.A.	70	190	308	198	30	98
1994	140	0	12	107	N.A.	139	180	15	201	64	54
1995	158	0	105.7	120	N.A.	160	175	17	228	69	27
1996	172	0	15	144	N.A.	209	154	118	224	57	17
1997	179	0	56	176	N.A.	206	204	18	249	68	19
1998	234	N.A.	65	207	N.A.	359	208	18	310	70	19
1999	213	1	0	239	N.A.	304	142	15	276	81	19
2000	225	1	2	262	N.A.	278	116	24	294	116	46
2001	249	1	1	287	N.A.	274	174	34	345	113	46
2002	227	1	N.A.	318	0.04	263	159	35	295	84	43
2003	233	26	N.A.	366	0.04	310	165	36	248	102	21
2004	225	1	N.A.	360	0.01	282	137	27	249	112	35

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2005	235	1	1	347	0.01	290	125	22	265	142	31
2006	193	215	1	261	0.02	248	112	20	218	108	27
2007	177	187	3	265	0.01	204	92	30	204	106	23
2008	172	152	5	281	0.02	200	71	21	189	101	33
2009	167	344	5	321	0.01	157	93	27	172	106	37
2010	156	102	6	280	0.37	146	70	35	168	100	63
2011	161	249	5	286	0.65	176	60	35	150	102	73
2012	167	207	5	287	0.21	177	77	30	177	103	46
2013	165	211	5	291	0.25	171	74	30	171	102	50
2014	163	223	5	293	0.30	165	75	31	168	103	54
2015	162	198	5	287	0.36	167	71	32	167	102	57
2016	163	217	5	289	0.35	171	72	31	166	102	56
2017	164	211	5	289	0.29	170	74	31	170	103	53
2018	163	212	5	290	0.31	169	73	31	168	102	54

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.18: India's Trade Intensity Index with ASEAN during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	115	3	3	82	3	156	7	79	121	78	271
1992	134	3	57	69	3	170	1209	59	175	79	220
1993	112	1	36	84	4	85	1165	30	165	85	134
1994	118	5	22	134	1	94	1080	47	150	96	134
1995	118	14	265	166	6	109	863	44	137	79	110
1996	126	14	14	198	7	130	858	51	139	76	105
1997	126	7	27	175	5	142	1036	52	136	73	91
1998	144	11	47	203	15	186	994	39	154	85	93
1999	146	7	39	207	16	198	776	34	151	91	95
2000	124	8	36	183	73	135	673	37	140	89	108
2001	138	7	41	202	57	140	1026	49	150	105	106
2002	144	10	51	249	26	132	905	74	156	97	114
2003	156	9	44	250	9	142	943	57	190	98	107
2004	155	9	31	237	17	129	848	53	219	88	104

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2005	146	40	29	204	25	110	772	53	221	84	101
2006	164	201	43	225	11	146	850	47	233	94	105
2007	165	185	39	201	9	159	705	41	245	95	106
2008	161	197	30	203	15	171	612	45	220	91	103
2009	159	323	25	263	31	150	665	53	189	89	98
2010	140	102	24	235	29	115	468	42	175	86	111
2011	150	413	24	239	54	121	388	42	194	89	108
2012	155	244	28	228	28	143	567	45	205	90	105
2013	153	256	26	234	31	140	540	45	197	89	105
2014	151	267	25	240	34	134	526	45	192	88	105
2015	150	256	26	235	35	131	498	44	192	88	107
2016	152	287	26	235	36	134	504	44	196	89	106
2017	152	262	26	235	33	136	527	45	196	89	106
2018	152	266	26	236	34	135	519	45	195	89	106

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.19 explains ASEAN's export intensity index with India. Table elaborates the growing trade intensities between India and ASEAN. ASEAN export intensity had remained more than one from 1991 till 2018. But these trade trends are not equally for all the ASEAN nations. Cambodia and Lao are not very prominent trading partners with India whereas Singapore, Indonesia, Malaysia, & Myanmar have been performing well, as far as growing trading ties with India are concerned. Philippines, Thailand and Vietnam are moderate trading partners. The product of these countries were not high in demand in India.

Export orientation of Brunei towards India was not so significant till 2005; thereafter Export Intensity Index remained more than one. In case of Myanmar the EII with India rose significantly to 967 in 2005 which reduced to 106 in 2006 but then again it stabilized to 792 in 2007 and 672 in 2018, the highest among all ASEAN countries followed by Indonesia to 275 in 2018.

Table 3.20 explains the demand for Indian products in ASEAN countries. Overall trends have been encouraging. ASEAN III with India was 192 in 1991 which reduced to 126 in 2011 and 134 in 2018. These figures clearly reveal that there is high demand for Indian products in ASEAN. Although all countries do not show equal demand generation. The major demand is in Myanmar, Indonesia followed by Singapore and Vietnam. In Indonesia the III rose from 111 in 1991 to 214 in 2018. The highest III is In Myanmar, 118 in 1991 to 396 in 2018. The reason behind this can be related to the close geographical proximity of India with Myanmar along with political factors adding to it. For Malaysia it was 109 and Singapore was 115 in 1991 and it rose to 160 for Malaysia but for Singapore it rose prominently to 213 in 2018 respectively. The III for Vietnam was 195 in 2018. Import Intensity Index with Thailand was 104 in 1991 and rose to 110 in 2007. Afterwards it declined and recorded an index value of 88 in 2018. For Philippines the III hovered from 99 in 1991 to 100 in 2018.

Table 3.19: ASEAN's Export Intensity Index with India during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Malaysia	Myanmar	Singapore	Thailand	Vietnam
1991	146	1	0	40	200	217	92	23	327
1992	136	0	296	33	177	404	94	26	434
1993	100	0	0	55	88	350	92	21	248
1994	132	1	71	128	134	259	117	51	177
1995	148	0	6	152	180	287	106	36	43
1996	162	0	0	172	201	344	95	39	3
1997	159	0	28	176	202	354	107	49	13
1998	196	0	40	215	285	214	162	83	13
1999	192	1	3	233	297	191	165	81	12
2000	183	1	12	193	170	142	129	70	12
2001	186	1	9	213	165	187	139	86	15
2002	171	1	4	245	165	137	123	66	20
2003	176	1	2	313	192	156	123	76	18
2004	169	1	1	324	164	164	117	75	26

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Malaysia	Myanmar	Singapore	Thailand	Vietnam
2005	157	1	1	260	129	967	102	76	30
2006	158	205	3	240	198	106	130	83	28
2007	163	189	2	253	199	792	140	96	19
2008	149	162	5	234	190	670	123	75	30
2009	145	335	4	311	155	875	110	101	38
2010	140	102	7	268	131	570	89	94	60
2011	150	107	6	280	140	600	93	95	57
2012	149	179	5	269	163	701	111	92	41
2013	147	177	5	272	156	683	105	91	45
2014	146	180	5	280	149	686	102	95	48
2015	146	149	6	274	148	648	100	93	50
2016	148	158	5	275	151	664	102	93	48
2017	147	169	5	274	153	676	104	93	47
2018	147	167	5	275	151	672	103	93	48

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.20: ASEAN's Import Intensity Index with India during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	192	9	2	111	5	109	118	99	115	104	110
1992	133	7	10	109	3	102	234	76	136	133	147
1993	139	4	53	145	10	94	466	55	133	135	139
1994	119	22	17	148	4	82	441	76	111	127	173
1995	115	58	30	272	9	84	381	85	100	111	244
1996	142	39	24	223	9	109	544	88	94	100	182
1997	132	16	44	135	7	98	387	98	91	86	172
1998	106	35	81	86	37	90	186	62	125	122	181
1999	104	16	80	155	43	109	239	71	127	143	214
2000	123	42	62	135	100	97	277	71	102	128	190
2001	141	27	72	180	161	150	286	94	118	136	191
2002	136	39	97	262	60	121	415	149	153	150	203
2003	131	47	102	314	14	121	471	98	157	123	192
2004	157	41	63	262	16	117	617	94	232	108	201

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2005	139	31	12	192	78	104	641	102	280	93	181
2006	143	264	93	229	22	100	481	109	250	103	193
2007	153	39	15	187	26	116	458	92	222	110	184
2008	165	55	22	171	27	158	458	103	173	92	185
2009	137	79	33	241	140	214	364	115	268	96	199
2010	119	58	21	225	27	144	387	92	193	78	196
2011	126	62	24	211	31	148	390	97	210	86	198
2012	140	59	23	207	50	156	411	100	213	92	192
2013	137	63	25	211	55	164	402	101	211	89	194
2014	132	64	25	219	61	165	391	101	219	88	196
2015	131	61	24	215	45	155	396	98	209	87	195
2016	133	62	24	213	48	158	398	99	213	88	195
2017	135	62	24	213	52	160	400	100	213	89	195
2018	134	62	24	214	52	160	397	100	213	88	195

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.21: ASEAN's Trade Intensity Index with India during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1991	177	8	3	91	3	151	567	78	202	266	112
1992	145	11	51	83	3	174	1026	68	193	98	86
1993	127	11	27	101	N/A	99	861	176	154	107	59
1994	128	14	19	125	N/A	120	826	67	155	106	65
1995	134	24	212	145	N/A	131	693	62	167	95	75
1996	160	40	12	203	N/A	168	648	257	162	89	70
1997	153	37	67	199	6	169	749	63	177	98	63
1998	173	11	67	184	15	247	822	42	199	98	81
1999	168	22	56	218	15	226	649	35	190	100	88
2000	178	12	52	245	71	205	601	44	202	127	105
2001	193	8	15	250	58	206	979	69	230	129	124
2002	182	12	N/A	284	27	180	890	95	204	115	134
2003	183	204	N/A	312	9	207	911	67	186	118	131
2004	186	10	N/A	306	16	205	798	49	207	119	127

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2005	190	52	30	274	27	198	787	49	232	122	100
2006	174	200	36	248	11	186	791	44	206	111	101
2007	167	173	40	244	8	173	621	49	198	113	97
2008	167	150	67	235	7	184	512	48	193	104	108
2009	159	310	27	269	31	152	605	52	171	103	96
2010	149	98	30	236	25	130	422	47	178	92	94
2011	157	5	0	234	50	152	383	0	183	90	100
2012	160	147	33	244	24	158	508	39	185	100	99
2013	158	142	31	244	27	155	486	37	182	98	99
2014	157	140	24	245	31	149	481	35	180	97	98
2015	156	106	24	240	32	149	456	32	182	95	98
2016	158	108	23	241	33	153	463	29	182	96	99
2017	158	129	27	243	30	153	479	34	182	97	99
2018	157	125	26	243	31	152	473	33	182	97	98

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.21 reveals that ASEAN's trade intensity with India has remain consistent over a period of time since 1991. 1991 it was 177 vis-à-vis India and 157 in 2018. Individual country wise analysis showed lot of variation as far as trade intensity index is concerned with respect to India. Myanmar's trade intensity index has remained quiet favorable with India but reduced from 567 in 1991 to 473 in 2018. Indonesia also showed improved trade intensity index with respect to India. It was 91 in 1991 which touched 306 in 2004 and settled at 243 in 2018 but TII was not favorable with Cambodia, Lao, Philippines, Vietnam and Thailand in 2018. Hence, India enjoying decent trade intensities with Brunei, Indonesia, Malaysia, Myanmar and Singapore.

3.4 EXPORT SIMILARITY AND DISSIMILARITY BETWEEN INDIA AND ASEAN

Export similarity highlight whether two nations trade in similar products and compete with each other in the global markets. Table 3.22 highlight Export Similarity Index (ESI) between India and ASEAN during 1991 to 2018. Export similarity shows the similarity of export product which make two countries competitors of each other.

Among all ASEAN nations, the exports of Indonesia, Malaysia, Singapore and Thailand were far competitive with India's than the other ASEAN nations in 2018. Table 3.22 exhibits that the Export similarity between India and ASEAN is not quoting any positive outlook as there is lot of dissimilarity in their export basket. Export similarity between India and ASEAN was 33.12 per cent in 1991 which rose to 34.12 per cent in 2000 and despite having AIFTA it was 44.34 per cent in 2018. This is quite pervasive across the ASEAN states. Interestingly, there was less competition of Philippines, Cambodia with India. In 1991 Thailand had an edge over exports similar to than that of India. However Indonesia and Vietnam were in pipeline but in 2002 Vietnam superseded Thailand and attain the highest export similarity vis-à-vis India. On the other side, India's competitive edge stands against Brunei, Cambodia, and Philippines among the ASEAN nations.

Table 3.22: Exports Similarity between India and ASEAN during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	World
1991	33.12	0.00	0.00	36.55	0.00	21.46	0.00	0.00	28.27	44.12	0.00	39.43
1992	35	3.57	0.00	38.78	0.00	22.23	0.00	0.00	28.16	44.54	0.00	42.13
1993	34.73	2.52	0.00	38.45	0.00	24.65	0.00	0.00	27.46	46.25	0.00	43.08
1994	35.41	3.25	0.00	39.88	0.00	22.12	0.00	0.00	26.65	44.32	0.00	44.64
1995	34.76	0.00	0.00	39.82	0.00	22.34	0.00	0.00	27.23	44.4	0.00	45.01
1996	35.03	0.00	0.00	40.12	0.00	23.97	0.00	35.69	26.29	43.99	0.00	45.65
1997	34.39	7.12	0.00	38.1	0.00	22.9	0.00	31.9	26.44	44.65	0.00	44.45
1998	30.16	9.54	0.00	40.89	0.00	20.44	0.00	26.58	25.24	43.87	0.00	42.58
1999	31.88	0.00	0.00	40.89	0.00	21.33	0.00	23.95	24.88	41.3	0.00	41.39
2000	34.12	0.00	18.66	40.67	0.00	24.91	0.00	26.3	27.68	43.95	43.11	44.32
2001	38.33	0.00	14.03	43.34	0.00	26.32	0.00	28.92	32.91	46.35	45.88	49.97
2002	36.48	13.13	16.02	44.78	0.00	27.3	0.00	27.27	32.39	44.84	46.21	49.19
2003	36.59	14.73	15.05	44.67	0.00	29.43	0.00	28.63	34.02	44.04	45.11	46.15
2004	38.63	16.06	13.48	46.07	0.00	32.07	0.00	27.87	35.48	43.08	42.35	53.53

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	World
2005	40.78	0.00	13.04	48.32	0.00	33.52	0.00	27.87	38.58	43.64	44.27	55.86
2006	40.33	18.33	13.52	52.31	0.00	39.8	0.00	33.07	42.08	43.04	48.53	58.8
2007	40.00	0.00	12.74	56.13	0.00	41.54	0.00	32.91	43.00	43.18	52.14	46.37
2008	42.17	0.00	12.77	55.16	0.00	43.94	0.00	34.59	47.07	46.09	55.07	50.59
2009	44.67	0.00	12.42	50.33	0.00	42.31	0.00	33.94	48.27	46.27	53.26	50.26
2010	47.77	0.00	13.31	52.19	0.00	42.58	0.00	33.63	45.84	44.63	0	51.59
2011	42.99	3.67	12.95	53.22	0.00	42.03	0.00	33.63	45.25	44.64	41.80	51.52
2012	43.52	0.73	12.84	53.41	0.00	42.48	0.00	33.74	45.89	44.96	40.45	50.07
2013	44.22	0.88	12.86	52.86	0.00	42.67	0.00	33.91	46.46	45.32	38.12	50.81
2014	44.63	1.06	12.88	52.40	0.00	42.41	0.00	33.77	46.34	45.16	34.73	50.85
2015	44.63	1.27	12.97	52.82	0.00	42.44	0.00	33.73	45.96	44.94	31.02	50.97
2016	44.00	1.52	12.90	52.94	0.00	42.41	0.00	33.76	45.98	45.01	37.22	50.84
2017	44.20	1.09	12.89	52.89	0.00	42.48	0.00	33.78	46.13	45.08	36.31	50.71
2018	44.34	1.16	12.90	52.78	0.00	42.48	0.00	33.79	46.17	45.10	35.48	50.83

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Table 3.23: Imports Similarity between India and ASEAN during 1991-2018

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	World
1991	47.16	0.00	0.00	48.82	0.00	45.42	0.00	0.00	49.29	55.8	0.00	53.67
1992	48.34	33.3	0.00	48.43	0.00	43.96	0.00	0.00	47.96	52.01	0.00	52.65
1993	49.87	36.56	0.00	49.81	0.00	47.98	0.00	0.00	48.93	52.51	0.00	53.42
1994	51.36	37.81	0.00	54.62	0.00	48.93	0.00	0.00	48.37	55.6	0.00	55.62
1995	53.29	0.00	0.00	56.94	0.00	51.70	0.00	0.00	50.55	57.59	0.00	58.50
1996	50.54	0.00	0.00	53.83	0.00	48.68	0.00	50.04	47.80	55.73	0.00	53.24
1997	50.85	38.07	0.00	54.91	0.00	48.55	0.00	48.95	49.29	55.36	0.00	56.13
1998	49.57	36.76	0.00	51.67	0.00	44.27	0.00	44.35	44.54	51.74	0.00	52.01
1999	48.28	0.00	0.00	54.16	0.00	41.42	0.00	43.14	42.74	49.68	0.00	48.43
2000	48.63	0.00	42.03	53.9	0.00	39.74	0.00	43.95	43.33	50.18	49.14	49.53
2001	49.63	34.37	38.49	55.64	0.00	43.60	0.00	45.51	46.55	53.15	50.58	52.64
2002	45.37	36.37	33.70	59.65	0.00	44.11	0.00	43.13	49.42	54.37	50.38	27.99
2003	46.71	38.97	34.55	63.16	0.00	45.81	0.00	46.80	51.96	56.98	52.71	38.68
2004	50.98	34.34	32.49	64.69	0.00	48.22	0.00	47.87	51.86	58.81	55.36	46.36
2005	53.55	0.00	32.65	70.15	0.00	50.01	0.00	50.43	55.46	63.55	58.17	58.36
2006	54.84	40.84	33.00	72.64	0.00	52.02	0.00	53.08	58.01	64.79	60.84	59.83

Contd.

Year	ASEAN	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	World
2007	52.48	0.00	34.47	72.81	0.00	55.51	0.00	56.33	60.58	65.17	61.80	33.48
2008	53.39	0.00	36.51	65.68	0.00	53.36	0.00	57.74	65.95	65.39	53.36	59.11
2009	55.2	0.00	40.72	64.47	0.00	54.26	0.00	56.2	65.07	64.39	55.28	61.34
2010	59.72	0.00	38.72	62.73	0.00	52.90	0.00	54.59	63.85	61.21	0.00	60.09
2011	55.13	0.00	36.68	67.67	0.00	53.61	0.00	55.59	62.69	64.19	46.26	54.77
2012	55.18	35.00	37.42	66.67	0.00	53.93	0.00	56.09	63.63	64.07	43.34	53.76
2013	55.72	38.56	38.01	65.44	0.00	53.61	0.00	56.04	64.24	63.85	39.65	57.81
2014	56.19	0.00	38.31	65.40	0.00	53.66	0.00	55.70	63.90	63.54	36.90	57.55
2015	56.39	38.90	37.83	65.58	0.00	53.54	0.00	55.60	63.66	63.37	33.23	56.80
2016	55.72	36.23	37.65	66.15	0.00	53.67	0.00	55.80	63.62	63.80	39.88	56.14
2017	55.84	37.90	37.84	65.85	0.00	53.68	0.00	55.85	63.81	63.73	38.60	56.41
2018	55.97	0.00	37.93	65.68	0.00	53.63	0.00	55.80	63.85	63.66	37.65	56.94

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

Unlike export, the import pattern (see Table 3.23) of India and ASEAN countries exhibited a high degree of similarity. The ISI of India and ASEAN was 47.16 in 1991 increasing to 55.97 in 2018. Surprisingly there was no import similarity for Cambodia and Lao PDR. In 2018 highest similarity in import pattern was witnessed in Indonesia followed by Singapore and Thailand close to 64 in 2018 which exhibited a high degree of similarity. However, between Indian exports and imports, the former were even less similar to ASEAN and consequently less competitive. Unlike export pattern, the import pattern of India and ASEAN countries exhibited a high degree of similarity. India's traded goods at the aggregate level were not greatly similar to ASEAN countries and thus not very competitive in the global market.

3.5 TRADE COMPLEMENTARITY BETWEEN INDIA AND ASEAN

This section attempts to identify in a limited way the extent of trade possibilities between the Indian and ASEAN states based on their existing trade patterns both at global and bilateral levels. Trade Complementarity Index (TCI) can show how well the export profile of India with ASEAN nations matches with the import profile of ASEAN nations with India. The index lies on the range of 0 to 100. If the value comes out to be 100, then the composition of import needs of ASEAN nations matches perfectly with exports of India. On the other hand where exports of India has no relevance to the import needs of ASEAN nations, the index takes the value of zero.

Countries with greater complementarities have more opportunities to trade with each other. As such, it is assumed that higher the TCI more favorable are the prospects of India's export to ASEAN nations and ASEAN export to India. Changes with the passage of time may reveal the fact that whether the trade profiles are becoming more or less compatible. It may be noted that high complementarities indices may be misleading if the nations are geographically distant, or if the difference in the size of the economies is huge.

Table 3.24: India's Export Complementarity with ASEAN and World during 1991-2018

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	ASEAN	World
1991	50.0	50.0	35.0	50.0	35.1	50.0	50.0	31.8	40.0	50.0	36.2	42.0
1992	31.5	50.0	36.9	50.0	35.6	50.0	50.0	32.9	38.3	50.0	36.5	43.8
1993	28.6	50.0	37.7	50.0	36.1	50.0	50.0	32.5	37.4	50.0	37.0	44.3
1994	32.1	50.0	38.6	50.0	35.2	50.0	50.0	31.8	36.9	50.0	36.6	45.5
1995	50.0	50.0	41.4	50.0	35.6	50.0	50.0	31.5	36.1	50.0	36.9	45.8
1996	50.0	50.0	42.2	50.0	36.6	50.0	37.1	31.6	37.8	50.0	37.7	45.0
1997	36.9	50.0	40.7	50.0	35.7	50.0	34.9	31.8	37.8	50.0	36.8	45.9
1998	36.1	50.0	39.9	50.0	30.5	50.0	32.7	27.9	37.0	50.0	33.7	43.4
1999	50.0	50.0	39.4	50.0	32.1	50.0	32.7	28.2	37.6	50.0	34.7	42.4
2000	50.0	40.2	43.5	50.0	34.8	50.0	35.4	30.8	41.2	44.2	37.7	45.2
2001	45.2	41.8	48.1	50.0	40.2	50.0	38.8	35.1	44.8	47.5	42.1	50.7
2002	39.8	41.2	48.0	50.0	39.5	50.0	36.4	34.9	45.5	47.5	49.1	34.5
2003	44.9	44.7	49.6	50.0	40.1	50.0	38.6	37.0	48.7	49.2	50.9	39.1
2004	46.0	46.1	51.0	50.0	42.4	50.0	40.5	37.5	51.6	53.5	52.2	48.8
2005	50.0	43.6	51.6	50.0	44.5	50.0	43.0	40.5	53.5	55.1	54.6	56.8

Contd.

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	ASEAN	World
2006	46.5	44.8	57.4	50.0	46.2	50.0	46.8	44.4	58.4	61.7	57.0	60.6
2007	50.0	44.2	58.4	50.0	47.9	50.0	48.9	47.0	58.2	58.3	62.1	61.9
2008	50.0	43.8	63.4	50.0	51.8	50.0	54.2	49.8	63.3	62.4	67.1	65.5
2009	50.0	48.5	57.4	50.0	48.9	50.0	51.4	48.2	56.1	53.7	60.5	63.8
2010	50.0	46.5	63.2	50.0	50.6	50.0	54.7	48.3	62.6	50.0	60.3	65.0
2011	49.3	45.6	60.0	50.0	49.1	50.0	51.2	47.5	59.7	57.2	61.4	63.4
2012	49.9	45.7	60.5	50.0	49.7	50.0	52.1	48.2	60.0	56.3	62.3	63.9
2013	53.2	46.0	59.5	50.0	50.0	50.0	52.7	48.4	60.3	55.9	62.3	64.3
2014	50.5	48.5	60.1	50.0	49.6	50.0	53.4	48.1	59.7	54.6	61.4	64.1
2015	50.6	46.4	58.7	50.0	49.8	50.0	52.8	46.3	60.5	54.8	61.5	64.1
2016	51.0	49.2	59.7	50.0	49.6	50.0	52.4	47.7	58.4	55.8	63.8	63.0
2017	51.0	47.2	61.0	50.0	49.7	50.0	52.7	49.2	56.1	55.5	62.3	63.9
2018	51.3	47.5	59.8	50.0	49.8	50.0	52.8	48.0	59.0	55.3	62.3	63.9

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

The TCI of India's export to ASEAN and World during 1991-2018 has been computed in this study. Table 3.24 depicts the same. It is clear from this table that India's export complementarity with ASEAN and World was low during 1991 i.e. 36.2 and 42.0 respectively. India's export complementarity with ASEAN and World was 37.7 and 45.2 in 2002 respectively which further increased to 62.3 and 63.9 in 2018 showing India's capabilities to fulfill import demand and ASEAN nations and World, over the time. India's export complementarity varied across ASEAN's nations.

At bilateral level, India's export complementarity index showed overall improvement with ASEAN nations. It means there are greater opportunities of India's export to ASEAN nations and World in future. The huge complementarities between India and ASEAN nations give rise to immense opportunities to develop their trade and investment relations.

In Table 3.25 the TCI of ASEAN export to India and World during 1991-2018 has been computed. ASEAN's export complementarity with India is also reciprocating in the same vein, suggesting that Look East Policy starts bearing fruits. ASEAN's TCI with India was 35.9 in 1991, rose to 51.0 in 2001 and 61.2 in 2018 which was higher than the world in respective years, indicating growing trade demand for ASEAN products in Indian market. Among the ASEAN states the highest TCI was traced in Indonesia and Singapore to 58.9 and 50.8 respectively, in 2018. It was almost 50.0 with Brunei, Lao, Malaysia, Myanmar and Vietnam.

Table 3.24 and 3.25 are indicating towards growing interdependence of trade between India and ASEAN nations. Barring Cambodia, Philippines, export complementarity index for almost every ASEAN nations has improved over the time indicating an improved and long term reliance of India and ASEAN trade agreement.

Table 3.25: ASEAN's Export Complementarity with India and World during 1991 to 2018

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	India	World
1991	50.0	50.0	44.9	50.0	40.4	50.0	50.0	49.7	31.3	50.0	35.9	48.7
1992	29.5	50.0	46.2	50.0	39.9	50.0	50.0	45.7	32.8	50.0	39.4	49.6
1993	27.2	50.0	46.5	50.0	39.6	50.0	50.0	45.5	35.6	50.0	41.2	51.2
1994	23.8	50.0	47.6	50.0	40.3	50.0	50.0	44.2	39.8	50.0	39.0	53.1
1995	50.0	50.0	50.0	50.0	42.9	50.0	50.0	45.9	40.7	50.0	38.6	56.1
1996	50.0	50.0	50.6	50.0	41.2	50.0	33.2	43.3	39.1	50.0	40.6	54.0
1997	29.1	50.0	54.0	50.0	42.4	50.0	32.1	44.5	42.9	50.0	46.3	54.2
1998	24.1	50.0	56.4	50.0	41.4	50.0	27.8	42.2	38.3	50.0	47.0	50.9
1999	50.0	50.0	55.6	50.0	38.0	50.0	23.8	39.3	36.4	50.0	49.3	47.8
2000	50.0	4.1	56.4	50.0	39.6	50.0	25.0	37.4	36.3	45.7	48.8	48.9
2001	50.0	5.0	57.3	50.0	43.3	50.0	26.5	41.4	38.1	42.8	51.0	51.8
2002	35.3	5.2	57.5	50.0	43.9	50.0	27.9	43.2	39.8	40.1	51.9	53.4
2003	34.6	5.0	60.4	50.0	47.7	50.0	31.1	45.3	42.3	40.1	53.1	44.0
2004	35.4	3.1	59.9	50.0	48.6	50.0	31.0	45.4	42.4	43.9	54.7	56.1
2005	50.0	3.2	59.5	50.0	49.8	50.0	32.7	47.9	43.3	46.0	57.4	57.6

Contd.

Year	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	India	World
2006	36.4	4.0	59.9	50.0	50.7	50.0	34.4	49.1	45.0	46.2	59.2	60.1
2007	50.0	4.7	57.6	50.0	53.3	50.0	37.0	51.7	48.2	45.5	62.8	56.8
2008	50.0	5.2	57.5	50.0	52.6	50.0	34.0	53.0	44.8	47.4	61.9	54.5
2009	50.0	7.0	58.9	50.0	53.6	50.0	36.6	55.1	47.9	46.1	63.4	56.2
2010	50.0	7.5	58.9	50.0	51.4	50.0	34.2	52.9	44.4	50.0	65.9	53.9
2011	41.3	4.0	59.5	50.0	50.0	50.0	33.2	47.9	44.2	44.3	57.4	54.9
2012	44.4	4.0	58.9	50.0	51.0	50.0	33.8	49.4	44.7	45.8	59.2	57.0
2013	47.3	4.8	58.7	50.0	52.0	50.0	34.9	51.4	45.8	46.2	60.9	57.0
2014	47.3	5.7	58.6	50.0	52.3	50.0	35.2	52.4	46.1	47.0	62.6	56.3
2015	48.3	5.7	58.5	50.0	52.2	50.0	35.0	52.1	45.9	46.7	62.3	55.3
2016	47.1	5.5	58.7	50.0	51.7	50.0	34.4	51.7	45.2	46.7	61.6	55.3
2017	46.6	5.5	59.0	50.0	51.6	50.0	34.6	51.3	45.4	46.5	61.4	55.8
2018	46.0	5.2	58.9	50.0	51.3	50.0	34.3	50.8	45.1	46.7	61.2	55.8

(Source: United Nations Commodity Trade Database (UNCOMTRADE))

In nutshell, the bilateral trade between India and ASEAN partner anchored largely on complementary products, though the extent of their prominence varied from country to country. Even with the expansion of trade as one important factor stood out that there is a huge scope for restructuring India-ASEAN trade in alignment with demand and supply conditions prevailing in the trading partners. For, several complementary products were not traded at all between them, and wherever traded, their market presence was mostly insignificant.

3.6 CONCLUSION

India's Look East Policy was a progressive step to moot India's external sector, and engaging ASEAN was step forward to fasten India's presence in East Asia. Since ASEAN India free trade agreement (AIFTA) is in place, the organic growth has been taking place between India and ASEAN members. Though combined GDP at current prices of ASEAN in 2018 equated with Indian GDP but their combined trade is approximately 36 times more than India. ASEAN as a group, exporting 47 times and importing 29.6 times more than India from rest of the world, indicating the edge ASEAN members are enjoying over India, as far as their engagement with rest of the world is concerned ASEAN FDI 3.6 times higher than India. This indicates the capability of ASEAN to engage rest of the world is better than India, but the India ASEAN ties are maturing over period and trade volume between two entities has risen from US\$ 1960 mn in 1991 to US\$ 80724 mn in 2017, although tilted in favor of ASEAN, as balance of trade bearing US\$ 9902 mn in 2017 in favour of ASEAN. But at a country level, India balance of trade was favorable with Cambodia, Myanmar, Singapore and Malaysia in 2017 but this deficit can be subdued with the performance of service sector, where India draws major advantage over ASEAN members.

