

TRADE CREATION, TRADE DIVERSION AND CONSUMER SURPLUS IN ASEAN-INDIA FREE TRADE AGREEMENT: A SINGLE MARKET PARTIAL EQUILIBRIUM APPROACH

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ABSTRACT

This paper has examined the Trade Creation (TC), Trade Diversion (TD) and Consumer Surplus (CS) in India as a result of tariff liberalization or tariff reduction under the ASEAN-India Free Trade Agreement (AIFTA) for India's special categories of products, namely tea and coffee using Single Market Partial Equilibrium Approach. Software for Market Analysis and Restrictions on Trade (SMART) model of WITS database of the World Bank has been used to analyse trade creation, trade diversion, and revenue effect for the commodities mentioned above. It has been found that the tariff reduction schedule in AIFTA has created a significant trade creation in Black Tea and Coffee for India in the ASEAN region. The study also indicates that the India's trade of coffee and tea have diverted from non-member countries to the ASEAN region and India has been one of the biggest gainers due to the tariff reduction in Black Tea and Coffee. It is also found that consumer surplus for India's market as a result of tariff reduction in Black Tea and Coffee is very perceptible.

Keywords: AIFTA, Tariff Liberalization, Trade Creation, Trade Diversion, Consumer Surplus
JEL Classification: B17, F10, F14, F15, F17

INTRODUCTION

Trade creation and trade diversion are the two most important economic aspects which need to be checked in the light of economic integration (Varma, 2015). Economic integration is an arrangement in which contracting nations agree to reduce or eliminate barriers to trade for mutual benefits (Akram et al., 2014; Akram, 2020; Baldwin & Venables, 1995). The concepts of trade creation and trade diversion were first brought to light by the Canadian economist Jacob Viner in the book titled "the Customs Union Issue" which was published in 1950 by the reputed Carnegie Endowment for International Peace and the concepts were later used in several researches such as Akram (2016); Arvind, et al., (1999); Balassa (1967); Clausing (2001); Endoh (1999); Viner (1982); Viner (2014); Magee (2008). By the term trade creation, we mean the generation of new trade within the trade bloc due to a shift from the high-cost producer to a low-cost producer (Veeramani & Saini, 2011). However, in the case of trade diversion, the trade shifts from a lower-cost producing country outside the union to a higher-cost producing country inside the union. Trade diversion occurs due to change in the preference rate, MFN rate or both (Laird & Yeats, 1986). Therefore, both trade creation and trade diversion are the outcomes of tariff reduction or elimination between the member countries of a trade bloc. Consumer surplus is another effect of tariff reduction or elimination. Consumer surplus occurs when the benefits accrue to the importing country's consumers due to the reduction or elimination of tariffs or ad valorem incidence of non-tariff distortions which lead to a reduction in domestic prices (Renjini, 2016).

As has been widely recognized, for many centuries, that growth in export trade, international shipping, and economic development are well-connected (Islam, 2019; Joshi,

2005), innumerable efforts have been undertaken to strengthen trade within and outside the region and especially to promote exports, and bring about environmental, economic and social sustainability. Such attempts to resort to international trade to fulfill the agenda of domestic development are very palpable in India from the instances of export promotion policy, expansionist strategies especially in the 1990s, and SAFTA which brings together eight economies of Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, & Sri Lanka (Akram, 2015; Akram & Sherwani, 2016; Sherwani & Akram, 2016). Together, these eight countries comprise 24 per cent of the world's population, and 5 per cent of the intra-regional trade (Ahmed, 2018). For ASEAN, which combines ten economies of Southeast Asian Nations- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, & Vietnam, this has occurred through ASEAN–Australia–New Zealand Free Trade Area, ASEAN–China Free Trade Area (ACFTA), ASEAN–Japan Comprehensive Economic Partnership, ASEAN–Korea Free Trade Area. Thus, to fulfill the same agenda of domestic development through bilateral trade and deeper access to markets, ASEAN-India Free Trade Agreement was signed in August 2009 by the ten countries of Southeast nations and India, a South Asian country. AIFTA came into force on 1 January 2010 (Francis, 2011). To check the impact of the agreement whether it has brought about any significant change as far as the creation of trade is concerned, this study is being done. Trade diversion always goes side by side with trade creation, and therefore, trade diversion and consumer surplus have also been extensively analyzed. Thus, the present research attempts to measure the trade creation and trade diversion in India's trade as a result of the tariff liberalization in the ASEAN-India Free Trade Agreement (AIFTA). It also aims to explore the quantum of consumer surplus for India due to tariff liberalization in AIFTA.

