INDIA'S BILATERAL TRADE WITH VIETNAM: A STUDY OF SOME SELECTED AGRICULTURAL COMMODITIES

Abstract

The present research paper tries to investigate the effectiveness of bilateral trade in explaining the relationship between India and Vietnam using the data from 2003 to 2021 through a Revealed Comparative Advantage Index (RCA). The finding of the RCA revealed that there is a change in the share of different agricultural items during the study period both in India's export to Vietnam as well as import from Vietnam. Further, Beverages and vinegar recorded the highest share in India's export to Vietnam in 2003-04, but with the passage of time, it lost its charm and become negligible in 2021-22. There is also a fall in the share of fish and crustaceans, oil seeds, and grains, but a massive gain is observed by cotton and cereals. This gain in the share of cotton and cereals is also supported by improvement in the RCA value of these items. A fall in the share of fish and crustaceans and oil seeds and grains is also caused by a fall in the RCA value of these items. Overall, the study concluded that India may have better trade potential by diversifying its trade structures to Vietnam.

Keywords: India; Vietnam; Bilateral Trade; and Revealed Comparative Advantage.

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I. INTRODUCTION

India and Vietnam have cultural and economic ties dating back to the second century (Sharma, 2009). Modern India supported Vietnam's independence from France, opposed American involvement in the Vietnam War, and advocated for Vietnam's unification (Frost, 1993). India and Vietnam established diplomatic relations in 1972 (Van. 2019). Since then, bilateral ties have steadily grown with regular high-level visits and exchanges of delegations between the two countries. Vietnam and India were both close allies of the Soviet Union during the Cold War, but both emphasized maintaining their strategic autonomy. The relationship was strengthened further when India launched its "Look East Policy" (Nguyen, 2023) in the early 1990s, with the specific goal of economic integration and political cooperation with Southeast Asia and East Asia (Nanda, 2003). 1992 saw the development of strong economic ties between Vietnam and India, spanning manufacturing, agriculture, and oil exploration (Frost, 1993). In 2003, the two countries issued a Joint Declaration on Comprehensive Cooperation in which they envisioned creating an "Arc of Advantage and Prosperity" in Southeast Asia. In 2007, the Vietnam-India Strategic Partnership Joint Declaration was signed (Shekhar, 2007). India and Vietnam agreed to establish a viceministerial-level strategic dialogue at the Foreign Office. The first strategic dialogue was held in 2009, and the most recent in August 2016. Vietnam is incredibly important to India's eastward outreach as a result of Modi's policy navigation from "Look East" to "Act East," which essentially seeks to strengthen ties with the extended neighborhood of the Asia Pacific region and to expand relations between India and Vietnam to the level of "Comprehensive Strategic Partnership" (India-Vietnam Relations - MEA, 2021), It can be seen in a variety of cooperating dimensions.

In the early years, bilateral trade between India and Vietnam suffered as a result of the 1997 Asian financial crisis, which was accompanied by a recession in Vietnam's economy. A major breakthrough came with the establishment of the Indian Business Chamber, which was formally licensed in February 1999 (Pant, 2018). Bilateral trade touched \$1 billion in 2006, crossed the \$2 billion mark in 2009, and reached \$7.8 billion in 2016. During FY 2021, bilateral trade between India and Vietnam reached around \$14 billion. Currently, India is one of the top 8th trading partners of Vietnam, while Vietnam is the 15th largest trading partner of India and the fourth in Southeast Asia (India–Vietnam Relations - MEA, 2021). The above statistics show many folds rise has been accounted for India and Vietnam trade, and it has grown very rapidly. In light of this growth of bilateral trade between countries, it is pertinent to know the state of gain or loss, in which direction both the country should go is also very critical for both the country.

Among all the products, particularly for India, agricultural items are very important because, during the last few decades, there has been a lot of diversification in the agriculture sector as well as very rapid growth has been realized both in production as well as in the productivity, so India is always in search of the market where India will be able to sell the agricultural items so that the farmers can have their better income as well as Vietnam is trying to diversify its trade and intends to make use of India's growing market so that both the country can move on the path of growth and development (Kumar, 2008). Hence, this research paper focuses on the bilateral trade in agricultural products between Vietnam and India. Additionally, it will also make an attempt to know what type of agricultural items India

is having comparative advantage over Vietnam and in which items Vietnam has comparative advantage over India so that the trade relations may be organized accordingly.