As far as AIFTA is concerned the chemistry between India and ASEAN members has started bearing fruits. India's share in ASEAN trade was less than one per cent in 1991 and touched the one per cent marking 1997 but from last seven years (2010-2017) it is hovering between 5.5 per cent to 6.16 per cent, which clearly indicates towards seriousness of the free trade agreement. Whereas, share of ASEAN in India's trade was 5.26 per cent in 1991 currently it hovered around 9.5 per cent to

11.0 per cent. These results are very encouraging. India's direction of trade within ASEAN has also underwent a change. During 1991, along with Singapore, Malaysia, Thailand and Indonesia were India's major trading partners, but barring Singapore, during 2017, India's trade direction moved to a new trade partner i.e. Vietnam. But overall, trade with ASEAN members is not equally distributed which indicates towards unexplored markets for Indian products with ASEAN region.

Pearls, precious stones, metal, coins, etc. were comprising almost 50 per cent of the total export from India to ASEAN in 1991 but owing to technological shift in 2017, products of their distillation and Mineral fuels, mineral oils, etc. have been gaining ground by comprising of 24.89 per cent of total export of India to ASEAN. Commodities like plastics, copper, pharmaceutical products and articles has also been finding place in India's export to ASEAN in 2017. It is worth mentioning that these items were comprising of non-existent share in India's export in 1991. In a similar vein, ASEAN countries basket of export to India has also broadened since 1991. Despite encouraging trade statistics still there exists some glaring gap or possible last opportunities between India and ASEAN members, as a few naming Singapore and Malaysia, are inching close to major trading partner with India among 10 member ASEAN community in last two decades. Trade issues along with geo political issues should be solved together to further strengthening the AIFTA. India should further deepen her service sector presence in ASEAN and reap the benefit of liberal policy of ASEAN and should fervently follow the policy of "Act East."

CHAPTER – 4

COMPETITIVENESS OF INDIA’S TRADE WITH ASEAN COUNTRIES

The orientation of free trade agreement is not only allow free movement of goods and services, but to augment competitiveness of trade among trading partners. As a concept, competitiveness is intuitively attractive, but it can be frustratingly difficult to pin down and operationalize, as many endogenous and exogenous factors affect the trade competitiveness in free trade agreements. This chapter evaluates the Indian Trade competitiveness viz-z a viz ASEAN members on two fronts:-

1) Trade competitiveness technology wise and 2) Trade Competitiveness – commodity wise to gauge the trade advantage took place because of ASEAN-India Free Trade Agreement (AIFTA). The whole chapter is divided into two sections.

Section I dealing with technology competitiveness of India and ASEAN based on tech classification suggested by Basu 2011 (See Chapter 1 for details) and later those technology classification measured against for the nature of commodity to measure the trade competitiveness (See Chapter 1 for detail). Section II is based on Balassa (1965) approach to gauge the trade competitiveness based on Revealed Competitiveness Advantage (RCA) approach at commodity level.

Section – I

Table 4.1 elucidates the technology wise competitiveness of commodity from 2001 to 2015 through three different phases to get the glimpse of how, with the advent of AIFTA, trade across technology line is changing. In Phase 1 a total of 3749 product lines were traded among India and ASEAN which rose to 3990 product lines during Phase 1, but overall product lines from 2001 to 2015 remained 3667 after factoring in the induction and deduction of product lines over a period of time. Table 4.1 deliberate on the competitiveness of different commodities across seven technology classification. Competitively Positioned commodities has fallen to 1632 from 1960 in Phase 1 i.e. during Phase 1 almost 52.28 per cent commodities which India used to export to ASEAN members has drastically reduced to 40.90 per cent in Phase 1, which in itself manifests the tilt in favor of ASEAN members in AIFTA.

Table 4.1: Trade Competitiveness across Technology classification between INDIA and ASEAN

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Non-fuel primary commodities	317 (16.17)	270 (16.54)	245 (15.05)	246 (15.53)	288 (14.17)	248 (14.04)	0 (0.00)	1 (25.00)	1 (33.33)	0 (0.00)	8 (25.00)	5 (25.00)	0 (14.29)	1 (16.67)	1 (14.29)	48 (24.49)	73 (25.80)	57 (23.55)
Unclassified products	112 (5.71)	104 (6.37)	97 (5.96)	101 (6.38)	144 (7.09)	114 (6.45)	0 (0.00)	0 (0.00)	0 (0.00)	1 (50.00)	4 (12.50)	2 (10.00)	1 (0.00)	0 (0.00)	0 (0.00)	17 (8.67)	23 (8.13)	16 (6.61)
High skill- and technology intensive manufactures	456 (23.27)	326 (19.98)	352 (21.62)	329 (20.77)	469 (23.08)	391 (22.13)	0 (0.00)	1 (25.00)	0 (0.00)	0 (0.00)	4 (12.50)	3 (15.00)	2 (28.57)	1 (16.67)	2 (28.57)	41 (20.92)	62 (21.91)	56 (23.14)
Medium skill- and technology intensive manufactures	334 (17.04)	334 (20.47)	326 (20.02)	312 (19.70)	346 (17.03)	322 (18.22)	0 (0.00)	1 (25.00)	1 (33.33)	1 (50.00)	4 (12.50)	3 (15.00)	0 (0.00)	0 (0.00)	0 (0.00)	14 (7.14)	18 (6.36)	15 (6.20)
Resource-intensive manufactures	511 (26.07)	399 (24.45)	434 (26.66)	356 (22.47)	507 (24.95)	410 (23.20)	0 (0.00)	1 (25.00)	0 (0.00)	0 (0.00)	8 (25.00)	6 (30.00)	3 (42.86)	1 (16.67)	2 (28.57)	45 (22.96)	63 (22.26)	57 (23.55)

Contd.

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Mineral fuels	62 (3.16)	59 (3.62)	55 (3.38)	54 (3.41)	60 (2.95)	56 (3.17)	0 (0.00)	0 (0.00)	1 (33.33)	0 (0.00)	1 (3.13)	1 (5.00)	0 (0.00)	1 (16.67)	1 (14.29)	15 (7.65)	16 (5.65)	17 (7.02)
Low skill- and technology-intensive manufactures	168 (8.57)	140 (8.58)	119 (7.31)	186 (11.74)	218 (10.73)	226 (12.79)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3 (9.38)	0 (0.00)	1 (14.29)	2 (33.33)	1 (14.29)	16 (8.16)	28 (9.89)	24 (9.92)
TOTAL	1960 (52.28)	1632 (40.90)	1628 (44.40)	1584 (42.25)	2032 (50.93)	1767 (48.19)	0 (0.00)	4 (0.10)	3 (0.08)	2 (0.05)	32 (0.80)	20 (0.55)	7 (0.19)	6 (0.18)	7 (0.19)	196 (5.23)	283 (7.09)	242 (6.60)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

High Skill and technology intensive manufacturer's related items were at receiving end in Phase 2. 456 items of this group were Competitively Positioned amounting to 23.27 per cent of all Competitively Positioned items for India, which reduced to 326 i.e. 19.98 per cent. Medium Skill and technology intensive manufacturer items remained unchanged during both the phases i.e. 334 in both the phases but their proportion in total Competitively Positioned items remained 17.04 per cent and 20.47 per cent in respective phases. Low Skill and technology intensive manufacturing, minerals, Unclassified Products and Non fuel Primary commodities percentage remained more or less same during both phases. This trend leads to conclude that overall Competitively Positioned items reduced and which is not a favorable scenario as far as AIFTA s concerned. This trends can be cross verified from the Weakly Positioned Type II items where in absolute terms number of commodities has increased from 196 to 283 in Phase I. This trend persists across the technology classification. Most affected technologies were Resource intensive manufacturing and High Skill Technology intensive manufacturing which is leading to an ominous sign where instead of strength the trade and diversifying the horizontal technology line, India is losing her competitive sheen in those products also where once her commodities were Competitively Positioned.

Table left Noting to imagination, as upgrading of technology is not taking place, as far as, India trade with ASEAN members is concerned and India is losing a competitive advantage even on basic technology is concerned. Technology wise commodities under Threatened Products has been strengthening the claim of India's lost technological diversification. 2032 products are being termed as Threatened Products in Phase 2 which were 1584 in Phase 1. Earlier the overall TP were comprising of 42.25 per cent during Phase 1 which rose to 50.93 per cent in Phase 2. TP are those product where India had global advantage but ASEAN members were also producing same, which are creating TP on the behest of a strong product line complementariness. Table is covering a period of 15 years but the time period is sufficient enough to capture on the realities that India's competitiveness on different technology has been worsening over a period of time.

Furthermore technological classification the maximum number of commodities were found in Resource intensive manufacturers followed by High skill technology

classification, whereas the commodities having minimum percentage were found in Minerals fuels and Unclassified products technology classification. On an aggregate, the percentage shift from Phase 1 to Phase 2 is calculated to about -16.73 per cent as the number of commodities from Phase 1 to Phase 2 have decreased in case of Competitive position product Groupings. However in case of Threatened Products it is the Phasewise percentage change is 28.23 per cent as the number of commodities have increased. The Emerging Products Tier II the highest percentage change Phasewise was recorded amounting to 16 times as the commodities increase drastically from Phase 1 to Phase 2. Therefore the products which have the competitive advantage were from Competitively Positioned and Threatened Products followed by Weakly Positioned Tier II Product grouping.

Table 4.2 explains the RCA Profile and Product Grouping technologywise between India and Brunei. On the basis of HS 6-digit level the number of commodities in Phase 1 were 241 which increased to 591 commodities in Phase 2 which was continued in Overall Phase as well. The maximum percentage of commodities were found in Emerging products Tier II with a drastic increase from Phase 1 with 30 per cent to 45 per cent in Phase 2 followed by products having RCA greater than 1 which were in Competitively Positioned product grouping having a percentage of 25 per cent in Phase 1 to 32 per cent in Phase 2. On an aggregate level the per cent change was found maximum in Emerging Products Tier II with 268 per cent change followed by Emerging Products Tier I with 260 per cent change from Phase 1 to Phase 2. Although as per technology wise classification the maximum number of products were found in Resource Intensive manufacturers followed by Medium skill technology and then commodities in Non-fuel primary technology. To conclude we can say that as there is less demand therefore the larger quantum of consumer goods from India are received in Brunei by adopting system of re-exports via Singapore & Malaysia. In the services sector, India has been exporting its human resource to Brunei, both highly qualified professionals, and skilled and semi-skilled workers and the repatriation of their savings to India constitute some vital foreign exchange earnings for India.

Table 4.2: Export Competiveness between India to Brunei

Technology Classification	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Non-fuel primary commodities	18 (30.51)	52 (27.37)	55 (28.21)	4 (33.33)	8 (29.63)	5 (22.73)	1 (10.00)	5 (13.89)	11 (27.50)	11 (15.28)	34 (12.83)	32 (11.99)	0 (0.00)	6 (75.00)	0 (0.00)	13 (15.29)	8 (12.31)	10 (15.87)
Unclassified products	4 (6.78)	10 (5.26)	10 (5.13)	0 (0.00)	3 (11.11)	3 (13.64)	0 (0.00)	1 (2.78)	1 (2.50)	3 (4.17)	16 (6.04)	17 (6.37)	0 (0.00)	0 (0.00)	0 (0.00)	2 (2.35)	2 (3.08)	1 (1.59)
High skill- and technology intensive manufactures	4 (6.78)	34 (17.89)	35 (17.95)	1 (8.33)	2 (7.41)	1 (4.55)	0 (0.00)	10 (27.78)	10 (25.00)	11 (15.28)	60 (22.64)	56 (20.97)	0 (0.00)	0 (0.00)	0 (0.00)	13 (15.29)	5 (7.69)	9 (14.29)
Medium skill- and technology intensive manufactures	2 (3.39)	20 (10.53)	20 (10.26)	1 (8.33)	2 (7.41)	2 (9.09)	4 (40.00)	13 (36.11)	11 (27.50)	23 (31.94)	68 (25.66)	70 (26.22)	0 (0.00)	0 (0.00)	2 (50.00)	22 (25.88)	17 (26.15)	15 (23.81)
Resource- intensive manufactures	23 (38.98)	56 (29.47)	58 (29.74)	4 (33.33)	10 (37.04)	8 (36.36)	3 (30.00)	7 (19.44)	7 (17.50)	16 (22.22)	51 (19.25)	52 (19.48)	3 (100.00)	2 (25.00)	2 (50.00)	26 (30.59)	21 (32.31)	20 (31.75)

Contd.

Technology Classification	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Mineral fuels	4 (6.78)	4 (2.11)	3 (1.54)	1 (8.33)	1 (3.70)	2 (9.09)	1 (10.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (2.26)	5 (1.87)	0 (0.00)	0 (0.00)	0 (0.00)	5 (5.88)	3 (4.62)	4 (6.35)
Low skill- and technology- intensive manufactures	4 (6.78)	14 (7.37)	14 (7.18)	1 (8.33)	1 (3.70)	1 (4.55)	1 (10.00)	0 (0.00)	0 (0.00)	8 (11.11)	30 (11.32)	35 (13.11)	0 (0.00)	0 (0.00)	0 (0.00)	4 (4.71)	9 (13.85)	4 (6.35)
TOTAL	59 (24.48)	190 (32.15)	195 (32.99)	12 (4.98)	27 (4.57)	22 (3.72)	10 (4.15)	36 (6.09)	40 (6.77)	72 (29.88)	265 (44.84)	267 (45.18)	3 (1.24)	8 (1.35)	4 (0.68)	85 (35.27)	65 (11.00)	63 (10.66)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.3 explains the RCA Profile and Product Grouping technology wise between India and Cambodia. On the basis of HS 6 digit commodity classification the maximum percentage of commodity was witnessed in CP product grouping with 35.12 per cent in Phase 1 increasing to 45.28 per cent in Phase 2 and 49.56 per cent in Overall phase followed by Emerging products tier II with 19.30 per cent in Phase 1 and 30.24 per cent in Phase 2 and 34 per cent in Overall phase. The maximum per cent from Phase 1 to Phase 2 change was found in EP Tier II product grouping of per cent followed by EP Tier I as the number of commodities rose significantly from 16 in Phase 1 to 30 commodities in Phase 2, However the similar change was also noticed in CP commodities with RCA >1 having 134 per cent change from Phase 1 to Phase 2. The WP tier II commodities were reduced from Phase 1 to Phase 2. At an aggregate level, on the basis of technology classification the major commodities were in High skill- and technology intensive manufactures followed by Medium skill- and technology intensive manufactures close by Resource-intensive manufactures. The minimum number of commodities were found in Unclassified products respectively which depicts lack of competitive advantage.

Table 4.4 illustrates that Export competitiveness with India and LAO PDR, at an aggregate level, maximum number of commodities were found in Medium skill- and technology intensive manufactures technology followed Resource-intensive manufactures and closely followed by High skill- and technology intensive manufactures and the least number of commodities were in Non-fuel primary commodities technology. On the basis of product grouping the maximum number of commodities were found in Emerging Products Tier II in Phase 1 with 28.13 per cent and 50.00 per cent in Phase 2 and 47.26 per cent in Overall Phase. Commodities in Competitively Positioned product grouping recorded 21.88 per cent in Phase 1 and 34.50 per cent in Phase 2 and 34.80 per cent in Overall Phase. Whereas the commodities which were Weakly Positioned Tier II decreased from Phase 1 as 28 commodities and 12 in Phase 2 commodities and 18 in Overall Phase having comparative advantage less than unity.. The maximum percentage change from Phase 1 to Phase 2 was in Emerging Products Tier I with 650 percentage change followed by EP Tier II with 456 percentage change. The Weakly positioned products Tier I and Tier II reveal negative in percentage change as the number of commodities decreased from Phase 1 to Phase 2. The export with Lao PDR there was no product in Threatened Product grouping. All this show that the exports among India and Lao PDR are increasing with the passage of time along with few policy changes.

Table 4.3: Export Competiveness between India to Cambodia

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	5 (3.82)	34 (11.07)	35 (10.42)	1 (3.85)	1 (2.04)	0 (0.00)	4 (25.00)	5 (13.16)	6 (8.33)	6 (8.33)	19 (9.27)	25 (10.82)	1 (16.67)	1 (16.67)	0 (0.00)	7 (5.74)	9 (12.33)	3 (6.38)
Unclassified products	3 (2.29)	15 (4.89)	16 (4.76)	0 (0.00)	1 (2.04)	0 (0.00)	1 (6.25)	3 (7.89)	3 (5.56)	4 (5.56)	18 (8.78)	19 (8.23)	0 (0.00)	0 (0.00)	0 (0.00)	7 (5.74)	3 (4.11)	2 (4.26)
High skill- and technology intensive manufactures	27 (20.61)	54 (17.59)	59 (17.56)	14 (53.85)	14 (28.57)	9 (45.00)	2 (12.50)	12 (31.58)	12 (15.28)	11 (15.28)	27 (13.17)	29 (12.55)	2 (33.33)	2 (33.33)	2 (50.00)	30 (24.59)	14 (19.18)	12 (25.53)
Medium skill- and technology intensive manufactures	18 (13.74)	69 (22.48)	75 (22.32)	6 (23.08)	11 (22.45)	5 (25.00)	4 (25.00)	10 (26.32)	11 (33.33)	24 (33.33)	61 (29.76)	71 (30.74)	2 (33.33)	1 (16.67)	0 (0.00)	24 (19.67)	19 (26.03)	9 (19.15)
Resource-intensive manufactures	50 (38.17)	96 (31.27)	106 (31.55)	3 (11.54)	14 (28.57)	4 (20.00)	3 (18.75)	8 (21.05)	8 (27.78)	20 (27.78)	42 (20.49)	53 (22.94)	1 (16.67)	1 (16.67)	1 (25.00)	24 (19.67)	17 (23.29)	6 (12.77)
Mineral fuels	18 (13.74)	23 (7.49)	26 (7.74)	1 (3.85)	5 (10.20)	2 (10.00)	1 (6.25)	0 (0.00)	0 (2.78)	2 (2.78)	9 (4.39)	9 (3.90)	0 (0.00)	0 (0.00)	0 (0.00)	13 (10.66)	5 (6.85)	5 (10.64)
Low skill- and technology-intensive manufactures	10 (7.63)	16 (5.21)	19 (5.65)	1 (3.85)	3 (6.12)	0 (0.00)	1 (6.25)	0 (0.00)	0 (6.94)	5 (6.94)	29 (14.15)	25 (10.82)	0 (0.00)	1 (16.67)	1 (25.00)	17 (13.93)	6 (8.22)	10 (21.28)
TOTAL	131 (35.12)	307 (45.28)	336 (49.56)	26 (6.97)	49 (7.23)	20 (2.95)	16 (4.29)	38 (5.60)	40 (5.90)	72 (19.30)	205 (30.24)	231 (34.07)	6 (1.61)	6 (0.88)	4 (0.59)	122 (32.71)	73 (10.77)	47 (6.93)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ₁: Phase 1(2001-2003) and (2007-2009) Φ₂: Phase 2 (2007-2009) and (2013-2015) Θ: Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.4: Export Competiveness between India to Lao PDR

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	0 (0.00)	5 (7.25)	5 (7.14)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	4 (4.00)	4 (4.21)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Unclassified products	0 (0.00)	2 (2.90)	2 (2.86)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (6.67)	1 (6.67)	0 (0.00)	7 (7.00)	6 (6.32)	0 (0.00)	0 (0.00)	0 (0.00)	1 (3.57)	0 (0.00)	1 (5.56)
High skill- and technology intensive manufactures	2 (14.29)	7 (10.14)	6 (8.57)	0 (0.00)	0 (0.00)	1 (50.00)	0 (0.00)	3 (20.00)	3 (20.00)	7 (38.89)	19 (19.00)	21 (22.11)	1 (50.00)	0 (0.00)	0 (0.00)	9 (32.14)	6 (50.00)	5 (27.78)
Medium skill- and technology intensive manufactures	5 (35.71)	23 (33.33)	24 (34.29)	0 (0.00)	1 (33.33)	0 (0.00)	0 (0.00)	2 (13.33)	2 (13.33)	7 (38.89)	31 (31.00)	28 (29.47)	1 (50.00)	1 (100.00)	1 (100.00)	8 (28.57)	3 (25.00)	6 (33.33)
Resource-intensive manufactures	3 (21.43)	16 (23.19)	16 (22.86)	0 (0.00)	1 (33.33)	1 (50.00)	1 (50.00)	3 (20.00)	3 (20.00)	0 (0.00)	19 (19.00)	14 (14.74)	0 (0.00)	0 (0.00)	0 (0.00)	9 (32.14)	0 (0.00)	5 (27.78)
Mineral fuels	2 (14.29)	3 (4.35)	4 (5.71)	0 (0.00)	1 (33.33)	0 (0.00)	1 (50.00)	1 (6.67)	1 (6.67)	2 (11.11)	5 (5.00)	6 (6.32)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (16.67)	1 (5.56)
Low skill- and technology-intensive manufactures	2 (14.29)	13 (18.84)	13 (18.57)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	5 (33.33)	5 (33.33)	2 (11.11)	15 (15.00)	16 (16.84)	0 (0.00)	0 (0.00)	0 (0.00)	1 (3.57)	1 (8.33)	0 (0.00)
TOTAL	14 (21.88)	69 (34.50)	70 (34.83)	0 (0.00)	3 (1.50)	2 (1.00)	2 (3.13)	15 (7.50)	15 (7.46)	18 (28.13)	100 (50.00)	95 (47.26)	2 (3.13)	1 (0.50)	1 (0.50)	28 (43.75)	12 (6.00)	18 (8.96)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ₁: Phase 1(2001-2003) and (2007-2009) Φ₂: Phase 2 (2007-2009) and (2013-2015) Θ: Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.5 demonstrates the Export Competitiveness with India and Malaysia the maximum number of commodities which were exported belonged the Resource-intensive manufactures product grouping followed by High skill- and technology intensive manufactures technology & closely followed by commodities of Medium skill- and technology intensive manufactures. The number of commodities in Phase 1 is 29.14 per cent which rose to 58.42 per cent in Competitively Positioned products product grouping. In Threatened products the percentage of commodities decreased from 61.33 per cent to 37 per cent from Phase 1 to Phase 2. Weakly Positioned Products Tier II also witnessed drastic change from Phase 1 to Phase 2 i.e. 6.09 per cent to 1.56 per cent revealing that the commodities having larger comparative disadvantage reduced in Phase 2. From the above it is analyzed that the trade relations among India and Malaysia are improving. India was a significant trading partner for Malaysia and therefore, both the them urged to work closely in order to expand their mutual ties.

Table 4.6 reveals the export competitiveness of India and Philippines. The major transition that took place from Phase 1 to Phase 2 was found in Weakly Positioned Products Tier II Product grouping. In Phase 1 the commodities were 13.72 per cent which were reduced to 4.75 per cent. So the aggregate percentage change from Phase 1 to Phase 2 was majorly seen which recorded -65.36 percentage share. Although in all other product grouping there was no significant change from Phase 1 to Phase 2, however the major number of commodities were found in Competitively Positioned Product grouping followed by Threatened Products holding the second position. As far as the technology wise grouping was the maximum number of commodities were found in High skill- and technology intensive manufactures followed by Medium Skill- and technology intensive manufactures. The minimum number of commodities were in Mineral Fuels. In conclusion, a number of growth drivers suggest a major and sustained growth in two-way trade and investment, helped by the conclusion of the India-ASEAN Trade in Services and Investment Agreements.

Table 4.5: Export Competitiveness between India to Malaysia

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	107 (14.52)	288 (17.43)	234 (21.35)	189 (12.19)	145 (13.85)	199 (12.41)	2 (11.11)	2 (9.52)	2 (5.41)	7 (18.92)	10 (34.48)	8 (24.24)	4 (12.50)	4 (11.43)	4 (11.76)	30 (12.61)	2 (4.55)	4 (10.00)
Unclassified products	63 (8.55)	104 (6.30)	89 (8.12)	64 (4.13)	55 (5.25)	70 (4.37)	3 (16.67)	3 (14.29)	6 (5.41)	6 (16.22)	3 (10.34)	6 (18.18)	0 (0.00)	5 (14.29)	2 (5.88)	13 (5.46)	5 (11.36)	2 (5.00)
High skill- and technology intensive manufactures	190 (25.78)	362 (21.91)	259 (23.63)	311 (20.05)	218 (20.82)	321 (20.02)	3 (16.67)	6 (28.57)	5 (5.41)	6 (16.22)	6 (20.69)	8 (24.24)	6 (18.75)	7 (20.00)	8 (23.53)	44 (18.49)	14 (31.82)	12 (30.00)
Medium skill- and technology intensive manufactures	122 (16.55)	281 (17.01)	153 (13.96)	335 (21.60)	208 (19.87)	336 (20.96)	1 (5.56)	2 (9.52)	2 (5.41)	3 (8.11)	4 (13.79)	4 (12.12)	5 (15.63)	8 (22.86)	8 (23.53)	17 (7.14)	8 (18.18)	8 (20.00)
Resource-intensive manufactures	168 (22.80)	396 (23.97)	230 (20.99)	418 (26.95)	274 (26.17)	440 (27.45)	6 (33.33)	4 (19.05)	5 (5.41)	11 (29.73)	3 (10.34)	4 (12.12)	12 (37.50)	8 (22.86)	7 (20.59)	33 (13.87)	8 (18.18)	7 (17.50)
Mineral fuels	27 (3.66)	54 (3.27)	40 (3.65)	56 (3.61)	41 (3.92)	55 (3.43)	2 (11.11)	2 (9.52)	1 (5.41)	1 (2.70)	1 (3.45)	0 (0.00)	1 (3.13)	1 (2.86)	2 (5.88)	4 (1.68)	2 (4.55)	3 (7.50)
Low skill- and technology-intensive manufactures	60 (8.14)	167 (10.11)	91 (8.30)	178 (11.48)	106 (10.12)	182 (11.35)	1 (5.56)	2 (9.52)	1 (5.41)	3 (8.11)	2 (6.90)	3 (9.09)	4 (12.50)	2 (5.71)	3 (8.82)	13 (5.46)	5 (11.36)	4 (10.00)
TOTAL	737 (29.14)	1652 (58.42)	1096 (38.76)	1551 (61.33)	1047 (37.02)	1603 (56.68)	18 (0.71)	21 (0.74)	22 (0.78)	37 (1.46)	29 (1.03)	33 (1.17)	32 (1.27)	35 (1.24)	34 (1.20)	154 (6.09)	44 (1.56)	40 (1.41)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ₁: Phase 1(2001-2003) and (2007-2009) Φ₂: Phase 2 (2007-2009) and (2013-2015) Θ: Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.6: Export Competiveness between India to Philippines

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	91 (11.32)	134 (11.88)	153 (12.36)	47 (12.27)	76 (14.48)	57 (13.73)	3 (6.98)	1 (2.08)	1 (1.89)	4 (5.33)	6 (6.32)	8 (6.84)	2 (4.88)	3 (6.25)	3 (6.98)	25 (11.68)	12 (13.04)	10 (14.29)
Unclassified products	53 (6.59)	73 (6.47)	79 (6.38)	15 (3.92)	29 (5.52)	23 (5.54)	4 (9.30)	2 (4.17)	2 (3.77)	7 (9.33)	15 (15.79)	16 (13.68)	2 (4.88)	1 (2.08)	1 (2.33)	13 (6.07)	5 (5.43)	4 (5.71)
High skill- and technology intensive manufactures	218 (27.11)	252 (22.34)	299 (24.15)	98 (25.59)	146 (27.81)	99 (23.86)	6 (13.95)	10 (20.83)	15 (28.30)	11 (14.67)	13 (13.68)	16 (13.68)	7 (17.07)	12 (25.00)	7 (16.28)	37 (17.29)	18 (19.57)	15 (21.43)
Medium skill- and technology intensive manufactures	192 (23.88)	276 (24.47)	297 (23.99)	105 (27.42)	125 (23.81)	104 (25.06)	8 (18.60)	10 (20.83)	10 (18.87)	13 (17.33)	10 (10.53)	14 (11.97)	15 (36.59)	7 (14.58)	7 (16.28)	49 (22.90)	15 (16.30)	11 (15.71)
Resource-intensive manufactures	152 (18.91)	227 (20.12)	238 (19.22)	57 (14.88)	90 (17.14)	79 (19.04)	17 (39.53)	19 (39.58)	20 (37.74)	33 (44.00)	45 (47.37)	58 (49.57)	10 (24.39)	17 (35.42)	16 (37.21)	59 (27.57)	30 (32.61)	17 (24.29)
Mineral fuels	30 (3.73)	46 (4.08)	51 (4.12)	10 (2.61)	11 (2.10)	6 (1.45)	3 (6.98)	2 (4.17)	1 (1.89)	3 (4.00)	1 (1.05)	1 (0.85)	0 (0.00)	1 (2.08)	2 (4.65)	4 (1.87)	2 (2.17)	2 (2.86)
Low skill- and technology-intensive manufactures	68 (8.46)	120 (10.64)	121 (9.77)	51 (13.32)	48 (9.14)	47 (11.33)	2 (4.65)	4 (8.33)	4 (7.55)	4 (5.33)	5 (5.26)	4 (3.42)	5 (12.20)	7 (14.58)	7 (16.28)	27 (912.62)	10 (10.87)	11 (15.71)
TOTAL	804 (51.54)	1128 (58.26)	1238 (63.95)	383 (24.55)	525 (27.12)	415 (21.44)	43 (2.76)	48 (2.48)	53 (2.74)	75 (4.81)	95 (4.91)	117 (6.04)	41 (2.63)	48 (2.48)	43 (2.22)	214 (13.72)	92 (4.75)	70 (3.62)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ₁: Phase 1(2001-2003) and (2007-2009) Φ₂: Phase 2 (2007-2009) and (2013-2015) Θ: Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.7 clearly reveals that the highest per cent share stand in Competitively Positioned product grouping and the Threatened products possess second position having the RCA value to be greater than 1 where percentage share in both the mentioned products groupings decreased while progressing from Phase 1 to Phase 2. The percentage share of Weakly Positioned products of tier II decreased from Phase 1 to Phase 2 but on the contrary the percentage share of Weakly Positioned Products of Tier II increased from Phase 1 to Phase 2 depicting lack of competitive advantage. The highest percentage share is witnessed in High skill- and technology intensive manufactures with 413 per cent share and then Resource intensive manufactures possess the second highest percentage share. The Non-fuel primary commodities and Medium skill- and technology intensive manufactures technology commodities possess the same percentage share of 277 per cent. RCA value for products should be greater than unity and the mean difference should be escalating while positioning them in Competitively Positioned Products product grouping.

Table 4.8 explains that the highest number of commodities are in Competitively Positioned Product grouping followed by Threatened products at second position where RCA is greater than unity but the mean difference is negative. The Phasewise percentage change can be seen in Competitively Positioned Product groupings followed but Threatened Products with 26.3 and 24.6 percentage share respectively. The Weakly Positioned Tier II having large comparative disadvantage the average percentage share of commodities reduced. Though the technologywise grouping the major share possessed by Resource-intensive manufactures having largest number of commodities followed by High skill- and technology intensive manufactures. The minimum number of commodities were found in Unclassified products having a number of 180 commodities only.