LITERATURE REVIEW

In this paper, the literature has been reviewed in two parts. The first part has explored the trade facilitation measure employed under the ASEAN-India Free Trade Agreement. The second part reviews the previous researches related to the present study.

Trade Facilitation under ASEAN-India Free Trade Agreement

As per Article 4 of the Agreement on Trade in Goods between India and ASEAN, each member country of the ASEAN-India Free Trade Agreement (AIFTA) should liberalize the applied tariff rates on the goods produced by the other member country as per the tariff reduction schedule given under the agreement. ASEAN-India Free Trade Agreement (AIFTA) categorised the tariff commitment schedule into:

- (i) **Normal Track:** Under the Normal Track, the tariff rates will remain at zero per cent if they are at zero per cent and if they are reduced to zero percent then they should be at zero per cent. No member country is allowed to raise the tariff rates as otherwise provided in the agreement. The Normal Track is divided into 2 parts which are Normal Track 1 (NT-1) and Normal Track 2 (NT-2). The tariff reduction period under the Normal Track 1 (NT-1) was for a short period (up to December 2018) whereas the tariff elimination period in Normal Track 2 (NT-2) is longer (up to December 2021).
- (ii) **Sensitive Track:** Under the Sensitive Track, if the applied Most Favour Nation (MFN) tariff rates are more than 5 per cent then it will be reduced to 5 per cent as per the below given schedule of tariff reduction:

(A). 1 January 2010 to 31 December 2016 for Brunei, Indonesia, Malaysia, Singapore and Thailand, and India.

(B). 1 January 2010 to 31 December 2019 for the Philippines and India.

(C) 1 January 2010 to 31 December 2016 for India and 1 January 2010 to 31 December 2021 for Cambodia, Lao PDR, Myanmar and Vietnam.

- (iii) **Special Products:** It includes India's Crude Palm Oil (CPO) and Refined Palm Oil (RPO), Coffee, Black Tea and Pepper. The tariff reduction schedules are given below in Table 1:

Table 1 TARIFF COMMITMENTS FOR SPECIAL PRODUCTS												
Tariff Line	Base Rate	Year (Not later than 1 January)										
		2010	11	12	13	14	15	16	17	18	19	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: Ministry of Foreign Affairs, Brunei Darussalam (<http://mfa.gov.bn/Pages/The-ASEAN-%E2%80%93-India-Free-Trade-Agreement.aspx>)

- (iv) **Highly Sensitive Lists:** The tariff reduction under the Highly Sensitive Lists are categorised into three parts:

- (a) Category 1: applied MFN tariff rates have to reduce to 50 %.
- (b) Category 2: applied MFN tariff rates have to reduce by 50%
- (c) Category 3: applied MFN tariff rates have to reduce by 25%.

The above reduction in tariff rates shall be accomplished by

31st December 2019 for Malaysia, Indonesia and Thailand.

31st December 2022 for the Philippines

31st December 2024 for Cambodia and Vietnam.

- (v) **Exclusion Lists:** AIFTA also facilitates to exclude some items from the tariff concessions or tariff elimination. The exclusion list is subject to the annual tariff review to enhance market access. 489 products have been removed by India from the tariff concession list and 590 products have been removed by India from the tariff elimination list (Pal & Dasgupta, 2009).

Major Findings across the Literature

There are various previous studies that have analysed the trade creation, trade diversion and consumer surplus due to the reduction in tariff rates in AIFTA. Veeramani & Saini (2011) in

their research article analyse the influence of India-ASEAN PTA on selective plantation products which are Pepper, Coffee and Tea. The authors have employed SMART model in the study to analyse the trade creation and trade diversion effects on import, welfare and revenue effects associated with tariff reduction, and import under different tariff reduction conditions. Veeramani & Saini (2011) hint that the preferential trade agreement between India and ASEAN would lead to remarkable growth in the imports of plantation products from ASEAN member countries to India. The authors further find that the tariff concession schedule under the APTA may cause some tariff revenue loss to the Government of India. However, reduction in domestic price and successive falls will bring in consumer surplus and it will offset the loss in tariff revenue thereby resulting in net welfare gains. Sikdar & Nag (2011) in their study attempted to evaluate the influence of ASEAN-India Free Trade Agreement on member countries of the ASEAN and India. They found that there is an occurrence of welfare loss to India because of allocative incapability and negative terms of trade effect. Malaysia, Singapore and Thailand are experiencing welfare gains in the ASEAN region. The authors have also found trade diversion in India and ASEAN region as a result of the implementation of AIFTA. The non-member countries are losing their market share in India and the ASEAN region due to the Free Trade Agreement between India and ASEAN.

