

**“ASEAN India Free Trade Agreement (FTA) and its Impact on India:  
A Case Study of Fisheries and Selected Agricultural Products”**

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**Abstract**

*The ASEAN India Free Trade Agreement has brought the opportunities to the Indian industry as well as challenges as it has been in force on 1<sup>st</sup> January, 2010. There is no clear cut estimates about the gains which will come to India especially in the sectors of agriculture, plantation and fisheries, however some of the sector which are labour intensive or unorganised will be facing the bigger challenges.*

*This paper attempts to examine the impact of FTA where the tariff is either reduced or eliminated on some of the agricultural products like tea, coffee, rubber and fisheries which have been projected as sensitive for India. The commitment of India & ASEAN under the FTA is analysed along with the trade and tariff data. While doing so the paper looks at some of the empirical evidence to examine the impact of India's unilateral tariff liberalisation Post-Uruguay Round by taking into consideration India's imports, domestic production etc. These results are then extrapolated to examine the tariff liberalisation impact on the domestic economy in view of India's commitment in the ASEAN-India FTA.*

*The study is divided into three parts. The first part deals with the history of India – ASEAN relationship and highlights the features of India – ASEAN FTA. The second part does the case study of fisheries, pepper, tea, coffee, coconut and rubber etc. with regard to FTA and likely impact on India. The Final part gives a broad conclusion of the study.*

*The study first looks at the bilateral trade data and then highlights the salient features of India – ASEAN FTA. It then reviews some of the literary works that have been carried out in this regard. The study thereafter looks at the historical trends of production, prices, trade values and tariffs on identified items at a national level as well as the items in India's tariff liberalisation programme (TLP). In the next section while identifying the position of it also examines the position of these items in ASEAN's TLP so as to assess whether Indian producers will get equal opportunities for preferential market access there or not. A comparison of the unit value price of Indian producers as well ASEAN members has been made to look at their respective competitiveness not only in the international markets but each others' market as well. The study gives its finding at the end summarising where the threats are there and where are the opportunities for Indian producers.*

**JEL Classification: F02, F13, F20, C00, C22**

**Keywords: FTA, India, ASEAN, Tariff, Trade Liberalisation and WTO**

## 1. Background

India's engagement with the Association of South East Asian Nations (ASEAN) started with its "Look East Policy" in the year 1991. ASEAN's political and strategic importance in the larger Asia-Pacific region and its potential to become a major partner of India in the area of trade and investment has encouraged India to seek closer linkages with these countries. Since its beginning, the partnership between India and ASEAN comprising Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam has been developing at quite a fast pace.

India became a sectoral dialogue partner of ASEAN in 1992. Mutual interest led ASEAN to invite India to become its full dialogue partner during the fifth ASEAN summit in Bangkok in 1995. India also became a member of the ASEAN Regional Forum (ARF) in 1996. India and ASEAN have been holding summit level meetings on an annual basis since 2002.

The Free Trade Agreement (FTA) in goods was signed in August 2009 (Bangkok, Thailand) and implementation began from 1<sup>st</sup> January 2010. The Agreement paves the way to mutually eliminate tariffs on approximately 4,500 products in a time bound manner. India and ASEAN have set an ambitious target of achieving bilateral trade of US\$ 50 billion by 2010 and both sides expect that FTA would help achieve this target.

## 2. India - ASEAN Trade and Economic Linkages

The deepening of ties between India and ASEAN is reflected by the fact that the bilateral trade grew by over 23 per cent from US\$ 13.2 billion in 2003-04 to US\$ 57.9 billion in 2010-11. ASEAN has now become India's fourth-largest trading partner after the EU, US and China. A summary of India's Export and Imports with ASEAN is given at Tables 1 & 2.

**Table 1: India's Exports to ASEAN Countries (US \$ Million)**

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Brunei</b>	4.59	5.06	42.94	8.3	10.45	17.64	24.44	25.29
<b>Cambodia</b>	18.6	18.13	24.19	52.12	53.45	46.9	45.54	63.91
<b>Indonesia</b>	1,127.20	1,332.60	1,380.20	2,026.50	2,160.18	2,559.82	3,063.36	6,245.33
<b>Lao PDR</b>	0.43	2.65	5.47	2.38	3.83	9	16.93	14.06
<b>Malaysia</b>	892.76	1,084.06	1,161.86	1,303.29	2,568.84	3,419.97	2,835.41	3,956.98
<b>Myanmar</b>	89.64	113.19	110.7	139.95	185.43	221.64	207.97	334.42
<b>Philippines</b>	321.53	412.23	494.66	582.09	618.95	743.77	748.77	882.74
<b>Singapore</b>	2,124.83	4,000.61	5,425.29	6,064.19	7,371.15	8,444.93	7,592.17	10,302.71
<b>Thailand</b>	831.68	901.39	1,075.31	1,443.22	1,808.79	1,938.31	1,740.16	2,792.80
<b>Vietnam</b>	410.43	555.96	690.68	981.84	1,603.16	1,738.65	1,838.95	2,659.56
<b>Exports</b>	<b>5821.69</b>	<b>8425.88</b>	<b>10411.3</b>	<b>12603.88</b>	<b>16384.23</b>	<b>19140.63</b>	<b>18113.7</b>	<b>27277.8</b>

(Source: Department of Commerce, Government of India)

The bilateral exports grew by over 22 per cent from US\$ 0.4 billion in 2003-04 to US\$ 27.3 billion in 2010-11- suggestion an increase of 4.6 times in absolute value terms. The bilateral

imports grew by over 23 per cent from US\$ 7.4 billion in 2003-04 to US\$ 30.6 billion in 2010-11 – imports too responded in nearly the same manner with nearly 4 times increase.

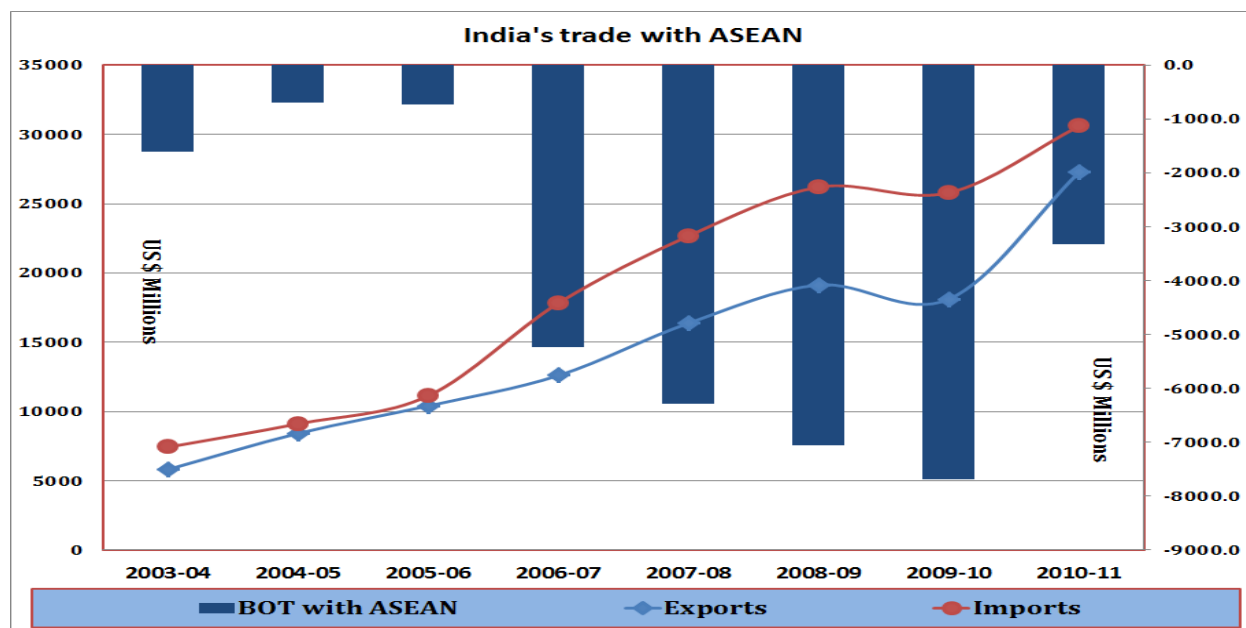
**Table 2: India's Total Imports from ASEAN partner countries (US \$ Million)**

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Brunei	0.3	0.5	0.9	285.0	225.8	397.5	428.7	234.2
Cambodia	0.3	0.2	0.8	1.6	2.9	2.7	5.1	8.0
Indonesia	2122.1	2617.7	3008.1	4165.8	4826.1	6666.3	8656.7	9918.6
Lao PDR	0.1	0.1	0.1	0.4	0.1	0.5	20.1	0.2
Malaysia	2046.6	2299.0	2415.6	5290.7	6007.8	7184.8	5176.8	6523.6
Myanmar	409.0	405.9	781.9	526.0	809.9	929.0	1289.8	1017.7
Philippines	122.1	187.4	235.5	167.3	204.7	254.8	313.1	429.4
Singapore	2085.4	2651.4	3353.8	5485.3	8121.6	7654.9	6454.6	7139.3
Thailand	609.1	865.9	1211.6	1744.3	2302.1	2703.8	2931.5	4272.1
Vietnam	38.2	86.5	131.4	167.5	173.5	408.7	521.8	1064.9
<b>Imports</b>	<b>7433.1</b>	<b>9114.7</b>	<b>11139.6</b>	<b>17833.7</b>	<b>22674.6</b>	<b>26203.0</b>	<b>25798.0</b>	<b>30608.0</b>

(Source: Department of Commerce, Government of India)

Therefore, since 2003 and up to 2011, India had negative balance of trade with the ASEAN countries. It is seen that the India's Balance of Trade (BoT) is in favour of ASEAN countries and the gap is widening every year ever since 2005-2006. India's adverse BoT with ASEAN saw a rise from US \$ 688 million in 2004-2005 to US \$ 7.6 billion during 2009-2010. This can be attributed to the rising bilateral imports from Malaysia, Indonesia, Singapore and Thailand.

**Figure 1: India's bilateral trade with ASEAN as a group is reflected at Chart - 1**



Source: Author's calculation on the basis of DGCIS data provided at website.

The long term BOT momentum is likely to be adverse for India under the AIFTA, however, the trends based on the last year analysed alone suggest a drastic reduction in the negative BOT for India. The reason seems to be a shifting concentration in the trade with China. The shares of China increased from 4.9 % in 2003-04 to 9.5 % in 2010-11, the increasing role of China over the nearly constant shares ASEAN economies - dominated especially in 2002 after the WTO accession.

ASEAN's share in India's trade has been decreasing marginally over the years from 2003-04 to 2010-11 from 10.6 % to 9.3 % respectively. This occurred owing to corresponding but opposite movements in the trends of India's export shares and import shares from ASEAN. As shown in Figure 2, India's total export share going to ASEAN have increased from 9.1 % in 2003-04 to 10.9% in 2010-11, while on the contrary total imports of India from ASEAN has seen a sharp drop from 12.3% in 2003-04 to 8.2% in 2010-11. Clearly, this suggest towards some kind of neutralisation of the negative BOT scenario of India. In spite of this positive phenomenon for India, only detailed sectoral analysis would be able to throw-up the reasons for India's adverse BOT scenario at macro level.

## **2.1 India – ASEAN FTA: Negotiating Background**

For starting the process of their economic engagements, a Joint Study on 'AIFTA (ASEAN Free Trade Area) - India Linkages for the Enhancement of Trade and Investment' was conducted by the Indian Institute of Foreign Trade (IIFT) and the Malaysian Institute of Economic Research (MIER). In its Report in May 2002, the study drew the road map for closer economic relationship between India and ASEAN and suggested a number of steps to increase the trade and investment flows between India and ASEAN which, inter-alia, emphasised the need for having a Regional Trade and Investment Agreement (RTIA) between India and ASEAN as its long-term objective. In the First ASEAN Economic Ministers (AEM) – India Consultations were held in September 2002 in Brunei Darussalam ASEAN-India Economic Linkages Task Force (AIELTF) was established for preparing a Framework Agreement to enhance the ASEAN-India trade and economic cooperation. The Framework Agreement on Comprehensive Economic Co-operation between ASEAN and India was signed on 8<sup>th</sup> October, 2003 during the Second ASEAN-India Summit in Bali, Indonesia.

The Framework Agreement prescribed for starting negotiations for FTA in Goods, and Agreements on Services and Investment. It also suggested having economic cooperation on several areas of mutual interest, including trade facilitation, harmonisation of customs procedures etc. The Framework Agreement prescribed that there should be reciprocity between India and ASEAN – 6 (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand), but India should provide special and differential treatment to the remaining four members of ASEAN i.e. Cambodia, Lao PDR, Myanmar and Viet Nam (new members of ASEAN). It was agreed that India will eliminate tariffs for ASEAN (except Philippines) in 5years, ASEAN – 5 will also do it in 5 years, however, India and Philippines will eliminate tariffs for each other in

10 years. The arrangement with Philippines was due to the insistence of Philippines that it cannot bring its duties to zero in 5 years for India. The new Members of ASEAN were given additional 5 years time frame to eliminate the duties for India. A Trade Negotiating Committee (TNC) was constituted to carry out the negotiations. The ASEAN side was led by Malaysia. The Framework Agreement prescribed that the negotiations on goods be concluded by June 2005, however due to the differences on the issues relating to rules of origin, modalities for tariff reduction/elimination and listing of items in India's Exclusion and Highly Sensitive Lists the negotiations got delayed.