Table 4.7: Export Competiveness between India to Singapore

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Non-fuel primary commodities	181 (13.13)	287 (22.03)	282 (19.82)	145 (14.47)	161 (11.39)	166 (12.85)	3 (25.00)	6 (28.57)	5 (18.52)	1 (5.56)	12 (31.58)	8 (18.18)	4 (15.38)	4 (6.78)	10 (17.24)	30 (0.00)	6 (6.00)	10 (10.64)
Unclassified products	96 (6.97)	73 (5.60)	95 (6.68)	48 (4.79)	87 (6.16)	65 (5.03)	0 (0.00)	1 (4.76)	3 (11.11)	2 (11.11)	2 (5.26)	5 (11.36)	1 (3.85)	4 (6.78)	2 (3.45)	9 (0.00)	9 (9.00)	6 (6.38)
High skill- and technology intensive manufactures	356 (25.83)	333 (25.56)	379 (26.63)	200 (19.96)	319 (22.58)	273 (21.13)	3 (25.00)	5 (23.81)	8 (29.63)	3 (16.67)	11 (28.95)	12 (27.27)	4 (15.38)	15 (25.42)	12 (20.69)	54 (0.00)	29 (29.00)	28 (29.79)
Medium skill- and technology intensive manufactures	236 (17.13)	184 (14.12)	192 (13.49)	202 (20.16)	289 (20.45)	280 (21.67)	2 (16.67)	2 (9.52)	3 (11.11)	5 (27.78)	2 (5.26)	4 (9.09)	8 (30.77)	8 (13.56)	7 (12.07)	27 (0.00)	18 (18.00)	16 (17.02)
Resource-intensive manufactures	357 (25.91)	289 (22.18)	333 (23.40)	248 (24.75)	360 (25.48)	316 (24.46)	3 (25.00)	5 (23.81)	6 (22.22)	5 (27.78)	4 (10.53)	9 (20.45)	7 (26.92)	13 (22.03)	12 (20.69)	29 (0.00)	23 (23.00)	18 (19.15)
Mineral fuels	42 (3.05)	41 (3.15)	46 (3.23)	40 (3.99)	50 (3.54)	45 (3.48)	0 (0.00)	1 (4.76)	1 (3.70)	0 (0.00)	1 (2.63)	1 (2.27)	1 (3.85)	5 (8.47)	5 (8.62)	5 (0.00)	2 (2.00)	2 (2.13)

Contd.

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Low skill- and technology-intensive manufactures	110 (7.98)	96 (7.37)	96 (6.75)	119 (11.88)	147 (10.40)	147 (11.38)	1 (8.33)	1 (4.76)	1 (3.70)	2 (11.11)	6 (15.79)	5 (11.36)	1 (3.85)	10 (16.95)	10 (17.24)	24 (0.00)	13 (13.00)	14 (14.89)
TOTAL	1378 (52.72)	1303 (44.41)	1423 (48.43)	1002 (38.33)	1413 (48.16)	1292 (43.98)	12 (0.46)	21 (0.72)	27 (0.92)	18 (0.69)	38 (1.30)	44 (1.50)	26 (0.99)	59 (2.01)	58 (1.97)	178 (6.81)	100 (3.41)	94 (3.20)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.8: Export Competiveness between India to Thailand

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	134 (10.24)	231 (13.97)	248 (13.64)	74 (10.83)	96 (11.28)	79 (11.52)	2 (7.41)	3 (9.38)	4 (10.26)	4 (6.35)	6 (9.68)	8 (11.94)	6 (21.43)	4 (12.90)	3 (12.50)	24 (12.70)	6 (10.91)	4 (8.00)
Unclassified products	94 (7.19)	115 (6.96)	123 (6.77)	36 (5.27)	51 (5.99)	43 (6.27)	2 (7.41)	2 (6.25)	3 (7.69)	5 (7.94)	4 (6.45)	9 (13.43)	3 (10.71)	1 (3.23)	0 (0.00)	14 (7.41)	7 (12.73)	2 (4.00)
High skill- and technology intensive manufactures	324 (24.77)	374 (22.63)	392 (21.56)	161 (23.57)	200 (23.50)	182 (26.53)	1 (3.70)	6 (18.75)	6 (15.38)	10 (15.87)	9 (14.52)	12 (17.91)	2 (7.14)	6 (19.35)	6 (25.00)	35 (18.52)	8 (14.55)	5 (10.00)
Medium skill- and technology intensive manufactures	283 (21.64)	336 (20.33)	373 (20.52)	161 (23.57)	183 (21.50)	146 (21.28)	2 (7.41)	2 (6.25)	3 (7.69)	15 (23.81)	6 (9.68)	4 (5.97)	5 (17.86)	4 (12.90)	3 (12.50)	26 (13.76)	3 (5.45)	5 (10.00)
Resource-intensive manufactures	316 (24.16)	399 (24.14)	459 (25.25)	141 (20.64)	195 (22.91)	135 (19.68)	19 (70.37)	16 (50.00)	19 (48.72)	23 (36.51)	26 (41.94)	25 (37.31)	9 (32.14)	10 (32.26)	7 (29.17)	59 (31.22)	17 (30.91)	18 (36.00)
Mineral fuels	37 (2.83)	39 (2.36)	48 (2.64)	21 (3.07)	28 (3.29)	19 (2.77)	1 (3.70)	0 (0.00)	1 (2.56)	3 (4.76)	6 (9.68)	6 (8.96)	0 (0.00)	2 (6.45)	1 (4.17)	6 (3.17)	8 (14.55)	8 (16.00)

Contd.

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Low skill- and technology-intensive manufactures	120 (9.17)	159 (9.62)	175 (9.63)	89 (13.03)	98 (11.52)	82 (11.95)	0 (0.00)	3 (9.38)	3 (7.69)	3 (4.76)	5 (8.06)	3 (4.48)	3 (10.71)	4 (12.90)	4 (16.67)	25 (13.23)	6 (10.91)	8 (16.00)
TOTAL	1308 (56.92)	1653 (61.59)	1818 (67.73)	683 (29.72)	851 (31.71)	686 (25.56)	27 (1.17)	32 (1.19)	39 (1.45)	63 (2.74)	62 (2.31)	67 (2.50)	28 (1.22)	31 (1.15)	24 (0.89)	189 (8.22)	55 (2.05)	50 (1.86)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.9: Export Competiveness between India to Vietnam

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Non-fuel primary commodities	135 (12.27)	128 (17.66)	194 (16.99)	31 (8.88)	143 (12.40)	77 (10.45)	0 (0.00)	2 (7.69)	2 (5.41)	3 (0.00)	9 (12.68)	10 (8.47)	1 (10.00)	2 (4.88)	2 (6.67)	13 (9.77)	7 (6.31)	6 (9.38)
Unclassified products	84 (7.64)	48 (6.62)	79 (6.92)	19 (5.44)	81 (7.03)	50 (6.78)	1 (16.67)	2 (7.69)	1 (2.70)	1 (0.00)	5 (7.04)	10 (8.47)	0 (0.00)	2 (4.88)	3 (10.00)	10 (7.52)	12 (10.81)	7 (10.94)
High skill- and technology intensive manufactures	277 (25.18)	168 (23.17)	259 (22.68)	87 (24.93)	300 (26.02)	209 (28.36)	0 (0.00)	4 (15.38)	7 (18.92)	4 (0.00)	12 (16.90)	23 (19.49)	4 (40.00)	10 (24.39)	7 (23.33)	39 (29.32)	22 (19.82)	11 (17.19)
Medium skill- and technology intensive manufactures	230 (20.91)	163 (22.48)	243 (21.28)	108 (30.95)	267 (23.16)	188 (25.51)	2 (33.33)	10 (38.46)	9 (24.32)	12 (0.00)	10 (14.08)	14 (11.86)	2 (20.00)	8 (19.51)	9 (30.00)	31 (23.31)	15 (13.51)	11 (17.19)
Resource-intensive manufactures	254 (23.09)	138 (19.03)	252 (22.07)	48 (13.75)	219 (18.99)	105 (14.25)	2 (33.33)	4 (15.38)	14 (37.84)	10 (0.00)	29 (40.85)	51 (43.22)	0 (0.00)	15 (36.59)	5 (16.67)	23 (17.29)	40 (36.04)	18 (28.13)

Contd.

Mineral fuels	32 (2.91)	20 (2.76)	28 (2.45)	11 (3.15)	34 (2.95)	26 (3.53)	0 (0.00)	1 (3.85)	2 (5.41)	1 (0.00)	2 (2.82)	4 (3.39)	0 (0.00)	2 (4.88)	1 (3.33)	4 (3.01)	5 (4.50)	3 (4.69)
Low skill- and technology-intensive manufactures	88 (8.00)	60 (8.28)	87 (7.62)	45 (12.89)	109 (9.45)	82 (11.13)	1 (16.67)	3 (11.54)	2 (5.41)	2 (0.00)	4 (5.63)	6 (5.08)	3 (30.00)	2 (4.88)	3 (10.00)	13 (9.77)	10 (9.01)	8 (12.50)
TOTAL	1100 (67.44)	725 (34.09)	1142 (53.67)	349 (21.40)	1153 (54.21)	737 (34.63)	6 (0.37)	26 (1.22)	37 (1.74)	33 (2.02)	71 (3.34)	118 (5.55)	10 (0.61)	41 (1.93)	30 (1.41)	133 (8.15)	111 (5.22)	64 (3.01)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.10: Export Competiveness between India to Myanmar

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	20 (4.84)	79 (8.65)	84 (8.98)	9 (5.92)	12 (6.15)	7 (4.05)	4 (11.76)	1 (1.82)	0 (0.00)	7 (11.29)	9 (5.77)	8 (5.37)	2 (10.00)	0 (0.00)	1 (4.35)	8 (3.90)	4 (7.14)	5 (7.94)
Unclassified products	20 (4.84)	52 (5.70)	47 (5.03)	10 (6.58)	8 (4.10)	13 (7.51)	4 (11.76)	1 (1.82)	3 (6.00)	7 (11.29)	10 (6.41)	12 (8.05)	2 (10.00)	3 (16.67)	1 (4.35)	11 (5.37)	4 (7.14)	2 (3.17)
High skill- and technology intensive manufactures	107 (25.91)	226 (24.75)	232 (24.81)	50 (32.89)	55 (28.21)	49 (28.32)	10 (29.41)	19 (34.55)	21 (42.00)	11 (17.74)	44 (28.21)	44 (29.53)	3 (15.00)	4 (22.22)	2 (8.70)	43 (20.98)	16 (28.57)	16 (25.40)
Medium skill- and technology intensive manufactures	134 (32.45)	249 (27.27)	258 (27.59)	51 (33.55)	63 (32.31)	54 (31.21)	12 (35.29)	12 (21.82)	7 (14.00)	20 (32.26)	25 (16.03)	25 (16.78)	6 (30.00)	6 (33.33)	11 (47.83)	60 (29.27)	20 (35.71)	20 (31.75)
Resource-intensive manufactures	44 (10.65)	164 (17.96)	162 (17.33)	7 (4.61)	11 (5.64)	13 (7.51)	1 (2.94)	14 (25.45)	14 (28.00)	12 (19.35)	55 (35.26)	46 (30.87)	2 (10.00)	2 (11.11)	2 (8.70)	45 (21.95)	4 (7.14)	13 (20.63)
Mineral fuels	18 (4.36)	39 (4.27)	41 (4.39)	5 (3.29)	6 (3.08)	4 (2.31)	0 (0.00)	3 (5.45)	1 (2.00)	3 (4.84)	6 (3.85)	6 (4.03)	0 (0.00)	0 (0.00)	2 (8.70)	9 (4.39)	2 (3.57)	2 (3.17)

Contd.

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ	Φ_1	Φ_2	Θ
Low skill- and technology-intensive manufactures	70 (16.95)	104 (11.39)	111 (11.87)	20 (13.16)	40 (20.51)	33 (19.08)	3 (8.82)	5 (9.09)	4 (8.00)	2 (3.23)	7 (4.49)	8 (5.37)	5 (25.00)	3 (16.67)	4 (17.39)	29 (14.15)	6 (10.71)	5 (7.94)
TOTAL	413 (46.61)	913 (65.54)	935 (67.12)	152 (17.16)	195 (14.00)	173 (12.42)	34 (3.84)	55 (3.95)	50 (3.59)	62 (7.00)	156 (11.20)	149 (10.70)	20 (2.26)	18 (1.29)	23 (1.65)	205 (23.14)	56 (4.02)	63 (4.52)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ_1 : Phase 1(2001-2003) and (2007-2009) Φ_2 : Phase 2 (2007-2009) and (2013-2015) Θ : Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

Table 4.11: Export Competiveness between India to Indonesia

Technology	CP ¹			TP ²			EPI ³			EPII ⁴			WPI ⁵			WPII ⁶		
	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ	Φ ₁	Φ ₂	Θ
Non-fuel primary commodities	87 (8.55)	141 (10.04)	142 (9.67)	60 (10.00)	64 (10.02)	63 (10.94)	0 (0.00)	4 (9.52)	4 (10.53)	6 (11.11)	6 (9.52)	5 (6.58)	2 (5.88)	4 (12.90)	4 (10.81)	17 (8.46)	8 (10.53)	9 (14.29)
Unclassified products	75 (7.37)	91 (6.48)	108 (7.36)	25 (4.17)	42 (6.57)	25 (4.34)	2 (6.67)	2 (4.76)	3 (7.89)	6 (11.11)	3 (4.76)	6 (7.89)	0 (0.00)	4 (12.90)	3 (8.11)	12 (5.97)	6 (7.89)	3 (4.76)
High skill- and technology intensive manufactures	276 (27.14)	321 (22.85)	344 (23.43)	153 (25.50)	180 (28.17)	157 (27.26)	8 (26.67)	8 (19.05)	7 (18.42)	7 (12.96)	8 (12.70)	13 (17.11)	6 (17.65)	7 (22.58)	8 (21.62)	42 (20.90)	17 (22.37)	12 (19.05)
Medium skill- and technology intensive manufactures	269 (26.45)	360 (25.62)	382 (26.02)	153 (25.50)	151 (23.63)	129 (22.40)	7 (23.33)	6 (14.29)	3 (7.89)	9 (16.67)	5 (7.94)	9 (11.84)	14 (41.18)	1 (3.23)	4 (10.81)	31 (15.42)	10 (13.16)	6 (9.52)
Resource-intensive manufactures	195 (19.17)	326 (23.20)	321 (21.87)	113 (18.83)	105 (16.43)	110 (19.10)	10 (33.33)	21 (50.00)	20 (52.63)	24 (44.44)	36 (57.14)	38 (50.00)	6 (17.65)	13 (41.94)	14 (37.84)	82 (40.80)	29 (38.16)	27 (42.86)
Mineral fuels	22 (2.16)	31 (2.21)	37 (2.52)	17 (2.83)	17 (2.66)	11 (1.91)	1 (3.33)	0 (0.00)	0 (0.00)	2 (3.70)	3 (4.76)	3 (3.95)	3 (8.82)	1 (3.23)	1 (2.70)	3 (1.49)	5 (6.58)	5 (7.94)
Low skill- and technology-intensive manufactures	93 (9.14)	135 (9.61)	134 (9.13)	79 (13.17)	80 (12.52)	81 (14.06)	2 (6.67)	1 (2.38)	1 (2.63)	0 (0.00)	2 (3.17)	2 (2.63)	3 (8.82)	1 (3.23)	3 (8.11)	14 (6.97)	1 (1.32)	1 (1.59)
TOTAL	1017 (52.53)	1405 (62.28)	1468 (65.01)	600 (30.99)	639 (28.32)	576 (25.51)	30 (1.55)	42 (1.86)	38 (1.68)	54 (2.79)	63 (2.79)	76 (3.37)	34 (1.76)	31 (1.37)	37 (1.64)	201 (10.38)	76 (3.37)	63 (2.79)

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

¹Competitive Positioned Product; ²Threatened Product; ³Emerging Product Tier I; ⁴Emerging Product Tier II; ⁵Weakly Positioned Product Tier I; ⁶Weakly Positioned Product Tier II

Φ₁: Phase 1(2001-2003) and (2007-2009) Φ₂: Phase 2 (2007-2009) and (2013-2015) Θ: Overall Phase (2001-2003) and (2013-2015)

(Figures in numbers represents percentage, Figures without brackets represents number of commodities)

The Export competitiveness between India to Vietnam, Table 4.9 explains that percentage share number of commodities of Phase 1 which have RCA greater than unity positioning in Competitively Positioned product grouping is relatively high i.e. 67.44 per cent which reduced to 34.09 per cent in Phase 2. Although in Threatened Products where RCA is greater than unity but the mean difference is negative the percentage share also rose as progressed from Phase 1 to Phase 2 i.e. 21.40 per cent and 54.21 per cent respectively. The percentage change from Phase 1 to Phase 2 can be witnessed in Emerging Products Tier I majorly with 333 per cent share followed by Weakly Positioned Products Tier I which clearly reveals that there is high comparative disadvantage. The highest number of products were found in Resource-intensive manufactures followed by Medium skill- and technology intensive manufactures. Unclassified products had the minimum number of commodities among all the technological distribution.

Table 4.10 explains the Export competitiveness between India to Myanmar. Myanmar export competitiveness can be seen with the highest percentage share in Competitively Positioned products groupings with 46.61 per cent followed by Weakly Positioned products in Phase 1 with 23 per cent having comparative disadvantage. Although in Phase 2 the number of commodities rose in Competitively Positioned product groupings having 65.54 per cent share. On the contrary in Weakly positioned products the percentage decreased in Phase 2 holding 4 per cent share. The Phasewise percentage change was witnessed maximum in Emerging Products Tier II with 151 per cent followed by Competitively Positioned Products with 121 per cent change. While analyzing the technologywise distribution Table 4.10 clearly states that the major number of products i.e. 1033 commodities were placed in Medium skill- and technology intensive manufactures followed by High skill- and technology intensive manufactures with 952 commodities. The minimum number of commodities in Myanmar were found in Mineral fuels technology i.e. only 147 commodities. We can sum up stating that trade between India and Myanmar is still lagging behind but steps are being adopted to boost the trade and improve the economies of both the country.

Table 4.11 demonstrates the export competitiveness of India to Indonesia. Indonesia was the only ASEAN states that almost continuously improved its share and become

the third important ASEAN supplier. In product grouping the RCA profile is more than unity and the mean RCA is increasing by the commodities positioned in Competitively placed which explains that the highest percentage share of 52.53 per cent in Phase 1 and 62 per cent in Phase 2 respectively. Threatened products have a percentage share of 28.32 per cent in Phase 1 and 25.51 per cent in Phase 1 and 2 respectively revealing Phase wise percentage change of 6.15 per cent. Weakly Positioned product groupings showed a major decrease in number of commodities while progressing from Phase 1 to Phase 2 i.e. -62.29 per cent share. The highest number of commodities were in High skill- and technology intensive manufactures closely followed by Medium skill- and technology intensive manufactures, the third position was grabbed by commodities which belonged to Resource-intensive manufactures.

Section – II

Section I focusing on trade competitiveness on technology level to understand the status of AIFTA in case of technological advantage garnered by the entity. But in bilateral trade products diversification at technology level generally takes long run to gain any tangible insight about technology aspect of trade. To understand trade competitiveness at product level is also important as it explains comparative advantage a country has globally and that product will gain more strength if partner nation is only importing it. This section focuses on comparing one country advantage over partner country import dependence on particular commodity by comparing Revealed Comparative Advantage (RCA) vis a vis Revealed Import Dependence (RID) to know the trade competitiveness at product level at 6 digit HS level.

Table 4.12 represents trade between India and ASEAN, where India enjoys $RCA > 1$ and ASEAN has $RID > 1$. The table presents that the top ten commodities which exhibit mutually cordial trade between India and ASEAN as for these commodities India has an $RCA > 1$ and ASEAN has an $RID > 1$ which presents that India has Revealed Comparative Advantage and ASEAN has Revealed Import Dependence which shows that these commodities can be traded between the countries.

Table 4.12: Commodities with RCA Index>1 for India and RID>1 for ASEAN**(Per cent)**

S. No	Product Code	Product label	RCA>1	RID>1
1.	230240	Bran, sharps and other residues of cereals, whether or not in the form of pellets	2.21	1.70
2.	090920	Coriander seeds	11.34	1.50
3.	090950	Seeds of fennel; juniper berries	13.54	1.31
4.	293941	Ephedrine and its salts	29.71	1.28
5.	230690	Oilcake and other solid residues, whether or not ground or in the form of pellets	21.19	1.09

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

The commodities like Bran, sharps and other residues of cereals, whether or not in the form of pellets (230240), Coriander seeds (090920), Seeds of fennel; juniper berries (090950), Ephedrine and its salts (293941), Oilcake and other solid residues, whether or not ground or in the form of pellets (230690) have RID >1 which means that ASEAN can benefit by importing these products from India but India can exports various other products like Shelled groundnuts, whether or not broken (excluding roasted or otherwise cooked) (120220), Cardamoms (090830), Amino hydroxyl naphthalene sulphonic acids and their salts (292221), Oilcake and other solid residues, whether or not ground or in the form of pellets (230500), Multiple "folded" or cabled yarn of jute or of other textile bast fibres of heading 5303 (530720) to ASEAN nations as the RCA value is greater than 1 for these products but RID of ASEAN is less than 1 therefore ASEAN will not benefit by importing these products from India.

Table 4.13: Commodities with RCA Index>1 for India and RID>1 for Lao PDR**(Per cent)**

S. No	Product code	Product label	RCA >1	RID>1
1.	570220	Floor coverings of coconut fibres "coir", woven, whether or not made up	48.10	3.90
2.	630419	Bedspreads of all types of textile materials (excluding knitted or crocheted, bedlinen, quilts)	37.47	9.54
3.	670300	Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair	31.32	8.99
4.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	1.19
5.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	1.90
6.	550951	Yarn containing predominantly, but < 85% polyester staple fibres by weight, mixed principally	16.96	4.61
7.	722620	Flat-rolled products of high-speed steel, of a width of <= 600 mm, hot-rolled or cold-rolled	16.85	3.98
8.	681293	Compressed asbestos fibre jointing, in sheets or rolls (excluding of crocidolite asbestos)	15.11	1.68
9.	732591	Grinding balls and similar articles for mills, cast (excluding such articles of non-malleable)	14.65	7.41
10.	551512	Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight	13.83	2.13

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.13 presents the top ten commodities which exhibit mutually cordial trade between India and Lao PDR as for these commodities India has an RCA>1 and Lao PDR has an RID>1 which presents that India has Revealed Comparative Advantage and Lao PDR has Revealed Import Dependence which shows that these

commodities can be traded between the countries. The commodities such as Floor coverings of coconut fibres "coir", woven, whether or not made up? (570220), Bedspreads of all types of textile materials (excluding knitted or crocheted, bedlinen, quilts ...(630419), Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair or other ...(670300), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates (excluding sodium) (283190), Yarn containing predominantly, but < 85% polyester staple fibres by weight, mixed principally ... (550951), Flat-rolled products of high-speed steel, of a width of <= 600 mm, hot-rolled or cold-rolled ...(722620), Compressed asbestos fibre jointing, in sheets or rolls (excluding of crocidolite asbestos) (681293), Grinding balls and similar articles for mills, cast (excluding such articles of non-malleable ...(732591), Woven fabrics containing predominantly, but < 85 per cent polyester staple fibres by weight, mixed ... (551512)) are exhibiting a vast scope of trade for India towards Lao PDR.

Table 4.14 exhibits that India can gain trade by exporting products like Turmeric "curcuma" (091030), Sandstone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks (251620), Bedspreads of all types of textile materials (excluding knitted or crocheted, bedlinen, quilts (630419), Granite and articles thereof, simply cut or sawn, with a flat or even surface (excluding with (680223), Cardamoms, crushed or ground (090832), Oils of mints, whether or not terpeneless, incl. concretes and absolutes (excluding those of ...(701120), Shawls, scarves, mufflers, mantillas, veils and similar articles of textile materials (excluding ...(621490), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320) to Brunei. Similarly, India can enjoy gains from trade with Cambodia (Table 4.15) by exporting Granite and articles thereof, simply cut or sawn, with a flat or even surface (680223), Dithionites and sulfoxylates (excluding sodium) (283190)

Table 4.14: Commodities with RCA Index>1 for India and RID>1 for Brunei**(Per cent)**

S. No	Product code	Product label	RCA>1	RID >1
1.	091030	Turmeric "curcuma"	44.42	6.15
2.	251620	Sandstone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks ...	44.16	4.22
3.	630419	Bedspreads of all types of textile materials (excluding knitted or crocheted, bedlinen, quilts)	37.47	9.04
4.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface	35.16	5035.87
5.	090832	Cardamoms, crushed or ground	31.81	17.06
6.	330125	Oils of mints, whether or not terpenes, incl. concretes and absolutes	31.29	1.60
7.	030741	Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola	27.84	395.86
8.	701120	Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings	26.85	28.32
9.	621490	Shawls, scarves, mufflers, mantillas, veils and similar articles of textile materials.	26.37	12.28
10.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	30.125

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.15: Commodities with RCA Index>1 for India and RID>1 for Cambodia

(Per cent)

S. No	Product code	Product label	RCA>1	RID>1
1.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface	35.16	1.65
2.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	2.08
3.	721041	Flat-rolled products of iron or non-alloy steel, of a width of \geq 600 mm, hot-rolled or cold-rolled	23.46	1.50
4.	230690	Oilcake and other solid residues, whether or not ground or in the form of pellets	21.19	3.95
5.	570390	Carpet tiles of vegetable textile materials or coarse animal hair, tufted "needle punched"	21.04	1.19
6.	630510	Sacks and bags, for the packing of goods, of jute or other textile bast fibres of heading 5303	20.72	4.09
7.	540710	Woven fabrics of high-tenacity yarn, nylon, other polyamides or polyesters, incl. monofilamen	16.39	3.94
8.	283319	Sodium sulphates (excluding disodium)	15.35	45.21
9.	411310	Leather further prepared after tanning or crusting "incl. parchment-dressed leather", of goa	14.85	4.21
10.	551329	Woven fabrics containing predominantly, but $<$ 85% synthetic staple fibres by weight,	14.36	1.56

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Flat-rolled products of iron or non-alloy steel, of a width of \geq 600 mm, hot-rolled or cold-rolled (721041), Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting (230690), Carpet tiles of vegetable textile materials or coarse animal hair, tufted "needle punched (570390), Sacks and bags, for the

packing of goods, of jute or other textile bast fibres of heading 5303 (630510), Woven fabrics of high-tenacity yarn, nylon, other polyamides or polyesters, incl. monofilament (540710), Sodium sulphates (excluding disodium) (283319), Leather further prepared after tanning or crusting "incl. parchment-dressed leather", of goats (411310), Woven fabrics containing predominantly, but less than 85 per cent synthetic staple fibres by weight, mixed (551329).

Table 4.16: Commodities with RCA Index>1 for India and RID>1 for Indonesia

(Per cent)

S. No	Product code	Product label	RCA>1	RID>1
1.	050100	Human hair, unworked, whether or not washed or scoured; waste of human hair	39.05	20.91
2.	090931	Cumin seeds, neither crushed nor ground	33.18	1.49
3.	230649	Oilcake and other solid residues, whether or not ground or in the form of pellets	32.25	2.56
4.	670300	Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair	31.32	3.09
5.	520523	Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear	30.27	1.99
6.	290361	Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene	30.04	1.10
7.	293941	Ephedrine and its salts	29.71	7.32
8.	701120	Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings	26.85	29.89
9.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	3.93
10.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	3.20

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.16 illustrates that India has major potential to export products to Indonesia like Human hair, unworked, whether or not washed or scoured; waste of human hair (050100), Cumin seeds, neither crushed nor ground (090931), Oilcake and other solid residues, whether or not ground or in the form of pellets (230649), Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair or other (670300), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear (520523), Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene (290361), Ephedrine and its salts (293941), Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings (701120), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates (excluding sodium) (283190) and

**Table 4.17: Commodities with RCA Index $>$ 1 for India and RID $>$ 1 for Malaysia
(Per cent)**

S. No	Product code	Product label	RCA $>$ 1	RID $>$ 1
1.	091030	Turmeric "curcuma"	44.42	5.29
2.	520521	Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear	42.26	4.97
3.	290392	Hexachlorobenzene (ISO) and DDT (ISO) (clofenotane (INN), 1,1,1-trichloro-2,2-bis	35.28	2.70
4.	090931	Cumin seeds, neither crushed nor ground	33.18	1.62
5.	290361	Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene	30.04	2.29
6.	030741	Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola	27.84	1.92
7.	701120	Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings	26.85	2.76
8.	621490	Shawls, scarves, mufflers, mantillas, veils and similar articles of textile materials	26.37	1.36
9.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	3.13
10.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	2.13

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

while exporting to Malaysia (Table 4.17) the products like Turmeric "curcuma (091030), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with linear (520521), Hexachlorobenzene (ISO) and DDT (ISO) (clofenotane (INN), 1,1,1-trichloro-2,2-bis (290392), Cumin seeds, neither crushed nor ground(090931), Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene (290361), Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola (030741), Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings (701120), Shawls, scarves, mufflers, mantillas, veils and similar articles of textile materials (621490), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates (excluding sodium) (283190) can make trade for India gain by exporting them.

Table 4.18: Commodities with RCA Index >1 for India and RID >1 for Myanmar

(Per cent)

S. No	Product code	Product label	RCA >1	RID >1
1.	294200	Separate chemically defined organic compounds, n.e.s.	45.10	1.02
2.	520521	Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight	42.26	2.16
3.	050100	Human hair, unworked, whether or not washed or scoured; waste of human hair	39.05	48.77
4.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface	35.16	1.27
5.	090931	Cumin seeds, neither crushed nor ground	33.18	3.73
6.	230649	Oilcake and other solid residues, whether or not ground or in the form of pellets	32.25	2.03
7.	670300	Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair	31.32	6.12
8.	330125	Oils of mints, whether or not terpeneless, incl. concretes and absolutes	31.29	1.62
9.	520547	Multiple "folded" or cabled cotton yarn, of combed fibres, containing \geq 85% cotton by weight	27.49	1.93
10.	520535	Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing \geq 85% cotton by weight	24.64	55.14

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.18 illustrates that India may have a comparative advantage in the export of certain commodities to Myanmar like Separate chemically defined organic compounds, n.e.s. (294200), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear (520521), Human hair, unworked, whether or not washed or scoured; waste of human hair (050100), Granite and articles thereof, simply cut or sawn, with a flat or even surface (680223), Cumin seeds, neither crushed nor ground (090931), Oilcake and other solid residues, whether or not ground or in the form of pellets (230649), Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair or other (670300), Oils of mints, whether or not terpeneless, incl. concretes and absolutes (330125), Multiple "folded" or cabled cotton yarn, of combed fibres, containing \geq 85 per cent cotton by weight (520547), Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing \geq 85 per cent cotton by weight (520535).

Table 4.19: Commodities with RCA Index $>$ 1 for India and RID $>$ 1 for Philippines

(Per cent)

S. No	Product code	Product label	RCA $>$ 1	RID $>$ 1
1.	290362	Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis	60.86	82.75
2.	130211	Opium	55.88	2.35
3.	252530	Mica waste	53.13	39.35
4.	520521	Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear ...	42.26	2.16
5.	293943	Cathine "INN" and its salts	37.38	6.89
6.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface	35.16	1.20
7.	290361	Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene	30.04	67.05
8.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	1.03
9.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	1.08
10.	2 90344	Dichlorotetrafluoroethanes and chloropentafluoroethane	24.97	17.09

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.19 clearly reflects that the potential gains by India can be achieved by exporting products which have high comparative advantage to Phillipines like Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis (290362), Opium (130211), Mica waste (252530), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear (520521), Cathine "INN" and its salts (293943), Granite and articles thereof, simply cut or sawn, with a flat or even surface (680223), Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene (290361), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates (excludingsodium) (283190), Dichlorotetrafluoroethane and chloro pentafluoroethane (290344)

Table 4.20: Commodities with RCA Index>1 for India and RID>1 for Singapore

(Per cent)

S.No	Product code	Product label	RCA>1	RID>1
1.	130211	Opium	55.88	1.83
2.	251620	Sandstone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks ...	44.16	1.05
3.	050100	Human hair, unworked, whether or not washed or scoured; waste of human hair	39.05	12.46
4.	293943	Cathine "INN" and its salts	37.38	2.08
5.	090832	Cardamoms, crushed or ground	31.81	1.57
6.	330125	Oils of mints, whether or not terpeneless, incl. concretes and absolutes	31.29	2.94
7.	293941	Ephedrine and its salts	29.71	1.19
8.	291230	Aldehyde-alcohols	21.65	3.68
9.	630510	Sacks and bags, for the packing of goods, of jute or other textile bast fibres of heading 5303	20.72	1.00
10.	330190	Extracted oleoresins; concentrates of essential oils in fats, fixed oils, waxes	20.69	3.47

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.20 exhibit a vast scope for trade between India and Singapore for products like Opium (130211), Sandstone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks (251620), Human hair, unworked, whether or not washed or scoured; waste of human hair (050100), Cathine "INN" and its salts (293943), Cardamoms, crushed or ground (090832), Oils of mints, whether or not terpeneless, incl. concretes and absolutes (330125), Ephedrine and its salts (293941), Aldehyde-alcohols (291230), Sacks and bags, for the packing of goods, of jute or other textile bast fibres of heading 5303 (630510), Extracted oleoresins; concentrates of essential oils in fats, fixed oils, waxes (330190).

