

## **India's agricultural export to Vietnam in the context of ASEAN-India free trade agreement : A partial equilibrium approach**

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### **ABSTRACT**

*Vietnam is the major agricultural export destination of India among Association of South East Asian Nations (ASEAN). The study has examined the possibility of market access for India in Vietnam for the selected agricultural products under ASEAN-India Free Trade Agreement by employing a partial equilibrium model developed by the World Bank. The simulations are carried out for the agricultural products which together constitutes more than 80 per cent of the India's export basket. The results revealed that, India can gain market share in Vietnam in meat products, fisheries, cotton for which Vietnam offers substantial tariff reduction to India under Agreement. The export promotion for these commodities can be done to harness maximum trade potential with Vietnam.*

**Keywords :** Agricultural export, ASEAN, partial equilibrium, SMART model

India and Vietnam shares long standing cultural and economical relation, dating back to centuries. India granted the "Most Favored Nation" status to Vietnam in 1975 and both nations signed a bilateral trade agreement in 1978. Subsequently, in 1992, India and Vietnam established extensive economic ties, including those in the fields of oil, trade, investment, science and technology, culture, education and training. India and Vietnam also cooperate closely in various regional forums such as ASEAN, East Asia Summit, Mekong Ganga Cooperation, and Asia Europe Meeting (ASEM) besides UN and WTO. The relations between the two countries benefited extensively from India's "Look East Policy". India's overall trade with Vietnam has increased from US\$139 million in 1995 to US\$ 9063 million in 2016. Among the ASEAN countries, Vietnam is one of the most preferred destinations for agricultural commodities export of India. The value of agricultural trade between India with Vietnam was US\$ 61 million in 1995, which increased rapidly to US\$ 4719 million in 2016. During 2016, export from India was worth US\$ 4238 with an import of US\$ 481 exhibiting a trade surplus of US\$ 3756. The 2009 ASEAN-India Free Trade Agreement (AIFTA) which offers significant tariff reduction from both the sides has also resulted into significant improvement in Indo-Vietnam relationship. In this background, the present study analyses benefit that may accrue to India from Vietnam in terms of agricultural trade due to ASEAN-India FTA. As compared to earlier studies which were focused on impact of ASEAN-India FTA on India (Batra, 2009; Pal and Dasgupta, 2009, Sumalatha and Nirmal, 2010; Veeramani and Saini, 2010; Nagur and Kumar, 2010;

and Harikumar *et al.*, 2011; Francis, S.,2011), this paper looks into export benefits and market access for India in Vietnam due to the agreement.

### **MATERIALS AND METHODS**

The study utilized a partial equilibrium model, SMART (Software for Market Analysis and Restrictions on Trade) to simulate the impact of tariff reduction scenarios for India and Vietnam. This model and the simulation tools are part of the World Integrated Trade Solution (WITS) trade database and supported by the World Bank and the United Nations Conference on Trade and Development. The SMART model focuses on the changes in imports into a particular market when there is a change in trade policy such as tariff reduction. The model can be used to analyze the tariff effect of an importing country on disaggregated product lines. This model was employed to analyze India's gain from Vietnam market under the agreement and simulation results are shown in terms of importing country. The theoretical framework and detailed description can be found in Laird and Yeats (1986). In this paper, base year and final year for tariff reduction has been taken as 2007 and 2018 respectively as per the FTA document.

### **RESULTS AND DISCUSSION**

#### ***Trend in trade between India and Vietnam***

The agricultural trade between India and ASEAN countries for TE 2014 is shown in the table 1. During this period, total value of agricultural export to ASEAN was around US \$ 8560 million out of which 46.97 per cent was constituted by Vietnam. This clearly indicates the growing importance of Vietnam as major destination of India's agricultural commodities. The major ASEAN countries like Malaysia (15.49 %), Indonesia (14.07 %)

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**Table 1: India's agricultural trade with ASEAN countries during TE 2014**