Ahmed (2012) in his research article attempted to analyse the sectoral dimensions of AIFTA with the help of SMART model. The author finds that trade creation under AIFTA is confined to limited tariff lines. The findings of Ahmed (2012) also indicate that AIFTA will have a negative impact on the trade balance and result in revenue loss for India. The agreement would adversely affect the public health, education and government gains which have a significant share of national budgets. On the positive side, the author expects that AIFTA will provide a significant impact on the processed food products, grain crops, textile and wearing apparel, light manufacturing and heavy manufacturing sectors. Sarath Chandran & Sudarsan (2012) in their research article made an attempt to analyse the impact of AIFTA on India's fisheries trade. Partial Equilibrium Simulation Method (SMART) has been used in the study. The findings of the research indicate that tariff reduction will result in trade creation and suggest marginal welfare. The study also argues that there is a need to take necessary steps to protect India's marine sector from large scale dumping. Mondal, et al., (2012) in their research article attempted to find out the impact of AIFTA on the dairy trade of India. The authors state that, in the ASEAN region, significant trade potential exists for India in dairy market. The coming into force of AIFTA India has created an additional scope for its export of dairy products to ASEAN member nations. Indian dairy industry will be benefitted by entering those markets where tariff has been eliminated through AIFTA. On the other hand, the authors fear that India's tariff elimination will create little scope for ASEAN member countries to expand their market shares in India.

Bhattacharyya & Mandal (2016) in their research article tried to analyse the ex-post effects of India- ASEAN FTA. They find that trade and tariff concessions will result in more benefits to ASEAN than India. As far as welfare is concerned, it has been found by Bhattacharyya & Mandal (2016) that during the starting two years of AIFTA both India and ASEAN benefitted in welfare but these benefits have been decreasing over the years. They point out that there is a sharp fall in imports of both India and ASEAN which caused a fall in tariff revenue from the rest of the world. The article suggests that the Indian government should avoid the negative surplus either by liberalizing more tariffs to elastic goods or by signing a similar agreement with the rest of the world. Darma & Hastiadi (2017) in their research article have measured the effect of trade creation and trade diversion on Indonesia food and beverage industry for the period 2005 to 2015 due to the formulation of AIFTA. The authors have found that there is a significant opportunity for India to access the food and beverage industry of Indonesia. AIFTA has set the platform for increment in the intraregional trade of beverages among member countries of AIFTA. Thus, the study finds the existence of trade creation as a result of the agreement among member countries and at the same time no trade diversion was

found in the case of non-member countries. However, the findings of Khurana & Nauriyal (2017) are not in conformity with those of Darma & Hastiadi (2017). Khurana & Nauriyal (2017) state that the implementation of free trade agreement has reduced exports between member countries and thus, trade diversion has occurred.

Jagdambe (2018) in his research article has tried to estimate the effects of trade creation and trade diversion on agriculture trade among member countries of the ASEAN-India Free Trade Agreement (AIFTA). The author has found that trade creation in the agriculture sector is taking place between the member countries of AIFTA. The author has further found that free trade agreement is not only facilitating an increment in trade between the member countries of FTA but also strengthening the trade relations with non-member countries. Jagdambe & Mouzam (2019) in their research article made an attempt to analyze the trade creation, trade diversion, revenue and welfare effect on coffee, tea and pepper. They found that increase in trade of the special products of can be attributed to the trade creation which could be possible because of the agreement between India and ASEAN members. The results of SMART also reveal that trade creation in tea, coffee and pepper for India has occurred, and Indonesia and Vietnam are the chief sources. India's trade in these special products has also reported trade diversion from the rest of the world to the ASEAN countries. The reason behind it is tariff reduction or tariff elimination. The authors expect an increase in consumer welfare in the region as high-cost domestic production is being replaced by imports either at zero or at lower duty.