Table 4.21 exhibit the trade advantage that India holds up against Vietnam. Commodities like Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis(290362), Separate chemically defined organic compounds, n.e.s. (294200), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear (520521), Hexachlorobenzene (ISO) and DDT (ISO) (clofenotane (INN), 1,1,1-trichloro-2,2-bis, (290392), Granite and articles thereof, simply cut or sawn, with a flat or even surface (680223), Oilcake and other solid residues, whether or not ground or in the form of pellets, (230649), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight (520523), High-tenacity yarn of viscose rayon filament (excluding sewing thread and yarn put up for retail (540310), Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear (520524), Dithionites and sulfoxylates (excluding sodium) (283190) while analyzing the products in refence to trade between India and Thailand (Table No 4.22), the following products benefit in trade like Castor oil and fractions thereof, whether or not refined, but not chemically modified (151530), Oilcake and other solid residues, whether or not ground or in the form of pellets, (230649), Anthranilic acid and its salts (292243), Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola (030741), Multiple "folded" or cabled cotton yarn, of combed fibres, containing \geq 85% cotton by weight (520547), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates

(excluding sodium) (283190), Flat-rolled products of iron or non-alloy steel, of a width of ≥ 600 mm, hot-rolled or cold-rolled (721041), Menthol (290611), Fruits of the genus *Capsicum* or of the genus *Pimenta*, dried, neither crushed nor ground (090421).

Table 4.21: Commodities with RCA Index >1 for India and RID >1 for Vietnam
(Per cent)

S. No	Product code	Product label	RCA >1	RID >1
1.	290362	Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis	60.86	5.25
2.	294200	Separate chemically defined organic compounds, n.e.s.	45.10	1.97
3.	520521	Single cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight and with a linear	42.26	1.06
4.	290392	Hexachlorobenzene (ISO) and DDT (ISO) (clofenotane (INN), 1,1,1-trichloro-2,2-bis	35.28	18.33
5.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface	35.16	2.81
6.	230649	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting	32.25	16.54
7.	520523	Single cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight and with a linear	30.27	3.85
8.	540310	High-tenacity yarn of viscose rayon filament (excluding sewing thread and yarn put up for retail	27.22	1.17
9.	520524	Single cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight and with a linear	25.27	1.57
10.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	1.07

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.22: Commodities with RCA Index>1 for India and RID>1 for Thailand**(Per cent)**

S. No	Product code	Product label	RCA>1	RID>1
1.	151530	Castor oil and fractions thereof, whether or not refined, but not chemically modified	51.37	2.77
2.	230649	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting	32.25	11.51
3.	292243	Anthranilic acid and its salts	28.44	1.04
4.	030741	Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola	27.84	1.23
5.	520547	Multiple "folded" or cabled cotton yarn, of combed fibres, containing \geq 85% cotton by weight	27.49	1.30
6.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	1.12
7.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	1.53
8.	721041	Flat-rolled products of iron or non-alloy steel, of a width of \geq 600 mm, hot-rolled or cold-rolled	23.46	1.87
9.	290611	Menthol	23.38	3.02
10.	090421	Fruits of the genus Capsicum or of the genus Pimenta, dried, neither crushed nor ground	21.20	5.07

(Source: Author's Calculations, Computed from UNCOMTRADE Database)**Comparison of commodities through which India-ASEAN can benefit from trade:**

RCA help us to analysis the comparative advantage that a country enjoys in the exports of certain commodities, although it does not necessarily reveal about the specific import requirements of the countries being focused for exports. So, although India may have a comparative advantage in the export of certain commodities, it

may not be necessary that ASEAN has a requirement for the same commodities. A comparison of the RCA of commodities in India with the RID of commodities in ASEAN nations will give us a more reliable picture to analyse the commodities which can be exported by a country or vice versa to benefit from trade.

Table 4.23: Commodities with RID>1 for India and RCA Index>1 for ASEAN

(Per cent)

S. No	Product Code	Product label	RID >1	RCA>1
1.	080131	Fresh or dried cashew nuts, in shell	24.51	5139.69
2.	440341	Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped	22.12	110994.97
3.	294200	Separate chemically defined organic compounds, n.e.s.	20.62	615.43
4.	071331	Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", whether ...	20.01	8808.71
5.	390421	Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances	19.35	101.45
6.	270119	Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal)	18.38	466.61
7.	500200	Raw silk (non-thrown)	17.48	21733.14
8.	852380	Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices	15.09	361.72
9.	151110	Crude palm oil	14.91	756.63
10.	440349	Tropical wood specified in the Subheading Note 1 to this chapter in the rough	14.64	8731.11

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.23 shows the commodities where ASEAN countries enjoy trade advantage over India. ASEAN can export commodities like Fresh or dried cashew nuts, in shell (080131), Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped (440341), Separate chemically defined organic compounds,

n.e.s. (294200), Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", (071331), Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances (390421), Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal) (270119), Raw silk (non-thrown) (500200), Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices (852380), Crude palm oil (151110), Tropical wood specified in the Subheading Note 1 to this chapter in the rough (440349). Here, RID, means India ASEAN import i.e. ASEAN dependence on India. Similarly, table exhibits the commodities that could be matched for exploring further trade opportunities between India and ASEAN.

Table 4.24: Commodities with RID>1 for India and RCA Index>1 for Cambodia

(Per cent)

S. No	Product code	Product label	RID >1	RCA >1
1.	271390	Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum ...	20.83	456.12
2.	292221	Aminohydroxynaphthalenesulphonic acids and their salts	15.43	113.73
3.	280920	Phosphoric acid; polyphosphoric acids, whether or not chemically defined	13.34	19.97
4.	290344	Dichlorotetrafluoroethanes and chloropentafluoroethane	12.62	1.43
5.	854011	Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour	11.66	4.42
6.	291529	Salts of acetic acid (excluding inorganic or organic compounds of mercury)	7.21	19.23
7.	294150	Erythromycin and its derivatives; salts thereof	6.74	18.56
8.	292145	1-Naphthylamine "alpha-naphthylamine", 2-naphthylamine "beta-naphthylamine" and their derivatives; ...	6.04	1.15
9.	540331	Yarn of viscose rayon filament, incl. monofilament of < 67 decitex, single, untwisted or with ...	5.93	1.36
10.	292121	Ethylenediamine and its salts	5.89	57.25

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.24 clearly states that India can benefit trade by importing Residues of petroleum oil or of oil obtained from bituminous minerals (271390), Amino hydro oxynaphthalene sulphonic acids and their salts (292221), Phosphoric acid; polyphosphoric acids, whether or not chemically defined (280920), Dichloro tetra fluoro ethanes and chloro penta fluoro ethane (290344), Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour (854011), Salts of acetic acid (excluding inorganic or organic compounds of mercury) (291529), Erythromycin and its derivatives; salts thereof (294150), etc. from Cambodia. Revealed Comparative Advantage and India's Revealed Import Dependence which shows that these commodities can be traded between the countries.

Table 4.25: Commodities with and RID>1 for India and RCA Index>1 for Brunei

(Per cent)

S. No	Product code	Product label	RID >1	RCA >1
1.	271111	Natural gas, liquefied	78.05	1.94
2.	291512	Salts of formic acid	59.21	3.95
3.	290511	Methanol "methyl alcohol"	30.18	1.71
4.	847979	Passenger boarding bridges (excluding of a kind used in airports)	16.26	2.56
5.	270900	Petroleum oils and oils obtained from bituminous minerals, crude	6.14	3.41
6.	845929	Drilling machines for working metal, not numerically controlled	4.57	3.34
7.	840710	Spark-ignition reciprocating or rotary internal combustion piston engine, for aircraft	3.82	2.66
8.	730423	Drill pipe, seamless, of a kind used in drilling for oil or gas, of iron or steel	3.65	1.26
9.	900830	Image projectors (excluding slide projectors and microfilm, microfiche or other microform readers)	3.65	1.77
10.	722230	Other bars and rods of stainless steel, cold-formed or cold-finished and further worked	3.58	2.11

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.25 elaborates that Brunei has comparative advantage in products like Natural gas, liquefied (271111), Salts of formic acid (291512), Methanol "methyl alcohol" (290511), Passenger boarding bridges (847979), Petroleum oils and oils obtained from bituminous minerals, crude (270900), Drilling machines for working metal, not numerically controlled (845929), Spark-ignition reciprocating or rotary internal combustion piston engine, for aircraft (840710), Drill pipe, seamless, of a kind used in drilling for oil or gas, of iron or steel (730423), Image projectors (excluding slide projectors and microfilm, microfiche or other microform readers) (900830), Other bars and rods of stainless steel, cold-formed or cold-finished and further worked (722230) while trading with India.

Table 4.26: Commodities with and RID>1 for India and RCA Index>1 for Indonesia

(Per cent)

S.No	Product code	Product label	RID >1	RCA>1
1.	080131	Fresh or dried cashew nuts, in shell	24.51	947.53
2.	540349	Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67 ...	23.66	483.49
3.	510129	Degreased wool, non-carbonised, neither carded nor combed (excluding shorn wool)	23.18	411.35
4.	440341	Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped ...	22.12	155.35
5.	530620	Multiple "folded" or cabled flax yarn	21.18	135.65
6.	271390	Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum ...	20.83	130.14
7.	294200	Separate chemically defined organic compounds, n.e.s.	20.62	121.11
8.	071331	Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", whether ...	20.01	115.43
9.	080211	Fresh or dried almonds in shell	19.70	113.39
10.	390421	Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances	19.35	105.30

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

India will gain by importing products like Fresh or dried cashew nuts, in shell (080131), Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67 (540349), Degreased wool, non-carbonised, neither carded nor combed (excluding shorn wool) (510129), Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped (440341), Multiple "folded" or cabled flax yarn (530620), Residues of petroleum oil or of oil obtained from bituminous minerals (271390), Separate chemically defined organic compounds, n.e.s. (294200), Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", (071331), Fresh or dried almonds in shell (080211), Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances (390421) from Indonesia. (Table 4.26).

Table 4.27: Commodities with and RID>1 for India and RCA Index>1 for Lao PDR

(Per cent)

S.No	Product code	Product label	RID >1	RCA>1
1.	271390	Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum ...	79.22	20.83
2.	270119	Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal)	73.87	18.38
3.	080280	Fresh or dried areca nuts, whether or not shelled or peeled	66.82	7.15
4.	090821	Mace, neither crushed nor ground	65.17	8.86
5.	090822	Mace, crushed or ground	61.77	1.95
6.	151321	Crude palm kernel and babassu oil	53.90	5.94
7.	151110	Crude palm oil	51.71	14.91
8.	090811	Nutmeg, neither crushed nor ground	45.58	1.31
9.	151190	Palm oil and its fractions, whether or not refined (excluding chemically modified and crude)	42.45	2.53
10.	400122	Technically specified natural rubber "TSNR"	34.83	1.21

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

In case of Lao PDR (Table 4.27), import of products like residues of petroleum oil or of oil obtained from bituminous minerals (271390), Coal, whether or not pulverised, non-agglomerated (270119), Fresh or dried areca nuts, whether or not shelled or peeled (080280), Mace, neither crushed nor ground (090821), Mace, crushed or ground (090822), Crude palm kernel and babassu oil (151321), Crude palm oil (151110), Nutmeg, neither crushed nor ground (090811), Palm oil and its fractions, whether or not refined (151190), Technically specified natural rubber "TSNR" (400122) will benefit India's trade as the Lao PDR has greater comparative advantage in the above mentioned products.

Table 4.28: Commodities with and RID>1 for India and RCA Index>1 for Malaysia

(Per cent)

S. No	Product code	Product label	RID>1	RCA>1
1.	440341	Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped	14.11	75.47
2.	854011	Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour	9.48	11.36
3.	852380	Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices	7.75	1.32
4.	080280	Fresh or dried areca nuts, whether or not shelled or peeled	7.15	1.03
5.	470319	Unbleached non-coniferous chemical wood pulp, soda or sulphate (excluding dissolving grades)	5.90	9.93
6.	293739	Catecholamine hormones, their derivatives and structural analogues, used primarily as hormones	4.41	18.14
7.	330741	"Agarbatti" and other odoriferous preparations which operate by burning	4.34	2.06
8.	690710	Unglazed ceramic tiles, mosaic cubes and similar articles, whether or not square or rectangular	4.17	6.08
9.	291521	Acetic acid	4.10	7.72
10.	730621	Casing and tubing of a kind used in drilling for oil or gas, welded, of flat-rolled products	3.62	1.25

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.28 exhibit wide scope of trade between India and Malaysia by importing products from Malaysia like Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped (440341), Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour (854011), Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices (852380). Fresh or dried areca nuts, whether or not shelled or peeled (080280), Unbleached non-coniferous chemical wood pulp, soda or sulphate (excluding dissolving grades) (470319) Catecholamine hormones, their derivatives and structural analogues, used Primarily as hormones (293739), "Agarbatti" and other odoriferous preparations which operate by burning (330741), Unglazed ceramic tiles, mosaic cubes and similar articles, whether or not square or rectangular (690710), Acetic acid (291521), Casing and tubing of a kind used in drilling for oil or gas, welded, of flat-rolled products (730621).

Table 4.29 exhibits that Myanmar has comparative advantage by exporting products like Dried, shelled pigeon peas "Cajanus cajan", whether or not skinned or split (071360), Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped (440341), Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", whether (071331), Raw skins of sheep or lambs, without wool on, fresh or salted, dried, limed or otherwise preserved (410229), Tropical wood specified in the Subheading Note 1 to this chapter in the rough (440349), Dried, shelled cow peas "Vigna unguiculata", whether or not skinned or split (071335), Dried, shelled peas "Pisum sativum", whether or not skinned or split (071310), Dried, shelled leguminous vegetables, whether or not skinned or split (excluding peas, chickpeas (071390), Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped (710310), Jute and other textile bast fibres, raw or retted (excluding flax, true hemp and ramie) (530310) to India.

Table 4.29: Commodities with and RID>1 for India and RCA Index>1 for Myanmar

(Per cent)

S. No	Product code	Product label	RID>1	RCA>1
1.	071360	Dried, shelled pigeon peas "Cajanus cajan", whether or not skinned or split	29.25	804.94
2.	440341	Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped	22.12	7.03
3.	071331	Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek"	20.01	909.62
4.	410229	Raw skins of sheep or lambs, without wool on, fresh or salted, dried, limed or otherwise preserved	14.80	1.12
5.	440349	Tropical wood specified in the Subheading Note 1 to this chapter in the rough	14.64	517.77
6.	071335	Dried, shelled cow peas "Vigna unguiculata", whether or not skinned or split	14.44	274.05
7.	071310	Dried, shelled peas "Pisum sativum", whether or not skinned or split	13.76	2.36
8.	071390	Dried, shelled leguminous vegetables, whether or not skinned or split (excluding peas, chickpeas)	11.84	741.77
9.	710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped	11.15	544.06
10.	530310	Jute and other textile bast fibres, raw or retted (excluding flax, true hemp and ramie)	8.88	2.83

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.30 clearly defines that India can benefit from trade with Singapore by importing products like Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67 (540349), Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances (390421), Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices (852380),

Table 4.30: Commodities with and RID>1 for India and RCA Index>1 for Singapore

(Per cent)

S. No	Product code	Product label	RID>1	RCA>1
1.	540349	Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67 ...	23.66	1.43
2.	390421	Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances	19.35	1.41
3.	852380	Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices ...	15.09	6.02
4.	710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...	11.15	1.52
5.	090710	Cloves, whole fruit, cloves and stems, neither crushed nor ground	10.10	9.41
6.	090821	Mace, neither crushed nor ground	8.86	2.39
7.	090700	Cloves, whole fruit, cloves and stems	8.19	5.32
8.	130190	Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins (excluding gum ...	7.41	1.51
9.	080280	Fresh or dried areca nuts, whether or not shelled or peeled	7.15	3.48
10.	290346	Bromochlorodifluoromethane, bromotrifluoromethane and dibromotetrafluoroethanes	7.10	6.18

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Table 4.31: Commodities with and RID>1 for India and RCA Index>1 for Thailand

(Per cent)

S. No	Product code	Product label	RID>1	RCA>1
1.	071331	Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek"	20.01	2.27
2.	852380	Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices	15.09	7.41
3.	151110	Crude palm oil	14.91	1.23
4.	071390	Dried, shelled leguminous vegetables, whether or not skinned or split (excluding peas, chickpeas)	11.84	2.40
5.	854011	Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour	11.66	7.06
6.	720990	Flat-rolled products of iron or steel, of a width of ≥ 600 mm, cold-rolled "cold-reduced"	11.61	1.10
7.	710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped	11.15	3.00
8.	890400	Tugs and pusher craft	8.62	4.40
9.	710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes	8.47	2.11
10.	071339	Dried, shelled beans "Vigna and Phaseolus", whether or not skinned or split	8.25	1.33

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped (710310), Cloves, whole fruit, cloves and stems, neither crushed nor ground (090710), Mace, neither crushed nor ground (090821), Cloves, whole fruit, cloves and stems (090700), Lac; natural gums, resins, gum-resins, balsams and other

natural oleoresins excluding gum (130190), Fresh or dried nuts, whether or not shelled or peeled (080280), Bromochlorodifluoromethane, bromotrifluoromethane and dibromotetra fluoroethanes (290346), While on the other hand when trading with Thailand (See table 4.31) products like Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", (071331), Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices (852380), Crude palm oil (151110), Dried, shelled leguminous vegetables, whether or not skinned or split excluding peas, chickpeas (071390), Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour (854011), Flat-rolled products of iron or steel, of a width of ≥ 600 mm, cold-rolled "cold-reduced" (720990), Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped (710310), Tugs and pusher craft (890400), Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes excluding gold (710812), Dried, shelled beans "Vigna and Phaseolus", whether or not skinned or split excluding beans (071339) can be imported by India for a profitable trade.

Table 4.32 presents a list of commodities which exhibit mutually amicable trade between India and Vietnam. The commodities like Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances (390421), Single yarn containing $\geq 85\%$ synthetic staple fibres by weight excluding sewing thread, yarn (550941), Diammonium hydrogenorthophosphate "diammonium phosphate" excluding that in tablets or similar (310530), Unbleached non- coniferous chemical wood pulp, soda or sulphate excluding dissolving grades (470319), Natural calcium, phosphates and natural aluminium calcium phosphates, natural and phosphatic (251010), Vessels and other floating structures for breaking up (890800), Sewing thread of artificial filaments, whether or not put up for retail sale (540120), Cinnamon and cinnamon-tree flowers (excluding cinnamon "Cinnamomum zeylanicum Blume" and crushed (090619), Tugs and pusher craft (890400), Mace (090820) can be imported from Vietnam by India.

Table 4.32: Commodities with and RID>1 for India and RCA Index>1 for Vietnam

(Per cent)

S.No	Product code	Product label	RID>1	RCA>1
1.	390421	Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances	19.35	2.73
2.	550941	Single yarn containing >= 85% synthetic staple fibres by weight (excluding sewing thread, yarn ...	18.93	2.14
3.	310530	Diammonium hydrogenorthophosphate "diammonium phosphate" (excluding that in tablets or similar	14.42	2.19
4.	470319	Unbleached non-coniferous chemical wood pulp, soda or sulphate (excluding dissolving grades)	12.23	1.49
5.	251010	Natural calcium phosphates and natural aluminium calcium phosphates, natural and phosphatic	12.11	1.02
6.	890800	Vessels and other floating structures for breaking up	10.57	2.37
7.	540120	Sewing thread of artificial filaments, whether or not put up for retail sale	10.16	3.15
8.	090619	Cinnamon and cinnamon-tree flowers (excluding cinnamon "Cinnamomum zeylanicum Blume" and crushed ...	10.16	21.86
9.	890400	Tugs and pusher craft	8.62	1.55
10.	090820	Mace	7.89	1.04

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

Similarly Table 4.33 exhibits wide scope of trade between India and Philippines by exporting products like Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis(290362), Opium (130211), Mica waste (252530), Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear (520521), Cathine "INN" and its salts (293943), Granite and articles thereof,

simply cut or sawn, with a flat or even surface (680223), Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene (290361), Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated (251320), Dithionites and sulfoxylates (excluding sodium) (283190) Dichlorotetra fluoroethanes and chloropentafluoroethane (283190) to India.

Table 4.33: Commodities with and RID>1 for India and RCA Index>1 for Philippines

(Per cent)

S.No	Product code	Product label	RID>1	RCA>1
1.	290362	Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis	60.86	82.75
2.	130211	Opium	55.88	2.35
3.	252530	Mica waste	53.13	39.35
4.	520521	Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear ...	42.26	2.16
5.	293943	Cathine "INN" and its salts	37.38	6.89
6.	680223	Granite and articles thereof, simply cut or sawn, with a flat or even surface (excluding with ...	35.16	1.20
7.	290361	Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene	30.04	67.05
8.	251320	Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated	25.88	1.03
9.	283190	Dithionites and sulfoxylates (excluding sodium)	25.20	1.08
10.	290344	Dichlorotetrafluoroethanes and chloropentafluoroethane	24.97	17.09

(Source: Author's Calculations, Computed from UNCOMTRADE Database)

CONCLUSION

Every trade negotiations efforts carries a core idea of reaping the benefits of trade competitiveness and AIFTA was not an exception. Trade Competitiveness at Technology wise classification and at single product level should be meticulously scrutinized to judge the success of the trade agreement. This effort also helps a nation to negotiate in a better way and or policy make r it became easy to understand the “quid” from “quo” proposition.

Overall, ASEAN is till now reaping the benefit of trade against India, as far as trade competitiveness technologywise is concerned. Competitively Positioned items fall down to 632 against 1960 while comparing at period from 2007-2015 vis-a-vis 2001-2007 respectively. Contribution of high skilled and technology intensive manufacturer products, fall down drastically, which is not a favorable trade preposition for India. This trend was not off settled by other technology based products too. In absolute sense MSTIM and MF remained stagnant. Number of product under Threatened Products (TP) list rose to alarming proposition. Almost 50 per cent of technology based items exported by India to ASEAN were defined as TP in Phase 2. Performance, in the category of Emerging /Products (Tier I or Tier II) remained dismal and Weakly Positioned products category was adding more products in Phase 2. Products across technolgywise classification failed to make any mark and what more adding salt to wounds were those commodities which were earlier treated as historically advantaged products to India like Resource Intensive manufacturing, Low skill and technology intensive manufacturing.

Overall picture of India ASEAN trade at technology level classification pose some given insights, as far as trade competitiveness is concerned. But on the scratch deep at country level data trends are favouring India’s decisions to look east. Technology level competitiveness has become favorable against Brunei, w here Competitively Positioned items rose to 190 from 59 during two phases. Performance of Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive based product has improved. Technology level competitiveness has also improved against Cambodia, Lao PDR, Malaysia,

Philippines, and Thailand. Not only technology based items increased but Competitively Positioned items rose from 131 commodities in Phase 1 to 307 commodities in Phase 2. This enhancement was common across all technology based items be it Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers. Even Emerging Products (Tier II) showed promising result as EP (Tier II) rose to 205 products in Phase 2 on comparing with 72 products in Phase 1. Products from Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures technology classification showed their presence in Emerging Products (Tier II). India's competitiveness of technology based products also enhanced vis-s-vis Lao PDR and sizable amount of new products found place in Competitively Positioned items in Phase 2. Malaysia is one of the prime members of the ASEAN community and share a healthy trade share with India, as far as India-ASEAN trade is concerned. Indian technology based competitiveness has improved significantly. During Phase 1, 737 products were Competitively Positioned, which zoomed to 1652 products and Indian competitiveness improved across all technology based classification including Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers, Mineral fuels, Unclassified products. Apart from this Threatened Products also mellowed down but not so significant products were adding up in Emerging Products category but also similar trended posing a positive vibe emerged in case of weakened products. Overall, competitive analysis of India's trade with Malaysia, is posing a sanguine image and posting a positive vibe for Indian producers as far as Malaysian market is concerned. Similar trends were emerging from Philippines also, as Competitively Positioned product rose to 1128 in Phase 2 as compared to 8804 products in Phase 1 but a mild growth found in Threatened Products category which is not a good sign.

Indian products also found a sizeable proportion in Competitively Positioned category in Thailand. But overall, Thailand presenting a mixed bag results while

comparing two phases. When Competitively Positioned products increased, Threatened Products also increased but Weakly Positioned items fall down sharply.

India is facing trade competitiveness competition from Singapore and Vietnam though Singapore posing a mixed results where on one way CP items shoot up from 1378 commodities in Phase 1 to 1703 commodities in Phase 2, so does Threatened products which rose to 1413 in Phase 2 from 1002 commodities in Phase 1. Vietnam is appearing to be tough market as Competitively Positioned products fall down to 725 in Phase 2 from 100 products in Phase 1. Threatened Products rose to almost three times and Weakly Positioned products also grow.

Hence, overall on an average based India's trade competition has mellowed down but at country level barring Singapore and Vietnam, rest of the countries proving out to be a god market for Indian products as competitiveness has improved favorably. Emerging Products category also improved and Weakly Positioned products has been falling down. In a nutshell, competitiveness of Indian Products at technology based classification is presenting favorable signal barring few markets but these threat can offset by India's robust service sector.

CHAPTER – 5

SECTORAL DISTRIBUTION OF TRADE POTENTIAL

The trade between India and ASEAN countries have increased progressively over a period of time and now with the emphasis laid in Look East Policy, various efforts were made by the country to build closer partnerships with the countries of Southeast Asia. However, these efforts failed to reinforce the economic, political or strategic partnership between India and ASEAN. This was mainly due to the dominance of China born communities in many Southeast Asian countries, which encouraged these nations to engage more actively with China.

The trade normalization process between India and ASEAN has undoubtedly open new trade opportunities. This study assesses trade possibilities between the two nations, examines the physical and regulatory impediments to realizing the trade potential, and suggests how the trade potential can be realized. As per the current data, 2017 the maximum percentage of import potential was in Unclassified products technology amounting to 34 per cent followed by High Skill and Technology intensive manufactures 14.57 per cent. The share of India's Potential Imports from ASEAN in her global Imports during 2001-17 is 56.36 per cent and Share of India's Potential Imports from ASEAN in ASEAN's Global Exports during 2001-17.

In this chapter, the analysis of the potentialities of trade between India and ASEAN countries has been done. The potentialities of trade depend upon their capacity to meet each other's requirement and their political will in this direction. As India and ASEAN are developing countries, the political will and capacity to meet each other's requirement are the pre-requisite for the development of trade relations between them. There is a great potentiality of trade between India and ASEAN because of the complementarity and competitiveness to each other.

India ASEAN Trade Potential

India saw its trade with ASEAN increase o relative to its trade with the rest of the world. Much of India's trade with ASEAN is directed towards Singapore, Malaysia, and Thailand, with whom India holds strong economic relations. This has resulted in concessional trade and a rise in investments; around 10 per cent of the total FDI equity inflows to India comes from the ASEAN region. ASEAN is India's 4th

largest and India is ASEAN's 7th largest trading partner. The GDP per capita among all ASEAN nations is highest of Singapore. The total ASEAN exports are 47 times more than that of India and imports are 30 times more than that of India as a whole which clearly depicts that exports by ASEAN nations are more than its imports. When we talk about volume of bilateral trade between India and ASEAN during 1991 to 2017 the imports of India when trading with ASEAN are more than exports. India's trade balance was favorable with Philippines, Singapore, Vietnam and Cambodia where exports to India to these countries are more than imports.

Table 5.1 depicts the value of major 50 items out of total items of India's global exports or ASEAN's global imports during 2001-17. It has been found out that if there had been political will on the part of both the countries, and if they wanted to exploit the potential, ASEAN could import from India, goods worth US\$ 40563 mn in 2001 and US\$ 1920257 mn in 2017. In this context, the initiatives of both the countries were rather more important. Further, the trend of these potentials was continuously in increasing order during this period except for 2014 but it was regained again in 2015 onwards. In this table, the comparison of actual and potential imports of ASEAN during 2001-17 has also been worked out. It is clear from this table that, the export from ASEAN to India were 8.17 per cent of the exports in 2001 and 12.96 per cent of the potential exports in 2017. The share of India's actual total exports from India to ASEAN during 2001-2017 was 11.69 per cent of the potential exports, which was far below than her potential exports to ASEAN. India could easily divert 89.54 per cent of her global exports to meet ASEAN's global import requirement during 2001-17.

Projections of India's actual and potential export to ASEAN during 2018-27 have been worked out on the basis of past data during 2001-17. Table 5.2 shows these projections also. The future actual and potential exports by India to ASEAN can increase manifolds, if there is a political-will on the part of both the countries. The trend growth rate of India's actual exports to ASEAN from India during 2001-17 was 12 per cent, which is also very encouraging. At this growth rate, India can export to ASEAN goods worth US\$ 36838 mn in 2018 and US\$ 54212 mn in 2027. Further, the trend growth rate of India's potential export to ASEAN during 2001-17 was 12 per cent, which is also very encouraging. At this growth rate, India can export to ASEAN nation's goods worth US\$ 305681 mn in 2018 and US\$ 444794 mn in 2027.