II. LITERATURE REVIEW

The literature related to the present topic is very limited; however, there are many studies available on bilateral trade between various countries, including India. Some selected literature related to the present topic is listed below:

Jha et al., (2008); Mullen and Prasad (2014); Marwah et al.(2021); and Bonagani (2022) stated that India's Act East Policy functions as a strategic partner in both bilateral and multilateral contexts. Shinoj and Mathur(2008) used Revealed Symmetric Competitive Advantage (RSCA) to determine India's competitive advantage in agricultural exports to Asia. They found that India's competitive advantage in most significant agricultural exports has been diminishing and losing ground to other Asian competitors. Chandran(2011) used the Trade Intensity Index (TII) and Revealed Comparative Index (RCA) to examine the trade structure between India and ASEAN. He came to the conclusion that there may be mutually beneficial industries and goods that can promote stronger cooperation between India and ASEAN. Andhale and Kannan(2015) calculated India's RCA in agro-processed products in comparison to the rest of the globe. From 2003 to 2013, the study tracked commodities aggregation through WITS (World Integration Trade Solution). Their study concluded that India has a competitive advantage in exporting 7 of 44 processed animal products, 12 of 40 processed vegetable goods, and 7 of 44 processed food products. Using the gravity model, Renjini et al. (2017), Sharma and Kathuria (2020), Kathuria(2018), and Gulnaz and Manglani(2022) anticipate that India and ASEAN's trade relationship in products and services will continue to be beneficial to both countries. A study by Renjini et al. (2018) observed that India has the potential to increase its market share in Vietnam's meat products, fisheries, and cotton sectors. Singh and Sharma (2014) established a model to analyze India's trade with the European Union (EU) and the Association of Southeast Asian Nations (ASEAN).

III.RESEARCH METHODOLOGY

The primary goal of this study is to investigate the bilateral trade relationship between India and Vietnam from 2003 to 2021. The data used in this study (based on a two-digit HS code) are secondary in nature and are taken from the databases of the UN-COMTRADE and the Ministry of Commerce and Industry, Government of India. After gathering the data, the study used Revealed Comparative Advantage (Balassa, 1965) to calculate and analyze the relative advantages and disadvantages of India and Vietnam in agricultural goods respectively with the help of the following expression.

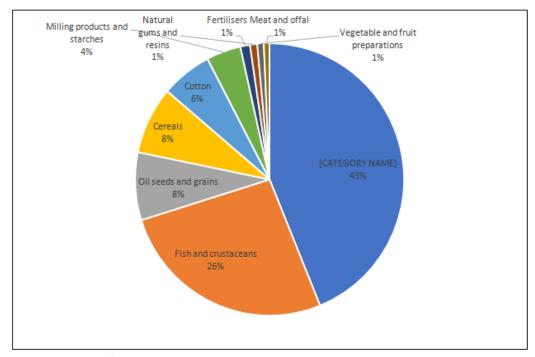
$$RCA = \frac{K_{ij}}{K_{it}} / \frac{L_j}{L_t} 1$$

(Where, RCA= Revealed comparative advantage, Kij = Country i (India/Vietnam) Export of commodity j to world, Kit = Country i(India/Vietnam) Total Export to world, Lj = World Export of Commodity j, Lt = World Total Export)

The RCA Index ranges from 0 to infinity. A country is said to have a comparative advantage in a particular commodity or industry if its RCA (Revealed Comparative Advantage) is > 1. On the other hand, if the RCA is < 1, the country is said to have a comparative disadvantage.RCA has frequently been used to examine changes in trade patterns (Ferto and Hubbard 2003: Batra and Khan 2005; and Kannan 2010).

IV. RESULTS AND DISCUSSION

1. Composition of India's Bilateral Trade with Vietnam in Agricultural Items: From a meagre amount of US\$ 200 million in the year 2000, bilateral trade between India and Vietnam has seen steady growth over the years. According to Indian statistics for Financial Year 2021-22, bilateral trade between India and Vietnam realized a growth of 27 % and reached US\$ 14.14 billion. Indian exports to Vietnam reached to US\$ 6.70 billion (increase of 34%) while Indian imports from Vietnam amounted to US\$ 7.44 billion (increase of 21%). In2020-21, Vietnam was the 15th largest trading partner of India globally and the 4th largest within ASEAN, following Singapore, Indonesia, and Malaysia. For Vietnam, on the other hand, India was the 10th largest trading partner globally (MEA, 2021).