RESEARCH METHODOLOGY & DATA SOURCES

This study has employed Partial Equilibrium Model. Partial Equilibrium model (all equations used in this study have been given in Appendix A) assess only one market at a particular period of time (Gilbert, 2017), which is directly affected by a given policy (World Bank, 2010a). The basic framework of the partial equilibrium model was used for the first time by Laird & Yeats (1986) and since then it has been extensively used by researchers like MacPhee (1987); Wylie (1995); Datta & Kouliavtsev (2009); Veeramani & Saini (2011); Choudhry, et al., (2012); Jagdambe & Mouzam (2019) to investigate the effect of economic integration on bilateral and multilateral trade. In this paper, the Software for Market Analysis and Restrictions on Trade (SMART) of the World Integrated Trade Solution, World Bank, has been used to analyse the influence (trade creation, trade diversion) of tariff reduction on the trade of Black Tea and Coffee between India and ASEAN. All the products at 6-digit HS Code have taken for the study. The Harmonised System code classifies the tradable items. The HS Code is internationally standardized and is maintained by the World Customs Organization.

In this study, we have analysed the impact of tariff reduction on the trade between India and ASEAN countries in the context of the AIFTA. The study is confined to Black Tea and Coffee among the Special Products. Black Tea and Coffee have further been categorised into Black Tea (Fermented) & Partly Fermented Tea (090230), Other Black Tea (fermented) & Other Partly Fermented Tea (090240), and Coffee not roasted or decaffeinated (090111). The products taken in this research have been coded as BT (F & PF) for the Black Tea (Fermented) & Partly Fermented Tea (HS Code: 090230), OBT (F & OPF) for Other Black Tea (fermented) & Other Partly Fermented Tea (HS Code: 090240) and C (NR/D) for Coffee, not roasted or decaffeinated (HS Code: 090111).

ANALYSIS AND DISCUSSIONS

This section has been divided into two. Firstly, we have analysed the impact of the AIFTA on Indo-ASEAN trade in terms of trade creation, trade diversion in the special Black Tea (Fermented) & Partly Fermented Tea (HS Code: 090230) which has been coded for the purpose of facilitation in the analysis as BT (F & PF), Other Black Tea (fermented) & Other Partly Fermented Tea (HS Code: 090240) (coded as OBT (F & OPF)), and Coffee, not roasted

or decaffeinated (HS Code: 090111) (coded as C (NR/D)). Secondly, we have analysed tariff revenue and Consumer Surplus in the above-mentioned products.

Trade Creation, Trade Diversion and Trade Effect in BT (F & PF), OBT (F & OPF), and C (NR/D)

In this section, trade creation, trade diversion, and total trade effect on BT (F & PF) have been analysed. It is evident from the Table 2 that India's export of BT (F & PF) to Indonesia in the base year was US \$ 889.78 which increased to US\$ 118087 in the year 2017. The analysis reveals that there is a creation of trade between India and Indonesia to the tune of US\$ 13843 and this increase is due to tariff reduction provided in AIFTA. The agreement resulted in the diversion of trade from non-member countries to India to a figure which is greater than trade creation. In the case of Singapore, India's export of BT (F & PF) was US\$ 460 in the base year which increased to US\$ 620 in the year 2017 due to tariff reduction. The tariff reduction under AIFTA led to the creation of trade for India with Singapore worth US\$ 70. Thus, the total trade effect of US\$ 160 in BT (F & PF) for India-Indonesia was found after the signing of the AIFTA. On the other hand, India's export to Vietnam in BT (F & PF) in the base year was US\$ 634540 which increased to US\$ 845850 in the year 2017 due to tariff reduction. The tariff reduction under the AIFTA has led to the creation of trade of US\$ 98720 for India-Vietnam. Furthermore, Vietnam has seen trade diversion BT (F & PF) from other countries to India worth US\$ 112590. The total trade effect of US\$ 211310 was found for India-Vietnam due to the tariff liberalization under AIFTA. The tariff reduction provided in AIFTA encouraged India to trade with ASEAN countries.