The Framework Agreement prescribed for negotiations to be held in services, investments and other areas of cooperation and to conclude them by 2007, however, discussions could not be held on them in the TNC as most of the time was devoted on goods. India wanted to start the dialogue on these issues, ASEAN however, was keen to conclude the agreement on goods first and then discuss services etc. India will be the likely beneficiary in services and getting investment inflows due to the comprehensive agreement.

It is expected that ASEAN and India will gradually turn their free trade agreement into a Comprehensive Economic Cooperation Agreement (CECA) that will also include services and investment. The agreement has a potential to create a huge market for services like banking, information technology, telecom, education and tourism. The investment agreement is expected to attract foreign direct investment (FDI) from ASEAN members, especially Singapore and Malaysia, and provide opportunity for Indian companies to invest in the ASEAN region in sectors such as pharmaceuticals, coal mining and automobiles.

## **2.2 Salient Features of India ASEAN FTA**

The negotiations on Trade in Goods have been concluded and the Free Trade Agreement (FTA) in goods was signed between India and the 10-member ASEAN during the year 2009<sup>1</sup>. The FTA in goods focuses on tariff liberalisation on mutually agreed tariff lines from both sides and the tariffs would be eliminated on 80% of the tariff lines accounting for 75% of the trade in a gradual manner starting from 1<sup>st</sup> January 2010. The agreement also provides for excluding the domestically sensitive items from the tariff reduction or elimination. India has excluded 489 items (at 6-digit HS) from the list of tariff concessions. There are some 590 additional items (at 6-digit HS) on which India will not eliminate the tariffs but would only give some tariff concessions. Many items from agriculture, textiles, auto, chemicals, palm oil, coffee, tea, pepper etc. fall within this category. Likewise, ASEAN members have also maintained individual similar lists for Indian exports.

### **Tariff Liberalisation Programme**

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<sup>1</sup> During the ASEAN – Economic Ministers (AEM) – India Consultations in Thailand in August 2009

A comparative statement on the tariff liberalisation programme for India & ASEAN is at Table – 3.

**Table 3: Offer under India – ASEAN FTA (at HS 2007)**

Country	HS Code Level	NT-1	NT-2	NT	ST	HST	EL	Total
Brunei	8 Digit	5628	928	6556	673	0	<b>1071</b>	8300
Cambodia	8 Digit	6644	336	6980	1134	19	<b>166</b>	8299
Indonesia	10 Digit	3657	409	4066	3486	552	<b>633</b>	8737
Laos	8 Digit	5711	719	6430	1640	0	<b>230</b>	8300
Malaysia	9 Digit	7461	1536	8997	1551	127	<b>1030</b>	11705
Myanmar	8 Digit	5533	588	6121	1255	0	<b>1250</b>	8626
Philippines	8/9 Digit	5226	1479	6705	600	393	<b>1174</b>	8872
Singapore	8 Digit	-	-	-	-	-	-	-
Thailand	8 Digit	5540	138	6278	958	26	<b>1045</b>	8307
Vietnam	10 Digit	5580	188	6368	661	607	<b>1549</b>	9185
<b>India</b>	<b>8 Digit</b>	<b>7775</b>	<b>1252</b>	<b>9027</b>	<b>1805</b>	<b>40</b>	<b>1297</b>	<b>12169</b>

Source: AIFTA Text

Box 1 below explains the terms used to decide modality for tariff liberalisation.

## BOX 1

### a) Normal Track

(i) Applied MFN tariff rates for tariff lines placed in the Normal Track will be reduced and subsequently eliminated in accordance with the following tariff reduction and elimination schedule:

· **Normal Track 1:**

1 January 2010 to 31 December 2013 for Brunei Darussalam, Indonesia, Malaysia, Singapore and Thailand, and India

1 January 2010 to 31 December 2018 for the Philippines and India

1 January 2010 to 31 December 2013 for India and 1 January 2010 to 31 December 2018 for Cambodia, Lao PDR, Myanmar and Viet Nam

· **Normal Track 2:**

1 January 2010 to 31 December 2016 for Brunei Darussalam, Indonesia, Malaysia, Singapore and Thailand, and India

1 January 2010 to 31 December 2019 for the Philippines and India

1 January 2010 to 31 December 2016 for India and 1 January 2010 to 31 December 2021 for Cambodia, Lao PDR, Myanmar and Viet Nam

(ii) Where the applied MFN tariff rates are at 0 per cent, they shall remain at 0 per cent. Where they have been reduced to 0 per cent, they shall remain at 0 per cent. No Party shall be permitted to increase the tariff rates for any tariff line, except as otherwise provided in this Agreement.

### (b) Sensitive Track

(i) Applied MFN tariff rates above five (5) per cent for tariff lines in the Sensitive Track will be reduced to five (5) per cent in accordance with the following tariff reduction schedules:

1 January 2010 to 31 December 2016 for Brunei Darussalam, Indonesia, Malaysia, Singapore and Thailand, and India

1 January 2010 to 31 December 2019 for the Philippines and India  
 1 January 2010 to 31 December 2016 for India and 1 January 2010 to 31 December 2021 for Cambodia, Lao PDR Myanmar and Viet Nam

(ii) Applied MFN tariff rates of five (5) per cent can be maintained for up to 50 tariff lines.

For the remaining tariff lines, applied MFN tariff rates are reduced to 4.5 per cent upon entry into force of the Agreement for ASEAN 6<sup>2</sup> and five (5) years from entry into force of the Agreement for Cambodia, Lao PDR, Myanmar and Viet Nam. The AIFTA preferential tariff rate for these tariff lines are further reduced to four (4) per cent in accordance with the end-date set in subparagraph (i).

(iii) Applied MFN tariff rates on four (4) per cent of the tariff lines placed in the Sensitive Track, as will be identified by each Party on its own accord and exchanged with other Parties, will be eliminated by:

31 December 2019 for Brunei Darussalam, Indonesia, Malaysia, Singapore<sup>3</sup> and Thailand, and India

31 December 2022 for the Philippines and India

31 December 2024 for Cambodia, Lao PDR, Myanmar and Viet Nam

**(c) Special Products**

(i) Special Products refer to India’s crude and refined palm oil (CPO and RPO, respectively), coffee, black tea and pepper.

(ii) Applied MFN tariff rates for the Special Products will be reduced in accordance with the following tariff reduction schedules:

(iii) Any better offers made by India to other competing oils/fats shall also be duly offered to palm products.

(iv) If the applied MFN tariff rate for CPO and RPO is lower than the preferential tariff under the AIFTA, the lower applied rate shall prevail.

Tariff Line	Base Rate	AIFTA Preferential Tariffs										
		Not later than 1 January										
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	31.12.2019
CPO	80	76	72	68	64	60	56	52	48	44	40	37.5
RPO	90	86	82	78	74	70	66	62	58	54	50	45
Coffee	100	95	90	85	80	75	70	65	60	55	50	45
Black Tea	100	95	90	85	80	75	70	65	60	55	50	45
Pepper	70	68	66	64	62	60	58	56	54	52	51	50

Source: AIFTA text.

**(d) Highly Sensitive Lists<sup>4</sup>**

Tariff lines placed by the Parties in the Highly Sensitive List are classified into three (3) categories, i.e.:

- (i) Category 1: reduction of applied MFN tariff rates to 50 per cent;
- (ii) Category 2: reduction of applied MFN tariff rates by 50 per cent; and
- (iii) Category 3: reduction of applied MFN tariff rates by 25 per cent,

and such tariff reduction shall be achieved by 31 December 2019 for Indonesia, Malaysia and Thailand, 31 December 2022 for the Philippines, and 31 December 2024 for Cambodia and Viet Nam.

**(e) Exclusion List**

Exclusion Lists shall be subject to an annual tariff review with a view to improving market access.

<sup>2</sup>Special arrangements for Thailand apply

<sup>3</sup>Modality for Sensitive Track does not apply to Singapore

<sup>4</sup>Does not apply to Brunei Darussalam, Lao PDR, Myanmar and Singapore.

### **Modification of Commitments:**

The Agreement prescribes for modification of concessions, under which India or ASEAN may modify or withdraw the tariff concessions. However, a compensatory adjustment through negotiations will have to be carried out.

### **Safeguard Measures:**

It also provides for initiating on AIFTA Safeguard measure if due to the tariff reduction/elimination the surge in imports have caused substantially or threaten to cause serious injury to the domestic industry. Under this provision a partial or full withdrawal of preferential tariff treatment can be done.

### **Joint Committee:**

There is a Joint Committee that has been established. The Joint Committee will review the implementation and operation of the agreement as well as supervise and coordinate the works of all other Sub-Committees.

### **Customs Procedures:**

While recognizing the importance of improving transparency, the agreement provides for sharing information and cooperation among the custom agencies. It aims for simplification and harmonization of custom procedures.

### **Dispute Settlement:**

There is a separate agreement between India and ASEAN which prescribe how any dispute relating to the interpretation, implementation or application of the FTA can be resolved.

### **Review:**

The agreement prescribes for a review by the Joint Committee. The first review meeting is to be held within one year from the date of entry into force and then biennially.

### **Rules of Origin:**

The Rules of Origin for a product to enjoy tariff preference that has been mutually agreed is CTSH (Change at 6-digit HS level) with a value addition of 35%. Secondly, since the duties on certain sectors are more or less at the same level the effects of trade creation can be more than trade diversion. The detailed procedure regarding checks and balances before issuance of certificate of Origin has been prescribed. Power has been given to importing country's customs to check and verify the genuineness of compliance with Rules of Origin.



For the purposes of this Rule, the formula for the 35 per cent AIFTA content is calculated respectively as follows:

**(i) Direct Method**

$$\frac{(AIFTA\ Material\ Cost + Direct\ Labour\ Cost + Direct\ Overhead\ Cost + Profit)}{(FOB\ Price)} * 100 \geq 35\%$$

**(ii) Indirect Method**

$$\frac{(Value\ of\ Imported\ Non - AIFTA\ Materials\ Parts\ or\ Produce + Value\ of\ Undermined\ Origin\ Materials,\ Parts\ or\ Produce)}{(FOB\ Price)} * 100 \leq 65\%$$

**3. LITERATURE REVIEW**

India has been a firm believer of rule based multilateral trading system and never used Regional Trade Agreements like FTAs or PTAs as a trade policy instrument for its economic engagement till 2000. However, in view of the fact that RTAs are going to play a major role in international trading system, India started pursuing engagement through RTAs in 2003. It felt that if it does not do so it will be locked-out of the markets of its important trading partners (Ratna 2008).

Supported by economic growth, India has been entering into number of regional economic initiatives both bilaterally and regionally with neighbours and others as well, over the years. The WTO dimension of challenges that India faced under the Article XXIV, the enabling clause and Article V of GATS (services) was evaluated (Farasat, 2008). Research study by (Das and Tewari, 2010) suggests India's north east region would benefit immensely from ASEAN FTA. This would provide enough opportunities for the region by way of new trading arrangement for both agricultural products and industrial goods, creating scope for investments and market. While other studies have discuss how increased preferential market access into the country for partner countries' intermediate products would increase the competitiveness of India's final goods exports (See Pal and Dasgupta 2009)

The roles played by RTAs have seen a change over the years in the content of later agreements. As India getting itself engaged with more number of RTAs it seems to entering into new issues like rules of origin (RoO), modalities of tariff reduction and elimination and Dispute Settlement Mechanism, investment and services (Seshadri, 2009) India had some important strides since the initiation of the reform program in 1991, and has been one of the fastest growing economies in the world. The liberalisation of India has been evolutionary (with inevitable hiccups and backtracking in the interim) rather than revolutionary, even a decade may offer too few degrees of freedom to pass definitive judgment on the longer-term prospects of the Indian economy. (Rajan & Sen, 2002) There may be balancing of Indian interests between the services, manufacturing and agricultural sectors which is seen in the later agreements.

However, in the backdrop of a severe recession of 2008 when the market economies one after the other across the world failed, the AIFTA decision of government was misplaced (Sarkar, 2009). The government on its behalf has contended that it has taken good care to include in the FTA conditions that will safeguard the interests of the domestic producers. Most vociferous had been the agricultural sector which feared the worst that liberalised imports of rubber, tea, pepper, coconut, cashew nut, cardamom, edible oils, and fish, shrimp and such other marine products will undermine the interests of the local producers. (Sarkar, 2009)

Given the market size there was a huge potential in furthering economic relations with ASEAN by way of an FTA. The FTA would provide India with an addition of 600 million people in terms of market. (Batra, 2009). It has been pointed towards a dilution of the Indian stand with its earlier stand on the question of rule of origin (RoO). Further, she pointed towards India's share in ASEAN's trade being very small and the fact that ASEAN's MFN tariff on is very low, so this would not translate into substantial benefits for India.

India's economic links with ASEAN has been an area of interest for researchers and policy makers for almost two decades. Baru and Francis (1997) studied the historical association, evolution, trade relations and investment relations of the two regions. The review highlighted that India and ASEAN would survive the East Asian crisis. Ramananda W. and Jiten (2006) in their work on the insidious financial intrusions in India's north east have thrown light on the sectoral distributions of financial intrusions in NE India, their impact & implications, lack of participation and transparency mechanism, environmental and social concerns. They also gave an account of the ongoing and upcoming projects for the development of the region.