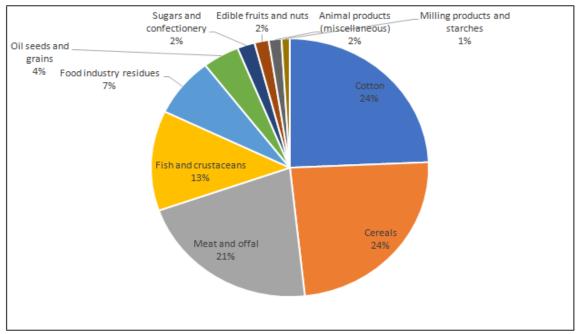
Source: Author Calculation based on UNCOMTRADE

Figure 1: India's Export Composition of Agricultural Items 2003-04

Based on the value of agricultural items traded between India and Vietnam, top 25 agricultural items are selected for the study. In the export composition of India to Vietnam, sum of the top 25 agricultural traded items accounted \$143.77 million for the year 2003. For the year 2003-04, major items have been shown in Figure 1. The top 5 agricultural items, exported by India to Vietnam for the year 2003-04wereBeverages and vinegar (42.68, \$61.36million), Fish and crustaceans (25.62%, \$36.84 million), Oil seeds

and grains (7.82%, \$11.24 million), Cereals (7.7%, \$11.18 million) and Cotton (5.96%, \$8.57 million).

The composition of India's export to Vietnam in 2021 is shown in Figure 2. The top exportable items are Cotton (24%, \$554.93 million), Cereals (23.19%, \$546.64 million), Meat and offal (20.67%, \$487.11 million), Fish and crustaceans (12.14%, \$286.13 million) and Food industry residues (7.18%, \$169.34 million). While comparing both figures 1-2, it may be seen that this is a diversification of India's agricultural export to Vietnam between 2003 and 2021.



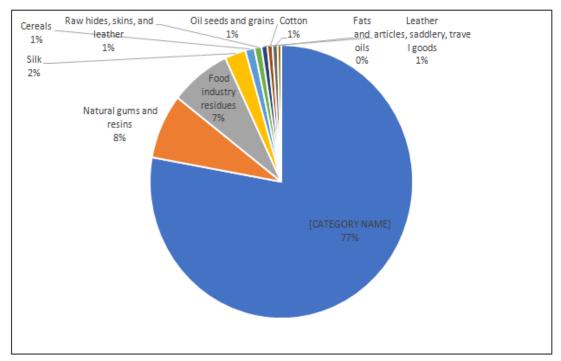
Source: Author Calculation based on UNCOMTRADE

Figure 2: India's Export Composition of Agricultural Items 2021-22

The export composition has drastically changed. In 2003, there were only a few items that have reasonable values in the top 25 agricultural items exported by India to Vietnam. Over the passing of time, items that were not exported have shown good performance in later years.

In the year 2003-04, Beverages and vinegar accounted for 43% of India's export to Vietnam which has almost been negligible i.e., 0.04% in 2021-22. The second highest contributor in India's export to Vietnam was made by Fish and crustaceans in 2003-04. But its share has also declined in 2021-22 and has been 4th major contributor. Oil seeds and grains, Cereals and Cotton were the 3rd, 4th and 5th largest contributors in India's export to Vietnam in 2003-04 respectively. Over the years, cotton and cereals have performed well and been the top exportable item of India's agricultural export to Vietnam in 2021-22. Meat and offal become the 3rd top exportable item of India to Vietnam in 2021-22.

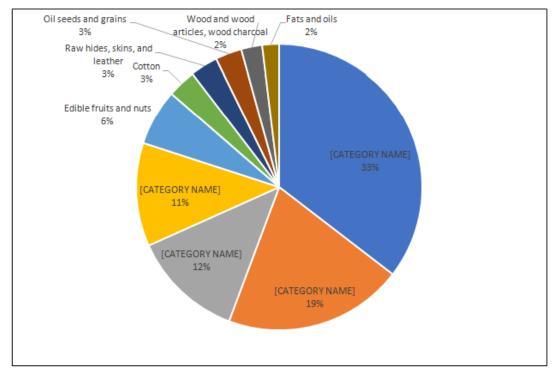
So far as the import is concerned, India was the 9th largest supplier of Vietnam for 2.3% of its total import with a value of \$6.95B billion, whereas Vietnam was the 21st largest supplier of India for 1.2% of its total import for the value of \$9.00B billion in 2021. (COMTRADE database on international trade) In the import composition of India from Vietnam, major agricultural items have shown in Figure 4 for the year 2021. The top 5 agricultural items in India's imports from Vietnam are Coffee, tea, and spices (33.06%, \$249.34 million), Fertilizers (18.93%, \$142.77 million), Food industry residues (11.76%, \$88.71 million), Silk (10.91%, \$82.3) and Edible fruits and nuts (5.96%, \$44.92 million).