Table 2 TRADE CREATION (TC), TRADE DIVERSION (TD) AND TOTAL TRADE EFFECT (TTE) VALUE IN US (\$1000)					
Countries	India's Export in Base Year	India's Exports (2017)	TC	TD	TTE
BT (F & PF)					
Indonesia	889.78	1180.87	138.43	152.66	291.10
Singapore	0.46	0.62	0.07	0.09	0.16
Vietnam	634.54	845.85	98.72	112.59	211.31
OBT (F & OPF)					
Indonesia	4112.39	6657.79	1548.49	996.91	2545.40
Singapore	0.65	1.06	0.25	0.16	0.41
Vietnam	8309.09	13405.48	3128.72	1967.66	5096.38
C (NR/D)					
Indonesia	13339.54	58173.82	44176.67	657.61	44834.28
Vietnam	33204.97	144658.56	109965.17	1488.42	111453.59

Source: Authors' calculation based on SMART simulation

As far as Other Black Tea (fermented) & Other Partly Fermented Tea (OBT (F & OPF)) is concerned, India's export to Indonesia in the base year was US\$ 4112390 which also increased to US\$ 6657790. The tariff liberalization has created a trade in OBT (F & OPF) for India-Indonesia worth US\$ 1548490. Whereas the diversion worth US \$ 996910 was also found during the period. The total trade effect for India-Indonesia in OBT (F & OPF) was to the tune of US \$ 2545400. These figures are also big in the case of India-Vietnam trade and both of them have large beneficiaries of the trade agreement. In the case of India-Vietnam, the trade creation and total trade effect have more than India-Indonesia as far as OBT (F & OPF) is concerned. India's trade with Singapore has also cemented after the agreement as the result shows that trade

has created under the aegis of the much-sought trade agreement between them. However, India's trade with Singapore could not be so benefitted as her trade with other ASEAN countries such as Vietnam and Indonesia.

The AIFTA has also facilitated India's increase in export of Coffee, not roasted or decaffeinated (HS Code: 090111) to Indonesia and Vietnam. India's export of C (NR/D) to Indonesia increased more than four times in ten year period. The export figure of C (NR/D) in the base year was US \$ 1333954 which grew as high as US \$ 5817382 in the year 2017 registering a phenomenal growth. Furthermore, the same pattern has been in the case of India's export of C (NR/D) to Vietnam. The agreement has been most beneficial for C (NR/D) product lines as the analysis shows that trade creation has been maximum in the case of Coffee than tea. The trade creation between India- Indonesia in the C (NR/D) product line has been found to be US \$ 4417667 whereas the trade creation for India-Vietnam in the C (NR/D) product line is even bigger standing at US \$ 10996517. Thus, it can be said that trade creation in coffee has been far greater than tea as far as India's trade with ASEAN members after the agreement is concerned.

So far as the trade of non-members with India is concerned, the analysis (Table 3) shows that a good number of countries suffered trade losses due to the coming into force of AIFTA. A table of the top ten countries whose trades have been diverted to India in BT (F & PF) due to tariff reduction under the AIFTA is given below:

Table 3 TRADE DIVERSION (TD) OF TOP TEN COUNTRIES IN BT (F & PF) AND OBT (F & OPF) DUE TO TARIFF LIBERALIZATION IN AIFTA (VALUE: US \$1000)						
S. No	BT (F & PF)		OBT (F & OPF)		C (NR/D)	
	Countries	TD	Countries	TD	Countries	TD
1	Sri Lanka	75.46	Nepal	1178.78	Uganda	1867
2	Kenya	65.91	Kenya	838.53	Cote d'Ivoire	142.15
3	Iran	47.25	Iran	329.32	Colombia	74.71
4	Papua New Guinea	33.13	Sri Lanka	245.74	Brazil	43.34
5	Malawi	22.38	Argentina	120.32	Liberia	6
6	Nepal	14.30	Malawi	82.73	Italy	5.04
7	United States	2.92	United Kingdom	77.89	Jamaica	3.45
8	Germany	2.62	Papua New Guinea	32.01	Costa Rica	1.97
9	China	1.37	China	17.42	Australia	1.66
10	South Africa	0.005	Tanzania	6.85	United States	0.68