Shekhar (2008) analysed the political and economic rationale for Thai investments in NE India. It was proposed that Thailand's investments in the Northeast would reflect a mutually beneficial scenario wherein the former will gain access to resources, and untapped local and huge Indian market, the latter will have foreign investment, up-to-date technology, large-scale local employment generation, economic integration with the mainstream India and with Southeast Asia, and prospect for peace and prosperity in the region. Thai investment comes as an important external stimulus to the process of industrial development, growth of agricultural sector, and development of infrastructure, which are important pre-requisites for sustained economic development and prosperity in the region. However, there is not enough work on the export potential of items being produced in the NE states of India to ASEAN countries. This paper, thus attempts to look at items of interest to NE India and explore ASEAN markets for them in an FTA scenario.

GTAP analysis on the impacts on welfare by (Nag and Sikdar, 2011) suggests that these gains are more ASEAN than for India for the present. The authors stressed on the higher gains for the bigger members from this group. India will only when the agreement will be fully implemented. The authors suggested that ASEAN may gain from higher 'term-of-trade' effect while India's gain mainly limited to resource reallocation and changes in domestic production activities

reflected through allocative efficiency. India will continue to rely on imports of higher priced imports (yet cheaper than average prevailing price) in several intermediate goods as also final goods. The situation in India would change significantly, if we assume increasing returns to scale in some sector.

Mishra (2007) argues poor returns to cultivation and absence of non-farm opportunities are indicative of the larger socio-economic problems in rural India. This is accentuated by the multiple risks decreasing yield, price, input, technology and credit among others, which the farmers are faced with. The institutional vacuum of organising farmers needs to be addressed through a federation of self-help groups (SHGs) or alternative structures.

Francis (2011) suggested increased access to the Indian market for semi-processed and processed agricultural products and close substitute could adversely impact the Indian agricultural sector. The author also suggested SMEs of India in the food and other agriculture-related products, some intermediate goods and light manufacturing products are also likely to be adversely impacted by this agreement. Also arguing that the liberalisation efforts by the Indian government would encourage the multinationals to undertake production rationalisation, this would be significant for sectors like transport equipments, machinery, chemical and iron and steel. The author warns against a possible neglect of development needs of the domestic agricultural sector and manufacturing base for expected gains in service sector. While Kumar (2007) analysed the implications of FTAs for FDI flows and industrial restructuring in general, Banga and Sahu (2010) and Francis (2011) examined the potential increase in FDI flows pursuant to the coming into effect of a particular FTA in the specific context of intra-industry trade.

#### **4. Methodology**

In order to examine the likely impact of the recently signed India-ASEAN FTA on select items, the following methodology has been used:

- (i) For all the items identified above, we have studied the historical trends of India's tariffs on these products with variables like employment, prices, area under cultivation, production, productivity, exports and imports at national levels to identify the linkages. It thus examines the level of protection the tariffs have provided to the domestic producers over the years on the other factors.
- (ii) The macro level analysis was then further extended to the regional level, by using simple statistical tool of Pearson correlation. The correlation is one of the most common and most useful statistics and is a single number that describes the degree of relationship between two variables.

For this analysis, we used SPSS software to calculate correlations. Data for this exercise was collected from the online portals of the various spices boards and trade data from WITS software.

The formula for the correlation used is:

$$N\sum XY - \sum X\sum Y / \sqrt{[N\sum(X)^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}$$

Where, N=number of observations, X & Y are the variables under study.

Correlation value always lies between -1.0 and +1.0. If the correlation is negative, we have a negative relationship; if it's positive, the relationship is positive.

- (iii) Once the impacts of tariffs were studied for each item/sector, the likely gains and losses of tariff liberalization under FTA on each identified product was examined. This was done by looking at the positions of each product in the tariff liberalisation schedules of India and ASEAN members under the FTA.
- (iv) We also used unit values of exports for each country, so as to gauge the price per unit differentials in these products in each country. This gives some idea on the export prices of the products under study in each country and thus their competitiveness in the international market.
- (v) Unit values are calculated as the ratio of value of exports by a country free on board (f.o.b.) basis to the quantity of its exports (at a 6 digit level of disaggregation). A country having lower unit value of exports in a given product than another country has a price advantage in that product over the other country. Products where unit value of India is lower than that of ASEAN countries, India is price competitive than ASEAN countries (such products may be exported by India to ASEAN at a price per unit cheaper than that in the ASEAN market). Products where unit value of ASEAN countries is lower than that of India, price per unit of India's export is higher than that of ASEAN, and thus India has a price disadvantage vis-à-vis ASEAN. Such products may come in as cheaper imports into India and displace the domestically produced products. These may also have an edge to Indian exports in the international markets. Data for calculating unit values was gathered from WITS.
- (vi) Finally, after studying the potential stakes and opportunities for these products under analysis from the FTA, we have concluded by talking about the potential and perceived threats, and if they are justified; the scope for improvement through export gains, and the lacunae in domestic efficiencies.
- (vii) The paper uses primary data from the sources like Government of India other official sources. It uses UNCOMTADE data and in some cases even the FAO online data. The results are arrived at by using simple statistical tools like correlation matrix and growth rates.

## 5. Limitations

- (i) Limitations of correlations:

Correlation is a central measure within the general linear model of statistics. It can be employed for measurement of relationships in countless applied settings. However, in situations where its

assumptions are violated, correlation becomes inadequate to explain a given relationship. These assumptions mandate that the distributions of both variables related by the coefficient of correlation should be normal and that the scatter-plots should be linear and homoscedastic. The greatest limitation of correlation, one that is often forgotten, is that it does not tell researchers whether or not the relationship is causal. In other words, correlation cannot prove causation. It only shows that two variables are related in a systematic way, but it does not prove nor disprove that the relationship is a cause-and-effect relationship. Only the experimental method can do that.

(ii) Limitations of using unit values:

Unit values are calculated by taking the ratio of export trade value by its quantity. Since these values are annual averages, the results get averaged. Also, since the values are national level average data, it may not truly reflect situation of a state. The trade values taken for our calculations are on f.o.b. and imports are taken on c.i.f., thus there may be data disparity to that extent. A higher/ lower unit value may be due to differences in quality, but this aspect cannot be taken into consideration by the data.

## **PART - II**

### **6. SECTORAL ANALYSIS: INDIAN SCENARIO**

#### **6.1 FISHERIES**

##### **6.1.1 PRODUCTION AND TRADE:**

The importance of Fisheries sector for India could be understood from the fact that India is the 16th largest exporter of fish in the world, comprising about 2.05% of world's total fish exports. China is the largest fish exporter globally, followed by Norway. Thailand (3rd largest) and Vietnam (5th largest) are the two ASEAN countries which are major fish exporters. India is a net exporter of fish. Over the years, India's fish exports have been much higher than the imports. India's total fish exports in the ASEAN market has seen an increase over the years with (Singapore, Thailand, Malaysia and Indonesia being the major destinations), ASEAN's share in India's total fish imports has been high (it went as high as 25% in 2003, coming down to about 7.27% in 2007<sup>5</sup>). Imports from ASEAN are mainly from Singapore, Thailand, Myanmar and Indonesia.<sup>6</sup>

Among Indian states, West Bengal is the largest producer of fish, followed by Andhra Pradesh and Gujarat. Kerala is the fourth largest fish producing state in India (comprising about 9.86% of total fish production as per 2006-07 data).

As per Harmonised System of Nomenclature (HS), fish sector comprises of products falling under Chapter 3 and headings 1604 and 1605. Trade in fish products primarily comprises of products under Chapter 3 (in 2007, Chapter 3 products constituted about 90% of India's exports of fish and fish products to the world and ASEAN and 96% of imports from the world and about 83% of imports from ASEAN). Thus, more than 90% of trade in the fisheries sector in India occurs in products under Chapter 3. Keeping in mind that majority of India's exports and imports

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<sup>5</sup> Calculated from WITS data

<sup>6</sup> Source: Taken from Indiastat web portal, compiled from Ministry of Agriculture, GoI

of fish happens in products that fall under chapter 3 of HS classification, we have based our analysis using tariff and trade data of only lines comprising Chapter 3 only.

### 6.1.2 TRENDS IN PRODUCTION, PRICES, TRADE AND TARIFFS

In order to study the link between tariffs, production, prices and trade in the fisheries sector of India, the historical trends in these variables were captured and are at Table 4.

**Table 4: Trends in the Indian Fisheries Sector**

Year	MFN Tariff (%)	Total fish production (in Lack Tonnes)	Average annual WPI of fish (base year 1993-04)	Exports to world (\$'000)	Imports from World(\$'000)	Exports to ASEAN(\$'000)	Imports from ASEAN (\$'000)
1997	10	53.9	168.7	1198461.3	11463.5	59033.6	262.8
1998	10	53.0	184.2	1028802.0	14800.6	49024.0	335.9
1999	15	56.8	184.4	1171002.5	7883.9	68310.1	723.6
2000	35	56.6	214.9	1372338.1	4590.6	78883.3	415.8
2001	35	59.6	219.7	1235526.6	8768.5	71870.2	873.9
2002	30	62.0	236.1	1350220.6	8103.1	97205.1	912.7
2003	30	64.0	232.4	1275934.4	9868.9	86941.5	2466.5
2004	30	63.0	233.6	1144270.9	15209.5	95288.9	1200.0
2005	30	65.7	260.3	1466661.6	19960.3	99903.1	2421.1
2006	30	68.7	282.8	1478405.0	24491.6	84629.9	1613.0
2007	30	71.2	286.9	1555336.3	24529.5	89279.0	1527.9
2008	30		295.1	1327320.5	57095.1	94510.9	1807.3

Sources: Tariffs and Trade figures have been taken from WITS and Production of fish is from India stat (taken from Ministry of Agriculture and Ministry of Food Processing Industries, GOI) and Price data (taken from India stat) is compiled from statistics released by MoCI, GOI

The MFN tariffs on fish (Chapter 3) have seen a fluctuating trend from 1997 – 2000, but in general an increase in duties. The average MFN tariff on fish products rose from 10% to 15% in 1999 and to 35% in 2000, then again declined to 30% in 2002. Tariffs have thus gone up from 10% in 1996 to 30% in 2008. Over the same period, total fish production (inland plus marine) in India rose from 53.9 lakh tonnes to 71.2 lakh tonnes in 2007. Average annual wholesale price index of fish also went up from 168.7 in 1996 to 295 in 2008. Balance of Trade in fish sector both with the world and with ASEAN was positive and grew over time. The Compound Annual Growth Rate (from 1996-2008) in exports of fish and fish products from India to world is 0.9% while it is 4.4% to ASEAN. Thus, growth in exports of fish to ASEAN is higher than to world. In terms of imports, CAGR of imports of fish from world is 15.7% as compared to 19.2% from ASEAN. Imports of fish from the ASEAN have grown more than imports from world. Looking at bilateral trade with ASEAN, growth in imports of fish from ASEAN has been much higher than the growth in exports to ASEAN.

### 6.1.3: Correlation

In order to link the movement in tariffs with these variables, correlations of each variable with tariffs was calculated. The results are tabulated in the Table 5.

**Table 5: Correlations Matrix: Fish**

		Tariff	Production	WPI	Exports to world	Imports from World	Exports to ASEAN	Imports from ASEAN
Tariff	Pearson Correlation	1.000	.625*	.679*	.612*	.141	.758**	.502
	Sig. (2-tailed)		.040	.015	.034	.663	.004	.096
	N	12.000	11	12	12	12	12	12

Note: \* Correlation is significant at the 0.05 level (2-tailed), \*\* Correlation is significant at the 0.01 level (2-tailed)

### Findings:

From the above output the following can be observed:

- (i) Correlation of production with tariffs is high and positive, and is statistically significant at 5% level. Thus, over the years, a rise in tariffs was also accompanied by a rise in fish production in the country.
- (ii) There is positive, high and statistically significant (at 5% level) correlation between wholesale fish prices and tariffs. This signifies that with an increase in tariffs, average wholesale price index of fish and fish products in India also rose. It may be thus said that higher tariffs have provided opportunity for higher domestic production of fish and fetch high prices.
- (iii) Correlations between rise in tariffs with the imports from world / ASEAN are positive but statistically insignificant. And therefore one cannot claim that the rise in tariffs can lead to reduced imports.

In general one can say that while tariffs in fish sector have risen over time, the production and prices in India have gone up (and so was the import and export). It may be thus presumed that tariff rise has to some extent protected the production and prices in the fisheries sector. What is equally important to note is the fact that import of such items requires fulfilment of other conditions like meeting SPS requirement for imports. This factor has not been taken into account as it is very difficult to quantify them, but they are bigger factor than tariffs for import purposes.

### 6.1.4 LIKELY IMPACT FTA ON FISHERIES SECTOR

In order to gauge the likely impact of the FTA on fisheries sector, it is important to first note the positions of fish products in the schedules of the signatory member countries. There are a total of 120 fish and fish products lines at HS 6 digit. The position of these lines in various country schedules is shown below in Table 6.

**Table 6: Position of Fish Products in schedules of India and ASEAN countries as per FTA**

Category	Number of lines (varies from country to country as it is per their national tariff classification of products)										
	India	Brunei	Cambodia	Indonesia	Lao	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
NT-1	70	120	111		101	118	108	45	-	78	9
NT-2	9			68		2		26	-	2	63
ST	3		8	4			20	6	-	18	14
EL	37		1	18	19		32	43	-	22	

HSL B										-		22
HSL C				30						-		

Source: AIFTA Agreement Text.