Source: Author Calculation based on UNCOMTRADE

Figure 3: India's Import Composition of Agricultural Items 2003-04

The composition of India's imports from Vietnam is shown in Figure 3 and Figure 4 for the years 2003-04 and 2021-22 respectively. The figure shows that more than 2/3rd of India's agricultural imports from Vietnam belongs to Coffee, tea, and spices in 2003-04. This year other major, agricultural items from Vietnam are Natural gums and resins, food industry residues and silk. After 18 years, there is a drastic change in the share of Coffee, tea, and spices in India's imports from Vietnam, though it remained on top but its percentage share in total import declined to 33% from 76%. Fertilizers have emerged as a major import and ranked at 2nd position. Food industry residues, silk and edible fruits and nuts are 3rd, 4th, and 5th major agricultural imports from Vietnam in 2021-22.



Source: Author Calculation based on MOCI, India

Figure 4: India's Import Composition of Agricultural Items 2021-22

2. Revealed Comparative Advantage of India: Revealed Comparative Advantage Indices of India in the world is presented in Table 5. RCA indices values are calculated for the year 2003 to 2021. 25 agricultural items are considered for the present study, India enjoys revealed comparative advantages in 9 items (Fish and crustaceans, Coffee, tea and spices, Cereals, Natural gums and resins, Vegetable plaiting materials, Tobacco and substitutes, Silk, Cotton, Other vegetable fibers and paper fabrics) during the whole study period. The remaining 16 items have shown comparative disadvantage as the index value for these are less than unity in one or two years.

Out of 16 revealed comparative disadvantage items, three namely (Meat and offal, milling products and starches, and Sugars and confectionery) were not having good RCA values in the initial years but over the passing of time, RCA index values have improved and are on the path of comparative advantage.

In addition to this, the other three items (Edible vegetables and roots, Edible fruits and nuts, and Food industry residues) are not consistent in their indices value as they have an advantage in the early phase of the study years but currently showing a downtrend and are out of revealed comparative advantage index.

Natural gums and resins recorded the highest Index value of 32.67 in 2012, reduced to 5.22 in 2021. Silk may be considered as the second item having better comparative advantages for India with an index value of 16.57 in 2003 but continuously being decreased in the following years. The next item in sequence to comparative advantages is cotton with an index value of 6.23 in 2003 and consistent at the index value

of more than 5 in the following years and performing at a value of 8.96 in 2021. The remaining items in the sequence to have comparative advantages are(Fish and crustaceans, Coffee, tea and spices, Cereals, Vegetable plaiting materials, Tobacco and substitutes, other vegetable fibers and paper fabrics).

3. Revealed Comparative Advantage of Vietnam: Revealed Comparative Advantage Indices of Vietnam in the world is presented in Table 6 on the basis of two digits HS Code (data further categorized in 25 major agricultural items) from 2003 to 2021. From items, Vietnam enjoys revealed comparative advantages in almost 8 items (Fish and crustaceans, Edible fruits and nuts, Coffee, tea, and spices, Cereals, milling products and starches, Vegetable plaiting materials, Meat and fish preparations and Silk)and comparative disadvantage in remaining 17 items as the indices value are lesser than unity. In all 8 items having Comparative advantages, Vietnam is sustained over the years 2003 to 2021.

A look at comparatively disadvantaged 17 items reveals that 4 items, (Edible vegetables and roots, Cereal and milk preparations, Tobacco and substitutes, and other vegetable fibers and paper fabrics) have lost the comparative advantage after 2014. Only one item (cotton) is showing an improvement in its value since 2008 and is on the path of comparative advantage.

Coffee, tea, and spices recorded the highest index value of 24.97 in 2007 after that it is continuously decreasing during the period 2008-2021. Fish and crustaceans are the second item having a better comparative advantage after Coffee, tea, and spices indicating an index value of 16.18 in 2003, but showing a declining trend in the following years to the index value and reduced to 3.11 in 2021. Remaining items like Edible fruits and nuts, Cereals, milling products and starches, Vegetable plaiting materials, Meat and fish preparations, and Silk have indicated the index value more than unity in all years during the study period 2003 to 2021 and hence showing comparative advantages in all these years.