Source: Authors' calculation based on SMART simulation

Our calculation shows that Sri Lanka suffered a lot due to the tariff reduction as a result of AIFTA. India's trade from Sri Lanka in Black Tea Fermented & Partly Fermented Tea to the tune of US\$ 75460 got diverted due to the tariff reduction in AIFTA. Kenya is the second biggest sufferer which lost trade with India worth US\$ 65910 due to tariff reduction under the agreement between Indian and ASEAN members. The other sufferers are Iran US \$47250, Papua New Guinea US\$ 33130, Malawi US\$ 22380, Nepal US\$ 14300, United States US\$ 2920, Germany US\$ 2620, China US\$ 1370 and South Africa US\$ 5. As far as the trade of non-member countries with India in other Black Tea fermented & Other Partly Fermented Tea HS Code: 090240 is concerned, Nepal suffered maximum due to the tariff reduction as part of AIFTA. India's trade of OBT F & OPF with Nepal as high as US \$1178780 faced trade diversion towards member countries of ASEAN. Kenya has been the second biggest sufferer whose trade loss is around 70 per cent of Nepal's trade diversion. The countries from which

trade OBT F & OPF with India got diverted are Iran Sri Lanka, Argentina, Malawi, United Kingdom, Papua New Guinea, China, and Tanzania. India's trade of Coffee, not roasted or decaffeinated (HS Code: 090111) with non-member countries too has registered a trade diversion effect which obvious from our analysis. The top ten countries namely Uganda, Cote d'Ivoire, Colombia, Brazil, Liberia, Italy, Jamaica, Costa Rica, Australia, and United States have suffered trade diversion effects as a result of the coming into force of AIFTA. Their trade has been diverted towards member countries of AIFTA.

Tariff Revenue and Consumer Surplus BT F & PF, OBT F & OPF, and C (NR/D)

The analysis also reveals a decrease in the tariff revenue in the year 2017 as compared to the base year and this happened as per the expectations as the tariff revenue is bound to decrease because of either zero duty or reduced rates imposed on the imports from the member countries. The tariff revenue in the product line of BT F & PF saw a negative change of US \$ 55940 whereas the product line of OBT F & OPF suffered a negative change of US \$ 2169.62 in the tariff. However, the negative change has been offset by the consumer surplus which happened on account of the agreement between India and ASEAN members. The agreement has created a consumer surplus of US \$ 20367 in the case of BT F & PF and US \$ 292941 in the case of OBT F & OPF product line. Unlike negative revenue changes in the case of BT F & PF and OBT F & OPF, a positive change in the case of C (NR/D) has been found worth USD \$ 7300889 and the consumer surplus for the same is found to be US \$12402215 which is far greater than the positive change in revenue thereby indicating two-way benefits (Table 4).

Table 4 TARIFF REVENUE AND CONSUMER SURPLUS TO INDIA IN BT F & PF AND OBT F & OPF VALUE: US \$1000				
	Tariff Revenue in Base Year	New Tariff Revenue 2017	Change in Tariff Revenue	Consumer Surplus
BT F & PF	3215.38	2655.98	559.40	203.67
OBT F & OPF	31572.08	29402.46	2169.62	2929.41
C (NR/D)	53462.88	126471.77	73008.89	124022.15

Source: Authors' calculation based on SMART simulation

CONCLUSION

The tariff reduction schedule in AIFTA has created a significant trade potential for India in Black Tea and Coffee in the ASEAN region. The agreement between India and ASEAN members has resulted in the diversion of trade from non-member countries tilting towards India's favour. Apart from it, it has been found that consumer surplus for India's market as a result of tariff reduction in Black Tea and Coffee is very perceptible. Countries such as Sri Lanka, Kenya, Iran, Papua New Guinea, Malawi, Nepal, United States, Germany, and China have suffered diversion of trade in Black Tea (Fermented) & Partly Fermented Tea (HS Code: 090230). Thus, they have lost as a result of India's trade agreement with the ASEAN members. However, India's customers have been found to be beneficiaries of the agreement as the results have indicated a huge consumer surplus. The same trend has been in the case of other products such as Other Black Tea (fermented) & Other Partly Fermented Tea (HS Code: 090240) and C (NR/D) for Coffee, not roasted or decaffeinated (HS Code: 090111). Thus, it can be concluded that the trade agreement between India and ASEAN members has been beneficial for India as the results show a fairly perceptible consumer surplus which is far greater than the negative change in the tariff revenue. However, the non-member countries have suffered trade losses in the product categories of tea and coffee.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest.

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