India offers 70 lines in NT-1, 9 in NT-2. 37 lines are in the EL. Brunei has placed all fish lines under NT-1, and will thus be offering full tariff concessions in these products. Lao and Malaysia also have placed most of the fish lines under NT-1. Philippines have maximum lines under EL, and is the most restrictive.

It would be important to note that 93% of India's imports of fish and fish products from the world and 81% of imports of fish from ASEAN fall under headings 0301-0306. These products are already allowed to be imported duty free under Asia Pacific Trade Agreement (APTA) which is a preferential trade agreement with Bangladesh, China, South Korea, Lao PDR and Sri Lanka being members. As we know, China is already the largest exporter of fish to the world, while Bangladesh is the largest supplier of fish and fish products to India. Despite this fact, no surge in imports from these countries has been reported causing any irritation to the domestic producers. Secondly, India being a major player for exports of processed fish to the world marketing requires to meet its requirement through imports as well. In fact, for the year 2008 the export import ratio 23:1. Two major reasons that are attributable to this could be a huge production in India at a competitive price and the quarantine measures that are applied for imports. While the huge domestic production keeps the prices in domestic market at a level at which imports are not commercially viable; even if imports are to take place, they shall have to comply with the SPS & TBT requirements of India and after obtaining a quarantine certificate. In this background therefore, all the threats for imports coming from ASEAN at this stage appear a remote possibility.

## 6.2 PEPPER

### 6.2.1 PRODUCTION, AREA AND PRODUCTIVITY

India is the 4th largest producer of pepper (in 2007 India's total pepper production was 69000 MT). Vietnam is the largest producer of pepper followed by Brazil and Indonesia. The productivity (measured as yield in Hg/Ha) in the pepper sector in India has declined over time (from 3108 in 1996 to 2804 in 2008). Yield in India is much lesser than that in pepper production in ASEAN countries. For the year 2008, average pepper sector yield for ASEAN countries was 22485 Hg/Ha as compared to 2804 Hg/Ha in India. Among ASEAN countries, Cambodia has the highest productivity in pepper, followed by Thailand, Vietnam and Philippines.

The producer price (in USD/ ton) in India is low and has been declining over the years (from 3650 in 1998 to 1487 in 2007). Average producer price of pepper in ASEAN countries was 5671 USD/ ton, compared to 1457 in India. Among ASEAN countries, highest producer price is in Brunei.

Out of the total area under pepper cultivation in the country, about 91.75% of the area is in Kerala, 6.4% in Karnataka and just over 1.5% in Tamil Nadu. Thus, Kerala has the largest chunk of area under pepper cultivation in India. In terms of total production of pepper in India, the share of Kerala in the total production of pepper is about 68% followed by Karnataka (24%) and



Tamil Nadu (8%). Thus, although Kerala captures more than 91% of the country's total area under pepper cultivation, its share in pepper production is relatively much lower at 68%.

Share of ASEAN in India's global exports of pepper has increased from 11% in 1996 to 25% in 2008, while ASEAN's share in India's total pepper imports has grown from 35% in 1996 to 55% in 2008. Among ASEAN countries, India's maximum exports of pepper are to Malaysia, while highest pepper imports are from Vietnam. However in terms of trade volume, India has export surplus on pepper, both to the world & ASEAN.

## 6.2.2 TRENDS IN PRODUCTION, PRICES, TRADE AND TARIFFS

Our analysis is based on tariff and trade data on the basis of HS lines of pepper. As per HS classification, pepper is classified as under in Table 7 below. As is shown in Table 8 below, the MFN tariff on pepper in India rose from 30 to 35% in 1999, and to 70% in 2002 (it has been constant at 70% since 2002). Over the period, area under pepper cultivation has gone up from 0.18 Million hectares in 1996 to 0.24 million hectares in 2006. Production has also raised from 56000 tonnes in 1996 to 69000 tonnes in 2006. However, yield has declines from 308 kg/hectare in 1996 to 280 kg/ha in 2006. Over this period, average annual wholesale prices of pepper (in Rs/quintal) have shown a random trend, having shown a rise till 2000, then decline till 2006, and again a rise in 2007-08. (growth in global exports & imports with ASEAN).

**Table 7: Pepper products**

HS code	Description	India's exports to World (\$'000)	India's imports from world (\$'000)	India's exports to ASEAN (\$'000)	India's imports from ASEAN (\$'000)
090411	pepper neither crushed nor ground	94,989.1	36,792.1	5,237.5	17,720.7
090412	pepper crushed or ground	25,895.5	12.7	307.0	11.504
090420	fruit of genus capsicum	276,521.9	1,364.2	110,766.9	87.735

Source: Descriptions as per ITC HS, trade data from WITS(for year 2007)

The Compound Annual Growth Rate (from 1996-2008) in exports of pepper from India to world is 6.9% while it is 24.4% to ASEAN. Thus, growth in exports of pepper to ASEAN is much higher than to world. In terms of imports, CAGR of imports of pepper from world is 18.3% as compared to 16% from ASEAN. Imports of pepper from the world have grown more than imports from ASEAN. Looking at bilateral trade with ASEAN, growth in exports of pepper to ASEAN has been much higher than the growth in imports from ASEAN.

**Table 8: Table on Tariffs, Area, Yield and Wholesale Prices**

Year	Tariffs (MFN)	Area ('000 hectares)	Production ('000 tonnes)	Yield (kg/hectares)	Annual average wholesale pepper prices (RS per Quintal)*	India's total exports of pepper (\$'000)	India's total imports of pepper (\$'000)	India's exports of pepper to ASEAN(\$'000)	India's imports of pepper from ASEAN(\$'000)
1996	30	180.3	55.6	308	211.5	171548.3	5189.0	19171.6	1837.1

1997	30	181.5	57.3	316	371.6	168171.2	7788.7	7775.5	5292.8
1998	30	239.8	75.7	316	503.6	181724.3	14465.7	6913.5	5311.9
1999	35	195.6	59	302	505.9	218431.8	11918.7	8788.5	4246.1
2000	35	213.9	63.7	298	546.7	125276.7	14007.1	5768.3	6674.6
2001	35	219.4	62.4	285	291.5	91914.8	12670.0	4589.6	8138.7
2002	70	216	64	296	238.9	94174.5	26472.5	5727.0	5941.2
2003	70	233.4	73.2	314	225.3	91223.8	23527.7	7483.2	12803.2
2004	70	228.3	73	320	203.7	123694.8	21262.6	24067.7	13984.0
2005	70	260.2	92.9	357	181.6	124279.4	28622.0	27253.0	15660.8
2006	70	246	69	280	232.9	194238.7	33771.4	49986.4	16585.6
2007	70				355.8	397406.5	38169.0	117553.0	17819.9
2008	70				386.6	349913.9	49537.4	86199.3	26975.4

Sources: Tariffs and Trade figures are taken from WITS and variable like Area, Production, Yield are taken from Indiastat (Compiled from the statistics released by: Spices Board, Ministry of Commerce & Industry & Ministry of Agriculture, GOI), Prices are compiled from the statistics released by MoCI, GoI

### 6.2.3: Correlation

In order to gauge the movement in the above defined variables with tariffs, their correlations were calculated with respect to tariffs by using the methodology explained in earlier. The correlation matrix for all variables under study in the pepper sector with tariffs is at Table 9

**Table9: Correlation Matrix: Pepper**

		Tariffs (MFN)	Area ('000 hect)	Production ('000 tonnes)	Yield (kg/hect)	Annual average wholesale pepper prices (RS per Quintal)	India's exports of pepper to world (\$'000)	India's imports of pepper from world (\$'000)	India's exports of pepper to ASEAN (\$'000)	Imports of pepper from ASEAN (\$'000)
Tariffs	Pearson Correlation	1.000	.597	.527	.207	-.730**	.193	.805**	.536	.728**
	Sig. (2-tailed)		.068	.118	.565	.007	.548	.002	.073	.007
	N	12.000	10	10	10	12	12	12	12	12

Note: \*\* Correlation is significant at the 0.01 level (2-tailed); \* Correlation is significant at the 0.05 level (2-tailed).

### Findings:

1. Correlation between tariffs and imports of pepper is positive, high and statically significant at 1% level. Thus, with rise in tariffs, imports of pepper from world and from ASEAN have also gone up. This means that tariff protection has not limited imports in pepper, taking into account the fact that tariffs over the years have hone up.
2. Correlation between average annual wholesale price of pepper and tariffs is negative, large and statistically significant at 1% level. In view of the part that average wholesale price of pepper has fallen over the years, while tariffs were rising, it would signify that higher tariffs have not been able to protect prices in pepper sector.

3. Correlations of area, production and yield are positive but low and statistically insignificant. However, it broadly shows that over the years, with rise in tariffs, area under pepper cultivation, production and yield have gone up.

We can conclude in case of pepper that in spite of rising tariff protection, imports of pepper from the world have been rising and domestic pepper prices have been falling. Tariff, thus has not acted as a good measure of protection for the sector.

#### 6.2.4 LIKELY IMPACT OF FTA ON PEPPER

We have seen above that in the pepper sector, the economic rationale that higher tariffs will protect domestic industry and producers by raising domestic prices / maintain higher prices have not been historically proved to be true. Tariffs have neither limited imports nor protected prices. We can therefore not link tariffs with the protection of domestic pepper sector/industry.

However, given the fears of domestic industry regarding negative impact of the recently signed ASEAN – India FTA, it is important to look into the price of pepper products as well as their positions in the schedules of India and ASEAN countries.

##### *Composition of pepper products in India's pepper trade*

Majority of India's pepper exports (more than 70% of pepper exports to world and 95% of pepper exports to ASEAN) is in HS 90420 (fruits of genus capsicum), while almost entire (more than 96%) of pepper imports by India are taking place in HS 90411 (pepper neither crushed nor ground). Thus, HS 90420 is the pepper product that has maximum export interest (India has a large and positive BOT in this product), while HS 90411 is the pepper line that is of maximum import interest. HS 91411 has a positive BOT for India with world, but a negative BOT with ASEAN.

For studying the composition/weightage of pepper lines at 6 digit HS in India's trade, it is essential to compare the prices at which these products are traded in the international market. This will indicate the price competitiveness of India vis-a-vis ASEAN on pepper products. For this, we calculated average unit values of pepper products (at HS 6 digit) exported by India and by ASEAN countries.

A Comparison of average unit values (price per unit) of pepper products exported by India and ASEAN is given in the Table 10:

**Table 10: Comparison on UVs**

Product	Description	India	Brunei	Indonesia	Malaysia	Phillipines	Singapore	Thailand.	Vietnam.
90411	Pepper not crush. or	0.0021		0.0021	0.0022	0.0019	0.0025	0.0023	0.0016

	ground								
90412	Pepper crushed or ground	0.0016		0.0018	0.004		0.0035	0.0011	0.0022
90420	Fruits of genus capsicum	0.0011	0.0011	0.0013	0.0003	0.0016	0.0013	0.0021	0.0026

*Source: compiled by authors; based on UN COMTRADE database*

From the table above, we can see that Philippines and Vietnam have a better UV than India on HS 90411, Thailand more competitive on HS 90412, and Malaysia and Brunei on HS 90420. Since maximum pepper imports of India from ASEAN are in HS 90411, there is potential threat that pepper imports from Indonesia, Philippines, Vietnam (which have a price competitive advantage to India) might displace domestically produced pepper (neither crushed or ground HS 90411). Also, since maximum exports of pepper is on HS 90420 (fruits of genus capsicum), India has a price competitive advantage in exporting this product to ASEAN countries (except in Malaysia and Brunei where this is cheaper).

However, these price differentials per unit matter only when a country allows its import at zero duty in the FTA. We need therefore to see the position of these products in the schedules of member countries that have signed the FTA. The position of pepper in India's as well as ASEAN member's schedules is at Table 11.

**Table 11: Relative Position of Pepper in AIFTA**

6 Digit HS	DESCRIPT ION	India	Brunei	Cambodia	Lao	Indonesia	Malaysia	Myanmar	Philippines	Singapore	Thailand
90411	Pepper, long	SP	NT-1	NT-1	ST	NT-1	NT-1	NT-1	NT-1, HSLC	Free	EL
90412	Crushed or ground	EL	NT-1	NT-1	ST	NT-1	NT-1	NT-1	EL	Free	EL
90420	Chilly- fruit of genus capsicum	EL	NT-1	ST	ST	EL	NT-1	EL	EL	Free	

*Source: AIFTA official documents*

The present base rate for tariff reduction for pepper is of 70% and it will be reduced down to 50% by the end of December 2019 on only one item of HS 90411. On rest items India has not offered any tariff reduction. As calculated in Table 8, compared to India's UV of exports, Philippines is 10.5% cheaper and Vietnam is 31.25% cheaper. Therefore, even when India will reduce its duties for ASEAN to 50% in another 9 years, as per the present UV the tariff of 50% will provide adequate protection to Indian producers in coming years as it would nullify the price UV advantage to ASEAN members.

The export side show that India's major export item in HS - 90420, which is in the Normal Track for Brunei, Malaysia and is free for Singapore. Therefore, the FTA will provide a greater an opportunity to enhance India's exports ASEAN on this item.

### **6.3 TEA**

#### **6.3.1. PRODUCTION, AREA ANF PRODUCTIVITY**

India is second largest producer of Tea in the world (in value terms the production in 2007 was 1.03 Bn USD; and 0.95 Million Tonnes in quantity terms).<sup>7</sup> China is the largest producer of tea in the world. Among ASEAN countries, Vietnam (6th largest producer, 0.17 Bn USD production in value and 0.16 Million tonnes in quantity terms) and Indonesia (7th largest producer globally, with 0.16 Bn USD production in value and 0.15 Million tonnes in quantity terms) are large tea producers.