III. CONCLUSION

The study has analyzed the bilateral trade of agricultural items between India and Vietnam during the year 2003 to 2021. It is found that there is a change in the share of different agricultural items during the study period both in India's export to Vietnam as well as import from Vietnam. Beverages and vinegar recorded the highest share in India's export to Vietnam in 2003-04, but with the passage of time, it lost its charm and became negligible in 2021-22. There is also a fall in the share of fish and crustaceans, oil seeds and grains, but a massive gain is observed by cotton and cereals. This gain in the share of cotton and cereals is also supported by the improvement in the RCA value of these items. A fall in the share of fish and crustaceans and oil seeds and grains is also caused by a fall in the RCA value of these items.

Changes are also observed in the import composition of agricultural items of India from Vietnam. Tea, coffee and spices have registered a sharp decline in their share in India's imports from Vietnam. This has largely happened because of a sharp decline in the RCA value of agricultural items of Vietnam, but remains the most imported item as it has the highest value of RCA even after fall. Food industry residue, silk, cotton, and edible fruit and

nuts have registered an improvement in their share in India's total import from Vietnam, as the RCA value of these items of Vietnam has improved. It can be therefore, concluded that the value of RCA of a commodity is very important in determining its trend, particularly between India and Vietnam.

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APPENDIX

Table 1: India's Export Composition of Agricultural Items 2021-22 (US\$ Million)

Commodity	2021-2022	Share %
Meat and offal	487.11	20.67
Fish and crustaceans	286.13	12.14
Dairy and edible produce of animal origin	5.61	0.24
Animal products (miscellaneous)	33.62	1.43
Edible vegetables and roots	9.56	0.41
Edible fruits and nuts	37.78	1.60
Coffee, tea, and spices	18.79	0.80
Cereals	546.64	23.19
Milling products and starches	22.1	0.94
Oil seeds and grains	97.57	4.14
Natural gums and resins	2.61	0.11
Fats and oils	8.15	0.35
Sugars and confectionery	46.66	1.98
Cocoa preparations	1.36	0.06
Cereal and milk preparations	1.28	0.05
Vegetable and fruit preparations	0.79	0.03
Miscellaneous edible preparations	11.75	0.50
Beverages and vinegar	1.06	0.04
Food industry residues	169.34	7.18
Tobacco and substitutes	6.62	0.28
Fertilizers	0.71	0.03
Silk	0.81	0.03
Wool and animal hair	4.26	0.18
Cotton	554.93	23.54
Other vegetable fibers and paper fabrics	1.9	0.08
Total	2357.14	

Table 2: India's Export Composition of Agricultural Items 2003-04 (US\$ Million)

Commodity	2003-2004	Share%
Meat and offal	0.96	0.67
Fish and crustaceans	36.84	25.62
Dairy and edible produce of animal origin	0.37	0.26
Animal products (miscellaneous)	0.03	0.02
Edible vegetables and roots	0.02	0.01
Edible fruits and nuts	0.06	0.04
Coffee, tea, and spices	0.37	0.26

Cereals	11.18	7.78
Milling products and starches	5.82	4.05
Oil seeds and grains	11.24	7.82
Natural gums and resins	1.22	0.85
Plaiting materials, other vegetable products	0.07	0.05
Fats and oils	0.7	0.49
Meat and fish preparations	0.51	0.35
Cocoa preparations	0.01	0.01
Cereal and milk preparations	0.01	0.01
Vegetable and fruit preparations	1.1	0.77
Beverages and vinegar	61.36	42.68
Food industry residues	0.15	0.10
Tobacco and substitutes	0.63	0.44
Fertilizers	1.63	1.13
Leather articles, saddlery, travel goods	0.49	0.34
Silk	0.09	0.06
Wool and animal hair and woven fabric	0.34	0.24
Cotton	8.57	5.96
Total	143.77	

Table 3: India's Import Composition of Agricultural Items 2003-04 (US\$ Million)