Table 5.1: India's Export Potential to ASEAN or ASEAN Import Potential from India during 2001-2017

(US\$ Million)

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	'271019	Unclassified products	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel,	0.00	0.00	1.05	2.65	5.97	10.13	12.44	19.43	12.95	17.88	27.88	26.66	41.63	36.70	16.35	13.52	11.07
2	'271012	Unclassified products	Light oils and preparations, of petroleum or bituminous minerals which >= 90% by volume "incl. ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.38	16.43	9.82	9.07	7.13
3	'300490	High skill- and technology intensive manufactures	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes,	0.45	0.61	0.79	0.95	1.31	1.60	1.93	2.47	2.76	3.78	4.72	5.19	5.39	5.56	5.82	6.21	6.22
4	'711319	Mineral fuels	Articles of jewellery and parts thereof, of precious metal other than silver	1.02	0.58	0.67	0.91	1.14	1.14	1.55	2.37	1.99	2.87	3.41	4.66	4.37	4.24	3.61	3.54	3.12

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
5	'030617	Non-fuel primary commodities	Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.23	0.08	-0.23	2.09
6	'710239	Resource-intensive manufactures	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	5.33	0.38	0.56	0.80	0.98	0.97	1.17	1.53	0.57	0.80	1.47	0.89	1.13	0.93	0.75	0.80	1.84
7	'870899	Medium skill- and technology intensive manufactures	Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons, ...	0.19	0.22	0.29	0.43	0.61	0.73	0.80	0.93	0.71	1.11	1.67	2.27	2.34	2.42	2.24	2.15	1.66
8	'710812	Unclassified products	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.11	0.44	0.03	2.44	2.43	5.31	4.33	1.48
9	'760110	Non-fuel primary commodities	Aluminium, not alloyed, unwrought	0.03	0.04	0.06	0.04	0.08	0.07	0.09	0.08	0.22	0.46	0.32	0.45	0.69	1.08	1.08	1.10	1.40

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
10	'740311	Non-fuel primary commodities	Copper, refined, in the form of cathodes and sections of cathodes	0.06	0.09	0.13	0.21	0.34	1.16	1.06	0.70	0.80	4.33	2.08	2.21	2.03	2.43	1.43	0.94	1.34
11	'870322	Medium skill- and technology intensive manufactures	Motor cars and other motor vehicles principally designed for the transport of persons, incl. ...	0.00	0.01	0.10	0.22	0.49	0.58	0.78	1.47	1.17	1.02	1.14	2.11	1.90	0.86	0.91	1.47	1.30
12	'871120	Low skill- and technology-intensive manufactures	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder ...	0.06	0.10	0.12	0.21	0.22	0.25	0.18	0.34	0.24	0.30	0.35	0.55	0.76	0.63	0.94	1.08	1.20
13	'870323	Medium skill- and technology intensive manufactures	Motor cars and other motor vehicles principally designed for the transport of persons, incl. ...	0.01	0.02	0.06	0.09	0.13	0.09	0.10	0.06	0.04	0.11	0.16	0.34	0.53	0.83	0.75	1.20	1.18
14	'880330	High skill- and technology intensive manufactures	Parts of aeroplanes or helicopters, n.e.s. (excluding those for gliders)	0.06	0.08	0.06	0.04	0.05	0.04	0.24	0.92	0.63	1.07	1.65	1.19	0.90	1.14	0.94	1.44	1.17

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
15	'841112	Medium skill- and technology intensive manufactures	Turbojets of a thrust > 25 kN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.02	0.10	0.07	1.10
16	'710231	Resource-intensive manufactures	Non-industrial diamonds unworked or simply sawn, cleaved or bruted (excluding industrial diamonds)	0.02	0.02	0.03	0.16	0.43	0.43	0.53	0.55	0.19	0.19	0.44	0.27	0.61	1.53	1.11	1.15	1.07
17	'020230	Non-fuel primary commodities	Frozen, boneless meat of bovine animals	0.12	0.13	0.12	0.19	0.18	0.19	0.25	0.18	0.19	0.21	-0.23	-0.46	-1.65	-1.75	-1.33	-1.09	0.82
18	'100630	Non-fuel primary commodities	Semi-milled or wholly milled rice, whether or not polished or glazed	0.60	0.39	0.48	0.59	0.88	0.95	1.38	2.81	1.87	2.27	2.59	1.97	1.04	1.40	1.35	1.20	0.78
19	'290243	High skill- and technology intensive manufactures	P-Xylene	0.00	0.02	0.11	0.13	0.12	0.28	0.42	0.35	0.26	0.13	0.36	0.25	0.19	0.23	0.23	0.24	0.68
20	'520100	Non-fuel primary commodities	Cotton, neither carded nor combed	0.01	0.01	0.03	0.15	0.28	0.84	1.45	1.38	0.88	2.37	3.13	3.31	3.05	2.42	1.57	1.08	0.62

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
21	'170199	Non-fuel primary commodities	Cane or beet sugar and chemically pure sucrose, in solid form (excluding cane and beet sugar)	0.12	0.16	0.18	0.03	0.01	0.33	0.40	0.43	0.00	0.57	0.59	0.46	0.42	0.43	0.49	0.81	0.55
22	'848180	Medium skill- and technology intensive manufactures	Appliances for pipes, boiler shells, tanks, vats or the like (excluding pressure-reducing valves, ...)	0.05	0.07	0.09	0.12	0.21	0.25	0.33	0.44	0.33	0.30	0.45	0.62	0.72	0.64	0.61	0.63	0.54
23	'732690	Low skill- and technology-intensive manufactures	Articles of iron or steel, n.e.s. (excluding cast articles or articles of iron or steel wire)	0.09	0.08	0.11	0.10	0.13	0.13	0.17	0.24	0.18	0.25	0.42	0.46	0.49	0.41	0.50	0.57	0.54
24	'721049	Low skill- and technology-intensive manufactures	Flat-rolled products of iron or non-alloy steel, of a width of >= 600 mm, hot-rolled or cold-rolled ...	0.14	0.11	0.13	0.52	0.85	0.84	1.04	1.24	0.64	0.64	0.66	0.75	1.04	0.94	0.61	0.64	0.53

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
25	'230400	Non-fuel primary commodities	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...	0.17	0.18	0.22	0.42	0.32	0.54	0.64	1.17	0.70	1.01	1.50	1.47	2.23	1.02	0.38	0.26	0.52
26	'840999	Medium skill- and technology intensive manufactures	Parts suitable for use solely or principally with compression-ignition internal combustion ...	0.06	0.07	0.10	0.15	0.22	0.32	0.42	0.50	0.33	0.43	0.58	0.46	0.51	0.56	0.63	0.64	0.51
27	'300420	High skill- and technology intensive manufactures	Medicaments containing antibiotics, put up in measured doses "incl. those in the form of transdermal ...	0.09	0.10	0.12	0.12	0.14	0.17	0.20	0.27	0.31	0.32	0.37	0.38	0.36	0.40	0.46	0.52	0.51
28	'380891	High skill- and technology intensive manufactures	Insecticides (excluding goods of subheading 3808.50)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.35	0.38	0.40	0.49	0.51	0.49	0.48	0.50
29	'380893	High skill- and technology intensive manufactures	Herbicides, anti-sprouting products and plant-growth regulators (excluding goods of subheading ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.17	0.20	0.31	0.31	0.43	0.56	0.50

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
30	'610910	Resource-intensive manufactures	T-shirts, singlets and other vests of cotton, knitted or crocheted	0.53	0.19	0.15	0.16	0.20	0.23	0.23	0.21	0.17	0.19	0.22	0.26	0.30	0.30	0.36	0.40	0.49
31	'720719	Low skill- and technology-intensive manufactures	Semi-finished products of iron or non-alloy steel containing, by weight, < 0,25% of carbon, ...	0.00	0.01	0.05	0.04	0.08	0.16	0.17	0.16	0.09	0.17	0.18	0.22	0.17	0.21	0.15	0.36	0.48
32	'090111	Non-fuel primary commodities	Coffee (excluding roasted and decaffeinated)	0.17	0.04	0.06	0.05	0.08	0.11	0.24	0.22	0.18	0.23	0.40	0.49	0.43	0.44	0.44	0.47	0.47
33	'790111	Non-fuel primary commodities	Unwrought zinc, not alloyed, containing by weight >= 99,99% of zinc	0.00	0.00	0.01	0.01	0.02	0.24	0.17	0.24	0.23	0.33	0.31	0.30	0.40	0.33	0.44	0.24	0.47
34	'293399	High skill- and technology intensive manufactures	Heterocyclic compounds with nitrogen hetero-atom[s] only (excluding those containing an unfused ...	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.15	0.23	0.32	0.42	0.41	0.49	0.46

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
35	'890590	Low skill- and technology-intensive manufactures	Light-vessels, fire-floats, floating cranes and other vessels, the navigability of which is ...	0.00	0.00	0.00	0.11	0.06	0.06	0.25	-0.08	-0.13	-0.73	-0.69	0.49	0.28	-0.08	0.29	-0.24	0.44
36	'540233	Resource-intensive manufactures	Textured filament yarn of polyester (excluding that put up for retail sale)	0.04	0.04	0.03	0.03	0.05	0.10	0.15	0.17	0.13	0.32	0.38	0.35	0.37	0.40	0.37	0.36	0.44
37	'290220	High skill- and technology intensive manufactures	Benzene	0.01	0.02	0.01	0.05	0.03	0.28	0.23	0.31	0.26	0.35	0.42	0.52	0.68	0.56	0.43	0.29	0.43
38	'392690	Medium skill- and technology intensive manufactures	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (excluding ...	0.06	0.06	0.06	0.08	0.11	0.15	0.20	0.23	0.20	0.28	0.31	0.40	0.49	0.49	0.53	0.61	0.41
39	'320417	High skill- and technology intensive manufactures	Synthetic organic pigments; preparations based on synthetic organic pigments of a kind used ...	0.11	0.11	0.12	0.12	0.17	0.21	0.26	0.31	0.26	0.34	0.37	0.37	0.40	0.42	0.38	0.38	0.40

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
40	'300220	High skill- and technology intensive manufactures	Vaccines for human medicine	0.05	0.06	0.06	0.06	0.06	0.10	0.12	0.06	0.21	0.15	0.29	0.31	0.34	0.30	0.37	0.48	0.39
41	'720839	Unclassified products	Flat-rolled products of iron or non-alloy steel, of a width of >= 600 mm, in coils, simply ...	0.01	0.02	0.04	0.14	0.23	0.27	0.28	0.27	0.09	0.07	0.12	0.18	0.21	0.26	0.11	0.19	0.39
42	'760120	Non-fuel primary commodities	Unwrought aluminium alloys	0.01	0.02	0.00	0.02	0.03	0.02	0.02	0.01	0.00	0.03	0.09	0.11	0.19	0.21	0.18	0.19	0.38
43	'240120	Non-fuel primary commodities	Tobacco, partly or wholly stemmed or stripped, otherwise unmanufactured	0.03	0.06	0.10	0.13	0.13	0.15	0.21	0.36	0.53	0.54	0.43	0.53	0.66	0.54	0.53	0.55	0.38
44	'260111	Non-fuel primary commodities	Non-agglomerated iron ores and concentrates (excluding roasted iron pyrites)	0.35	0.10	0.15	0.20	0.35	0.47	0.54	0.85	0.38	0.68	0.84	0.73	0.55	0.68	0.11	0.54	0.38
45	'730511	Low skill- and technology-intensive manufactures	Line pipe of a kind used for oil or gas pipelines, having circular cross-sections and an external ...	0.03	0.04	0.03	0.12	0.36	0.33	0.31	0.43	0.43	0.48	0.59	1.04	0.66	0.52	0.15	0.25	0.37

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
46	'850440	Medium skill- and technology intensive manufactures	Static converters	0.01	0.01	0.02	0.04	0.15	0.32	0.31	0.40	0.26	0.31	0.39	0.36	0.29	0.36	0.40	0.46	0.36
47	'293339	High skill- and technology intensive manufactures	Heterocyclic compounds with nitrogen hetero-atom[s] only, containing an unfused pyridine ring,	0.01	0.01	0.01	0.01	0.02	0.04	0.07	0.08	0.12	0.12	0.13	0.18	0.24	0.31	0.34	0.34	0.34
48	'390210	High skill- and technology intensive manufactures	Polypropylene, in primary forms	0.12	0.18	0.21	0.32	0.16	0.39	0.41	0.26	0.29	0.68	1.05	0.75	1.31	1.03	0.65	0.49	0.34
49	'940360	Resource-intensive manufactures	Wooden furniture (excluding for offices, kitchens and bedrooms, and seats)	0.03	0.04	0.07	0.14	0.18	0.23	0.30	0.28	0.22	0.20	0.26	0.31	0.37	0.39	0.40	0.42	0.34
50	'851762	Unclassified products	Machines for the reception, conversion and transmission or regeneration of voice, images or ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.08	0.08	0.08	0.09	0.12	0.15	0.33

Contd.

S. No	Commodity code	Technology	Product description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
51	'420221	Resource-intensive manufactures	Handbags, whether or not with shoulder straps, incl. those without handles, with outer surface ...	0.11	0.06	0.06	0.09	0.14	0.16	0.21	0.23	0.22	0.25	0.32	0.33	0.39	0.42	0.39	0.37	0.32
52	'840710	Medium skill- and technology intensive manufactures	Spark-ignition reciprocating or rotary internal combustion piston engine, for aircraft	0.00	0.00	0.00	0.00	0.01	0.01	0.06	0.07	0.11	0.06	0.08	0.11	0.39	0.53	0.36	0.34	0.32
53	'294190	High skill- and technology intensive manufactures	Antibiotics (excluding penicillins and their derivatives with a penicillanic acid structure,	0.06	0.08	0.12	0.10	0.11	0.13	0.16	0.18	0.21	0.25	0.30	0.29	0.31	0.39	0.40	0.37	0.32
Total India's Potential exports to ASEAN				40.56	45.59	54.29	68.35	90.07	108.83	132.07	162.43	158.87	197.45	266.99	257.27	298.73	286.25	237.95	233.95	192.03
Actual Total India's exports to ASEAN				3.32	4.50	5.07	7.55	10.29	12.37	13.82	19.43	17.90	22.96	34.50	32.30	37.89	31.29	26.43	26.38	24.89
% of India's Actual exports to ASEAN				8.17	9.88	9.34	11.05	11.42	11.37	10.47	11.96	11.27	11.63	12.92	12.55	12.68	10.93	11.11	11.28	12.96

Share of India's Potential export to ASEAN in Her Global exports during 2001-17 = 89.54 %

Share of India's Potential EXPORT TO ASEAN in ASEAN's Global Imports s during 2001-17= 19.53%

India's Import Potentials are the sum of value of items in which ASEAN could meet India's requirement fully/partially during 2001-2017.

(Source: Author's Calculations, United Nations, International Trade Statistics)

Table 5.2: India- ASEAN Actual and Potential Imports and Export during 2001- 17 and their Projections for 2018-2027

(US\$ million)

Year	Total India's export Potentials to ASEAN	Actual Total India's export to ASEAN	Per cent of India's Actual export to ASEAN
2001	40563	3315	8
2002	45595	4503	10
2003	54289	5072	9
2004	68352	7552	11
2005	90067	10286	11
2006	108831	12369	11
2007	132074	13824	10
2008	162427	19433	12
2009	158866	17899	11
2010	197450	22958	12
2011	266986	34498	13
2012	257270	32295	13
2013	298726	37885	13
2014	286250	31294	11
2015	237953	26428	11
2016	233946	26381	11
2017	192026	24888	13
2001-2017	2831671	330882	12
	PROJECTION		
2018	305681	36838	12
2019	321138	38768	12
2020	336595	40699	12
2021	352052	42629	12
2022	367509	44559	12
2023	382966	46490	12
2024	398423	48420	12
2025	413880	50351	12
2026	429337	52281	12
2027	444794	54212	12
2018-2027	3752375	455247	12

(Source: Author's Calculations, United Nations, International Trade Statistics)

It is clear from this table that India's actual export to ASEAN was 12.00 per cent of her potential imports from the latter during 2001-17. During this period, the share of India's actual export in potential export to ASEAN ranged between 8.00 per cent in 13.00 per cent in 2017. On the basis of projections, India's actual export to ASEAN would be 12.00 per cent of India's actual export to the latter during 2018-27. During this period, the share of India's in potential exports to ASEAN would remain stagnant to 12 per cent in 2020. This would be rather discouraging situation as compared to the past as is clear from the preceding discussion.

The below analysis reveals that there is an ample scope for India's exports to ASEAN. However, India should increase the production of those items in which ASEAN's requirement is higher than the production capacity of India. India should increase the export of those items in which ASEAN is dependent upon the developed countries of the world. This will reduce ASEAN's dependence on the developed countries and these two countries will become closer to each other. Projections of ASEAN's actual and potential export to India during 2018-27 have also been worked out on the basis of past data during 2001-17. Table 5.4 shows these projections. The future actual and potential exports of ASEAN's nations to India can increase manifolds. India has been facing unfavourable balance of trade with ASEAN. India's capacity to meet India's requirement of items is very limited. By way of comparing the composition of India's global exports and ASEAN's global imports during 2001-17, top 50 commodities to 6 digit code have been identified which India could have imported from ASEAN. It has been found out that there had been political will on the part of both the countries. India could import from ASEAN, goods worth US\$ 39533 mn in 2001 and US\$ 222104 mn in 2017 although actual exports from ASEAN to India were 13.00 per cent and 16.00 per cent respectively, of the potential during this period. India's actual imports from ASEAN during 2001-17 were 11.00 per cent only of the potential imports. Hence, ASEAN actual exports to India were far below than her potential imports from ASEAN. The share of ASEAN's export potential from India in her global exports comes to be 27.00 per cent during this period, whereas the respective share in India's global imports comes out to be 88.00 per cent. Thus, ASEAN could easily divert 27.00 per cent of her global exports to meet India's global import requirement during 2001-17.

Table 5.3: India's Import Potential from ASEAN or ASEAN Export Potential to India during 2001 to 2017

(US\$ Million)

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
1	'270900	Petroleum oils and oils obtained from bituminous minerals, crude	Unclassified products	12.41	13.33	15.47	20.58	27.20	29.50	31.45	40.15	24.16	28.94	36.96	36.85	32.34	29.58	18.09	13.98	16.52	427.50
2	'854221	Monolithic integrated circuits, digital (excluding cards incorporating an electronic monolithic)	High skill- and technology intensive manufactures	0.00	12.76	0.00	-0.20	-0.20	-0.13	-0.05	0.00	2.48	2.80	1.65	0.89	3.21	8.77	12.37	12.42	12.28	69.05
3	'851770	Parts of telephone sets, telephones for cellular networks or for other wireless networks	Unclassified products	0.00	0.00	0.00	0.00	0.00	0.00	2.04	1.71	1.36	1.55	2.05	2.56	2.38	2.46	4.69	5.95	8.31	35.06
4	'710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes	Unclassified products	0.44	0.48	0.67	0.36	0.66	1.56	2.23	4.54	7.39	9.38	8.03	8.95	5.08	3.92	5.07	9.38	8.30	76.44

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
5	'270119	Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal)	Unclassified products	0.06	0.05	0.06	0.29	0.50	1.10	1.34	2.50	3.54	5.06	8.05	7.79	7.13	5.79	4.82	4.82	7.46	60.36
6	'271111	Natural gas, liquefied	Unclassified products	0.00	0.01	0.02	0.26	0.66	1.19	1.82	3.01	2.48	2.56	5.94	7.80	8.31	9.84	6.99	5.41	5.34	61.63
7	'854270	Electronic microassemblies made from discrete, active or both active and passive components	Unclassified products	0.00	0.25	0.02	0.02	0.01	0.00	-0.10	-0.03	6.02	2.08	2.04	3.10	5.35	1.80	0.50	1.08	4.72	26.87
8	'854140	Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled	High skill- and technology intensive manufactures	0.01	0.01	0.02	0.05	0.05	0.10	0.16	0.39	0.38	0.22	1.13	0.80	0.99	0.68	1.83	2.90	2.74	12.46
9	'851712	Telephones for cellular networks "mobile telephones" or for other wireless networks	Unclassified products	0.00	0.00	0.00	0.00	0.00	0.00	6.38	4.91	3.09	5.04	5.38	4.18	5.08	6.64	6.42	3.99	2.65	53.75

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
10	'260300	Copper ores and concentrates	Non-fuel primary commodities	0.22	0.24	0.15	0.46	0.16	3.71	3.79	3.23	2.38	3.58	4.24	2.59	3.92	2.82	3.28	1.93	2.37	39.07
11	'851762	Machines for the reception, conversion and transmission or regeneration of voice, images	Unclassified products	0.00	0.00	0.00	0.00	0.00	0.00	1.34	2.45	1.92	1.15	0.98	0.73	1.10	1.92	2.11	1.81	2.24	17.77
12	'847130	Data-processing machines, automatic, portable, weighing <= 10 kg	Unclassified products	0.01	-0.02	-0.03	0.00	0.08	0.19	0.39	0.58	0.51	0.93	1.29	1.89	2.29	2.08	2.43	2.05	2.01	16.70
13	'271019	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel	Unclassified products	0.00	8.25	-0.09	-0.13	-0.63	1.67	3.23	4.75	1.99	1.98	2.34	2.37	2.65	2.64	1.61	1.72	1.98	36.34
14	'710239	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	Resource-intensive manufactures	0.34	0.41	0.59	0.90	2.30	0.99	1.14	1.44	1.18	1.30	1.66	1.80	2.25	2.53	2.29	2.20	1.88	25.21

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S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
15	'870899	Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons	Medium skill- and technology intensive manufactures	0.74	0.66	0.61	0.59	-0.34	-0.06	2.10	11.02	5.09	8.44	11.29	11.68	11.12	10.25	10.45	10.35	1.29	95.28
16	'852990	Parts suitable for use solely or principally with transmission and reception apparatus	High skill- and technology intensive manufactures	0.14	0.17	0.21	0.38	0.47	0.57	0.69	1.45	1.32	1.35	1.45	1.67	1.49	1.50	1.43	1.27	1.12	16.68
17	'852520	Transmission apparatus incorporating reception apparatus, for radio-telephony, radio-telegraphy	High skill- and technology intensive manufactures	0.09	0.15	0.24	0.33	0.37	0.58	0.45	0.56	0.69	0.70	0.79	0.90	0.92	0.96	0.93	1.04	0.88	10.60
18	'390110	Polyethylene with a specific gravity of < 0,94, in primary forms	High skill- and technology intensive manufactures	0.24	0.54	1.55	2.17	3.13	3.94	3.68	1.82	0.30	0.50	0.16	0.07	0.13	0.21	0.27	0.42	0.86	19.99
19	'850440	Static converters	Medium skill- and technology intensive manufactures	0.05	0.05	0.07	0.09	0.16	0.22	0.30	0.39	0.56	0.95	0.76	0.95	0.93	1.15	1.04	0.92	0.79	9.36

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S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
20	'880330	Parts of aeroplanes or helicopters, n.e.s. (excluding those for gliders)	High skill- and technology intensive manufactures	0.02	0.04	0.07	0.10	0.17	0.24	0.36	0.42	0.40	0.41	0.73	0.64	0.67	0.64	0.73	0.78	0.75	7.17
21	'290531	Ethylene glycol "ethanediol"	High skill- and technology intensive manufactures	0.09	0.23	0.39	0.34	0.58	0.71	0.73	0.44	0.62	0.69	0.69	1.04	1.09	1.39	1.30	1.84	0.69	12.87
22	'310210	Urea, whether or not in aqueous solution (excluding that in pellet or similar forms,	High skill- and technology intensive manufactures	0.00	0.00	0.03	0.09	0.10	0.12	0.24	0.31	0.41	0.64	0.73	0.67	0.74	0.83	0.72	0.51	0.64	6.80
23	'740400	Waste and scrap, of copper (excluding ingots or other similar unwrought shapes, of remelted	Non-fuel primary commodities	0.02	0.03	0.02	0.10	0.33	0.23	0.42	0.67	0.43	0.54	0.95	0.96	0.99	0.80	0.59	0.53	0.63	8.25
24	'711319	Articles of jewellery and parts thereof, of precious metal other than silver	Mineral fuels	0.09	0.07	0.07	0.11	0.24	0.36	0.52	0.43	0.30	0.51	0.95	1.16	0.80	0.88	0.71	0.66	0.61	8.49

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
25	'847330	Parts and accessories of automatic data-processing machines or for other machines of heading	High skill- and technology intensive manufactures	0.02	0.04	0.07	0.12	0.13	0.28	0.31	0.05	0.38	0.02	0.42	4.82	0.66	0.59	0.23	0.25	0.56	8.96
26	'392690	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s	Medium skill- and technology intensive manufactures	0.25	0.29	0.32	0.42	1.24	1.36	0.99	0.05	0.43	0.04	0.67	0.92	0.97	0.90	0.79	0.76	0.56	10.95
27	'852580	Television cameras, digital cameras and video camera recorders	Unclassified products	0.06	0.06	0.09	0.11	0.17	0.21	0.25	0.32	0.29	0.38	0.53	0.56	0.55	0.65	0.69	0.77	0.56	6.24
28	'848180	Appliances for pipes, boiler shells, tanks, vats or the like (excluding pressure-reducing valves)	Medium skill- and technology intensive manufactures	0.00	0.00	0.00	0.00	0.00	0.00	1.38	2.18	0.13	0.28	0.38	0.55	0.44	0.43	0.50	0.42	0.55	7.23

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
29	'300490	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes, ...	High skill- and technology intensive manufactures	0.08	0.10	0.12	0.15	0.23	0.27	0.40	0.52	0.47	0.50	0.64	0.80	0.66	0.65	0.75	1.62	0.54	8.50
30	'854239	Electronic integrated circuits (excluding such as processors, controllers, memories and amplifiers)	High skill- and technology intensive manufactures	0.04	0.09	0.09	0.12	0.19	0.28	0.37	0.49	0.55	0.61	0.52	0.46	0.48	0.56	0.51	0.58	0.53	6.47
31	'847989	Machines and mechanical appliances, n.e.s.	Medium skill- and technology intensive manufactures	0.00	0.00	0.00	0.00	0.00	0.00	56.37	41.51	0.01	-0.23	-0.08	0.01	0.25	0.34	0.40	0.53	0.51	99.63
32	'890590	Light-vessels, fire-floats, floating cranes and other vessels, the navigability of which is ...	Low skill- and technology-intensive manufactures	0.06	0.10	0.17	0.20	0.37	0.42	0.55	0.66	0.79	0.66	0.91	0.86	0.87	0.70	0.70	0.71	0.50	9.25

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S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
33	'847150	Processing units for automatic data-processing machines, whether or not containing in the same ...	Unclassified products	0.01	0.03	0.03	0.24	0.26	0.33	0.24	0.10	0.37	1.13	0.69	0.59	0.59	0.46	0.63	0.30	0.48	6.49
34	'890520	Floating or submersible drilling or production platforms	Low skill- and technology-intensive manufactures	0.01	0.04	0.08	0.14	0.20	0.32	0.41	0.33	0.32	0.39	0.53	0.58	0.51	0.56	0.71	0.64	0.47	6.26
35	'271012	Light oils and preparations, of petroleum or bituminous minerals which >= 90% by volume	Unclassified products	0.08	0.15	0.34	0.09	0.05	0.13	0.26	0.30	-0.14	0.25	-0.09	1.76	1.31	0.34	0.30	0.67	0.44	6.26
36	'281410	Anhydrous ammonia	High skill- and technology intensive manufactures	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.83	1.04	0.69	1.46	1.25	0.43	32.72

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
37	'854231	Electronic integrated circuits as processors and controllers, whether or not combined	High skill- and technology intensive manufactures	0.14	0.13	0.18	0.26	0.38	0.43	0.35	0.66	0.34	0.46	0.63	0.64	0.58	0.53	0.52	0.44	0.38	7.04
38	'853890	Parts suitable for use solely or principally with the apparatus of heading 8535, 8536 or 8537	Medium skill- and technology intensive manufactures	0.00	0.00	0.00	0.00	0.00	0.00	4.46	17.63	0.40	0.19	0.37	0.55	0.53	0.42	0.47	0.39	0.37	25.78
39	'854229	Electronic integrated circuits, monolithic, analogue or analogue and digital	Unclassified products	0.05	0.06	0.10	0.14	0.23	0.32	0.42	0.48	0.40	0.46	0.53	0.48	0.44	0.49	0.50	0.49	0.37	5.94
40	'852380	Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices	Mineral fuels	0.00	18.58	0.07	0.12	0.27	0.34	0.41	0.10	0.29	0.45	0.85	5.31	1.91	1.33	0.81	0.65	0.32	31.82

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
41	'847170	Storage units for automatic data-processing machines	Unclassified products	0.00	0.00	0.00	0.00	0.00	0.00	0.38	1.30	0.85	0.55	0.88	0.61	0.35	0.25	0.22	0.27	0.28	5.94
42	'271113	Butanes, liquefied (excluding of a purity of >= 95% of N-butane or isobutane)	Unclassified products	0.11	0.15	0.16	0.19	0.30	0.38	0.47	0.48	0.39	0.26	0.51	0.64	0.56	0.56	0.51	0.44	0.25	6.36
43	'271011	Light oils and preparations, of petroleum or bituminous minerals which >= 90% by volume	Unclassified products	0.13	0.11	0.29	0.46	0.66	0.46	0.50	0.56	0.31	0.28	0.52	0.48	0.29	0.34	0.17	0.16	0.22	5.93
44	'890190	Vessels for the transport of goods and vessels for the transport of both persons and goods	Low skill- and technology-intensive manufactures	0.06	3.23	1.53	2.70	5.03	3.53	3.80	4.25	1.07	0.99	1.87	1.72	0.50	0.28	0.19	0.15	0.19	31.10

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
45	'844399	Parts and accessories of printers, copying machines and facsimile machines	Medium skill- and technology intensive manufactures	0.05	0.12	0.17	0.11	0.20	0.47	0.45	0.76	0.62	0.63	0.34	0.73	0.18	0.30	0.76	0.12	0.17	6.19
46	'854260	Hybrid integrated circuits	Unclassified products	0.00	0.00	0.00	0.00	0.00	0.00	17.56	5.77	-0.11	-0.05	-0.10	-0.02	0.16	0.21	0.23	0.21	0.14	24.03
47	'854250	Electronic micro assemblies made from discrete, active or both active and passive components	Unclassified products	0.00	7.76	0.02	0.04	0.07	0.11	0.07	0.00	0.00	0.00	0.00	0.00	0.19	0.03	0.07	0.19	0.00	8.56
48	'271000	Petroleum oils and oils obtained from bituminous minerals (excluding crude); preparations containing	Unclassified products	0.01	0.01	0.00	9.25	4.20	3.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.99
49	'854219	Monolithic digital integrated circuits, incl. circuits obtained by a combination of bipolar	High skill- and technology intensive manufactures	0.82	1.38	-0.11	1.97	2.49	3.68	1.89	1.16	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.13

Contd.

S. No	Product Code	Product label	Technology	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2001-2017
50	'710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes	Unclassified products	0.16	0.18	0.00	3.14	3.56	4.85	0.40	0.44	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.03
Total ASEAN Export Potential to India				44.67	51.20	64.21	88.25	126.17	159.26	193.20	284.34	240.31	313.04	416.74	444.59	424.12	416.02	350.58	319.36	292.94	4229.00
Actual Total ASEAN Exports to India				6.00	6.26	8.23	10.73	14.69	18.96	25.44	31.37	26.09	36.99	45.66	44.39	41.93	43.35	40.16	37.54	45.84	483.62
% of ASEAN Actual Exports Potential Exports to India				13	12	13	12	12	12	13	11	11	12	11	10	10	10	11	12	16	11

Share of ASEAN Potential exports to India in Her Global exports during 2001-17= 27 per cent

Share of ASEAN's Potential exports to India in India's Global imports during 2001-17=88 per cent

***India's Import Potentials are the sum of value of items in which ASEAN could meet India's requirement fully/partially during 2001-17.**

(Source: U.N., International Trade Statistics Year Book, & Commodity Year Book of International Trade, (various issues))

The trend growth rate of ASEAN actual export to India during 2001-17 was 11.00 per cent, which is very encouraging. At this growth rate ASEAN export to India goods worth US\$ 53236 mn in 2001 and US\$ 78024 mn in 2017. Further, the trend growth rate of ASEAN potential exports to India during 2018-27 was 11 per cent, which is also very encouraging. At this growth rate, ASEAN can export to India nation goods worth US\$ 463705 mn in 2018 and US\$ 678644 mn in 2027. It is clear from table 5.3 that ASEAN actual export to India was 11 per cent of her potential exports to the latter during 2001-17. During this period, the share of ASEAN actual export in potential export to India ranged between 13.00 per cent in 2001 and 16.00 per cent in 2017. On this basis of projection, ASEAN actual export to India would be 11.00 per cent during 2001-2017.