In terms of producer price, India's producer price of tea is much lower than the producer price of tea in other ASEAN countries (in 2006, producer price of tea in India was 324 USD). The producer price of tea in India has grown over the years (from 184 in year 2000 to 324 in 2006).

In terms of productivity, India's yield of tea (in hectogram per hectare) is higher than that of most ASEAN countries (only Malaysia is superior to India in terms of yield of tea). India's yield in tea sector was 16986 Hg/Ha in 2008, compared to ASEAN average of 8802Hg/Ha.

Among Indian states, Assam is the largest producer of tea (comprising about 49.7% of total tea production), followed by West Bengal (23.7%) and Tamil Nadu (17.3%). Kerala produces about 7.16% of tea in the country. Highest employment in tea cultivation is in the state of Assam (61% of total employment in tea cultivation), followed by West Bengal (24.5%), Tamil Nadu (7.5%) and Kerala (5.5%).

#### **6.3.2 TRENDS IN PRODUCTION, PRICE, TRADE AND TARIFFS**

India is 5th largest exporter of tea (0.45 Bn USD in value terms in 2007). Sri Lanka is the largest tea exporter in the world, followed by Kenya, China and . India's share in total global exports of tea is 9.11%. Among ASEAN countries, only Vietnam (Rank 10) is a large exporter of tea in the global market (USD 0.13 Bn in value terms). Share of ASEAN in total global tea exports is 3.41%. Among ASEAN countries, India's tea exports are highest to Cambodia, Thailand, Singapore and Philippines. India's imports of tea from ASEAN are mainly from Indonesia and Vietnam. India has been a net exporter of tea to the world historically (with a positive BOT), though it has been a net importer with ASEAN in some years.

As per HS classification, the lines which fall under tea sector include the following (Table 12):

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<sup>7</sup> India stat web data based on auction prices.

**Table 12: HS Tariff Codes Selected**

HS Code	DESCRIPTION
090210	Green tea in packets not exceeding 3 kg
090220	Other green tea(not fermented)
090230	Black tea(fermented) & partly fermented tea in immdte packing of a content not exceeding 3 kg
090240	Other black tea/other partly fermented tea
210120	Extracts essences & concentrates, of tea/mate & preparations with a basis of these Extracts, essences or concentrates or with a basis of tea/mate

**Source:** Descriptions as per International Trade Classification, Trade data taken from WITS

Almost 75% of India's tea exports and imports of tea are in HS 90240 (other black tea). HS 90230 (black tea fermented) also comprises more than 10% of imports and 16% of exports of tea by India. Thus, in terms of weightage, almost 90% of India's trade in tea sector is taking place in HS 90230 and HS 90240.

In order to get an idea about the performance of tea sector in India over the last decade, we have tried to study the trends production, area, yield, employment, exports and imports, along with the movement in tariffs on tea products. Since more than 95% of India's trade in tea sector is under heading 0902, our analysis is based on tariffs and trade data only for lines under heading 0902. The performance of chosen variables is at Table 13:

**Table13: Trends in Production, Prices, Tariffs and trade in Tea Sector**

YEAR	Tariff MFN (0902 HS line) (%)	Production (In ' 000. Kg.)	Area (In Hectares)	Avg. Yield (In Kg./Hect.)	Avg. no. of workers employed ('000)	Avg. (Auction) prices in Rs./kg	India's tea exports to World (\$'000)	India's tea imports from World (\$'000)	India's tea exports to ASEAN (\$'000)	India's tea imports from ASEAN (\$'000)
1996	10	780140	431204	1809	1013	48.77	284273.8	1747.6	1349.9	828.8
1997	10	810031	434294	1865	763	66.89	495655.3	4780.2	1329.7	1925.0
1998	10	874108	474027	1844	895	76.43	513106	15423.3	986.2	9378.0
1999	15	825935	490200	1685	853	72.79	405949.1	5927.2	895.6	2105.9
2000	15	846922	504366	1679	903	61.71	357668.3	7256.1	1860.7	5376.4
2001	70	853923	509806	1675	322	61.66	422932.2	11336.9	2192.0	6659.9
2002	100	838474	515832	1625	666	55.96	324293.5	26693.3	1983.0	12082.0
2003	100	878129	519598	1690	615	56.03	313381.2	13356.8	3862.2	3243.7
2004	100	892965	521403	1713	691	64.54	381623.9	31310.5	3656.4	15346.9
2005	100	945970	555611	1703	626	58.05	385483.1	24166.9	3322.1	6245.8
2006	100	981800	567020	1732	422	66.01	415286.8	28773.9	23196.2	10312.1
2007	100	944680	567999	1663		67.4	433340.1	29285.3	14185.8	4181.7
2008	100	980820	-				560493.5	40300.9	7249.1	7725.1
2009										

*Sources: Tariffs and Trade are taken from WITS and for variable like Production, Area, Yield and Prices taken from Indiastat (compiled from Tea Board of India) ; Employment is taken from compiled from Indiastat (taken from Ministry of Labour and Employment, GoI)*

It would be seen that the tariffs on tea have risen over the years (they went up from 10% to 15% in 1999, 70% in 2001 and 100% in 2002, and since then maintained at 100%. The rise in the

duty of tea was mainly attributable to the fact that India offered limited tariff concession to Sri Lanka under the bilateral FTA (at 7.5% as against the then MFN Duty of 15%). This concession was allowed under a fixed quota of imports of tea (2.5 million tonnes per annum) under FTA; but it created lot of hue and cry from some states which were tea producers. As in case of ASEAN FTA, the largest protest came from Kerala. The Government of India, thereafter raised the duty, but maintained the preference for Sri Lanka.

Production in the sector has also gone up (from 0.78 Bn kgs in 1996 to 0.98 Bn in 2008) and the area under cultivation also saw a rise from 0.43 million hectares in 1996 to 0.56 million hectares in 2007 in India. However, the average yield in the sector has fallen over the period, from 1809 kgs/hectare in 1996 to 1663 kgs /hectare in 2007. Also, the average number of persons employed in the tea plantations in India has declined from 1013000 in 1996 to 422 in 2006. Average annual auction prices of tea in India have risen (from 48.7 Rs/kg in 1996 to 67.4 Rs/kg in 2007). The Compound Annual Growth Rate (from 1996-2008) in exports of tea from India to world is 5.8% while it is 15% to ASEAN. Thus, growth in exports of tea to ASEAN is higher than to world. In terms of imports, CAGR of imports of tea from world is 29.9% as compared to 20.4% from ASEAN. Imports of tea from the world have grown more than imports from ASEAN. However, looking at bilateral trade with ASEAN, growth in imports of tea from ASEAN has been much higher than the growth in exports to ASEAN.

In order to understand the link between tariffs and other variables explaining the performance of tea sector over this period, we have looked at the correlations of each variable with tariffs. This has been shown in table 14:

**Table 14: Correlation Matrix**

		Tariffs	Production	Area	Yield	Employment	Prices	World exp	World imp	ASEAN exp	ASEAN imp
Tariffs	Pearson Correlation	1.000	.724**	.831**	-.622*	-.727*	-.256	-.062	.822**	.516	.516
	Sig. (2-tailed)		.005	.001	.031	.011	.422	.842	.001	.071	.071
	N	13.000	13	12	12	11	12	13	13	13	13

Note \*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed).

### Findings:

In view of the above results, the following observations can be made:

- (i) Correlation between production and tariffs is positive, large and statistically significant at 1% level. This shows the rise in production of tea with rising tariffs.

- (ii) Correlation of area under cultivation with tariffs is positive, large and statistically significant (at 1%) level. Thus, Area of tea cultivation has also gone up over the years when tariffs rose.
- (iii) Correlation between yield and tariffs is negative and statistically significant at 5% level. Over the years, yield in tea sector declined while tariffs rose. Thus, tariff rise did not protect the productivity in the sector.
- (iv) Correlation of employment with tariffs is large, negative and significant at 5% level. Thus, over the years, with increasing tariffs, average number of people employed in the tea sector has declined.
- (v) Imports of tea from the world have gone up (shown by positive and large correlation, at 1% level of significance). Tariff hike has thus not been successful in limiting imports of tea into India.
- (vi) Average auction price of tea has also fallen (shown by negative correlation) though the value is not high and is statistically not significant. It may still be useful to broadly gauge that increase in tariffs have not protected prices in tea.

It may thus be observed that with the increased tariff protection, the imports as well as production and area under cultivation grew; but yield, auction prices and employment fell. Tariff rise was, thus, neither successful in limiting tea imports nor in protecting yield, auction prices and domestic employment. It may therefore be safe to conclude that historically, tariff rise has not protected the domestic tea industry.

### 6.3.3 LIKELY IMPACT OF FTA

In order to gauge the likely impact of the Indo-ASEAN FTA on the domestic tea sector, we need to first look at the positions of tea products in the agreement schedules of all countries, as well as compare unit values (price per unit of exports) of tea products.

Schedules of India and ASEAN countries as per the Indo- ASEAN FTA Agreement are given in Table 15.

**Table 15: Relative Position of Items in AIFTA**

Product	India	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Phil.	Singapore	Thailand	Vietnam
090210	EL	EL	NT-1	EL	ST	NT-1	EL	NT-2, EL	Free	EL	HSL C
090220	EL	ST	NT-1	EL, ST	ST	NT-1	EL	NT-2, EL	Free	EL	HSL C
090230	EL	ST	HSL	ST	ST	EL	NT-2	NT-2, EL	Free	EL	HSL C
090240	SP	ST	HSL	NT-1, ST	ST	EL	NT-2	NT-1	Free	EL	HSL C
210120	EL	EL	ST	NT-2	ST				Free		

Source: AIFTA official documents

As per India's commitments, most tea lines are in the exclusion list where no tariff concessions are offered. Its only HS 090240 which is under the Special Product where tariffs will go down to



45 % in December 2019.( except for Philippines). Since maximum tea imports of India take place in HS 090240, this product could be of prime concern. On the other hand each ASEAN has given different treatment to tea in their Schedules.

In order to get a better idea about the competitiveness of ASEAN exports in terms of prices vis-à-vis India, we also need to take into account the unit values of tea products exported from ASEAN (Table 16).

**Table 16: Comparison on UVs of ASEAN Partners**

Country	UV of HS 90210	UV of HS 90220	UV of HS 90230	UV of HS 90240	UV 210120
India	0.0024	0.0028	0.0027	0.0024	0.0064
Brunei	0.0097		0.0010	0.0025	0.0250
Indonesia	0.0030	0.0013	0.0013	0.0013	0.0031
Malaysia	0.0027	0.0017	0.0039	0.0028	0.0023
Philippines		0.0106			0.0009
Singapore	0.0049	0.0015	0.0075	0.0028	0.0031
Thailand	0.0051	0.0010	0.0070	0.0024	0.0015
Vietnam	0.0036	0.0025	0.0031	0.0014	0.0055

*Source: Compiled by authors, Data from WITS*

For HS 090220 (Other green Tea-not fermented) which carries maximum weightage in India's tea imports, Indonesia and Vietnam are cheaper. Thus, Imports from these countries might be a threat to the domestic producers in terms of UV. The margin of difference in the price per unit between India and Indonesia, Vietnam is very high. Indonesia's exports are 45.8% cheaper to India's, while Vietnam's is 41.6% cheaper. Thus, though a tariff cushion of 45% will remain after tariff cuts are imposed, this cushion may not be sufficient to protect domestic prices. Even if one takes into account the freight cost of imports, the prices would be comparable. This is an item, thus where the Indian producers would need to strive to enhance efficiency in production and price competitiveness.

On the exports side, unit value of export of India in HS 090420 is less than that of Brunei, Singapore and Malaysia. However, Malaysia has kept the product in its EL, while Brunei has kept it in ST. This product is in the normal track of Indonesia, Myanmar and Philippines and therefore India might be able to get some preferential market access. This however is subject to the fact that other ASEAN members are exporting to them under AFTA, whereby the chances for India to enhance its exports will be minimal.

## 6.4 COFFEE

### 6.4.1 Production, Area and Productivity

India is the 6<sup>th</sup> largest producer of coffee in the world (its production in 2007 was 288000 MT). Brazil is the largest producer of coffee followed by Vietnam, Colombia and Indonesia.

Productivity of coffee in India has fallen over the years (from 816kg/Hectare in 1996 to 761Kg/hectare in 2007). In comparison to other ASEAN countries, yield of India's coffee sector is less than that of Vietnam, Cambodia, Thailand and Philippines. In terms of prices, producer price of coffee in India has fallen from 1673 USD/ton to 1550 USD/ton. Producer price of coffee in Brunei and Cambodia are much higher than in India. In 2007, the average producer price of coffee in ASEAN was 2674 USD/ton, as compared to 1550 USD/ton in India<sup>8</sup>. Thus, on an average, the Indian coffee producer receives lesser price than the producer in ASEAN.