Commodity	2003-2004	Share%
Fish and crustaceans	0	0.00
Dairy and edible produce of animal origin	0	0.00
Live plants, bulbs, flowers (ornamental)	0.02	0.10
Edible vegetables and roots	0	0.00
Edible fruits and nuts	0.01	0.05
Coffee, tea, and spices	15.13	76.57
Cereals	0.22	1.11
Oil seeds and grains	0.12	0.61
Natural gums and resins	1.49	7.54
Plaiting materials, other vegetable products	0.08	0.40
Fats and oils	0.09	0.46
Meat and fish preparations	0	0.00
Cereal and milk preparations	0.07	0.35
Vegetable and fruit preparations	0.06	0.30
Miscellaneous edible preparations	0	0.00
Food industry residues	1.45	7.34
Tobacco and substitutes	0	0.00
Fertilizers	0	0.00
Raw hides, skins, and leather	0.17	0.86
Leather articles, saddlery, travel goods	0.14	0.71
Wood and wood articles, wood charcoal	0.09	0.46

Cork and article of cork	0	0.00
Silk	0.5	2.53
Wool and animal hair and woven fabric	0	0.00
Cotton	0.12	0.61
Total	19.76	

Table 4: India's Import Composition of Agricultural Items 2021-22 (US\$ Million)

Commodity	2021-2022	Share %
Fish and crustaceans	11.86	1.57
Dairy and edible produce of animal origin	0.49	0.06
Live plants, bulbs, flowers (ornamental)	0.06	0.01
Edible vegetables and roots	0.06	0.01
Edible fruits and nuts	44.92	5.96
Coffee, tea, and spices	249.34	33.06
Cereals	0.16	0.02
Milling products and starches	0.05	0.01
Oil seeds and grains	21	2.78
Natural gums and resins	5.56	0.74
Plaiting materials, other vegetable products	10.01	1.33
Fats and oils	13.45	1.78
Meat and fish preparations	1.76	0.23
Sugars and confectionery	0.88	0.12
Cereal and milk preparations	1.28	0.17
Vegetable and fruit preparations	8.76	1.16
Miscellaneous edible preparations	2.46	0.33
Beverages and vinegar	0.79	0.10
Food industry residues	88.71	11.76
Fertilisers	142.77	18.93
Raw hides, skins, and leather	21.96	2.91
Leather articles, saddlery, travel goods	6.2	0.82
Wood and wood articles, wood charcoal	16.7	2.21
Silk	82.3	10.91
Cotton	22.74	3.01
Total	754.27	