Table 5.4: ASEAN India Actual and Potential Imports and Export during 2001-17 and their Projections for 2018-2027

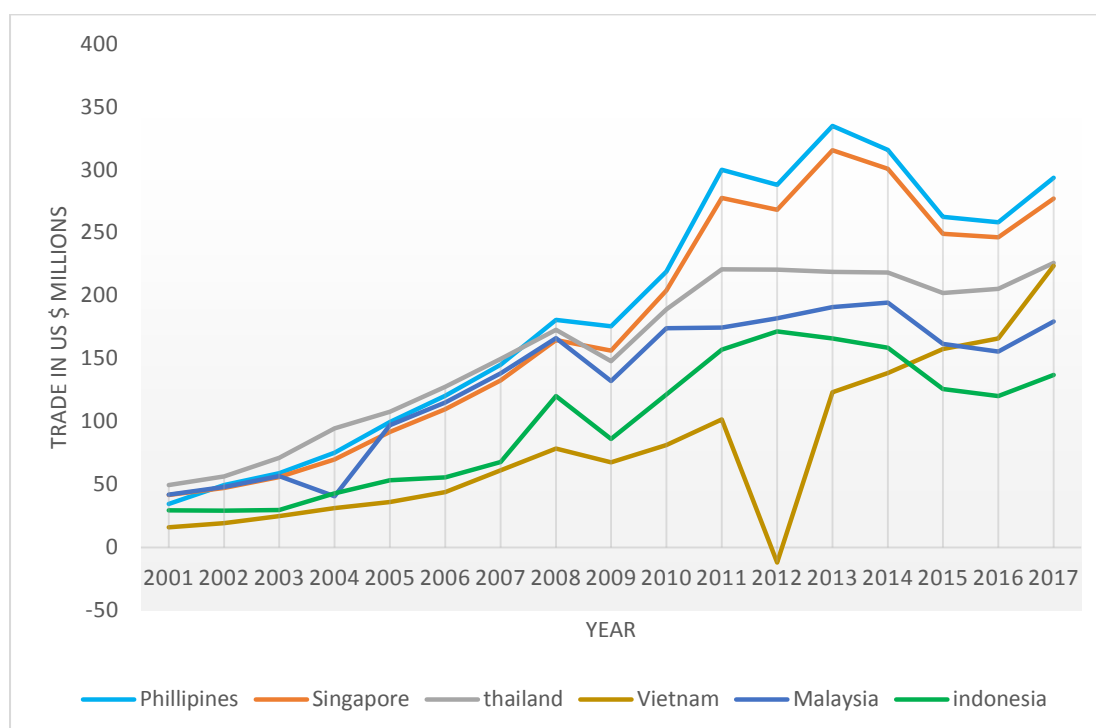
(US\$ million)

Year	Total Potential ASEAN Export to India	Actual ASEAN Export To India	% of ASEAN Actual Exports to India
2001	44670	6001	13
2002	51198	6256	12
2003	64205	8225	13
2004	88254	10727	12
2005	126168	14694	12
2006	159257	18956	12
2007	193202	25443	13
2008	284344	31368	11
2009	240312	26089	11
2010	313039	36990	12
2011	416741	45662	11
2012	444589	44387	10
2013	424116	41930	10
2014	416017	43352	10
2015	350584	40161	11
2016	319364	37538	12
2017	292937	45841	16
2001-2017	4228997	483874	11
PROJECTION			
2018	463705	53236	11
2019	487587	55991	11
2020	511469	58745	11
2021	535351	61499	11
2022	559233	64253	11
2023	583116	67007	11
2024	606998	69762	11
2025	630880	72516	11
2026	654762	75270	11
2027	678644	78024	11
2018-2027	5711745	656304	11

(Source: United Nations, International Trade Statistics)

The foregoing analysis clears that there is plentiful scope for India's imports from ASEAN. ASEAN nations should increase the production of those items in which India's requirement is higher than the production capacity of ASEAN's nations.

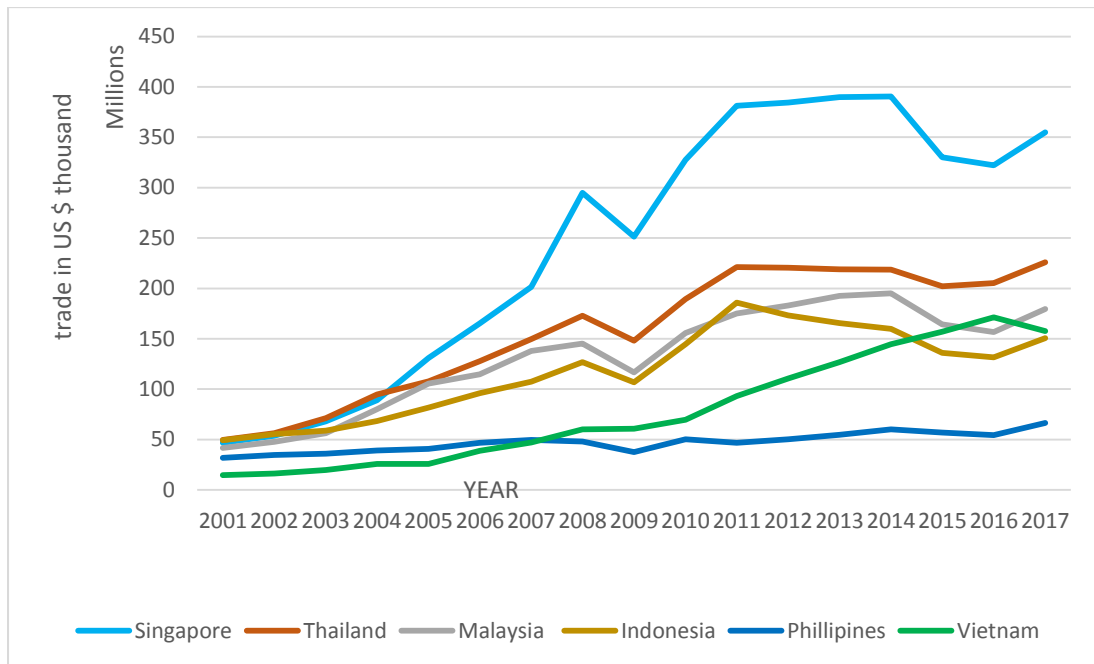
Fig. 5.1: India's Major Trading Countries Among ASEAN Nations



(Source: Computed from UNCOMTRADE Database)

From the figure 5.1 it is clear that the highest trade potential among the India ASEAN trade is majorly with few countries namely Philippines, Singapore, Thailand, Vietnam, Malaysia and Indonesia. As per the latest statistics, the top trading partner among India ASEAN trade is Philippines followed by Singapore and then Thailand. The trade with Vietnam suddenly has fallen in 2012 but after that it states again regarding its position and maintained with Thailand. The trade with Malaysia was high in 2011-2013 bit later it stated decreasing in 2015 and 2016. In 2017 it again rose. Similarly the trade with Indonesia rose sharply in 2007-2008, but it again decreased in 2008-2009, later after 2010 it stated to regain its position but among the major trading partner it is considered as sixth trading partner among India and ASEAN Trade.

Fig. 5.2: ASEAN Major Trading Countries With India



(Source: Computed from UNCOMTRADE Database)

The above figure 5.2 explains the major trading partners of ASEAN trading with India. Among the ASEAN Nations the major ASEAN countries trading with India are majorly Singapore on the first position followed by Thailand Malaysia, Vietnam and Indonesia are almost on the same pattern in the recent years of trade Philippines is at the sixth position who trades with India. The trade of Philippines has not changed significantly from 2001 but on comparison with Singapore the trade has account a significant change from 2001-2017 showing a rapid increase. Although there was a fall in 2014 and 2015 but later it regained and the trade again started to rise in 2017.

POTENTIAL ITEMS OF TRADE BETWEEN INDIA AND ASEAN

The findings below showcase that both India and ASEAN nations compete with each other in the sale of their exportable; but still there are many areas where complementarities could be forged for maximizing commercial benefits. There are few commodities which have the potential and are actually being exported also from India to ASEAN but on the other hand there are few commodities which have the potential but still are not being actually exported by India to ASEAN. Such

commodities need to be explored and measures should be adopted to export them. The same scenario is found in commodities which are imported by India from ASEAN.

Table 5.5: Top ten Actual and Potential commodities exported from India to ASEAN during 2001-2017

S. No	Actual Exported Commodities	Potential Exported Commodities
1.	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel
2.	Frozen, boneless meat of bovine animals	Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume
3.	Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes
4.	Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns	Articles of jewellery and parts thereof, of precious metal other than silver
5.	Aluminium, not alloyed, unwrought	Diamonds, worked, but not mounted or set (excluding industrial diamonds)
6.	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons
7.	Copper, refined, in the form of cathodes and sections of cathodes	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold)
8.	Flat-rolled products of iron or non-alloy steel, of a width of ≥ 600 mm, in coils	Aluminium, not alloyed, unwrought
9.	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes,	Copper, refined, in the form of cathodes and sections of cathodes
10.	Frozen fish, n.e.s.	Motor cars and other motor vehicles principally designed for the transport of persons

(Source: Computed from UNCOMTRADE Database)

From the table 5.5 it is clear that few top ten commodities which have the potential and also are actually being exported from India to ASEAN during 2001-2017 namely Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume, Aluminium, not alloyed, unwrought, Diamonds, worked, but not mounted or set (excluding industrial diamonds), Copper, refined, in the form of cathodes and sections of cathodes etc. but there are other commodities like Frozen, boneless meat of bovine animals, Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns, etc. which are being exported but they do not have the potential. On the contrary the commodities like Articles of jewellery and parts thereof, of precious metal other than silver, Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons, Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold), Motor cars and other motor vehicles principally designed for the transport of persons have the potential but are not being exported by India to ASEAN.

From the table 5.6 we can figure out the commodities which are have the potential and are actually exported by ASEAN to India or which are imported by India from ASEAN like Copper ores and concentrates, Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal), Petroleum oils and oils obtained from bituminous minerals, crude, Parts of telephone sets, telephones for cellular networks or for other wireless networks and but on the contrary there are commodities which do not have the potential but are actually exported by ASEAN to India like Crude palm oil, Palm oil and its fractions, whether or not refined (excluding chemically modified and crude), Petroleum oils and oils obtained from bituminous minerals, crude, Wire of refined copper, with a maximum cross-sectional dimension of ≤ 6 mm, Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Technically specified natural rubber "TSNR", Processing units for automatic data-processing machines, whether or not containing in the same, etc. Similarly there are also commodities which have the potential to be exported by ASEAN to India as there is requirement of these commodities in India but they are not exported by ASEAN like Monolithic integrated circuits, digital (excluding cards incorporating an electronic monolithic), Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes, Electronic micro assemblies made

from discrete, active or both active and passive components, Natural gas liquefied, Electronic micro assemblies made from discrete, active or both active and passive components etc, Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled, etc.

Table 5.6: Top ten Actual and Potential commodities exported from ASEAN to India During 1991-2017

S.No	Actual Exported Commodities	Potential Export Commodities
1.	Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal)	Petroleum oils and oils obtained from bituminous minerals, crude
2.	Crude palm oil	Monolithic integrated circuits, digital (excluding cards incorporating an electronic monolithic)
3.	Palm oil and its fractions, whether or not refined (excluding chemically modified and crude)	Parts of telephone sets, telephones for cellular networks or for other wireless networks
4.	Petroleum oils and oils obtained from bituminous minerals, crude	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes
5.	Wire of refined copper, with a maximum cross-sectional dimension of ≤ 6 mm	Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal)
6.	Copper ores and concentrates	Natural gas, liquefied
7.	Parts of telephone sets, telephones for cellular networks or for other wireless networks and	Electronic micro assemblies made from discrete, active or both active and passive components
8.	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel	Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled
9.	Technically specified natural rubber "TSNR"	Telephones for cellular networks "mobile telephones" or for other wireless networks
10.	Processing units for automatic data-processing machines, whether or not containing in the same	Copper ores and concentrates

(Source: Computed from UNCOMTRADE Database)

The study suggests a vast potential of trade still untapped between India and ASEAN, and recommended a list of commodities which are having good trade prospects, but so far not traded between them. Gradually, many new sectors like high tech trade are being explored while information technology and infrastructure development are already emerging as major areas for cooperation.

CONCLUSION

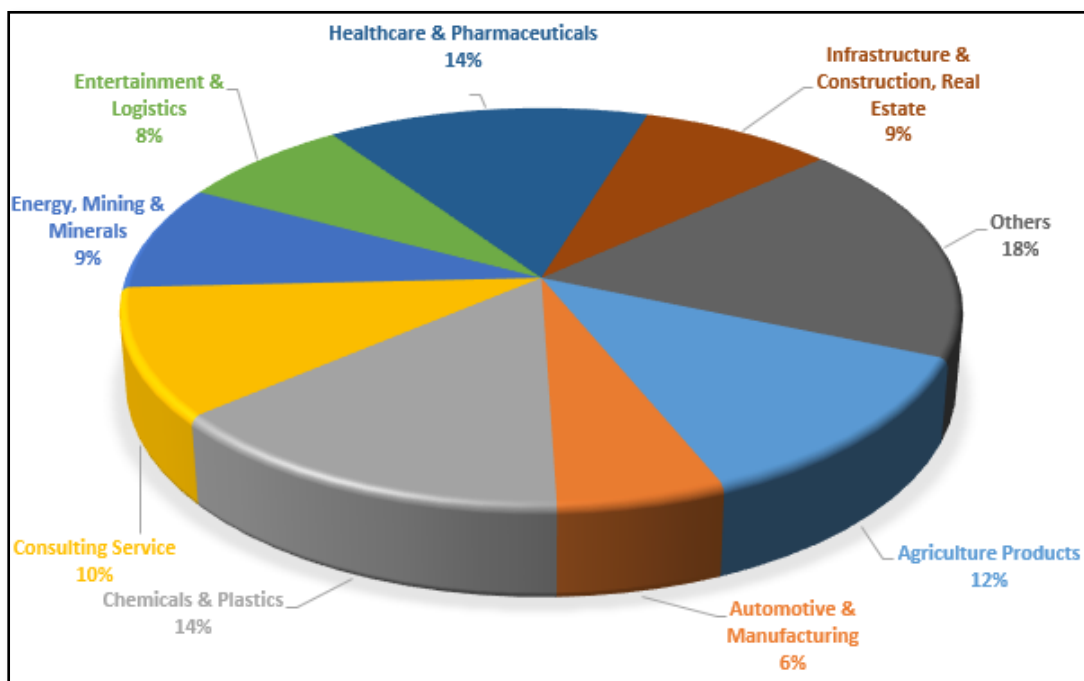
The preceding discussion concludes that there is enormous potential of trade between India and ASEAN. India should increase the export of those items in which ASEAN is dependent upon the developed countries of the world. Similarly, ASEAN should also increase the export of those items in which India is dependent upon the developed countries. During 2001-17, India's actual total exports to ASEAN were 12.00 per cent only of the potential imports. On the basis of projections, ASEAN actual exports to India would be 11.00 per cent of her potential exports to latter during 2018-27. In fact, trade relations between India and ASEAN have always been governed by political and geo strategic interest. Increased trade and economic cooperation would generate pressure for having normal relations with each other which would give a fillip to economic development in the region. Higher level of economic and trade cooperation would certainly result in more friendly relations between the two countries. Promotion of trade relations, joint-ventures, joint marketing, joint study groups on trade and other issues, frequent meeting of political and civil leadership, people to people contact, etc. could be some formidable steps towards confidence building exercise before the eventual solution to the core issues. The overall analysis finds that although both India and ASEAN nations compete with each other in the sale of their exportable; but still there are many areas where complementarities could be forged for maximizing commercial benefits. Gradually, many new sectors like high tech trade are being explored while information technology and infrastructure development are already emerging as major areas for cooperation.

CHAPTER – 6

INDIAN EXPORTERS SURVEY IN CONTEXT OF ASEAN COUNTRIES

A survey of 112 respondents was conducted to bring out the expectations of the members of corporate India having business engagement with ASEAN. The survey was targeted at companies from different sectors which have already invested or are doing business with ASEAN countries. Respondents of this survey covered sectors such as Pharmaceuticals, Automotive manufacturing, Plastics, Chemicals, Infrastructure and constructions, Consulting Services, Healthcare, Agriculture Products, Mining and Minerals and others¹.

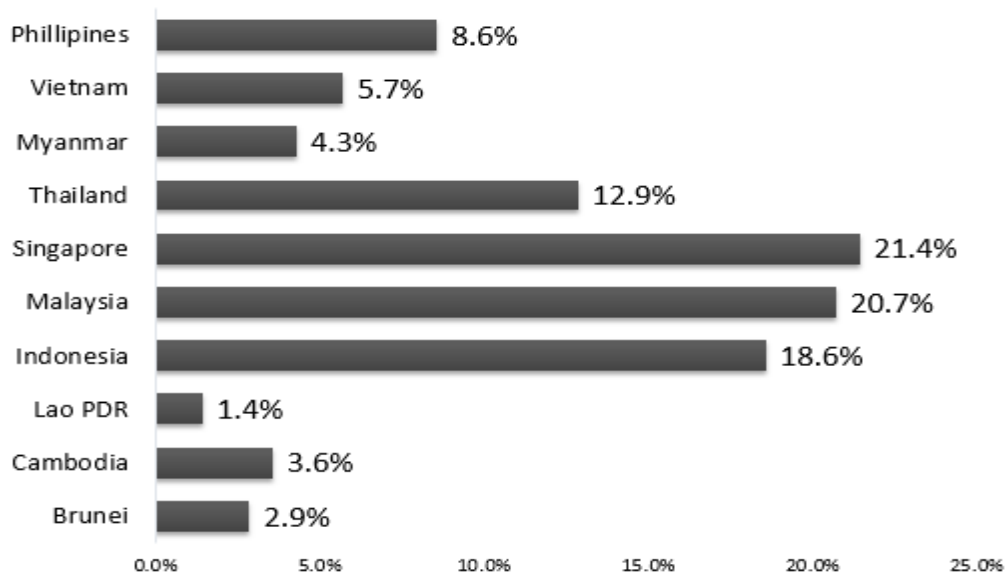
Fig. 6.1 : Respondent Sectorwise



Most of the respondents were trading predominately with Singapore, Malaysia, Indonesia and Thailand apart from other ASEAN nations. Very few respondents were trading with Brunei, Cambodia, Lao, Vietnam and Myanmar (see figure 6.2)

¹ Boards, Bullet Proof Vests, Aerospace Products, Electrical Equipment's, Frozen Seafood, Gems, Handicraft, IT Services, IT/Software Services, Jewelry, Leather, Rubber items, Tyres, Sewing Machines

Fig. 6.2 : Respondent's Firms Trading Countries



Indian industry trade destination with ASEAN is not equal distributed (see Fig 6.3). Survey found that major destination for trader was Singapore (20 per cent), Indonesia (22 per cent), Malaysia (19 per cent), Thailand (16 per cent) respectively. Apart from that 9 per cent of respondents shared Philippines is their trading destination. But very few respondents were trading with Brunei (2 per cent), Cambodia (2 per cent), Lao PDR (2 per cent), Myanmar (2 per cent) and Vietnam (7 per cent).

Fig. 6.3: Important ASEAN Destination for Indian Industry

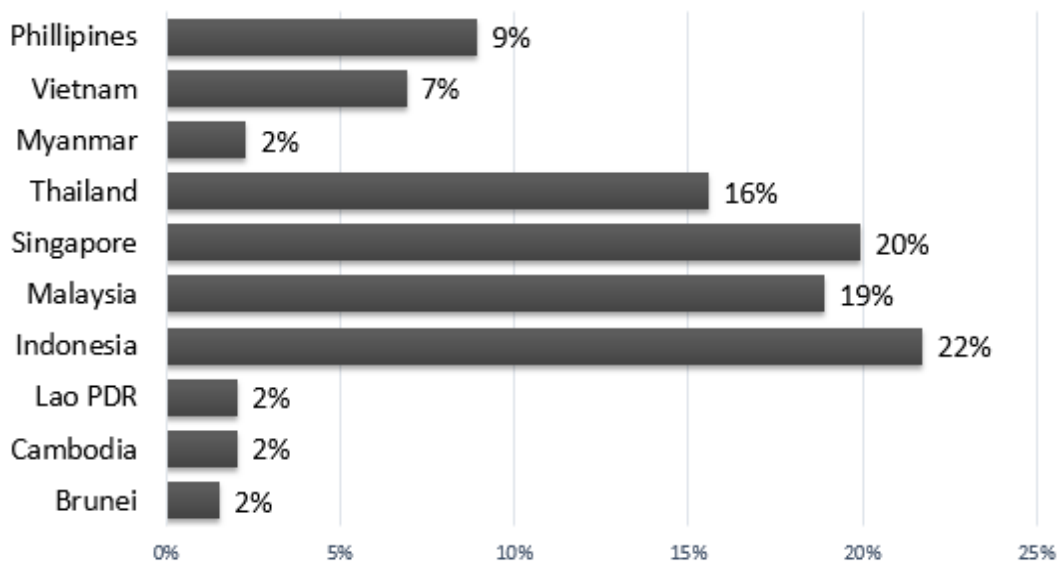


Fig. 6.4 : Ease of Doing Business

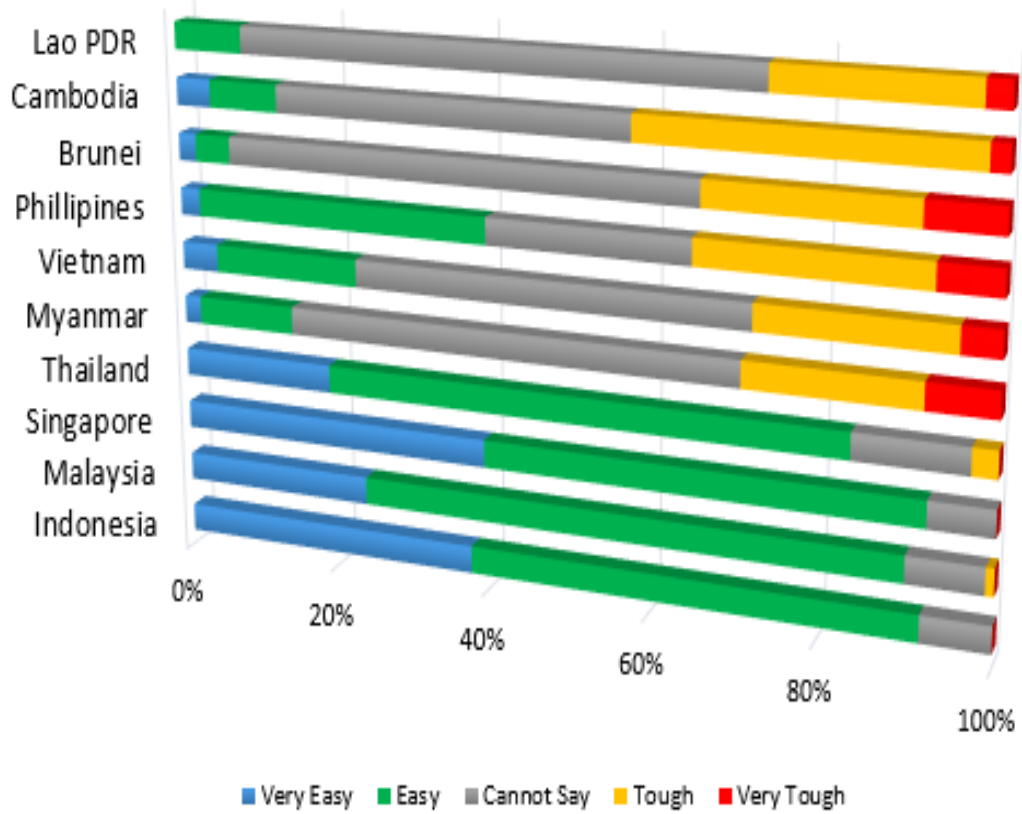
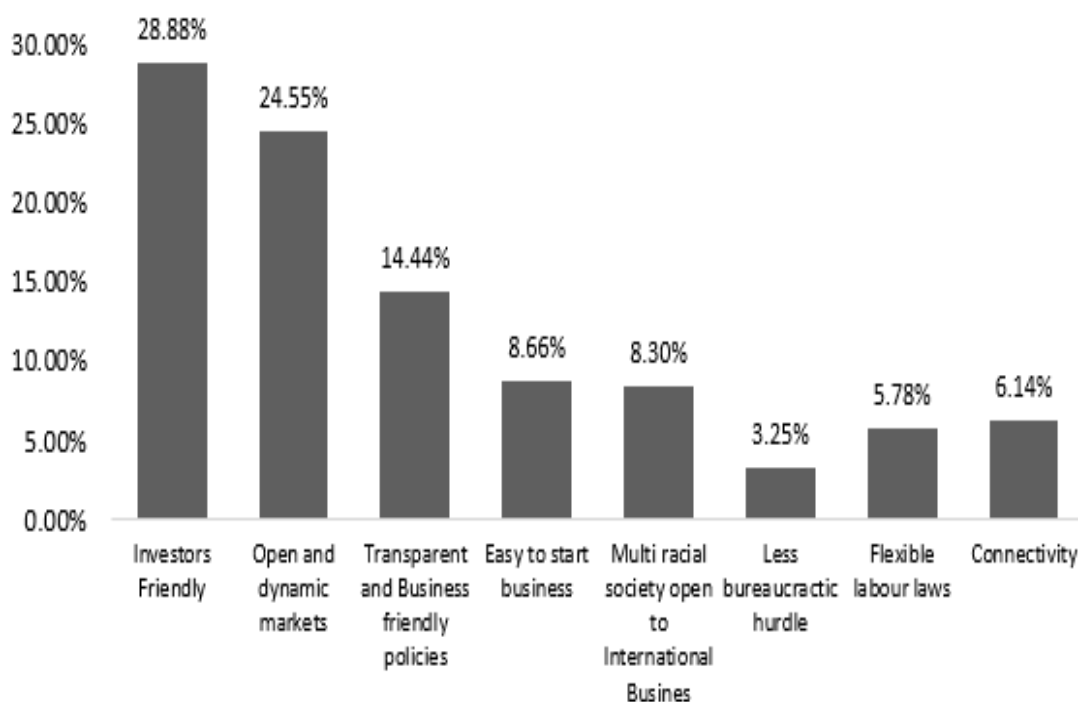


Fig. 6.4 elaborate the Indian industry ease of doing business with ASEAN countries. Country like Indonesia, Malaysia, Singapore and Thailand are preferred trade destination owing to easy “ease of doing business” norms among all the ASEAN countries. Sector wise few industries found Indonesia, Malaysia, Singapore and Thailand “very tough” but these responses were too small to count. On the other hand, country like Lao PDR, Cambodia, Brunei, Philippines, Vietnam and Myanmar termed are tough countries to trade with. Respondent’s response on trading with Philippines was mixed as Philippines is not open to all the sector and country have adopted sector specific approach to deals with different countries. But overall, ASEAN is a favorable destination for all the respondents for various reasons. Fig 6.5 explained various aspects of doing business with ASEAN countries. 28.88 per cent of respondents found ASEAN region as investor friendly, 24.55 per cent believed that ASEAN region is open and dynamic market which provide a good opportunity to traders. Even their policies, largely are transparent and business friendly as 14.44

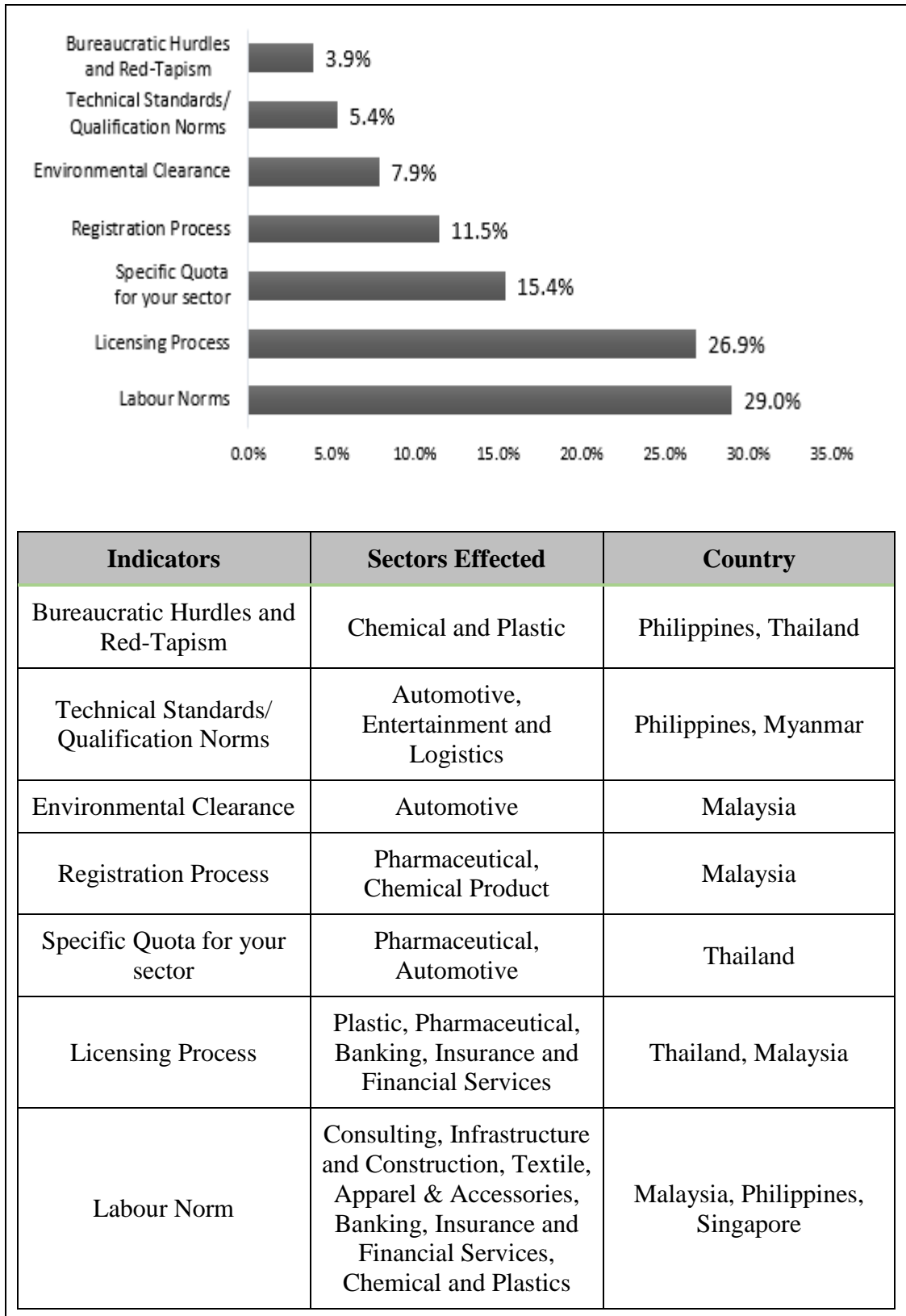
per cent of respondents substantiate this fact. Apart for it 8.66 per cent respondents felt that it is easy to start business with ASEAN countries as compared to rest of the world. Multi-racial society with open and international business is also an aspect which made ASEAN a favorite destination for Indian investors to invest in ASEAN countries. But few aspects need worth attention for trader who want to trade with ASEAN countries, like bureaucratic hurdles, labour laws and connectivity.