ASEAN Country	Export (US \$ Million)	Share (%)	Import (US \$ Million)	Share (%)
Indonesia	1204.65	14.07	5433.97	56.80
Malaysia	1326.16	15.49	2432.68	25.43
Philippines	386.82	4.52	28.02	0.29
Singapore	362.59	4.24	76.35	0.80
Thailand	1031.79	12.05	472.28	4.94
Vietnam	4021.21	46.97	432.30	4.52
Others	227.44	2.66	691.87	7.23
ASEAN Total	8560.66	100.00	9567.47	100.00

Note: Computed from UNCOMTRADE data

**Table 2: India's agricultural trade with Vietnam 1995-2014**

Year	Agri export to Vietnam (‘000US\$)	Agri export to ASEAN (‘000US\$)	% share (Col.1/col.2)	Agri import from Vietnam (‘000US\$)	Agri import from ASEAN (‘000US\$)	% share (Col.4/col.5)	Agri trade balance (‘000US\$) (Col.1-col.4)
	Col.1	Col.2	Col.3	Col.4	Col.5	Col.6	Col.7
1995	46340	841755	5.51	14900	816310	1.83	31439
2000	58386	843593	6.92	7179	1249277	0.57	51207
2005	259709	1370178	18.95	59016	1960598	3.01	200693
2010	1269719	3842363	33.05	163513	6470248	2.53	1106206
2011	2425928	6338413	38.27	242182	8488000	2.85	2183746
2012	2706811	7142432	37.90	383044	10113169	3.79	2323767
2013	4420922	9564506	46.22	441765	9353177	4.72	3979157
2014	4935904	8974405	55.00	472096	9232657	5.11	4463808

Note: Computed from UNCOMTRADE data

**Table 3: Major agricultural commodities exported by India to Vietnam during TE 2014**

HS code	Commodity description	Value in '000US\$	% share of total export to ASEAN
02	Meat and edible meat offal	1685080.00	41.90
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	862485.33	21.45
09	Coffee, tea, mate and spices	177446.67	4.41
10	Cereals	263388.00	6.55
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	268472.67	6.68
23	Residues, wastes of food industry, animal fodder	249148.33	6.20
41	Raw hides and skins (other than furskins) and leather	86480.00	2.15
52	Cotton	323706.00	8.05

Thailand (12.05 %) also have considerable share in India's export. The total agricultural import from ASEAN was worth of around US\$ 9567 million in which share of Vietnam was 4.52 per cent.

The trend in agricultural trade between India and Vietnam is shown in the table 2. The share of India's agricultural export to Vietnam has increased from 5.51 per cent in 1995 to 55 per cent in 2014. Whereas, the share of India's agricultural import from Vietnam has

increased from 1.83 per cent in 1995 to 5.11 per cent in 2014. It is clear that India has exhibited the trade surplus with Vietnam in agricultural commodities throughout the period. This envisages the potential to widen the export to Vietnam. It should also be noted that agricultural export has shown a quantum jump from 2010 onward after the signing of agreement, which is a positive signal for India. Apart from hike in the import share, trade balance also increased over the years from US\$

## India's agricultural export to Vietnam

31 million to US\$ 3979 million which is favourable to India.

The major agricultural commodities exported by India to Vietnam are given in the table 3. These commodities together constitute more than 80 per cent of India's agricultural export to ASEAN. Among these, meat and edible meat offal export have maximum share (41.90 %) followed by fisheries products (8.05 %), oilseeds (6.68%) and cereals (6.5%). India mainly exports processed meat of buffalo, sheep and goat in which buffalo meat gets more preference in Vietnam market. India stands top among major suppliers of seafood to Vietnam which consists of shrimp, tunas. Another major product that is being exported to Vietnam is cotton in which Indian traders supply roughly 2 per cent of raw garment and textile materials to Vietnam. Moreover, Vietnam is the world's fifth largest garment and textile exporter and the third largest importer of garment materials which gives major boost to Indian exporters.

### Tariff reduction by Vietnam under AIFTA

The successful trade and integration among countries are possible through formation of Free Trade Agreements which are accompanied by the reductions of tariffs from all partners. As the agreement is reciprocal in nature both the countries will gain from each other's market. When the AIFTA was signed in 2009, Vietnam proposed tariff reduction for most of the agricultural commodities imported from India which are categorized into following :

- Normal track: The applied Most Favored Nation (MFN) rates for this category will be eliminated. The Normal track: 2 category has a longer implementation period (till 2021) than Normal track -1 (till 2018).