Table 5: Revealed Comparative Advantage Index of India in Agricultural Items

Product label	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Meat and offal	0.81	0.91	0.94	1.01	1.02	1.06	0.94	1.25	1.37	1.71	2.16	2.30	2.37	2.14	2.07	1.74	1.48	1.46	1.24
Fish and crustaceans	3.38	2.60	2.63	2.32	2.18	1.61	1.40	1.81	2.00	2.18	2.70	2.83	2.83	2.90	3.33	3.06	2.95	2.92	2.82
Dairy and edible produce of animal origin	0.31	0.36	0.55	0.40	0.41	0.51	0.21	0.23	0.16	0.24	0.44	0.29	0.28	0.23	0.23	0.32	0.29	0.22	0.27
Animal products (miscellaneous)	1.09	1.01	0.82	0.76	0.80	0.49	0.55	0.70	1.29	0.85	0.73	0.65	0.56	0.66	0.62	0.71	0.53	0.62	1.28
Edible vegetables and roots	1.33	1.43	1.67	1.57	1.34	1.21	1.13	1.17	0.97	0.91	1.19	1.00	1.08	1.01	0.94	1.02	0.86	1.01	0.94
Edible fruits and nuts	1.77	1.95	1.82	1.60	1.33	1.40	1.06	0.98	0.99	0.97	0.94	0.92	0.89	0.89	0.92	0.74	0.67	0.62	0.59
Coffee, tea, and spices	6.30	6.06	4.84	4.97	4.90	4.66	3.47	3.71	3.47	3.52	3.56	3.32	3.76	3.75	3.79	3.75	3.88	4.45	3.85
Cereals	4.49	4.85	4.45	3.13	3.62	3.28	2.67	2.37	2.75	4.60	5.25	4.96	4.08	3.51	4.18	4.12	3.71	4.62	4.53
Milling products and starches	1.67	1.06	0.40	0.35	0.39	0.33	0.28	0.37	0.45	0.75	0.92	0.92	1.01	0.77	0.74	0.93	0.90	1.20	1.36
Oil seeds and grains	1.49	1.87	1.39	1.50	1.66	1.35	0.83	1.09	1.36	1.22	1.05	1.27	1.22	1.15	1.07	0.96	1.02	1.05	0.77
Natural gums and resins	11.57	11.33	11.78	10.41	8.95	8.38	5.24	7.92	17.21	32.67	18.60	15.82	9.91	7.54	8.10	7.82	6.81	5.77	5.22
Vegetable plaiting materials	3.72	5.52	5.17	4.42	4.55	4.79	3.56	5.00	3.75	4.77	4.24	3.54	3.82	4.69	3.72	2.74	2.66	2.10	2.21
Fats and oils	0.72	1.01	0.85	0.70	0.64	0.57	0.56	0.60	0.57	0.57	0.56	0.55	0.67	0.59	0.72	0.71	0.77	0.88	0.62
Meat and fish preparations	0.45	0.59	0.63	0.71	0.55	0.57	0.40	0.52	0.23	0.11	0.14	0.17	0.29	0.40	0.48	0.48	0.52	0.71	0.69
Sugars and confectionery	2.87	0.45	0.34	2.28	3.35	4.16	0.19	1.59	2.31	2.61	1.27	1.65	2.12	2.27	1.43	1.66	2.86	4.06	4.93
Cereal and milk preparations	0.35	0.35	0.40	0.38	0.37	0.45	0.32	0.35	0.39	0.43	0.42	0.42	0.48	0.48	0.43	0.40	0.39	0.44	0.40
Vegetable and fruit preparations	0.37	0.39	0.45	0.53	0.42	0.46	0.41	0.39	0.38	0.43	0.42	0.48	0.52	0.50	0.53	0.54	0.55	0.67	0.59
Miscellaneous edible preparations	0.73	0.57	0.58	0.57	0.54	0.52	0.44	0.46	0.46	0.56	0.50	0.52	0.55	0.57	0.59	0.58	0.61	0.65	0.63
Food industry residues	2.33	3.82	2.85	3.87	3.79	4.60	2.33	2.52	2.56	2.32	2.57	1.47	0.92	0.69	1.23	1.27	1.10	1.16	1.06
Tobacco and substitutes	1.31	1.34	1.22	1.35	1.41	1.72	1.79	1.71	1.19	1.35	1.40	1.31	1.46	1.52	1.21	1.28	1.22	1.27	1.16
Fertilizers	0.04	0.05	0.05	0.04	0.04	0.05	0.23	0.05	0.06	0.08	0.06	0.07	0.10	0.11	0.10	0.14	0.12	0.14	0.06
Silk	16.57	16.30	12.95	11.30	10.03	8.99	6.83	7.03	4.65	3.30	2.95	2.90	2.90	2.55	2.18	2.28	2.45	4.19	4.32
Wool and animal hair	0.57	0.58	0.65	0.63	0.64	0.80	0.76	0.76	0.79	0.82	0.63	0.74	0.86	0.77	0.72	0.77	0.83	0.74	0.59
Cotton	6.23	6.01	5.70	6.79	8.02	7.53	5.26	8.10	6.63	8.02	8.80	8.24	8.23	7.24	7.21	8.01	6.20	7.77	8.96
Other vegetable fibers and paper fabrics	4.67	5.25	4.95	4.18	4.37	5.32	4.29	6.24	5.24	5.17	4.33	4.39	4.72	5.89	5.87	5.11	4.93	6.83	6.42

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Table 6: Revealed Comparative Advantage Index of Vietnam in Agricultural Items