The total area of coffee cultivation in India in 2008 was 342000 hectares. The traditional areas of coffee cultivation in India (which cover about 88% of total area under cultivation in the country) are Karnataka (58% of total area under coffee cultivation in India), Kerala (22%) and Tamil Nadu (8%). Non Traditional areas include Andhra Pradesh (9.7%), Orissa (0.8%) and North Eastern region (1.5% approx). In terms of state wise value of output of coffee, about 83% comes from Karnataka, 10% from Kerala, 6.3% from Tamil Nadu and less than a percent from AP, Assam and Orissa. Thus, per hectare output of coffee in Kerala is much lower than in Karnataka and Tamil Nadu. About 98.8% of the total number of coffee holding in India (as per 2007-08 data) are small holdings (less than 10 hectares) while only 1.2% of them are large holdings. These small holdings account for about 75% of the area under coffee cultivation and 70% of the total production of coffee in India. Since, majority of the share in area and produce of coffee is covered by small holdings, coffee cultivation is a major livelihood source for the country.

#### **6.4.2 Trends in Production**

India is the 18<sup>th</sup> largest coffee exporter in the world (exporting about 1.52% of total global exports of coffee). Brazil is the largest exporter followed by Vietnam and Colombia. Among ASEAN countries, Vietnam and Indonesia are the major players with 2<sup>nd</sup> and 5<sup>th</sup> largest exporters in the world market.

India imports large share of its coffee from ASEAN, Indonesia is the largest supplier of coffee to India (36.42 % of India's total coffee imports come from Indonesia). Vietnam is the third largest supplier of coffee to India (13.54% of India's imports of coffee).

In 2007, India's exports of coffee to ASEAN is less than a percent of its total global coffee exports, whereas its imports of coffee from ASEAN is more than 50% of its total coffee imports. India's balance of trade with world is positive but has been falling over the years, while with ASEAN it is negative and the gap is increasing. Thus, though India is a net exporter of coffee to the world, it is a net importer of coffee from ASEAN.

As per HS classification, coffee products come under heading 0901 and some lines under heading 2101. These products are defined at HS 6 digit as follows (Table 17):

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<sup>8</sup> Source:FAOstat

**Table 17 : Coffee Products**

HS code	Description	Exports to World('000 \$)	Imports from World ('000 \$)	Exports to ASEAN ('000 \$)	Imports from ASEAN ('000 \$)
90111	coffee neither roasted nor decaffeinated	292272.9	33086.4	49.8	17142.5
90112	not roasted but decaffeinated coffee	0.5			
90121	roasted not decaffeinated coffee	828.8	211.1	6.5	30.9
90122	roasted decaffeinated coffee	303.7	44.3		
90190	other coffee	589.4	60.0	110.4	7.2
210112	preparation with a basis of extracts essences or concentrates or with a basis of coffee	63.4	239.8		60.3
210130	roasted chicory & other roasted coffee substitutes & extracts essences& concentrates thereof	4452.5	5.1	5.7	1.0

Source : Descriptions as per ITC HS, Trade figures from WITS (for year 2007)

Majority (more than 98%) of India's coffee trade takes place in HS 90111 (coffee not roasted, not decaffeinated). India's almost entire imports of coffee are in this line. Thus, considering the fact that India's coffee trade is covered mainly by only one line, we have based our analysis primarily on this line (using tariffs and trade figures of HS 90111).

The historical trends and growth in its area, production, yield, employment and trade are at Table 18. Tariffs on coffee products rose from 10% to 15% in 1999, to 70% in 2001 and 100% in 2002. It has been stable at 100% since 2002. Average annual wholesale price of coffee has shown a random trend; while it was falling from 1997 to 2002, it has been on a rise thereafter. In 1996, average annual WPI of coffee was 161, while in 2008 it was 229. There has been a growth in production of coffee from 0.205 million tonnes in 1996 to 0.27 million tonnes in 2008. Area under cultivation also grew from 0.25 Million Hectare in 1996 to 0.34 Million Hectare in 2008. However, the yield of coffee cultivation has fallen (it rose from its 1996 level of 836 kg/Hectare to 937kg/Hectare in 2001, but from 2001 onwards has been falling. As of 2007, productivity in coffee sector is 761kg/Ha). Average number of people employed in the coffee sector has risen over these years, from 0.48 Million in 1996 to 0.58 Million in 2008.

**Table 18: Tariffs, Area, Production, Yield, Prices, Employment and Trade**

Year	Tariffs % (0901)	Avg annual wholesale Auction prices of coffee (Rs/Quintal)	Coffee production (Metric Tonnes)	Area under cultivation (Hectares)	Productivity of coffee (Kg/Hectares)	Avg no. of persons employed	Exports to World('000 \$)	Imports from World ('000 \$)	Exports to ASEAN ('000 \$)	Imports from ASEAN ('000 \$)
1996	10	161.0	205000	251284	816	486730	323292.5	1051.8	2115.5	993.1
1997	10	202.7	228300	285652	799	491700	349925.4	3258.2	888.8	3201.6
1998	10	199.2	265000	302234	877	526470	332175.6	3423.7	1743.1	3364.0
1999	15	152.0	292000	308433	947	535156	265892.1	2958.0	1243.2	2279.2
2000	15	132.5	301200	313934	959	551777	178971.4	4616.9	1292.7	3686.9
2001	70	110.4	300600	320737	937	496845	177330.2	1916.7	860.3	1384.1

2002	100	88.3	275275	320615	859	527540	143280.8	1667.0	473.5	1440.4
2003	100	98.4	270500	325124	832	527431	156299.8	5224.4	817.9	3761.1
2004	100	100.6	275500	333338	826	542699	155343.7	8978.6	813.4	5806.6
2005	100	143.9	274000	341351	803	578254	236696.2	40409.0	893.8	39029.4
2006	100	177.2	288000	343040	840	579126	316373.5	21108.7	51.3	19098.4
2007	100	199.1	262000	344508	761	587294	293995.3	33401.7	166.7	17180.6
2008	100	229.7	276600				392101.4	58731.9	784.0	38943.6

Sources: *Tariffs and Trade data from WITS and variables like Area, Production, Productivity from Indiastat (compiled from the Statistics released by coffee board); Employment from Indiastat (from Ministry of Labour and Employment, GoI), Prices taken from Indiastat (compiled from MoCI)*

The Compound Annual Growth Rate (from 1996-2008) in exports of coffee from India to world is 1% while it is -1% to ASEAN. Thus, exports of coffee to ASEAN have seen negative growth over the period. Exports of coffee to world have grown more than exports to ASEAN. In terms of imports, CAGR of imports of coffee from world is 27.3% as compared to 23.1% from ASEAN. Imports of coffee from the world have grown more than imports from ASEAN. However, looking at bilateral trade with ASEAN, growth in imports of coffee from ASEAN has been much higher than the growth in exports to ASEAN

### 6.4.3 Correlation

In order to get a better picture of the direction and trend in the movement of all above discussed factors, correlations were calculated between these variables with tariffs. The results are at Table 19.

**Table 19: Correlations**

		Tariffs	Wholesale prices (Rs/Quintal)	Production (metric tones)	Area (Ha)	Productivity (Kgs/Ha)	employment	Exports to World (\$'000)	Imports from World (\$'000)	Exports to ASEAN (\$'000)	Imports from ASEAN (\$'000)
Tariffs	Pearson Correlation	1.	-.251	.335	.799**	-.414	.556	-.303	.554*	-.771**	.534
	Sig. (2-tailed)		.409	.263	.002	.181	.060	.315	.050	.002	.060
	N	13	13	13	12	12	12	13	13	13	13

**Note:** \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

#### Observations:

- (i) Correlation between imports of coffee from the world and tariffs is positive and significant at 5% level. Correlation between tariffs and imports of coffee from ASEAN is also positive (though not significant statistically). From Table 17 it can be observed that

with rising tariffs, imports of coffee from the world and from ASEAN have gone up over the same period. Thus, rise in tariffs has not been successful in limiting imports.

- (ii) Correlation between area under cultivation and tariffs is positive, high and significant at 1% level. Thus, over the years when tariffs on coffee rose, area under cultivation also grew. Correlations of tariff with production and employment are positive (though not significant statistically).
- (iii) Correlation of productivity and wholesale prices with tariffs are negative, low and insignificant. Over the years when tariffs rose, productivity as well as wholesale prices of coffee was falling. This is contrary to the general belief that rise in tariffs leads to higher domestic prices as imports become expensive. Tariff rise therefore did not protect prices and productivity in the domestic coffee sector. One may say that higher tariffs do not protect productivity and prices, and therefore keeping tariffs high may not always be a solution to protecting the domestic sector.
- (iv) The period witnessed a rise in employment in the coffee sector. There has been a positive impact of tariff rise in terms of growth in the average number of people employed in coffee plantations. To what extent this has benefitted the cultivators can only be gauged by assessing the change in their per capita land holding and productivity. It can be concluded that tariff protection is not sufficient in either limiting imports or protecting domestic prices and productivity in the coffee sector. It is rather more important to look into domestic policies and focus on enhancing productivity and efficiency of domestic coffee sector.

On the whole, it is difficult to conclude if tariff protection has actually been of any benefit to the sector, since there is a mismatch in the impact on prices, productivity and that on the average employment in the sector.

#### 6.4.4 LIKELY IMPACT OF FTA

We have seen above that contrary to economic logic, high tariffs have not rendered protection to the domestic prices and productivity. However, in order to understand the concerns of domestic industry, we tried to examine the position of items in country's schedule as well as compare the UV price.

The positions of schedule of tariff concessions of all ASEAN countries as well as India is at Table 20.

**Table 20: Schedule of coffee in AIFTA**

6 Digit HS	India	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
090111	SP	ST	ST	NT-1	ST	NT-1	EL	HSL C	Free	EL	NT-1
090112	EL	ST	NT-1	NT-1	ST	NT-1	EL	EL	Free	EL	NT-1

090121	EL	ST	NT-1	NT-1	ST	NT-1	NT-1	EL	Free	EL	NT-2
090122	EL	ST	NT-1	NT-1	ST	NT-1	NT-2	EL	Free	EL	NT-2
090190	EL	NT-1	NT-1	NT-1	ST	NT-1	NT-2	EL	Free	EL	NT-2
210112	EL	EL	NT-1	NT-1	ST	NT-1	NT-1	EL	Free	EL	NT-1
210130	EL	NT-1	NT-1	NT-1	ST	NT-1	NT-1	EL	Free	ST	NT-1

Source : AIFTA official documents

Considering the fact that India's coffee imports are covered mainly by only one product -90111, we have based our analysis on tariff liberalisation and trade on this line. It is important to note that in India's schedule HS 90111 is a Special Product (where tariffs will go down from a base rate of 100% to 45 % by the end of December 2019). All the other coffee lines are in the Exclusion list. Thus, the only concern in coffee for India is on HS 90111.

To get a better picture of price differentials in the product from ASEAN and India's domestic prices, we looked at the unit values of exports of coffee from these countries. (at Table 21).

**Table 21: Unit Value comparison**

Product	India	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
090111	0.002	0.002	0.002	0.0034	0.0036	0.0015	0.0016
090112	0.0048	0.0014	0.0053	0.0033	0.0029	0.0043	0.0023
090121	0.0029	0.0043	0.0025	0.0063	0.007	0.0056	0.0022
090122	0.0026	0.0019	0.0035		0.0057	0.0128	0.0015
090190	0.0023	0.0044	0.0032	0.0001	0.0024	0.0018	0.002
210112	0.0148	0.0022	0.0033		0.0022	0.0018	0.0046
210130	0.0009	0.0056	0.0027		0.0093	0.0034	

Source : compiled by authors, data taken from WITS COMTRADE

India's coffee imports are mainly concentrated on HS 90111. Thailand and Vietnam have a cheaper UV than India's export UV. However, the differentials in prices are low, Vietnam's exports are 20% and Thailand is 25% cheaper than Indian coffee. As per India's commitment in the FTA, tariff on 90111 will only come down to 45% by December 2019. Thus, even with tariff reduction, a cushion of 45% will remain higher than the margin by which ASEAN countries have better UV.

When we look at India's bilateral coffee trade with ASEAN, HS 90111 and 90190 form a large chunk of India's coffee exports to ASEAN. These products are in the normal tracks of many ASEAN countries, and thus provide an opportunity to exploit our export potential in these products. Through gains in exports to ASEAN, we can enhance our domestic production and efficiency.

It is therefore only a perceived threat and not real threat that cheaper imports from ASEAN may displace Indian coffee. High tariffs have neither given much protection to our coffee industry historically, nor is it likely that reduction in tariffs will threaten the domestic sector. The actual problem thus lies in domestic inefficiencies and not with liberalization of tariffs.

## 6.5 COCONUT

### 6.5.1 PRODUCTION, AREA AND PRODUCTIVITY

India is the 3<sup>rd</sup> largest producer of coconut in the world, with Indonesia and Philippines being the largest and 2<sup>nd</sup> largest respectively. Production of coconut in India has risen over the years. From 9.7 Million Tonnes in 1996, it has gone up to 10.8 Million tonnes in 2008. In comparison to production capacity in other ASEAN countries, India's production of coconut is much lower than Indonesia (19.5 Million tonnes in 2008) and Philippines (15.3 Million). Thailand and Vietnam are also large coconut producers, though their production is much lesser than India.

Producer price of coconut (in USD/ton) in India has fallen over the years (from 109.8 in 1997 to 85.6 in 2007). Also, producer price is the lowest for India when compared to ASEAN countries. The average producer price of coconut in ASEAN is 201.35. Looking at these figures, we can say that the coconut producer in India is much competitive, but receives a much lower remuneration than the average price received by a producer in ASEAN.

In terms of productivity of coconut plantation, the yield in India has risen over the years (from 41928 Hg/ Ha in 1997 to 56154 Hg/Ha in 2008). However, in comparison to ASEAN countries, the yield in coconut sector of India is lower than Myanmar (88095 Hg/Ha in 2008), Singapore (86666), Vietnam (78524), Indonesia (66101) and Thailand (67331).

