



INDO-BHUTAN AGRICULTURAL TRADE: TRENDS AND PROSPECTS

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Abstract:

Purpose: This paper argues the dynamics of agricultural trade between India and Bhutan from 2003-04 to 2022-23, highlighting substantial potential for increased bilateral trade based on RCA analysis. It also points out the constraints faced by exporters in agricultural trade.

Design/methodology/approach: Conventional statistical methods, such as ratios and percentages, were employed to analyze the trends in exports and imports. To find out competitiveness between countries RCA has calculated.

Findings: The result showed that India dominates this trade landscape, with major exports including cereals, dairy products, and vegetable oils. Despite this dominance, there is significant potential for the further expansion of India's agricultural export market to Bhutan. The RCA for various agricultural commodities, discovered that India holds a competitive edge in several key products. Bhutan, while maintaining a comparative advantage in specific sectors, such as beverages and spices, has a less diversified export portfolio compared to India. Challenges such as SPS and TBT measures are critical considerations for exporters.

Research limitation: This study primarily based on secondary sources of data, to understand the deeper understanding of trade like informal trade which occurred between border of both side and through ICT and required strategy to improve border trade a study based on field study is important.

Originality/value: Although several studies have examined agricultural trade between India and its neighbouring countries, this study updates the agricultural trade structure specifically between India and Bhutan.

Paper type: Research paper

Key Words: Agricultural Trade, Bilateral Trade, India-Bhutan Trade, Non-tariff measure

1. Introduction:

A long-standing custom of trade exists between adjacent nations, such as India and Bhutan, because of their close proximity and shared historical, religious, and cultural links. This connection began when Bhutan was first exposed to Buddhism in 747 A.D. by the Indian saints Padmasambhava (Nga et al. 2019). Even though trade is usually driven by comparative advantages, it also plays a crucial role in maintaining inflation rates for basic goods and ensuring food security and safety in industries like agriculture.

India and Bhutan enjoy friendly relations founded in mutual benevolence, common historical bonds, and close collaboration. As India became independent in 1947, Bhutan was one of the first nations to acknowledge it. Although formal diplomatic relations were not established until 1968, the relationship between the two countries was solidified with the signing of the "Treaty of Friendship" in 1949. While some academics contend that the two nations may not have cooperated during this time, others think that their closeness and mutual trust rendered official links superfluous.

In 1995, an agreement was signed between India and Bhutan to enhance trade participation and economic activities (Sen, 1991). This agreement strengthened previous free trade and service agreements and emphasized the expansion of bilateral trade and collaboration in economic development projects. The sale of Bhutan lottery tickets in Indian states was permitted under the trade and commerce agreement, which recognized 12 entry and exit border corridors for trade and services (Rajput, 2014). This agreement not only strengthened the previous free trade and service agreements between India and Bhutan but also emphasized bilateral trade expansion and collaboration in economic development projects (Bisht, 2010; Shubham, 2014). Bhutan later requested India to revisit Article 2 of the 1949 agreement, which was positively responded to by New Delhi, and with mutual consent, Article 2 was revised accordingly in 2007 in the presence of the then Indian Foreign Minister, Mr. Pranab Mukherjee, and Bhutan's crown prince (Rajput, 2014 ; Nga et al. 2019). Since then, India has cooperated closely with Bhutan on issues related to its national interests.

Bhutan has been significant to India's two major foreign policies, the 'neighbourhoods First Policy' and 'Act East Policy' (formerly Look East Policy), since the beginning of diplomatic relations (Singh, 2024). Bhutan gained special importance for its cordial behaviour and tension-free alliances. However, with the invasion of Tibet by China in 1950, the relationship between India and Bhutan shifted from a trade-centric to a political-economic and strategic perspective (Rathore, 1974). On the other hand, India and Bhutan have come together because of national security concerns about supporting each other in defending their territories from Chinese incursions. Bhutan has known that its small economy and lack of trained troops in numbers and technology cannot resolve border issues with China (Rajput, 2014). Bhutan

relies heavily on Indian routes and territory for the exchange of goods and services with India and other neighbouring countries for trade and other commercial activities (Taneja et al., 2019). Considering that 2018 commemorated the 50th anniversary of friendship between the two nations, an analysis of their economic ties, particularly their agricultural commerce, is vital. In addition to analyzing the comparative advantage in agricultural commerce between India and Bhutan, this study looks at the patterns and composition of that trade. This article also briefly addresses the hurdles that agricultural exporters have with SPS and TBT measures, as well as the measures that must be taken to overcome these difficulties.

2. Review of Literature:

It has been noted that the relationship between India and Bhutan is of considerable importance, with this connection tracing its origins to India's independence in 1947. This was followed by the Treaty of 1949, which served as a continuation of the Anglo-Bhutanese Treaty of 1910, demonstrating the British legacy of perceiving the Himalayas as a strategic buffer for India's security (Shubham, 2014). Penjore (2004) examined Bhutan's security in the context of being situated between two Asian giants, India and China. He argues that the term "vulnerability" best describes the plight of small states in any security discussion, and Bhutan is the most vulnerable sector in the Indian security system, standing out as a "wide vacuum on a frontier of vital strategic importance" (Penjore, 2004).

Chand & Saxena (2017) found that bilateral commerce acts as an economical and effective means to manage price fluctuations and market instability in both nations, with the bulk of agricultural exchanges taking place to mitigate variations in domestic output.