- Sensitive track: The applied MFN rates that are above 5 per cent will be reduced to 5 per cent.
- Exclusion list (EL): No reduction commitments have been made but shall be subject to an annual tariff review
- Highly Sensitive List (HSL): reduction of tariffs under 3 categories; Reduction to 50 per cent, reduction by 50 per cent and reduction by 25 per cent for the commodities imported.

Analysis of tariff reduction commitment to India in all agricultural products under AIFTA reveals that, Vietnam has kept 71 per cent of its product lines in NT-1, 16 per cent in NT-2, 6 per cent in Sensitive Track, and 4 per cent in highly sensitive category (Table 4). Vietnam has kept lowest number of product lines in the exclusion list (1.12%) for which tariff rate is not mentioned. This is to enable the country to change the tariff rate according to the market sentiments in future. Tariff rate for HSL category ranges from 10 to 65 per cent, and for Special Track category it ranges from 5 to 50 per cent.

**Table 4: Tariff commitment of Vietnam under AIFTA in agricultural sector**

Category	Number of HS 6 digit tariff line
Normal Track-1 (NT-1)	639 (71.48)
Normal Track-2 (NT-2)	146 (16.33)
Sensitive Track (ST)	56 (6.26)
Exclusion List (EL)	10 (1.12)
Highly Sensitive List (HSL)	43 (4.81)
<b>Total</b>	<b>894</b>

Note : Computed from AIFTA document ([http://asean.org/?static\\_post=asean-india-free-trade-area-3](http://asean.org/?static_post=asean-india-free-trade-area-3)) (Figures in the parentheses are percentage to the total)

**Table 5 : Average applied tariff rate of commodities by Vietnam to India at 6-digit level in base (2007) and final year (2018)**

HS code	Category	Normal Track- 1		Normal Track-2		Sensitive Track	
		Base	Final	Base	Final	Base	Final
02	Meat and edible meat offal	10.67	0	23.9	10.2		
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	28.75	0	28.8	10.0		
09	Coffee, tea, mate and spices	20.00	0	35.0	11.2	29.0	12.5
10	Cereals	12.44	0				
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	9.52	0			10.0	6.0
23	Residues, wastes of food industry, animal fodder	7.42	0			9.0	5.5
41	Raw hides and skins (other than furskins) and leather	6.64	0				
52	Cotton	7.50	0				

Note: Computed from ASEAN-India FTA document; Base- base year 2007; Final- final year of tariff reduction 2018

**Table 6: Product-wise change in agricultural commodity exports from India ('000 US\$)**

HS code and commodity description	Export Before	Export after	Change in export
Meat of bovine animals, frozen (0202)	4651.29	5189.54	538.25
Frozen fish (0303)	482.46	1756.94	1274.48
Crustaceans (0306)	3674.32	6287.76	2613.44
Molluscs (0307)	324.23	536.60	212.37
Pepper (0904)	1181.16	1672.36	491.20
Maize (1005)	10609.43	36100.20	25490.77
Rice (1006)	460.08	663.71	203.63
Groundnut (1202)	626.38	693.29	66.92
Oilseeds: Sesame& Mustard (1207)	1920.91	2300.85	379.94
Oil meals: soy (1208)	55.57	471.37	415.80
Flours, meals and pellets, of meat/fish/ crustaceans, molluscs (2301)	87.22	329.27	242.05
Bran, sharps and other residues, whether or not in the form of pellets (2302)	3526.89	4588.00	1061.11
Residues of starch manufacture and similar residues, beet-pulp, bagasse and other waste (2303)	232.53	272.49	39.97
Acorns, horse-chestnuts, marc and other vegetable materials and vegetable waste (2308)	120.26	403.86	283.60
Preparations of a kind used in animal feeding (2309)	942.69	1130.96	188.26
Tanned or crust hides and skins of bovine or equine animals (4104)	11279.10	15776.65	4497.55
Tanned or crust skins of sheep or lambs (4105)	1981.85	2347.53	365.68
Tanned or crust hides and skins of goats or kids (4106)	1567.23	1760.04	192.81
Leather further prepared after tanning or crusting of bovine (4107)	2089.61	3865.08	1775.47
Leather further prepared after tanning or crusting of goats (4113)	9668.27	13523.96	3855.69
Composition leather with a basis of leather or leather fibre, in slabs, sheets or strip (4115)	186.16	205.10	18.94
Garneted stock of cotton (5202)	473.01	746.70	273.69
Cotton yarn other than sewing thread, (5205&5207)	6653.98	8643.46	1989.48
Woven fabrics of cotton (5208,5209,5210,5211&5212)	1810.02	3684.64	1874.62