In India, about 38.5% of coconut production is in the state of Kerela. Tamil Nadu accounts for about 34% of total coconut production in India, while Karnataka accounts for only 11%. Andhra Pradesh, West Bengal, Orissa and Maharashtra are other coconut producing states.

### 6.5.2 TRENDS IN PRODUCTION, PRICES, EXPORTS, IMPORTS AND TARIFFS

Almost 80% of coconut exports in the world are from ASEAN. Philippines is the largest exporter of coconut constituting about 40.5 % of total global exports, followed by Indonesia (29.4%). Malaysia is the 4th largest coconut exporter comprising about 6% of total exports while Vietnam ranks 7th (forming 1.5% share). India ranks 8th constituting only 1.48% of global coconut exports. Of this, only about 2% of India's total coconut exports go to ASEAN (primarily to Malaysia and Singapore). In terms of imports, almost 96% of India's total coconut imports come from ASEAN. Indonesia is the largest supplier of coconut to India, followed by China<sup>9</sup>.

As per HS classification, the following products have been taken into our analysis (Table 22):

**Table 22: Coconut Products**

HS code	Description	India's exports to World (\$'000)	India's imports from World (\$'000)	India's exports to ASEAN (\$'000)	India's imports from ASEAN (\$'000)
80111	COCONUT DESICCATED	347.51		0.089	

<sup>9</sup> Calculated from WITS

80119	OTHER COCONUTS	1,833.58	2.612	10.728	2.612
151311	COCONUT (COPRA) CRUDE OIL & FRACTIONS	98.85			
151319	COCONUT (COPRA) REFINED OIL & FRACTIONS	6,847.06	5,618.6	391.55	5,618.7

Source: Descriptions as per ITC HS, Trade data from WITS (all figures for year 2007)

Note: Coir and its products have not been included in the analysis

Coconut oil is the major export and import product for the Indian coconut sector. India has a positive balance of trade with the world in desiccated coconut, but a negative and high BOT in coconut oil. With ASEAN, India has a negative BOT in desiccated coconut and coconut oil.

This section has been dealt with in two parts, one examining the performance and indicators of desiccated coconut and the other of coconut oil. Since these two products are of varying importance in the sector, we have looked at them separately. Table 23 shows the linkages in desiccated coconut (080111 and 080119):

**Table 23: Trends in area, production, WPI and trade of desiccated coconut (Heading 0801)**

Year	Tariffs on 0801	Area (Mn hectares)	Production (Mn Nuts)	Yield (nuts/ha)	Avg WPI (base 1993-94=100)	Exports to World (US \$ '000)	Imports from World (US \$ '000)	Exports to ASEAN (US \$ '000)	Imports from ASEAN (US \$ '000)
1997-98	40	1.9	127.2	6834	148.3	284.8	41.7	0.6	14.0
1998-99	40	1.8	125.4	7145	118.2	348.7		3.8	
1999-00	40	1.8	121.3	6860	145.9	406.3	0.9		
2000-01	35	1.8	126.0	6847	109.1	367.3	64.4		0.1
2001-02	70	1.9	129.6	6709	94.3	353.9	5.4	82.6	5.4
2002-03	70	1.9	125.4	6337	121.4	918.6	4.4	0.8	
2003-04	70	1.9	121.8	6310	146.5	800.6	176.6		11.7
2004-05	70	1.9	128.3	6615	155.2	1200.1	8099.8	0.1	17.1
2005-06	70	2.0	148.1	7608	138.6	1458.3	935.1	1.0	30.6
2006-07	70	1.9	158.4	8165	126.6	1543.5	0.3	4.1	0.3
2007-08	70	1.9	108.9	5616	130.0	2181.1	2.6	10.8	2.6
2008-09	70				153.3	9519.2	3.3	36.5	2.1

Sources: Tariffs and Trade data from WITS and variable like Area, Production and Yield Taken from Indiastat (source-National Horticulture Board); Prices from Indiastat (source- Ministry of Agriculture)

It would be observed that that India's import tariffs in coconut (desiccated) went up from 40% to 70% from 1997 to 2008. Area under cultivation has almost remained the same over this period, while production of desiccated coconut increased till 2006, but fell thereafter. Yield has come down over the years. Average WPI of coconut has shown a random trend again, Exports of coconut have gone up, while imports have declined. Balance of trade of desiccated coconut has been positive with the world. On the other hand, BOT with ASEAN has been negative in some years. The Compound Annual Growth Rate (from 1997-2008) of India's exports of coconut to the world is 37.6% while CAGR of exports to ASEAN over this period is 45.3%. Thus, growth in exports of coconut to ASEAN is higher than to the world. In terms of imports, CAGR of imports of coconut from world is -20.6% and from ASEAN is -15.8%. Growth in imports of coconut from ASEAN is higher than imports from world.



Table 24 shows the linkages of all variables with tariffs:

**Table 24: Correlation Matrix**

		Tariffs	Area	Production	Yield	WPI	World exports	World imports	ASEAN exports	ASEAN imports
Tariffs	Pearson Correlation	1.000	.891 **	.244	-.113	.107	.363	.214	.274	.157
	Sig. (2-tailed)		.000	.469	.741	.740	.246	.527	.475	.687
	N	12.000	11	11	11	12	12	11	9	9

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed), \*. Correlation is significant at the 0.05 level (2-tailed).

**Observations (Desiccated coconut):**

- (i) Correlation of Area under cultivation and tariff is positive, high and statistically significant at 1% level. Thus, over the period under consideration, area under cultivation has increased with the rise in tariffs.
- (ii) Correlation of production, wholesale price index and imports with tariffs are positive but small and not significant. However, it broadly tells us that over the period, both imports production and the prices have gone up.
- (iii) However, negative correlation of yield with tariffs shows that while tariffs rose, yield came down (though the correlation value is very small and not significant statistically).

Broadly speaking it can be stipulated that with rise in tariffs over the years, area, production and prices increased. This might lead us to say that higher tariffs protected the sector in terms of production and prices. However, yield came down. One needs to thus also look into other reasons associated with the declining domestic efficiencies and productivity.

**Coconut Oil:**

Coming to coconut oil, Table 25 shows the trends in the production, prices, exports and imports in coconut oil (HS 151311 and HS 151319). As can be seen from the table above, tariffs on coconut oil went up from 40% to 100% in 2000 and have been at that level since then. Over this period, average wholesale price index of coconut oil saw a mixed trend; though the same in 2008 is higher than the WPI in 1997. Production of coconut oil has increased significantly (from 532 tonnes in 1998 to 1369 tonnes in 2008). Both exports and imports to the world and to ASEAN have increased. India's BOT with world and with ASEAN in coconut oil has been negative and growing over the years. The Compound Annual Growth Rate (from 1997-2008) of India's exports of coconut oil to the world is 15.8% while CAGR of exports to ASEAN over this period is 22.4%

**Table 25: Production, Prices, and Trade of coconut oil**

Year	Tariff (%)	Avg WPI (base year 1993-94=100)	Production (Tonnes)	Exports to world (\$'000)	Imports from world (\$'000)	Export to ASEAN (\$'000)	Imports from ASEAN (\$'000)

1997	40	146.1		2746.8	1028.1	59.4	1028.1
1998	40	131.4	532.5	1543.8	1029.6	40.1	1013.7
1999	40	143.0	536.8	3033.3	3125.6	64.4	2572.3
2000	100	108.1	842.7	3084.9	3070.1	62.3	2192.5
2001	100	95.2	920.1	3322.8	7969.1	62.9	7602.5
2002	100	111.3	1137.1	3508.9	11772.0	56.8	11693.0
2003	100	148.3	1366.9	6299.6	7469.0	110.1	7459.5
2004	100	175.5	1595.3	6491.4	8511.0	116.6	8264.7
2005	100	162.7	1609.6	6522.4	3917.6	260.9	3875.7
2006	100	138.8	1286.8	5479.5	8621.7	267.9	8621.3
2007	100	139.8	1425.6	6945.9	5618.8	391.6	5618.8
2008	100	161.7	1369.4	13757.9	23658.0	549.9	23658.0

Source: Tariffs and Trade data taken from WITS and Production data from Indiatat (source- CSO); Prices from Indiatat (source-Compiled as per statistics released by MoCI, GoI)

Thus, growth in exports of coconut oil to ASEAN is higher than to the world. In terms of imports, CAGR of imports of coconut oil from ASEAN as well as from the world is 33%. Thus, growth in exports of coconut oil from India to ASEAN has been lower than its imports from ASEAN.

The correlations of price and production, exports and imports in coconut oil with tariffs are given in Table 26 below.

**Table26: Correlations in coconut oil**

		Tariff	WPI	Production (tonnes)	Exports to world (\$'000)	Imports from wld (\$'000)	Exports to ASEAN(\$'000)	Imports from ASEAN (\$'000)
Tariff	Pearson Correlation	1.000	-.043	.781**	.518	.530	.427	.523
	Sig. (2-tailed)		.895	.005	.085	.077	.167	.081
	N	12.000	12	11	12	12	12	12

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

### Findings:

- (i) Correlation between production of coconut oil and tariffs is positive, large and significant at 1% level. Thus, with higher tariff protection in coconut oil, production has also gone up.
- (ii) Correlation of imports with tariffs is positive (but not significant statistically). This shows that despite increase in tariffs, imports could not be checked. Tariffs have thus not limited imports of coconut oil.
- (iii) Correlation between WPI and tariffs is negative but small and not significant statistically. We can still broadly say that despite increasing tariffs, WPI was falling. Tariffs have thus not protected prices in coconut oil.

To conclude, it may be said that higher tariffs on coconut oil lead to increased production but did not limit imports or protect prices.

### 6.5.3. LIKELY IMPACT OF FTA

We examined the schedule of tariff concessions by India & ASEAN. It is worth noticing that all lines falling under desiccated coconut as well as coconut oil are in the exclusion list of India. The FTA therefore poses no threat to this sector as India will not be offering any tariff concession.

Table 27 below presents the schedule of concession.

**Table 27: Schedule of coconut& coconut oil**

HS code	India's schedule	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
80111	EL	NT-1	EL	NT-1	ST	NT-1	NT-1	EL	Free	EL	NT-1
80119	EL	NT-1	EL	NT-1	ST	NT-1	NT-1	EL	Free	EL	NT-1
151311	EL	NT-1	NT-1	NT-1	ST	NT-1	EL	EL	Free	EL	NT-1
151319	EL	NT-1	NT-1	NT-1	ST	NT-1	NT-1	EL	Free	EL	NT-1

*Source: AIFTA Official documents*

While India is not offering any concessions on coconut oil, it can exploit its exports potential in Indonesia, Malaysia, Thailand, Vietnam, Brunei, as these countries have put coconut oil in their normal tracks. Other countries (except Philippines & Thailand) also offer tariff concessions. Coconut is thus a sector where India gets a preferential market access to ASEAN without offering any tariff concessions on these products.

## 6.6 NATURAL RUBBER

### 6.6.1 PRODUCTION AND PRICES

India is the 4<sup>th</sup> largest producer of rubber in the world (in 2007, the production was 1622 Million dollars in value and 3.02 Million tonnes in quantity terms). Thailand, Indonesia and Malaysia are the 3 largest natural rubber producers.

Area under cultivation of natural rubber in India is lesser than that in Indonesia, Thailand, Malaysia and Vietnam. Area cultivated in India in 2007 was 0.45 Million hectares, compared to 2.7 Million Hectare in Indonesia, 1.7 Million Hectare in Thailand and 1.2 Million Hectare in Malaysia. In terms of yield, India is higher than ASEAN countries. In 2008, India's yield in natural rubber cultivation was 18200 Hg/Hectare, compared to ASEAN average of 12050. Only Philippines is ahead of India in terms of yield (with 33347 Hg/Hectare in 2008).

Producer price of natural rubber in India has fallen over the years (from 1304 USD/tonne in 1996 to 813 USD/tonne in 2007). This price (813 USD/tonne in 2007) is much lower than the ASEAN average of 1127 USD/tonne). Producer price is higher in Malaysia, Thailand and Philippines.

Among Indian states, Kerala is the largest producer of natural rubber, both in terms of area covered as well as production. About 82% of the country's total area under rubber cultivation and 91.25% of total India's production of rubber is from Kerala.

## 6.6.2 TRENDS IN PRODUCTION, AREA, YIELD, WPI AND TRADE

Thailand, Indonesia, Malaysia are the top exporters of natural rubber globally and around 90% of natural rubber's global exports are from ASEAN, India's exports to world is less than half percent of world export, though it is 15<sup>th</sup> largest exporter.

About 93% of India's imports in Natural rubber come from ASEAN. Thailand is the largest supplier (supplying almost 50% of total natural rubber imports of India) followed by Indonesia (38%). India exports large quantity of natural rubber to Malaysia (25% of its global exports in natural rubber), followed by China (10%) and Sri Lanka (6%).