Fig. 6.5 : Aspects of Doing Business



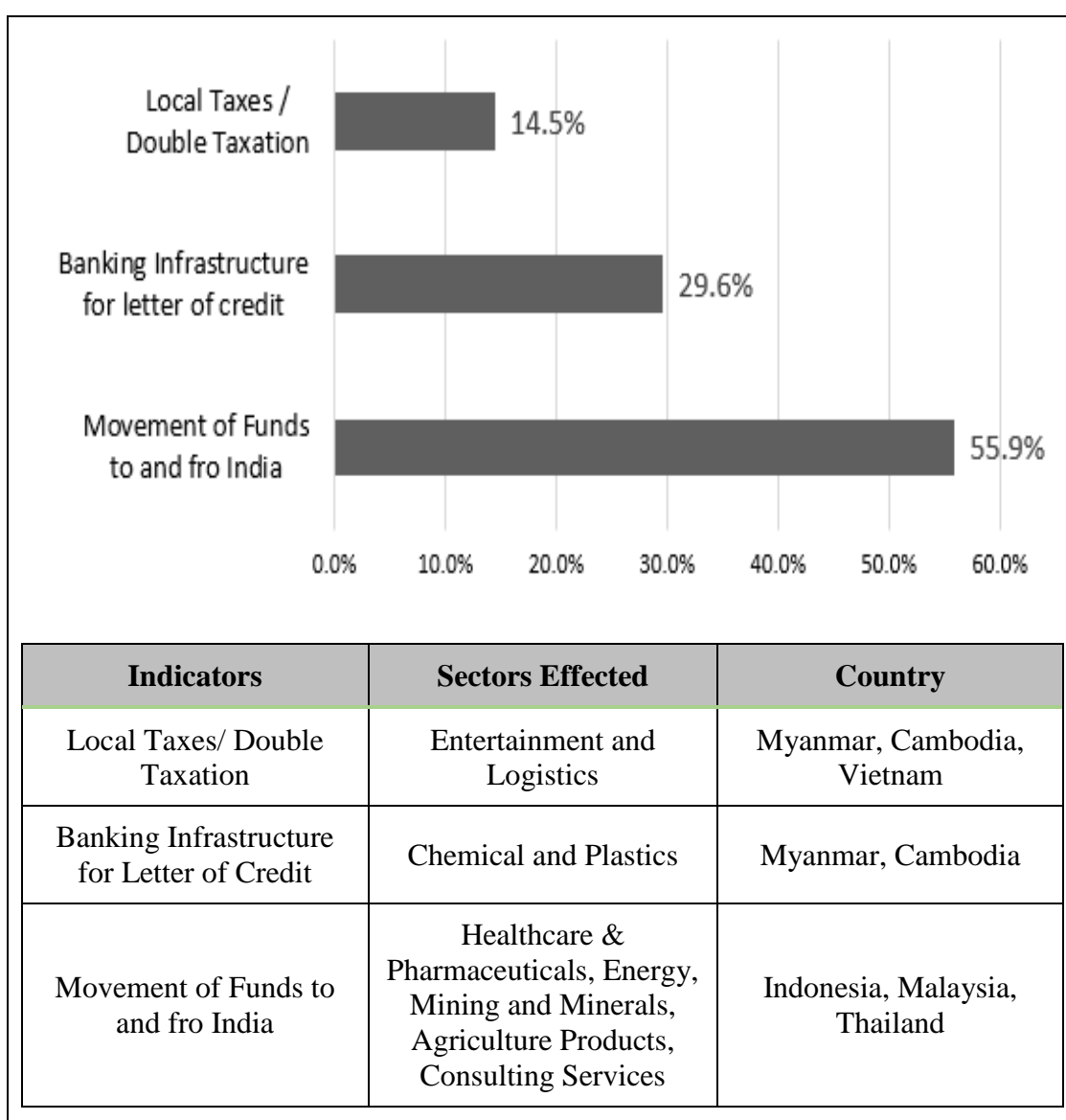
Key issues which affects traders trading with ASEAN countries are labour norms. 29.0 per cent of respondents mentioned labour norms as key issues while trading with ASEAN countries, seconded by Licensing process (26.9 per cent). Figure 6.6 also explained that specific quota under particular sectors also affects their businesses. 11.5 per cent of respondents mentioned registration process as another challenges along with environmental clearance (7.9 per cent). A few respondents also mentioned bureaucratic hurdles and red tapism (3.9 per cent) and Technical Standards/Qualification norms (5.4 per cent) as major key issues while dealing with ASEAN countries.

Fig. 6.6 : Key Issues



Chemical and plastic sector in Philippines and Thailand are most effected with bureaucratic hurdles and red tapism. Automotive, Entertainment and Logistics related sectors found hurdles in technical standards and qualification norms primarily in Philippines and Myanmar. Labour norms related challenge are being faced by Consulting, Infrastructure and Construction, Textile, Apparel & Accessories, Banking, Insurance and Financial Services, Chemical and Plastics sector in Malaysia, Philippines and Singapore. Hence, labour norms, licensing processes, registration, quotas, with countries like Indonesia, Philippines, Thailand and Malaysia, are cited impediments by the respondents.

Fig. 6.7 : Tax Regime Related Issues



Tax regime related issues highlighted by respondents includes movement of funds to and fro India followed by banking infrastructure for letter of credit and local taxes. 55.9 per cent of traders cited movement of funds – to and fro India (see fig. 6.7) as major tax regime related with issue they faced while dealing with ASEAN countries. 29.6 per cent respondents mentioned banking infrastructure as another challenges in case of letter of credit related issues.

Healthcare and pharmaceutical, energy, mining and minerals, agriculture products, consulting services related Indian sectors found movement of funds- to and fro India as major impediments while dealing with Indonesia, Malaysia and Thailand predominately. While letter of credit related challenges are being faced by Chemical and plastic sectors while dealing with Myanmar and Cambodia. Entertainment and Logistic sector primarily, faced local tax related issues while dealing with Myanmar, Cambodia and Vietnam.

Fig. 6.8: Regulatory Environment Issues

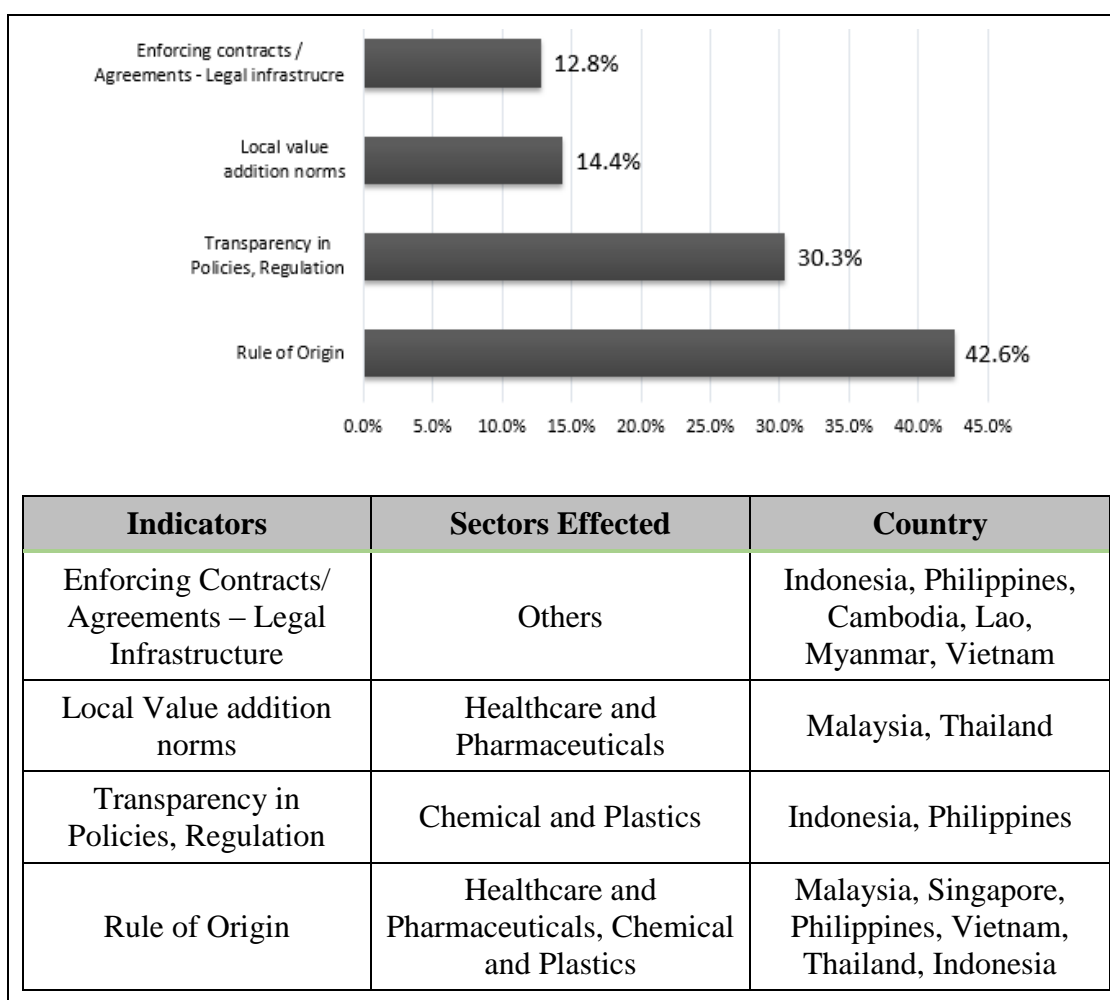


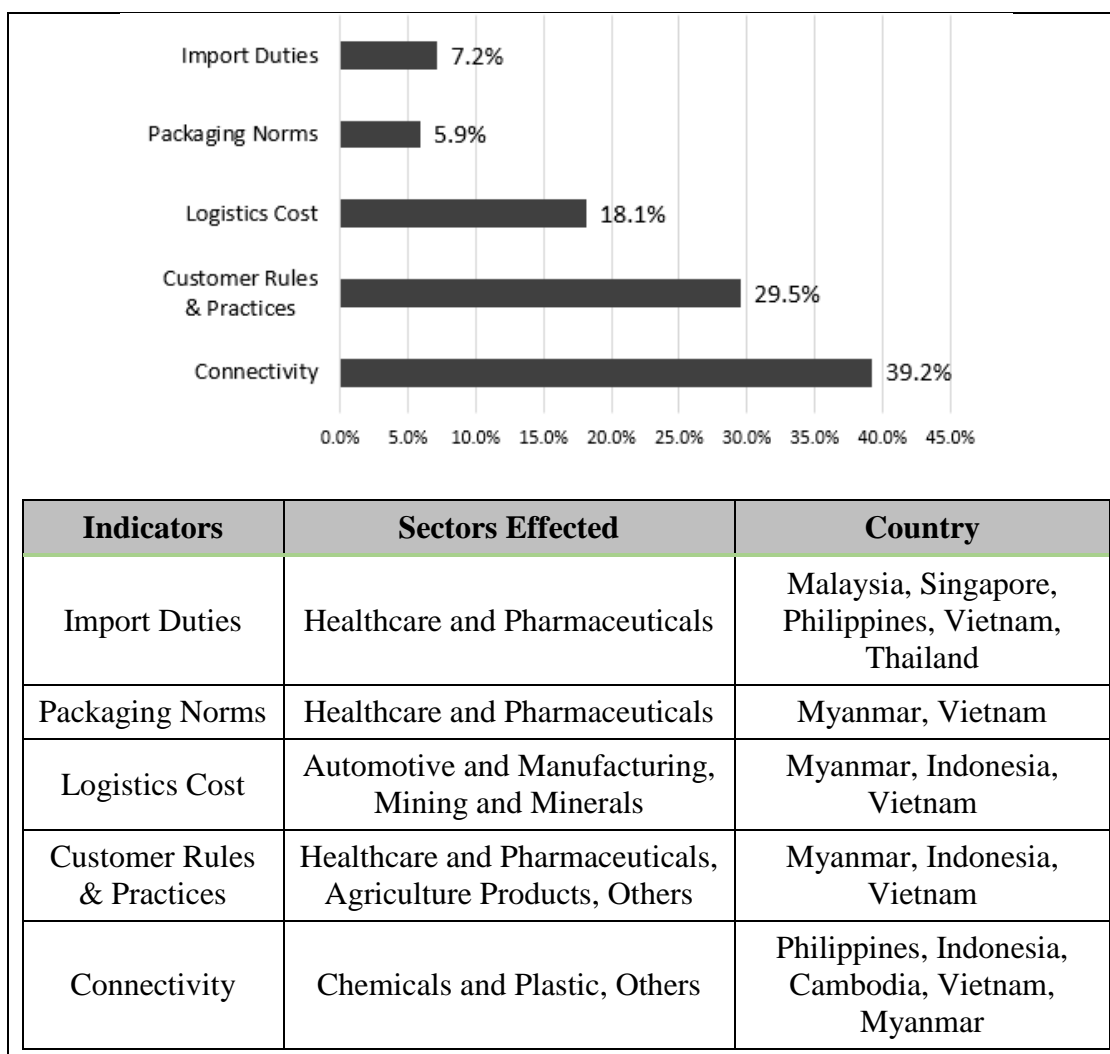
Figure 6.8 explained the regulatory environment related issues faced by Indian traders while trading with ASEAN countries. 42.6 per cent respondent's raise concerned about the rule of origin related policies adopted by ASEAN countries as major regulatory issue followed by transparency in policies and regulation (30.3 per cent). Local value addition norms (14.4 per cent) was also a major concern for traders, as some ASEAN countries are very particular about local value addition to encourage their domestic trade or to provide cover to their domestic output, which ultimately raise the cost of doing business. 12.8 per cent respondents also mentioned enforcing contracts or agreements as one of the prime regulatory environment issues.

Indonesia, Philippines, Cambodia, Lao, Myanmar and Vietnam are the ASEAN countries where sectors like IT services, etc (included in Others category) found enforcing contracts or agreement as major challenge. Healthcare and Pharmaceutical sector found local value addition norms in Malaysia and Thailand as major regulatory environment issue. Healthcare and Pharmaceutical, Chemical and Plastics found rule of origin as major impediments while dealing with Malaysia, Singapore, Philippines, Vietnam, Thailand and Indonesia.

Over 39.2 per cent of the respondents experiencing problems during Sales and Distribution, find aspects of connectivity as major concern, followed by customer rules and practice (29.5 per cent), logistic cost (18.1 per cent). Packaging norms and Import duties (see fig. 6.9) was also mentioned as concern area with respondent's responses of 5.9 per cent and 7.2 per cent respectively.

Connectivity related challenges were faced by Chemicals and Plastic and others with countries like Philippines, Indonesia, Cambodia, Vietnam and Myanmar. Customer rules and practices are affecting healthcare and pharmaceuticals, agriculture products and other with Myanmar, Indonesia and Vietnam. Automotive and manufacturing along with mining and minerals are finding logistic cost as major challenges while dealing with Myanmar, Indonesia and Vietnam.

Fig. 6.9 : Sales/Export/Import Distribution Issues



The fruit of ASEAN-India Free Trade Agreement in Goods are yet to arrive, but the trends of trade with ASEAN countries has been quite promising. The key finding of the survey are as follows:

- i) The general feeling among the Indian traders is that doing business with ASEAN countries is “easy”. 28.88 per cent respondents found ASEAN markets as investor friendly and open and dynamic (24.55 per cent).
- ii) Respondents are doing business mainly with Singapore, Malaysia, Thailand, and Indonesia.
- iii) Among the respondents, majority belongs to Agriculture, Healthcare and Pharmaceuticals, Chemical and plastics.

- iv) 55.9 per cent of the respondents citing movement of fund – to and fro India as major bottleneck, specifically with CLMV (Cambodia, Laos, Myanmar and Vietnam) countries. Banking infrastructure is cited by over 29 per cent of respondents as tax regime issue.
- v) Over 30 per cent of the respondents highlighted labour norms related issues as major challenges followed by licensing process (26.9 per cent). Sector specific quota is also an issue where 15.4 per cent of respondents were agreed upon.
- vi) On regulatory environment issues, almost 42 per cent of respondents found challenges while dealing with rule of origin related norms. Transparency in policies (30.3 per cent) was also an issue mentioned by respondents.
- vii) Almost 40 per cent of the respondents experiencing problems during Sales and Distribution, find related aspects of connectivity, customer rules and practices, logistic cost, as another concern area. This is specifically with regard to Myanmar, Philippines, Indonesia and Vietnam, which are not having direct marine and air connectivity with India.
- viii) As far as expectation from more comprehensive deal with AIFTA respondents expects the following aspects should be covered:
 - a) Avoidance of double taxation.
 - b) Relaxations and flexibility of rules of origin criteria.
 - c) Import duties should match with Chinese counterparts.
 - d) India needs to create the right environment for fast track clearance of projects.
 - e) China-ASEAN FTA (signed in 2010), is more favorable for Chinese exporters than AIFTA under which Indian exporters are unable to qualify change in CTSH (Change in Tariff Sub Heading) code and minimum value addition.

CHAPTER – 7

SUMMARY AND CONCLUSION

During 1990s India pursued a more open and liberal trade-investment regime and her interest in collaborating with its Eastern and South-Eastern neighbors deepened. India and ASEAN member share a long colonial and cultural history, which over the years has helped shape economic and commercial relations between them. This partnership stimulated after the launch of India's 'Look East Policy' during 1990s, which later rechristened 'Act East' in 2015. ASEAN is a group of the developing countries of the world. They constitute 8.8 per cent of the world population, 7.0 per cent of the world trade, 3.6 per cent of the world GDP, and 3.0 per cent of world area. India-ASEAN relations have evolved over time. In 1992, India was Southeast Asian grouping's Sectoral Dialogue Partner which later graduated to Summit level partner in 2002. Further, ASEAN leaders agreed to transform ASEAN into an ASEAN Economic Community (AEC) by 2020.

India's trade relations with ASEAN has strengthened since 1991, as a part of 'Look East Policy'. Her complementary economic structure with ASEAN involves significant mutual gains. India's trade with ASEAN has increased from US\$ 1960 million in 1991 to US\$ 80724 million in 2017 with consistent unfavorable balance of payment in India's account. Increased trade volume along with hostile balance of payments clearly shows the robustness of ASEAN member countries vis-à-vis India's trade. It is worth to note that this trade imbalance is in context of goods only, but in case of services the situation is reverse. India's export with ASEAN grew by CAGR of 16.00 per cent and import grew by 19.9 per cent during 1991-2017. India's share in ASEAN trade was as low as 0.99 per cent in 1991 which rose to 6.12 per cent in 2017, but for the same period ASEAN share in India's trade was 5.26 per cent and 11.10 per cent respectively, which manifest the benefit of Look East Policy becoming visible. Within ASEAN, India exporting ties are more pervasive with Singapore, Indonesia, Malaysia and Vietnam. As regards to the direction of trade, major export partners of India were USA, UAE, and China, whereas ASEAN's export partners were China, USA, Japan and Hong Kong during 2017. 1991 the maximum share of export by India was of Pearls, precious stones,

metals, coins, etc. which was reduced considerably by 2017 from 42.47 per cent it was reduced to 3.51 per cent by 2017 respectively. On the contrary the share of items like Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes increased considerably. In 1991 the share of exports of these items was 2.49 per cent respectively which settled at 24.89 per cent respectively contributing the largest share of percentage. Export of items from Iron and steel sector has increased from 1.37 per cent in 1991 to 6.79 per cent in 2017 occupying the second highest export sector. The share of percentage of items of Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof have reduced from 1991 to 2017 i.e. from 6.65 per cent to 5.34 per cent respectively holding the third position in terms of export. During 1991-2017 the composition of India's export to ASEAN has diversified over the time and has been changing drastically. The overall export from India to ASEAN has decreased from 82.13 per cent share in 1991. The commodities which India import from ASEAN. Overall, India's import from ASEAN nations was of capital goods, which have not changed so far, rather India's import from ASEAN nations diversified over time, but her export remained concentrated to only few commodities. In 1991 the maximum imports were from Mineral and Mineral fuels i.e. 41.04 per cent and in 1995 it reduced to 12.95 per cent. On the contrast in 1995 the imports increased to 16.14 per cent in Animal or vegetable fats and oils and their cleavage products. Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof recorded per cent of imports from ASEAN by India. In 2010 the maximum imports by India were in Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof and Animal or vegetable fats and oils and their cleavage product which continued to be the same till 2017 with an addition of Electrical machinery and equipment and parts thereof. On the other hand, commodities like articles of iron and steel, copper and article thereof, optical, photographic, cinematographic, measuring, checking, precision, etc. apparatus mild down over the time.

Despite encouraging trade statistics still there exists some glaring gap or possible last opportunities between India and ASEAN members, as a few naming Singapore and Malaysia, are inching close to major trading partner with India among 10 member ASEAN community in last two decades. Trade issues along with geo political issues

should be solved together to further strengthening the AIFTA. India should further deepen her service sector presence in ASEAN and reap the benefit of liberal policy of ASEAN and should fervently follow the policy of “Act East.”. India is still considered a highly protected market and tariff rates are higher than international tariff standard. Since 1995 persistent efforts are on to bring down these rates and the tariffs are lowered down to great extent, and still there is room to reduce them further with mutual agreement.

Trends of exports and imports intensity was quite favorable for India-ASEAN trade, but were not equally dispersed, which shows India trade was not properly entwined within ASEAN nations and varied from country to country. But there are many points to ponder upon before arriving at some concrete conclusion, as these nations has few commonalities and large disparities exists as far as there social-economic status are concerned. Hence, there needs are also different. In nutshell, ASEAN markets are opening new opportunities for Indian products in future and a slow and steady approach will bring fruitful results in future. Interestingly, mutual trade intensity index always remained more than desired level as far as India ASEAN trade is concerned.

In context of export intensities, India’s export intensity vis-à-vis ASEAN has been very favorable and it has showing a sign of deepening export intensities over a period of time. In 1991, India’s export intensity stood at 121 against ASEAN and it touched 202 in 2014 and in 2018 it was 205, manifesting the growing trade reliance between India and ASEAN. India’s export intensity among ASEAN member countries was not evenly dispersed and still there is a room of export vis-à-vis Cambodia, Lao PDR, Philippines, and Thailand. India’s import intensity with ASEAN is not as promising as India’s export intensity was, it indicates that role of ASEAN members are biggest importer is yet to become a reality. India’s import intensity with Cambodia, Loa, Myanmar, Philippines and Vietnam is not convincing as yet despite having trade relations with these countries from last more than 25 years.

As regards to trade similarity, export similarity between India and ASEAN is not quoting any positive outlook as there is lot of dissimilarity in their export basket.

Export similarity between India and ASEAN was 33.12 per cent in 1991 which rose to 34.12 per cent in 2000 and despite having AIFTA it was 44.34 per cent in 2018. This is quite pervasive across the ASEAN states. Unlike export pattern, the import pattern of India and ASEAN countries exhibited a high degree of similarity. India's traded goods at the aggregate level were not greatly similar to ASEAN countries and thus not very competitive in the global market.

India's export complementarity with ASEAN were lower than World, and matched up around 62.3 per cent in 2018. India's export complementarity varied across ASEAN states. It was almost 50.0 per cent with Lao, Myanmar, Singapore and Malaysia, indicating the existence of India's high trade potential with these ASEAN member countries. ASEAN export complementarity with India was higher than the World, and matched up around 61.2 per cent in 2018. In nutshell, the bilateral trade between India and ASEAN partner anchored largely on complementary products, though the extent of their prominence varied from country to country. Even with the expansion of trade as one important factor stood out that there is a huge scope for restructuring India-ASEAN trade in alignment with demand and supply conditions prevailing in the trading partner for complementarity products were not traded at all between them, and wherever traded, their market presence was mostly insignificant. The orientation of free trade agreement is not only allowing free movement of goods and services, but to augment competitiveness of trade among trading partners. While studying the competitiveness of trade among India and ASEAN, it was observed that India trade competitiveness has risen but only with few ASEAN countries only. Overall picture of India ASEAN trade at technology level classification pose some given insights, as far as trade competitiveness is concerned. But on the scratch deep at country level data trends are favoring India's decisions to look east. Technology level competitiveness has become favorable against Brunei; where Competitively Positioned items rose to 190 from 59 commodities during two phases. Performance of Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive based product has improved. Technology level competitiveness has also improved against Cambodia, Lao PDR, Malaysia, Philippines, and Thailand. Not only technology based items increased but Competitively Positioned items rose from 131 commodities in Phase 1

to 307 commodities in Phase 2. This enhancement was common across all technology based items be it Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers. Even Emerging Products (Tier II) showed promising result as EP (Tier II) rose to 205 commodities in Phase 2 on comparing with 72 commodities in Phase 1. Products from Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures technology classification showed their presence in Emerging Products (Tier II). India's competitiveness of technology based products also enhanced vis-s-vis Lao PDR and sizable amount of new products found place in Competitively Positioned commodities in Phase 2. Malaysia is one of the prime members of the ASEAN community and share a healthy trade share with India, as far as India- ASEAN trade is concerned. Indian technology based competitiveness has improved significantly. During Phase 1, 737 products were Competitively Positioned, which zoomed to 1652 products and Indian competitiveness improved across all technology based classification including Non-fuel Primary commodities, High skill- and technology intensive manufactures, Medium skill- and technology intensive manufactures, Resource-intensive manufactures, Low skill- and technology-intensive manufacturers, Mineral fuels, Unclassified products. Apart from this Threatened Products also mellowed down but not so significant products were adding up in Emerging Products category but also similar trended posing a positive vibe emerged in case of weakened products. Overall, competitive analysis of India's trade with Malaysia, is posing a sanguine image and posting a positive vibe for Indian producers as far as Malaysian market is concerned. Similar trends were emerging from Philippines also, as Competitively Positioned product rose to 1128 in Phase 2 as compared to 8804 products in Phase 1 but a mild growth found in Threatened Products category which is not a good sign.

Indian products also found a sizeable proportion in Competitively Positioned category in Thailand. But overall, Thailand presenting a mixed bag results while comparing two phases. When Competitively Positioned products increased, Threatened Products also increased but Weakly Positioned items fall down sharply.

India is facing trade competitiveness competition from Singapore and Vietnam though Singapore posing a mixed result where on one way CP items shoot up from 1378 commodities in Phase 1 to 1703 commodities in Phase 2, so does Threatened products which rose to 1413 in Phase 2 from 1002 commodities in Phase 1. Vietnam is appearing to be tough market as Competitively Positioned products fall down to 725 in Phase 2 from 100 products in Phase 1. Threatened Products rose to almost three times and Weakly Positioned products also grow.

Hence, overall on an average based India's trade competition has mellowed down but at country level barring Singapore and Vietnam, rest of the countries proving out to be a good market for Indian products as competitiveness has improved favorably. Emerging Products category also improved and Weakly Positioned products has been falling down. In a nutshell, competitiveness of Indian Products at technology based classification is presenting favorable signal barring few markets but these threat can offset by India's robust service sector. Study also recommend a list of commodities which are having good trade prospects, but so far not traded between them. The identified tradable commodities between India and ASEAN are those in which Revealed Comparative Advantage (RCA) and Revealed Import Dependence (RID) were more than one. The commodities in with India had RCA more than one and ASEAN had RID more than one during 2001-2015 on an average, and thus could be exported from India to ASEAN were bran, sharps and other residues of cereals, whether or not in the form of pellets, coriander seeds, seeds of fennel, juniper berries, ephedrine and its salts, oilcake and other solid residues, whether or not ground or in the form of pellets. Individual ASEAN country-wise, these commodities were as follows: **Lao** – floor covering with coconut fibers, coir, woven whether or not made up, bedspreads and all types of textile materials, human hair, dressed, thinned, bleached, emery, natural corundum, natural garnet and other natural abrasives, dithionites and sulfoxylates, yarn containing predominately, but <85% polyester staple fibers, flat rolled product of high speed steel, compressed asbestos fiber jointing, grinding balls and similar articles for mills, cast, woven fabrics. **Brunei** – turmeric, sandstone, bedspreads, granite and articles thereof, simply cut or sawn, cardamoms, crushed or ground, oils and mints, live, fresh or chilled, not smoked cuttle fish, glass envelopes, shawls, scarves, mufflers, mantillas,

veils, emery, natural corundum, natural garnet and other natural abrasives, whether or not heat-treated. **Cambodia** – granite and articles thereof, simply cut or sawn, dithionites and sulfoxylates, flat rolled products of iron or non-alloy steel, oilcake and other solid residues, carpet tiles or vegetables textile material or coarse animal hair, sacks and bags of jute or other textile bast fiber, woven fabrics of high tenacity yarn, nylon, sodium sulphates, leather further prepared after tanning or crusting, woven fabrics containing predominately synthetic staple fibers. **Indonesia** – human hair, unworked, cumin seeds, oilcake and other solid residues, single cotton yarn, of combed fibers, chlorobenzene, ephedrine and its salts, glass envelopes, emery, dithionites and sulfoxylates. **Malaysia** – turmeric, single cotton yarn, hexachlorobenzene, DDT, cumin seeds, chlorobenzene, live, fresh or chilled, not smoked, cuttle fish, glass envelopes, shawls, scarves, mufflers, mantillas, veils and similar articles, emery, natural corundum, natural garnet and other natural abrasives, dithionites and sulfoxylates. **Myanmar** – Separate chemically defined organic compounds, n.e.s., Single cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight, Human hair, unworked, whether or not washed or scoured; waste of human hair, Granite and articles thereof, simply cut or sawn, with a flat or even surface, Cumin seeds, neither crushed nor ground, Oilcake and other solid residues, whether or not ground or in the form of pellets, Oils of mints, whether or not terpeneless, incl. concretes and absolutes, Multiple "folded" or cabled cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight. **Philippines** – Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis, Opium, Mica waste, Single cotton yarn, of combed fibres, containing $\geq 85\%$ cotton by weight and with a linear, Cathine "INN" and its salts, Granite and articles thereof, simply cut or sawn, with a flat or even surface, Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene, Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated, Dithionites and sulfoxylates (excluding sodium), Dichlorotetrafluoroethanes and chloropentafluoroethane. **Singapore** – Opium, Sandstone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks, Human hair, unworked, whether or not washed or scoured; waste of human hair, Cathine "INN" and its salts, Cardamoms, crushed or ground, Oils of mints, whether or not terpeneless, incl. concretes and absolutes, Ephedrine and its salts, Aldehyde-alcohols, Sacks and bags, for the packing of

goods, of jute or other textile bast fibres of heading 5303, Extracted oleoresins; concentrates of essential oils in fats, fixed oils, waxes. **Vietnam** – Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis, Separate chemically defined organic compounds, n.e.s, Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear, Granite and articles thereof, simply cut or sawn, with a flat or even surface, Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting, High-tenacity yarn of viscose rayon filament (excluding sewing thread and yarn put up for retail, Dithionites and sulfoxylates (excluding sodium). **Thailand** – Castor oil and fractions thereof, whether or not refined, but not chemically modified, Oilcake and other solid residues, whether or not ground or in the form of pellets, Anthranilic acid and its salts, Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola, Multiple "folded" or cabled cotton yarn, of combed fibres, containing \geq 85% cotton by weight, Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated, Dithionites and sulfoxylates (excluding sodium), Flat-rolled products of iron or non-alloy steel, of a width of \geq 600 mm, hot-rolled or cold-rolled, Menthol, Fruits of the genus Capsicum or of the genus Pimenta, dried, neither crushed nor ground.