Note: Figures in parentheses are the respective HS code of the commodities

The average applied tariff rates for the selected agricultural commodities exported to Vietnam are given in the table- 5. These averages are calculated across each 6- digit product categories and compiled to the two digit categories. Vietnam offers significant tariff reduction for the fisheries product for which average tariff rate will decrease from 28.75 in 2007 to zero by 2018. Though the final year of tariff reduction agreement for AIFTA is 2019, for Vietnam, the rates will be slashed by 2018. Meat of bovine animals is placed in NT-2 categories whose average tariff rates will be reduced to 10 by end of 2018. Other animals' meat is placed in NT-1 categories whose tariff will reduce to zero in the final year of the agreement. Live fish, frozen and dried fish are kept in NT-1 category whose tariff will be slashed to zero. Whereas crustacean, molluscs are placed in NT-2 categories.

#### **SMART simulation result**

The simulations results provided for important commodities exported shows that Vietnam will continue

to be favorite destination for Indian commodities. In meat products, import of meat of bovine animal (HS code: 0202) predominates (with reduction from 20 to 10 per cent) that will increase by US\$ 538 thousand. The items in the fisheries product category considered *i.e.* frozen fish, crustaceans and molluscs (HS code: 0303, 0306 and 0307), have kept in Special Track with tariff reduction reduction from 30 to 10 per cent. Since base year tariff is high, India will gain Vietnam market with increase in the import value of US\$ 1274.48 thousand for frozen fish US\$ 2613.44 thousand for crustaceans and US\$ 212.37 thousand for mollusks (Table 6). Cereals will be another category which will have market gain represents 18 per cent share in the total import of Vietnam that includes maize (HS code: 1005) and rice (HS code: 1006) where tariff will reduce to zero from 30 and 40 respectively. The increased import will be worth around US\$ 25490.77thousand for maize. Whereas in the case of rice increase in the export will be to the tune of US\$ 203.63 thousand. Pepper species (HS code: 90411) whose tariff will reduce from 40 to 10, will lead to the

increase in export worth of US\$ 491.20 thousand. Sesame and mustard seed dominates in oilseeds export even though it is in Special Track, the increase in import by Vietnam will be amounting US\$ 379.94 thousand. Soya meal export will also increase under the AIFTA by US\$ 415.80 thousand. Other important commodities that can gain in Vietnam market share are fish products and flours whose tariff will be reduced to zero and the increase will be to the tune of US \$ 242.05. The milled products of cereals (HS code 2303) will be witnessing a higher export worth US\$ 1061.11 thousand. Residues of the bovine animals and skin and leather products of the bovine animals will also be exported more. Cotton yarn and woven fabrics of cotton will gain the market share in Vietnam with increased export worth of US\$1989.48 thousand and US\$ 1874.62 thousand respectively. The analysis reveals that India can expand the market share of major commodities currently exported to Vietnam.

The trend between agricultural trade between India and Vietnam reveals that India has always been benefitted from Vietnam. The extensive tariff reduction offered by Vietnam for most of the agricultural commodities exported by India shows the benefit that may accrue to India in future. The Vietnamese preference of Indian products especially bovine meat, raw cotton helps India to have a greater share in their market. India can gain substantially from export of meat products, fisheries products, cotton, residues, and leather products as tariff for these products are being slashed. The export promotion policies may be pursued in these commodities so as to harness maximum market share in Vietnam.

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