The following products as per HS classification fall under natural rubber:

**Table 28: Natural Rubber**

6 Digit HS	Description	India's exports to World (\$'000)	India's imports from World (\$'000)	India's exports to ASEAN (\$'000)	India's imports from ASEAN (\$'000)
400110	NATRL RUBR LATEX W/N PRE-VULCANISED	16786.1	561.6	125.6	527.6
400121	NATRL RUBR IN SMKD SHEETS	25332.3	136731.9	9621.5	124270.8
400122	TECHNICALLY SPCFD NATRL RUBR(TSNR)	10.2	91987.2		88869.3
400129	NATURAL RUBBER IN OTHER FORMS	8435.7	9122.5	3342.1	8274.6

Source: Descriptions as per ITC HS, Trade data from WITS (all figures are for year 2007)

Majority of trade in natural rubber in India takes place in HS 400121 A high value of imports in natural rubber is also in HS 400122 Since maximum trade in natural rubber takes place under 400121 and 400122, we have primarily based our analysis on these products (using tariffs on these lines).

To gauge the economic performance of rubber sector of India historically, we have looked at some variables like production, area under cultivation, yield, WPI, exports and imports. which is at Table 29.

**Table 29 : Trends in Tariffs, Production, Area, Yield, WPI and Trade in Natural Rubber**

Year	Tariffs	Production (Tonnes)	Tapped Area	Yield (Ks/Ha)	WPI	Rubber exports to	Imports from	Exports to	Imports from
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			(hectares)			world (\$ '000)	world (\$ '000)	ASEAN (\$ '000)	ASEAN (\$ '000)
1997	20	583830	376970	1549	139.4	1659.1	32637.5	52.5	29844.7
1998	20	605045	387100	1563	116.5	835.1	21656.7	61.1	19083.3
1999	25	622265	394800	1576	120.6	1106.8	13297.5	31.6	11706.3
2000	25	630405	399901	1576	118.2	1920.5	8213.3	201.5	7331.9
2001	25	631400	400713	1576	125.7	4044.4	23957.6	1623.1	22845.6
2002	25	649435	407953	1592	152.5	21908.3	17038.0	7884.4	16233.2
2003	25	711650	427935	1663	196.2	42684.2	44244.4	9175.7	42951.2
2004	25	749665	439720	1705	216.9	61141.9	83153.3	6316.1	79764.7
2005	25	802625	447015	1796	260.8	72935.3	80427.6	10201.5	78133.4
2006	25	852895	NA	NA	358.3	123520.3	99433.3	30557.8	85690.8
2007	25	825345	NA	NA	NA	50564.3	238403.2	13089.2	221942.3
2008	20	864500	NA	NA	NA	168949.0	229649.5	49883.1	210180.0

Source: Tariffs and Trade from WITS; WPI taken from Indiastat (source-Office of Economic Advisor, MoI) Production, Area, Yield from Indiastat (source-The Rubber Board)

As can be seen, a tariff on rubber rose from 20 to 25% in 1999, was stable at that level till 2007 and again dropped to 20% in 2008. Production has been on a rise over the period (it grew from 0.58 Million tonnes in 1997 to 0.86 Million tonnes in 2008). Area under cultivation has also shown a rise from 0.37 Million in 1997 hectares to 0.44 Million hectares in 2005 as well as yield (from 1549 kg/Ha in 1997 to 1796 Kg/Ha in 2006). WPI has also been on the rise during this period. India has been a net importer of natural rubber over the years (shown by a large negative balance of trade). Its negative BOT with ASEAN has grown over time. The Compound Annual Growth Rate (from 1997-2008) of India's exports of natural rubber to the world is 52.2% while CAGR of exports to ASEAN over this period is 86.5%. Thus, growth in exports of natural rubber to ASEAN has been much higher than to the world. In terms of imports, CAGR of imports of natural rubber from ASEAN as well as from the world is 19.4%. Thus, growth in exports of natural rubber from India to ASEAN has been much higher than its imports from ASEAN.

### 6.6.3: Correlation

In order to understand the linkage of all above described variables with tariffs on rubber products, we calculated correlations between each variable and tariff. The results are presented at Table 30.

**Table 30: Correlations with Tariffs**

		Tariffs (%)	Production (Tonnes)	Area (Hectares)	Yield (Kg/Ha)	Exports to World	Imports from World	Exports to ASEAN	Imports from ASEAN	WPI
<b>Tariff</b>	Pearson Correlation	1.	.153	.364	.206	-.125	-.152	-.236	-.143	.358

	Sig. (2-tailed)		.636	.301	.567	.700	.637	.459	.658	.344
	N	12	12	10	10	12	12	12	12	9

Note : \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

### Findings

- (i) As we can see from the table of correlations, though production, area, yield and WPI have positive correlations with tariffs, however, none of them are statistically significant.
- (ii) Negative correlation can be observed in imports with tariffs both from ASEAN and world. This follows normal economic logic of restriction in imports from rise in tariffs. However, these figures are also not statistically significant.

Thus, from the correlations, we can only broadly say that area, production and yield has grown with rising tariffs, while imports have come down. However, since these figures are not statistically significant, we may say that the evidence is not conclusive.

### 6.6.4 LIKELY IMPACT OF FTA

In order to gauge the threats and potential export opportunities in natural rubber from the FTA, we need to look at the positions of rubber products in the schedules of member countries. The positions are given at Table 31:

**Table31: Position of natural rubber in TLP schedules of India and ASEAN countries**

6 Digit HS	Description	India for ASEAN5+C	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
400110	natrI rubr latex w/n pre-vulcanised	EL	NT-1	NT-1	ST	NT-1	NT-1	NT-1	EL	Free	NT-1	NT-1
400121	natrI rubr in smkd sheets	EL	NT-1	ST	NT-1	NT-1	NT-1	NT-1	EL	Free	NT-1	NT-1
400122	technically spcfd natrI rubr(tsnr)	EL	NT-1	ST	NT-1	NT-1	NT-1	NT-1	EL	Free	NT-1	NT-1
400129	natural rubber in other forms	EL	NT-1	NT-1	NT-1	NT-1	NT-1	NT-1	EL	Free		NT-1

Source: AIFTA official documents

As we can see, rubber lies in the exclusion list of India. India is thus not giving any tariff concessions to any ASEAN member on natural rubber. For most other ASEAN countries, rubber lies in the normal track, signifying potential export possibilities to India.

However, in order to see export possibility, it is important that India's exports should be price competitive in the international market. To gauge this, we have calculated unit values of exports of India as well as other ASEAN countries, so as to compare the price per unit of natural rubber

in these countries. Unit values are calculated as a ratio of exports value (at f.o.b.) to quantity of exports. This has been tabulated in the Table 32 below:

**Table 32: Comparison of unit values of natural rubber**

Product	India	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
400110	0.0015	0.0014	0.0023	0.0016	0.0021	0.0014	0.0018
400121	0.0022	0.0020	0.0022	0.0018	0.0022	0.0021	0.0020
400122	0.0010	0.0020	0.0021	0.0017	0.0021	0.0021	0.0020
400129	0.0019	0.0020	0.0022	0.0013	0.0020	0.0020	0.0020

*Source: Calculated from WITS data (all figures are in \$'000/unit).*

As we can see, India is competitive (has lower unit value) in HS 400110 in the markets of Malaysia, Philippines, Singapore and Vietnam. In HS 400121, Indian exports are equally priced as that of Malaysia and Singapore. This product is in the normal track of Malaysia and free to Singapore, thus India can exploit these markets by way of increasing its exports to them. In HS 400122, India is cheaper than all ASEAN countries and here again it can export to ASEAN as this product is also in the normal tracks of most countries. Similarly, India can export HS 400129 to Indonesia, Malaysia, Singapore, Thailand and Vietnam

Rubber products are therefore the ones where India will gain preferential market access to ASEAN without giving any concessions on return.

### **Section III:**

#### **Conclusion**

The sensitivity of agriculture sector for India needs no elaboration. This is reflected if one looks at India's position in WTO negotiations as well as some FTAs, including ASEAN. This sector is not only important due to the large population dependence but also due to the fact that it is linked to livelihood issues as well as employment. In case of India AIFTA out of 489 items that are in the exclusion list, more than two-third items are from agriculture and allied products and fisheries sectors.

In fact one of the reasons for non-conclusion of negotiations for FTAs is attributed to the fact that while India was very reluctant to liberalise its agriculture sector under AIFTA, the members of ASEAN wanted several items from agriculture sector to be included in the tariff liberalisation. The fact that China has already opened its agriculture sector for ASEAN under FTA was cited many a times by their negotiators.

Looking at the sectors that have been identified in this study and the results thereof the following observations can be made:

- In case of fish sector though a correlation between the tariff, production and price was seen and the fact that tariff rise has to some extent protected the production and prices in the fisheries sector, the important factor of meeting SPS requirement for imports is

important. Most of these products are already allowed to be imported duty free under Asia Pacific Trade Agreement (APTA) which is a preferential trade agreement with Bangladesh, China, South Korea, Lao PDR and Sri Lanka being members. Despite this fact, no surge in imports from these countries has been reported causing any irritation to the domestic producers. Secondly, India being a major player for exports of processed fish to the world marketing, it would be required to be meet its requirement through imports as well. In this background therefore, all the threats for imports coming from ASEAN at this stage appear a remote possibility.

- In spite of rising tariff protection, imports of pepper in India from the world have been rising and domestic pepper prices have been falling. Tariff, thus has not acted as a good measure of protection for the sector. The present base rate for tariff reduction for pepper is of 70% and it will be reduced down to 50% by the end of December 2019 and on only one item of HS 090411. Philippines and Vietnam produce cheaper than India but the reduced duty of 50% another 9 years, will provide adequate protection to Indian producers in coming years. On rest of the items India has not offered any tariff reduction. On the export side, India's major export item in HS - 090420, which is in the Normal Track for Brunei, Malaysia and is free for Singapore? Therefore, the FTA will provide a greater an opportunity to enhance India's exports ASEAN on this item. In an overall scenario, the expected loss to India is lesser. Much would however, depend on how the Indian farmers and exporters perform.
- Tariff rise in tea again was neither successful in limiting tea imports not in protecting yield, auction prices and domestic employment. For HS 090420 which carries maximum weightage in India's tea imports, Indonesia and Vietnam are cheaper. Thus, Imports from these countries might be a threat to the domestic producers in terms of UV. Even if one takes into account the freight cost of imports, the prices would be comparable. This is an item, thus where the Indian producers would need to strive to enhance efficiency in production and price competitiveness. On the exports side, India is cost competitive on HS 090420 for Brunei, Singapore and Malaysia. Malaysia has kept the product in its EL, while Brunei has kept it in ST. This product is in the normal track of Indonesia, Myanmar and Philippines and therefore India might be able to get some preferential market access. This however is subject to the fact that other ASEAN members are exporting to them under AFTA, whereby the chances for India to enhance its exports will be minimal.
- When we look at India's bilateral coffee trade with ASEAN, HS 90111 and 90190 forms a large chunk of India's coffee exports to ASEAN. These products are in the normal tracks of many ASEAN countries, and thus provide an opportunity to exploit our export potential in these products. High tariffs have neither given much protection to our coffee industry historically, nor is it likely that reduction in tariffs will threaten the domestic sector.
- In case of coconut, it was observed that with rise in tariffs, the area, production and prices increased. This might lead us to say that higher tariffs protected the sector in terms of production and prices. However, yield came down. One needs to thus also look into other



reasons associated with the declining domestic efficiencies and productivity. While India is not offering any concessions on coconut and coconut oil, it can exploit its exports potential in Indonesia, Malaysia, Thailand, Vietnam, Brunei, as these countries have put coconut oil in their normal tracks. Other countries (except Philippines & Thailand) also offer tariff concessions. Coconut is thus a sector where India gets a preferential market access to ASEAN without offering any tariff concessions on these products.

- Rubber is in the Exclusion List of India and hence there is no question of any adverse effect of on Indian producers. The problems associated with this sector are due to our own domestic inefficiencies or practices.

In addition to the specific case studies as above, one would also like to point that many a times the problem relating to India's domestic inefficiencies are not pointed out not discussions are held for improving them. Most of the times, the blames are put on either the WTO and now on FTAs. Instead, there is a need for any introspect to solve our own problems. The actual problem lies in domestic inefficiencies and not with liberalization of tariffs, in these particular cases taken in this study. Low productivity, huge handling wastage in agriculture and the benefits not going to farmers are some of the issues which will need an urgent answer without waiting for the Doha deal in WTO or FTAs. At the domestic level, a strong case for “*Farmers Markets*” across India has become even more pronounced in the context un-competitiveness generated out of these Free trade deals.<sup>10</sup> Clearly, these problems are not a creation of today but are historic. Further at the international level, a balance needs to be established; to protect the interest of the farmers without hurting the domestic consumers. This would mean taking corrective measures by the Governments both Central as well as States and some of them would have to be hard and unpopular measures within the domestic front.

Due to its autonomous liberalisation of tariffs India has almost reached the ASEAN level (in some sectors, the duties of some of the ASEAN members are higher than India's tariffs) and therefore the fear that trade deflection may take place from third countries appears remote.

With the delayed outcome of Doha negotiations, the India AIFTA will provide ample opportunity to the industry of India and ASEAN to explore each others' markets on preferential basis. This agreement will provide an opportunity to them to expand their economic engagement with their counterparts in ASEAN. ASEAN is one of the major trading partners of India and thus provides a big market for Indian exporters. The success of FTA will depend on how they are able to grab the market.

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<sup>10</sup> Kallummal Murali and Srinivasan Sakthi, 2007, “*Meeting Local Demands for Vegetables and Fruits: The Dynamics of Fair Farmers' Markets. A Case Analysis of Uzhavar Sandhai of Tamil Nadu*”, Make Fair Trade (MTF) Campaign, Oxfam GB, 2007, New Delhi.

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