Productlabel	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Meat and offal	0.16	0.24	0.17	0.11	0.17	0.15	0.11	0.08	0.09	0.09	0.05	0.06	0.08	0.09	0.07	0.06	0.07	0.03	0.03
Fish and crustaceans	16.18	14.33	13.50	14.11	13.96	13.69	11.08	10.50	9.56	8.16	6.91	6.43	4.87	4.26	4.23	4.07	3.55	3.20	3.11
Dairy and edible produce of animal origin	1.02	0.47	0.77	0.73	0.24	0.26	0.24	0.29	0.32	0.37	0.33	0.31	0.28	0.19	0.13	0.15	0.12	0.12	0.13
Animal products (miscellaneous)	0.87	0.56	0.56	0.53	0.34	0.26	0.34	0.36	0.39	0.32	0.29	0.26	0.20	0.25	0.39	0.35	0.62	0.45	0.62
Edible vegetables and roots	1.27	1.24	1.13	1.55	1.58	1.18	1.73	1.10	1.67	1.87	1.15	1.86	0.89	0.64	0.69	0.64	0.35	0.34	0.38
Edible fruits and nuts	3.40	4.08	4.05	3.35	3.50	3.90	3.36	3.61	3.67	3.49	2.93	3.05	3.20	3.79	4.26	3.84	3.13	2.36	2.48
Coffee, tea, and spices	18.62	19.70	16.87	20.75	24.97	20.17	16.30	14.33	13.73	15.32	11.88	12.32	8.42	8.98	7.25	6.49	4.89	3.77	4.14
Cereals	6.85	7.31	10.13	7.67	5.85	7.07	7.37	8.03	5.83	4.91	3.39	3.09	2.75	2.04	2.09	1.90	1.60	1.53	1.34
Milling products and starches	4.49	3.18	3.34	5.21	4.83	3.60	4.26	5.69	5.95	7.46	5.84	5.23	5.58	4.09	3.71	3.58	3.43	3.02	3.01
Oil seeds and grains	0.98	0.59	0.77	0.31	0.55	0.32	0.18	0.26	0.24	0.08	0.08	0.08	0.07	0.11	0.08	0.08	0.11	0.12	0.13
Natural gums and resins	0.61	1.08	1.37	1.10	0.52	0.35	0.22	0.03	0.09	0.05	0.14	0.05	0.14	0.34	0.49	0.44	0.61	0.49	0.51
Vegetable plaiting materials	5.96	5.00	4.17	5.04	3.01	2.26	2.21	2.15	1.99	2.67	2.92	2.70	2.27	2.29	1.51	1.36	1.59	1.51	1.28
Fats and oils	0.45	0.52	0.15	0.12	0.23	0.29	0.26	0.26	0.36	0.48	0.37	0.34	0.34	0.18	0.15	0.16	0.16	0.15	0.18
Meat and fish preparations	2.41	3.24	3.86	4.12	3.89	4.03	3.99	5.10	4.91	4.19	4.63	5.06	3.93	3.77	3.61	3.34	3.03	2.93	2.80
Sugars and confectionery	0.46	0.28	0.23	0.26	0.45	0.56	0.53	0.55	1.02	0.46	0.98	0.59	0.40	0.24	0.24	0.25	0.23	0.29	0.19
Cereal and milk preparations	1.32	1.27	1.37	1.37	1.42	1.39	1.21	1.29	1.22	1.15	1.06	0.79	0.87	0.85	0.72	0.63	0.65	0.60	0.60
Vegetable and fruit preparations	0.81	0.95	0.72	1.09	0.85	0.88	0.73	0.80	0.66	0.52	0.67	0.61	1.33	0.65	0.65	0.69	0.88	0.90	1.09
Miscellaneous edible preparations	0.28	0.30	0.42	0.40	0.36	0.36	0.39	0.44	0.60	0.64	1.02	0.76	0.71	0.72	0.77	0.72	0.68	0.62	0.65
Food industry residues	0.37	0.14	0.09	0.24	0.24	0.26	0.32	0.50	0.55	0.64	0.62	0.73	0.72	0.78	0.71	0.69	0.63	0.61	0.73
Tobacco and substitutes	2.17	2.02	1.62	1.34	1.06	0.96	1.04	1.24	1.05	0.96	1.01	0.81	0.74	0.66	0.51	0.47	0.55	0.34	0.32
Fertilizers	0.49	0.42	0.29	0.36	0.39	0.88	0.60	0.58	1.17	1.20	0.90	0.72	0.46	0.39	0.42	0.37	0.31	0.37	0.43
Silk	4.38	4.19	4.03	3.74	3.13	2.59	2.53	2.80	3.10	2.71	2.95	2.98	2.89	3.03	3.63	3.71	3.86	3.74	4.85
Wool and animal hair	0.04	0.09	0.12	0.09	0.21	0.19	0.11	0.09	0.11	0.06	0.03	0.04	0.04	0.04	0.04	0.03	0.04	0.13	0.14
Cotton	0.49	0.36	0.34	0.46	0.54	1.24	1.88	2.42	2.07	1.96	2.30	3.05	3.06	3.58	3.79	3.73	3.85	3.55	4.03
Other vegetable fibers and paper fabrics	1.36	1.28	1.21	2.14	1.66	1.77	2.31	1.96	1.91	1.56	1.16	1.25	0.89	0.67	0.60	0.69	0.48	0.42	0.33

Source: Author Calculation based on UNCOMTRADE

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