The commodity not traded in which ASEAN had RCA more than one and India had RID more than one during 2001-2015 on an average, and thus could be exported from ASEAN to India was fresh and dried cashew nuts, dark red meranti, separte chemically defined organic, shelled beans of species "Vigna mungo", non-plasticised poly vinyl chloride, coal, raw silk, media for the recording of sound or of other phenomena, crude palm oil, tropical wood. Individual ASEAN country-wise, the commodities not traded were as follows. **Cambodia** – Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum, Aminohydroxynaphthalenesulphonic acids and their salts, Phosphoric acid; polyphosphoric acids, whether or not chemically defined, Dichloro-tetra-fluoroethanes and chloropentafluoroethane, Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour, Salts of acetic acid (excluding inorganic or organic compounds of mercury), Erythromycin and its derivatives; salts thereof, 1-Naphthylamine "alpha-naphthylamine", 2-naphthylamine "beta-naphthylamine" and

their derivatives, Yarn of viscose rayon filament, incl. monofilament of < 67 decitex, Ethylenediamine and its salts. **Brunei** – Natural gas, liquefied, salts of formic acid, methanol, methyl alcohol, Passenger boarding bridges (excluding of a kind used in airports), Petroleum oils and oils obtained from bituminous minerals, crude, Drilling machines for working metal, not numerically controlled, Spark-ignition reciprocating or rotary internal combustion piston engine, for aircraft, Drill pipe, seamless, of a kind used in drilling for oil or gas, of iron or steel, Image projectors (excluding slide projectors and microfilm, microfiche or other microform readers), Other bars and rods of stainless steel, cold-formed or cold-finished and further worked. **Indonesia** - Fresh or dried cashew nuts, in shell, Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67, Degreased wool, non-carbonised, neither carded nor combed (excluding shorn wool), Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped, Multiple "folded" or cabled flax yarn, Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum, Separate chemically defined organic compounds, Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", Fresh or dried almonds in shell, Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances. **Lao** **PDR** - Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum, Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal), Fresh or dried areca nuts, whether or not shelled or peeled, Mace, neither crushed nor ground, Crude palm kernel and babassu oil, Nutmeg, neither crushed nor ground, Palm oil and its fractions, whether or not refined (excluding chemically modified and crude), Technically specified natural rubber. **Malaysia** – Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped, Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour, Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices, Fresh or dried areca nuts, whether or not shelled or peeled, Unbleached non-coniferous chemical wood pulp, soda or sulphate (excluding dissolving grades), Catecholamine hormones, their derivatives and structural analogues, used primarily as hormones, "Agarbatti" and other odoriferous preparations which operate by burning, Unglazed ceramic tiles, mosaic cubes and similar articles, whether or not square or rectangular, Acetic acid,

Casing and tubing of a kind used in drilling for oil or gas, welded, of flat-rolled products. **Myanmar** – dried, shelled pigeon peas, dark red meranti, light red meranti and meranti bakau wood in the rough, dried shelled beans, Raw skins of sheep or lambs, without wool on, fresh or salted, dried, limed or otherwise preserved, Tropical wood specified in the Subheading Note 1 to this chapter in the rough, Dried, shelled cow peas "Vigna unguiculata", whether or not skinned or split, Dried, shelled leguminous vegetables, whether or not skinned or split (excluding peas, chickpeas, Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, Jute and other textile bast fibres, raw or retted (excluding flax, true hemp and ramie). **Singapore** - Multiple "folded" or cabled artificial filament yarn, incl. artificial monofilament of < 67, Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances, Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices, Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, Cloves, whole fruit, cloves and stems, neither crushed nor ground, Mace, neither crushed nor ground, Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins, Fresh or dried areca nuts, whether or not shelled or peeled. **Thailand** - Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", Media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices, Crude palm oil, Dried, shelled leguminous vegetables, whether or not skinned or split (excluding peas, chickpeas, Cathode ray television picture tubes, incl. video monitor cathode ray tubes, colour, Flat-rolled products of iron or steel, of a width of ≥ 600 mm, cold-rolled "cold-reduced", Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, Tugs and pusher craft, Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes, Dried, shelled beans "Vigna and Phaseolus", whether or not skinned or split. **Vietnam** - Non-plasticised poly"vinyl chloride", in primary forms, mixed with other substances, Single yarn containing $\geq 85\%$ synthetic staple fibres by weight (excluding sewing thread, yarn, Diammonium hydrogenorthophosphate "diammonium phosphate" (excluding that in tablets or similar, Unbleached non-coniferous chemical wood pulp, soda or sulphate (excluding dissolving grades), Natural calcium phosphates and natural aluminium calcium phosphates, natural and phosphatic, Vessels and other floating structures for breaking up, Sewing thread of artificial filaments, whether or not put up for retail

sale, Cinnamon and cinnamon-tree flowers, Tugs and pusher craft, mace.
Philippines - Hexachlorobenzene (ISO) and DDT (ISO) clofenotane (INN), (1,1,1-trichloro-2,2-bis, Opium, Mica waste, Single cotton yarn, of combed fibres, containing \geq 85% cotton by weight and with a linear, Cathine "INN" and its salts, Granite and articles thereof, simply cut or sawn, with a flat or even surface, Chlorobenzene, o-dichlorobenzene and p-dichlorobenzene, Emery; natural corundum, natural garnet and other natural abrasives, whether or not heat-treated, Dithionites and sulfoxylatesm Dichlorotetrafluoroethanes and chloropentafluoroethane.

Both India and ASEAN can reap enormous gains from mutual trade. They have actually benefited from trade with each other. top ten commodities which have the potential and also are actually being exported from India to ASEAN during 2001-2017 namely Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Light oils and preparations, of petroleum or bituminous minerals which \geq 90% by volume, Aluminum, not alloyed, unwrought, Diamonds, worked, but not mounted or set (excluding industrial diamonds), Copper, refined, in the form of cathodes and sections of cathodes etc. but there are other commodities like Frozen, boneless meat of bovine animals, Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns, etc which are being exported but they do not have the potential. On the contrary the commodities like Articles of jewellery and parts thereof, of precious metal other than silver, Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons, Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold), Motor cars and other motor vehicles principally designed for the transport of persons have the potential but are not being exported by India to ASEAN.

Study also revealed that commodities which are have the potential and are actually exported by ASEAN to India or which are imported by India from ASEAN like Copper ores and concentrates, Coal, whether or not pulverised, non-agglomerated (excluding anthracite and bituminous coal), Petroleum oils and oils obtained from bituminous minerals, crude, Parts of telephone sets, telephones for cellular networks or for other wireless networks and but on the contrary there are commodities which

do not have the potential but are actually exported by ASEAN to India like Crude palm oil, Palm oil and its fractions, whether or not refined (excluding chemically modified and crude), Petroleum oils and oils obtained from bituminous minerals, crude, Wire of refined copper, with a maximum cross-sectional dimension of ≤ 6 mm, Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, Technically specified natural rubber "TSNR", Processing units for automatic data-processing machines, whether or not containing in the same, etc. Similarly there are also commodities which have the potential to be exported by ASEAN to India as there is requirement of these commodities in India but they are not exported by ASEAN like Monolithic integrated circuits, digital (excluding cards incorporating an electronic monolithic), Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes, Electronic micro assemblies made from discrete, active or both active and passive components, Natural gas liquefied, Electronic micro assemblies made from discrete, active or both active and passive components etc, Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled, etc.

Till 2017, India's actual export to ASEAN countries was just 12 per cent of their trade potential. Actual trade between India and ASEAN was of US\$ 3308 million against the trade potential of US\$ 28316 million during 2001-2017. In similar way, ASEAN actual export to India is just 11 per cent of their total trade between 2001-2017.

To understand the state of India-ASEAN trade, in addition to secondary data, a primary survey revealed many dimensions of AIFTA, which are as follows:

- The general feeling among the Indian traders is that doing business with ASEAN countries is "easy". 28.88 per cent respondents found ASEAN markets as investor friendly and open and dynamic (24.55 per cent).
- Respondents are doing business mainly with Singapore, Malaysia, Thailand, and Indonesia.
- Among the respondents, majority belongs to Agriculture, Healthcare and Pharmaceuticals, Chemical and plastics

- 55.9 per cent of the respondents citing movement of fund – to and fro India as major bottleneck, specifically with CLMV (Cambodia, Laos, Myanmar and Vietnam) countries. Banking infrastructure is cited by over 29 per cent of respondents as tax regime issue.
- Over 30 per cent of the respondents highlighted labour norms related issues as major challenges followed by licensing process (26.9 per cent). Sector specific quota is also an issue where 15.4 per cent of respondents were agreed upon.
- On regulatory environment issues, almost 42 per cent of respondents found challenges while dealing with rule of origin related norms. Transparency in policies (30.3 per cent) was also an issue mentioned by respondents.
- Almost 40 per cent of the respondents experiencing problems during Sales and Distribution, find related aspects of connectivity, customer rules and practices, logistic cost, as another concern area. This is specifically with regard to Myanmar, Philippines, Indonesia and Vietnam, which are not having direct marine and air connectivity with India.
- As far as expectation from more comprehensive deal with AIFTA respondents expects the following aspects should be covered:
 - a) Avoidance of double taxation.
 - b) Relaxations and flexibility of rules of origin criteria.
 - c) Import duties should match with Chinese counterparts.
 - d) India needs to create the right environment for fast track clearance of projects.
 - e) China-ASEAN FTA (signed in 2010), is more favorable for Chinese exporters than AIFTA under which Indian exporters are unable to qualify change in CTSH (Change in Tariff Sub Heading) code and minimum value addition.

The following policy suggestions may be helpful as the future guidelines for the trade and economic relations between India and ASEAN:

- Both India and ASEAN should exploit their latent trade potentialities as more than 88 per cent of their trade during 2001-2015 was untapped.

- A strong policy intervention is required to boost trade with Malaysia, Indonesia, Myanmar, Thailand and Brunei in order to balance the mutual trade. In the same vein, these ASEAN countries should reciprocate.
- Commodities, not traded so far and in which India has great potential of exports to ASEAN are manmade staple fibre, tools, implements, cutlery of base metal, special woven or tufted fabric, lace, tapestry, tobacco and vegetables plaiting material, etc.
- India should pursue individual FTA with Indonesia along with AIFTA. The economic structure of both the countries is very much complementary which involves significant mutual gains. Further, mutual trade intensity between them has increased considerably over the period.
- Apprehensions about possible deterioration in terms of trade of agriculture products, particularly plantation, tea, spices, coffee and rubber and possible gains to some segments of the manufacturing sectors in India. Therefore, it demands a policy to alleviating the burden falling on those adversely affected.

In the end, it can confidently be concluded that India need to pursue their Look East policy with vigor and should expand the horizon from trade orientation to geo-political orientation and engage individual ASEAN member in a mutually beneficial manner. It will require a herculean effort on the part of commercial diplomacy, coordination between business associations and diplomatic missions. India and ASEAN shared common history and culture, which could act as bridge for both. Both entities should pursue their economic goal to exploit emerging opportunities in trade in the light of new geo-economic scenario.

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HS Commodity Codes- UNCTAD

High skill- and technology intensive manufactures

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Low skill- and technology-intensive manufactures

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HS 2002 Classification by Section

SECTION – I

LIVE ANIMALS; ANIMAL PRODUCTS

Section Notes :

- 01 Live animals.
- 02 Meat and edible meat offal.
- 03 Fish and crustaceans, molluscs and other aquatic invertebrates.
- 04 Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included.
- 05 Products of animal origin, not elsewhere specified or included.

SECTION – II

VEGETABLE PRODUCTS

Section Notes :

- 06 Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage.
- 07 Edible vegetables and certain roots and tubers.
- 08 Edible fruit and nuts; peel of citrus fruit or melons.
- 09 Coffee, tea, mate and spices.
- 10 Cereals.
- 11 Products of the milling industry; malt; starches; inulin; wheat gluten.
- 12 Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder.
- 13 Lac; gums, resins and other vegetable saps and extracts.
- 14 Vegetable plaiting materials; vegetable products not elsewhere specified or included.

SECTION – III

ANIMAL OR VEGETABLE FATS AND OILS AND THEIR CLEAVAGE PRODUCTS; PREPARED EDIBLE FATS; ANIMAL OR VEGETABLE WAXES

Section Notes :

- 15 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes.

SECTION – IV

PREPARED FOODSTUFFS; BEVERAGES, SPIRITS AND VINEGAR; TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES

Section Notes :

- 16 Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates.
- 17 Sugars and sugar confectionery.
- 18 Cocoa and cocoa preparations.
- 19 Preparations of cereals, flour, starch or milk; pastrycooks' products.
- 20 Preparations of vegetables, fruit, nuts or other parts of plants.
- 21 Miscellaneous edible preparations.
- 22 Beverages, spirits and vinegar.
- 23 Residues and waste from the food industries; prepared animal fodder.
- 24 Tobacco and manufactured tobacco substitutes.

SECTION – V

MINERAL PRODUCTS

Section Notes :

- 25 Salt; sulphur; earths and stone; plastering materials, lime and cement.

- 26 Ores, slag and ash.
- 27 Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.

SECTION – VI

PRODUCTS OF THE CHEMICAL OR ALLIED INDUSTRIES

Section Notes.

- 28 Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes.
- 29 Organic chemicals.
- 30 Pharmaceutical products.
- 31 Fertilisers.
- 32 Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints and varnishes; putty and other mastics; inks.
- 33 Essential oils and resinoids; perfumery, cosmetic or toilet preparations.
- 34 Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modelling pastes, "dental waxes" and dental preparations with a basis of plaster.
- 35 Albuminoidal substances; modified starches; glues; enzymes.
- 36 Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations.
- 37 Photographic or cinematographic goods.
- 38 Miscellaneous chemical products.

SECTION – VII

PLASTICS AND ARTICLES THEREOF; RUBBER AND ARTICLES THEREOF

Section Notes :

- 39 Plastics and articles thereof
- 40 Rubber and articles thereof

SECTION – VIII

RAW HIDES AND SKINS, LEATHER, FURSKINS AND ARTICLES THEREOF; SADDLERY AND HARNESS; TRAVEL GOODS, HANDBAGS AND SIMILAR CONTAINERS; ARTICLES OF ANIMAL GUT (OTHER THAN SILK-WORM GUT)

Section Notes :

- 41 Raw hides and skins (other than furskins) and leather.
- 42 Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut).
- 43 Furskins and artificial fur; manufactures thereof.

SECTION – IX

WOOD AND ARTICLES OF WOOD; WOOD CHARCOAL; CORK AND ARTICLES OF CORK; MANUFACTURES OF STRAW, OF ESPARTO OR OF OTHER PLAITING MATERIALS; BASKETWARE AND WICKERWORK

Section Notes :

- 44 Wood and articles of wood; wood charcoal,
- 45 Cork and articles of cork.
- 46 Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork.

SECTION – X

PULP OF WOOD OR OF OTHER FIBROUS CELLULOSIC MATERIAL; RECOVERED (WASTE AND SCRAP) PAPER OR PAPERBOARD; PAPER AND PAPERBOARD AND ARTICLES THEREOF

Section Notes:

- 47 Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard.
- 48 Paper and paperboard; articles of paper pulp, of paper or of paperboard.

- 49 Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans.

SECTION – XI

TEXTILES AND TEXTILE ARTICLES

Section Notes :

- 50 Silk.
- 51 Wool, fine or coarse animal hair; horsehair yarn and woven fabric.
- 52 Cotton.
- 53 Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn.
- 54 Man-made filaments.
- 55 Man-made staple fibres.
- 56 Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof
- 57 Carpets and other textile floor coverings.
- 58 Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery.
- 59 Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use.
- 60 Knitted or crocheted fabrics.
- 61 Articles of apparel and clothing accessories, knitted or crocheted.
- 62 Articles of apparel and clothing accessories, not knitted or crocheted.
- 63 Other made up textile articles; sets; worn clothing and worn textile articles; rags.

SECTION – XII

FOOTWEAR, HEADGEAR, UMBRELLAS, SUN UMBRELLAS, WALKING-STICKS, SEAT-STICKS, WHIPS, RIDING-CROPS AND PARTS THEREOF; PREPARED FEATHERS AND ARTICLES MADE THEREWITH; ARTIFICIAL FLOWERS; ARTICLES OF HUMAN HAIR

Section Notes :

- 64 Footwear, gaiters and the like; parts of such articles,
- 65 Headgear and parts thereof

- 66 Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof
- 67 Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles of human hair.

SECTION – XIII

ARTICLES OF STONE, PLASTER, CEMENT, ASBESTOS, MICA OR SIMILAR MATERIALS; CERAMIC PRODUCTS; GLASS AND GLASSWARE

Section Notes :

- 68 Articles of stone, plaster, cement, asbestos, mica or similar materials.
- 69 Ceramic products.
- 70 Glass and glassware.

SECTION – XIV

NATURAL OR CULTURED PEARLS, PRECIOUS OR SEMI-PRECIOUS STONES, PRECIOUS METALS, METALS CLAD WITH PRECIOUS METAL AND ARTICLES THEREOF; IMITATION JEWELLERY; COIN

Section Notes :

- 71 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation, jewellery; coin.

SECTION – XV

BASE METALS AND ARTICLES OF BASE METAL

Section Notes :

- 72 Iron and steel.
- 73 Articles of iron or steel.
- 74 Copper and articles thereof

- 75 Nickel and articles thereof.
- 76 Aluminium and articles thereof
- 77 *(Reserved for possible future use in the Harmonized System)*
- 78 Lead and articles thereof
- 79 Zinc and articles thereof.
- 80 Tin and articles thereof.
- 81 Other base metals; cermets; articles thereof.
- 82 Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal.
- 83 Miscellaneous articles of base metal.

SECTION – XVI

MACHINERY AND MECHANICAL APPLIANCES; ELECTRICAL EQUIPMENT; PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES

Section Notes :

- 84 Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof
- 85 Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles,

SECTION – XVII

VEHICLES, AIRCRAFT, VESSELS AND ASSOCIATED TRANSPORT EQUIPMENT

Section Notes :

- 86 Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds.

- 87 Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof.
- 88 Aircraft, spacecraft, and parts thereof.
- 89 Ships, boats and floating structures.

SECTION – XVIII

OPTICAL, PHOTOGRAPHIC, CINEMATOGRAPHIC, MEASURING, CHECKING, PRECISION, MEDICAL OR SURGICAL INSTRUMENTS AND APPARATUS; CLOCKS AND WATCHES; MUSICAL INSTRUMENTS; PARTS AND ACCESSORIES THEREOF

Section Notes :

- 90 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof
- 91 Clocks and watches and parts thereof.
- 92 Musical instruments; parts and accessories of such articles.

SECTION – XIX

ARMS AND AMMUNITION; PARTS AND ACCESSORIES THEREOF

Section Notes :

- 93 Arms and ammunition; parts and accessories thereof.

SECTION XX

MISCELLANEOUS MANUFACTURED ARTICLES

Section Notes :

- 94 Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated nameplates and the like; prefabricated buildings.
- 95 Toys, games and sports requisites; parts and accessories thereof
- 96 Miscellaneous manufactured articles.

SECTION – XXI

WORKS OF ART, COLLECTORS' PIECES AND ANTIQUES

Section Notes :

97 Works of art, collectors' pieces and antiques.

98 *(Reserved for special uses by Contracting Parties)* 99 *(Reserved for special uses by Contracting Parties)*

**CHALLENGES FACED BY STAKEHOLDERS WHILE
TRADING SURVEY QUESTIONNAIRE
INDIA-ASEAN**

Questions

1. Name of the firm:

**2. In which of the following sector your firm trade with ASEAN countries
(Multiple choices can be made)**

- | | | |
|----|--|--------------------------|
| a) | Infrastructure & Construction, Real estate | <input type="checkbox"/> |
| b) | Healthcare and pharmaceuticals | <input type="checkbox"/> |
| c) | Entertainment and Logistics | <input type="checkbox"/> |
| d) | Energy, Mining and Minerals | <input type="checkbox"/> |
| e) | Chemicals and plastics | <input type="checkbox"/> |
| f) | Consulting service | <input type="checkbox"/> |
| g) | Automotive and manufacturing | <input type="checkbox"/> |
| h) | Agriculture products | <input type="checkbox"/> |
| i) | Other (please specify)_____ | |

3. Which ASEAN countries your firm deals with (Multiple choices can be made)

- | | | | | | |
|----|-----------|--------------------------|----|-------------|--------------------------|
| a) | Brunei | <input type="checkbox"/> | f) | Singapore | <input type="checkbox"/> |
| b) | Cambodia | <input type="checkbox"/> | g) | Thailand | <input type="checkbox"/> |
| c) | Lao PDR | <input type="checkbox"/> | h) | Myanmar | <input type="checkbox"/> |
| d) | Indonesia | <input type="checkbox"/> | i) | Vietnam | <input type="checkbox"/> |
| e) | Malaysia | <input type="checkbox"/> | j) | Philippines | <input type="checkbox"/> |

4. Which of the following destination is consider most important for Indian industry (Multiple choices can be made)

- | | | | |
|--------------|--------------------------|----------------|--------------------------|
| a) Singapore | <input type="checkbox"/> | f) Vietnam | <input type="checkbox"/> |
| b) Indonesia | <input type="checkbox"/> | g) Phillipines | <input type="checkbox"/> |
| c) Malaysia | <input type="checkbox"/> | h) Brunei | <input type="checkbox"/> |
| d) Thailand | <input type="checkbox"/> | i) Cambodia | <input type="checkbox"/> |
| e) Myanmar | <input type="checkbox"/> | j) Lao PDR | <input type="checkbox"/> |

5. How do you rate the ease of doing business with ASEAN nations?

	Very Easy	Easy	Cannot Say	Tough	Very Tough
Indonesia					
Malaysia					
Singapore					
Thailand					
Myanmar					
Vietnam					
Philippines					
Brunei					
Cambodia					
Lao PDR					

6. Tick the appropriate aspects of doing business with ASEAN. (Multiple choices can be made)

- | | |
|--|--------------------------|
| a) Investors Friendly | <input type="checkbox"/> |
| b) Open and dynamic markets | <input type="checkbox"/> |
| c) Transparent and Business friendly policies | <input type="checkbox"/> |
| d) Easy to start business | <input type="checkbox"/> |
| e) Multi racial society open to International Business | <input type="checkbox"/> |
| f) Less bureaucractic hurdle | <input type="checkbox"/> |
| g) Flexible labour laws | <input type="checkbox"/> |
| h) Connectivity | <input type="checkbox"/> |

7. What are the key impediments you faced while initiating business with ASEAN countries? (Multiple choices can be made)

- a) Labour Norms
- b) Licensing Process
- c) Specific Quota for your sector
- d) Registration Process
- e) Environmental Clearance
- f) Technical Standards / Qualification Norms
- g) Bureaucratic Hurdles and Red-Tapism

8. Tax regime related issues your firm faced while dealing with ASEAN. (Multiple choices can be made)

- a) Movement of Funds to and fro India
- b) Banking Infrastructure for letter of credit
- c) Local Taxes / Double Taxation

9. Regulatory Environment issue your firm faced while dealing with ASEAN countries (Multiple choices can be made)

- a) Rule of Origin
- b) Transparency In Policies, Regulation
- c) Local value addition norms
- d) Enforcing contracts / Agreements - Legal infrastructure

10. Sales / Export / Import distribution issues your firm faced while dealing with ASEAN countries (Multiple choices can be made)

- a) Connectivity
- b) Customer Rules & Practices
- c) Logistics Cost
- d) Packaging Norms
- e) Import Duties

11. Give your comments on India-ASEAN FTA with its impact of India's trade with ASEAN

LIST OF RESPONDENTS
(EXPORT HOUSES- EXPORT TO ASEAN)

1	69 ONE WORLD	marketanalysis@intracen.org
2	AGILE OVERSEAS INC	anand@agileoverseas.in
3	AKI PHARMA	akipharmacy@gmail.com
4	ALLWIN CHEMICALS AND PHARMACEUTICALS	mukundvsanghvi@allwin.co.in
5	AMAR AGRICULTURAL MACHINERY GROUP	kbamar@usa.net,
6	AMD INTERNATIONAL	info@amdtechnologies.com
7	AMY EVENTS	amy@fortheLoveEvents.com
8	ANKIT PULPS AND BOARDS	sales@celluloseankit.com
9	APOLLO LIFE SCIENCES PVT.LTD	apollolifesciences@gmail.com
10	APOLLO VISA LINK & CONSULTANCY (PVT. LTD)	apollotoursntravels.com
11	APTECH	investor_relations@aptech.ac.in
12	ASMI GLOBAL	asmi1@outlook.com
13	ATASI OVERSEAS COSMATICS PVT LTD	atasi@mtnl.net.in
14	AVOCADO GLOBAL	info@avocadoglobal.com
15	AVON CYCLES LTD	avon@avoncycles.com
16	BANSAL TRADING CO.	jatin@bansaltrading.com,
17	BAZAYAN ENTERPRISES	info@bazayan@gmail.com
18	BEE DEE CYCLE INDUSTRIES	aditya@bdwire.com
19	BLUE SHARK SOFTWARE SOLUTIONS	bluesharksoftwaresolutions@gmail.com
20	CHHATARIYA -RUBBER-CHEMICAL-INDUSTRIES	chhatariya@vsnl.com
21	CINNAMON ORGANICS	cinnamon-organics@gmail.com
22	CONSERVEX ENERGY SOLUTIONS PVT LTD	info@conservexenergy.com
23	CREATIVES	praveen@creativeinfotech.co.in
24	DALWADI CERAMIC WORKS	infoceramicindia@gmail.com
25	DHL GLOBAL	dhl_global@yahoo.in

26	DURGA EXPORTS	shridurga80@yahoo.com
27	EFFICA PHARMA	efficapharmasolutions.@yahoo.com
28	ELKAY-CHEMICALS-PVT-LTD	information@elkaysilicones.co.in
29	FIBRE CEMENT SHEET EXPORTS	info@everestind.com
30	FIRE SAFETY DEVICES PVT LTD	info@fcfsd.com
31	G K LEATHER (G K INTERNATIONAL GROUP)	15-16, Leather Complex, Kapurthala Road, Jalandhar, Punjab 144001
32	GIZTIGS	john@giztigs.com
33	GLOBAL TRADE GSM LTD	globaltraders@gmail.com
34	GPS GLOBAL	info@gpsglobalexport.com
35	GPSINFOTECH	gpsinfotech.net@gmail.com
36	GUPTA PACKERS	tusharint@yahoo.co.in, info@guptapackers.in
37	H.M.FASHION INDIA	paul@freightlinkindia.com
38	HERO STEELS LTD	parveensetia@herosteels.com
39	HIGHTECH ENTERTAINMENT AND LOGISTICS	atandtworldwide@gmail.com
40	INDIAN CHEMICAL AND MINERALS	icm.sharma@gmail.com,
41	INVIYA INDORAMA INDUSTRIES LTD	info@indorama.in
42	ION EXCHANGE	export.sales@ionexchange.co.in
43	J C ENTERPRISE	info@jcexpoter.in
44	J C METAL FAB	info@jcmachine.com
45	J V GEMSTONE	info@jvoverseas.in
46	JAIMINI-ELEVATORS-ESCALATORS-PVTLTD	admin@jaiminielevators.com
47	JALAN REFRACTORIES	info@jalanref.com
48	JENI POLYCHEM INDUSTRIES	jeni@jenipolychem.com
49	KANISHKA EXPORTS	info@kanishkaexports.com
50	KARSAM CHEMICAL PVT LTD	info@karsamchemicals.in
51	KARTAR ENGINEERING WORKS	kartarengg@ksbtoplink.com
52	KSK DRILLING AND MINING EQUIPMENT	kskdrillingequipment@gmail.com
53	MANAN STEEL & METALS	kamlesh@manansteel.com
54	MANAN STEEL & METALS	kamlesh@manansteel.com
55	MANNAT TRADING AND EXPORTS (P) LTD.	berets@berets.com

56	MASTER SOFTWARE SOLUTIONS	support@mastersoftwareolutions.com
57	MAXTHERM TECHNOLOGIES PRIVATE LIMITED	commercialmaxtherm.ho@gmail.com
58	MAYUR TRADERS	info.mayurtraders@gmail.com
59	METAL PRODUCTS OF INDIA	sales@chetakttools.com
60	MS SHREENATH CHEMICAL INDUSTRIES	shreenathgroup@gmail.com
61	MULBERRY-CHEMICALS-PVT-LTD	mulberrychemicals@gmail.com
62	NATIONAL AGRO	sales@nationalagro.com
63	NILKAMAL LTD	presales.furniture@nilkamal.com
64	NIKUNJ TRADING COMPANY	nikunjtradings.com
65	OM INTERNATIONAL MACHINE TOOLS	ominternationalmachine@gmail.com
66	ORGANICA AROMATICS (BANGALORE) PVT. LTD.	organicaaroma@gmail.com,
67	P.C. UDYOG	rakesh_pcu86@rediffmail.com
68	PHARMECH-ENGINEERING-CO	pharmech@gmail.com
69	POLARIS FT	nagaraj.prasadh@polarisft.com,
70	PRIDE STONE IMPEX	contact@pridestoneimpex.com
71	PRIME INTERNATIONAL SHIPPING SERVICES	contact@primecargo.com
72	PRISHA IMPEX	vinod@prishaimpex.com
73	PRIVED METALS AND MINERALS PVT LTD	purav.prived@gmail.com
74	PUNK69 CORSET COMPANY	punk69@corsetcompany.en.ec21.com
75	RAMANATHAN SURGICALS	office@vinexports.com
76	RAMSON TYRES	info@ramsonstyres.com
77	REXCA COLOURS AND CHEMICALS	rexza.colors@gmail.com,
78	ROMA ORGANICS	info@romachem.com
79	RO SUN NATURAL PRODUCTS	info@rosungroups.com
80	RYDER SUPPLY CHAIN SOLUTIONS	info@ryder-supply.co.tz
81	SAMUDRA INTERNATIONAL	samudrafoods@gmail.com
82	SANANI GLOBAL TRADE	saagencies_1995@yahoo.com
83	SANGHVI METALS	info@sanghvimetal.com

84	SARDA ENERGY & MINERALS LTD	nagpur@seml.co.in
85	SATURN INDUSTRIES	dinesh@saturnindustries.net
86	SHALIMAR RUBBER & PLASTIC INDUSTRIES	shalimar@shalimarrubber.com
87	SHARAD ENTERPRISES	sharad_enterprises@yahoo.com
88	SHINING SUN	pkbharti01@gmail.com
89	SHREE GANESH TRADERS	contact@ganeshremedies.com
90	SHREE RAM SHARNAM HANDICRAFTS	suthar.bhagaram@gmail.com
91	SKYLINE INCORPORATION	skylinenet@rediffmail.com
92	SOLIDARIDAD	csg-unit@tsrdarashaw.com
93	SOUTH INDIA TEXTILE RESEARCH	training@sitra.org.in
94	SSD SOLUTION CHEMICAL INDIA PVT LTDF	infoourproduct@gmail.com
95	STANLEY PRODUCTS	sbd-customercommunications@sbdinc.com
96	SWAMBE CHEMICALS	swambechemical@gmail.com
97	TAL CONSULTANCY	info@talconsultancy.com
98	TATA CONSULTANCY SERVICES	csg-unit@tsrdarashaw.com
99	TECH MAHINDRA	pranab_choudhury@mahindrasatyam.com
100	TEMBO INTERNATIONAL	tembointernational2016@gmail.com
101	TEXAS ENTERPRISES	info@texas.in
102	TIPSON CYCLES PVT LTD	tipson@tipsonexport.com
103	TRUST EXIM	trust.exim@yahoo.com
104	UNIVERSAL SHIPPING COMPANY	sales@usiship.com
105	USHA INDUSTRIES (INDIA)	ushainds@gmail.com
106	V.K. ENTERPRISE	info@vkenterprise.net
107	V.R.STEEL AND AGRO INDUSTRIES	gautam00912@gmail.com
108	VISION ELECTROMECH	info@visionemc.com
109	VIVEK TRADING COMPANY	info@vivektradingco.com
110	WARYAM STEEL CASTINGS PVT LTD	waryamsteelcastings@yahoo.co.in
111	WHITEWAY ENTERPRISES,	info@primetissues.com
112	YOGESH CYCLES LTD	yogeshcycles@yahoo.com