Bandolkar & K, (2023) investigate the impact of India's bilateral trade agreements on agricultural export competitiveness. Their findings showed mixed outcomes, with some cases (e.g., India-Thailand FTA) showing improvement and others (e.g., India-Singapore CECA) showing deterioration. They discovered that India's agricultural export competitiveness with its partners improved after the establishment of these Regional Trade Agreements.

Biswas (2015) examined the effect of e-governance on agricultural trade and found that the quality of e-governance in the exporting country had a positive impact on the volume of agricultural exports crossing the border. The primary barriers for developing countries' agricultural exports were asymmetric trade costs and differences in agricultural productivity levels across all countries in the sample, which were examined using a neo-Ricardian trade model (Eum et al., 2018).

Balié et al. (2017) examined the impact of bilateral import tariffs and alterations in trade arrangements connected with regional trade agreements on the backward and forward integration of Sub-Saharan's agriculture and food value chains. Their findings indicated that bilateral trade policies affect the utilization of foreign and domestic inputs in exports and influence the backward and forward integration of the region's agriculture and food global value chains. Bureau and Jean (2013) discovered that the emergence of non-cooperative policies, such as export restrictions, can result in a more disjointed trading system.

Although several studies have examined bilateral trade relations between India and Bhutan, most focus on geo-strategic importance, with limited emphasis on the significance of agricultural exports. This paper provides a comprehensive review of the export potential and opportunities for agricultural commodities.

3. Objective:

1. To study the trends and competitiveness of agricultural trade between India and Bhutan.

4. Data Source and Methodology:

This study explicitly based on secondary data sources. The data on agricultural export and import for both of India and Bhutan's bilateral trade was sourced from Export-Import Databank, Ministry of Commerce, Government of India. Information on the world's imports and exports from India and Bhutan was sourced from the International Trade Centre website. Basic statistics are used in this study to examine the export-import patterns of trade between India and Bhutan.

A country's relative advantage or disadvantage in a particular industry, as shown by trade flows, is measured by the Revealed Comparative Advantage (RCA). RCA was first presented by Balassa (Balassa, 1965) and can be computed numerically as

$$RCA_{ij} = (X_{ij}/X_i)/(X_{wj}/X_w) \dots\dots\dots (1)$$

Where,

RCA_{ij} is the Revealed comparative advantage of i^{th} country for j^{th} commodity

X_{ij} = i^{th} country's export of commodity j to the world

X_i = i^{th} country's total exports to the world

X_{wj} = World exports of commodity j

X_w = Total world exports.

A country's position in relation to levels of global commerce is explained by its revealed comparative advantage, which also shows how rival nations are integrating into the global economy. A product is considered to have a global comparative advantage if its RCA index value is greater than 1 (one).

5. Results and Discussion

5.1 Total and agricultural commerce between India and Bhutan

A thorough summary of bilateral commerce between India and Bhutan, a country in the Himalayas, is given in Table 1 for the years 2003–04 through 2022–23. Because the trade trends of the two countries fluctuate annually, trade data are displayed as triennial (TE) averages. Trade between India and Bhutan increased from US\$ 161.79 million in TE 2005/06 to US\$ 445.80 million by TE 2013/14. Eventually, two-way trade grew gradually and by TE 2022–2023, it had reached a total of US\$ 1,393.19 million. Based on the net commerce between the two countries, India was the country that exported the most to Bhutan during the study period, as indicated in the table [Refer Table 1]

table 1: total and agricultural trade between India and Bhutan (US\$ million)

Trade	TE 2005/06	TE 2013/14	TE 2022/23
India's total export to Bhutan	91.08	272.89	888.64
India's total import from Bhutan	70.71	172.91	504.55
Total trade	161.79	445.80	1393.19
Net trade	20.37	99.99	384.09
India's agricultural export to Bhutan	17.58	23.38	181.89
India's agricultural import from Bhutan	7.93	1.82	13.78

Total agricultural trade	25.52	25.20	195.67
Net trade	9.65	21.56	168.11
Share of agricultural trade to overall trade	15.77	5.65	14.04

Source: Export Import Data Bank, Ministry of Commerce and Industry, Government of India
 Note: Two digits agricultural trade data have taken

The two periods' total agricultural trade, TE 2005/06 and TE 2013/14, are nearly identical, as shown in the table [Refer Table 1]. However, in the later study period, the two countries' total agricultural trade increased significantly, reaching US\$ 195.67 million by TE 2022/23. According to Table 1, India accounted for a significant portion of global agricultural commodity exports during the study period, while Bhutan's proportion was relatively small. It may argued that the primary reason behind the Bhutan's susceptibility towards a frail agricultural exports condition is its continued reliance on only two major sectors—hydropower and tourism (Nayak, 2022).

It is noteworthy that, over the entire study period, the percentage of agricultural exports to aggregate exports was negligible. The table [Refer Table 1] makes it clear that a significant amount of bilateral commerce between Bhutan and India consists of non-agricultural commodities. Bhutan also received a commendable boost in the number of agricultural commodities exported from India.

Figure 1 showed the trends in volume of total agricultural exports and the proportion of total agri-exports to overall export from India to Bhutan during 2003 - 04 to 2022–23. The primary axis indicates the percentage of agricultural exports to total export from India to Bhutan and secondary axis represents the total volume of agricultural exports to Bhutan. Data analysis has shown that across the research years, there has been a discernible progressive increasing trend in the volume of agricultural exports to Bhutan. According to the Fig. [Refer Figure 1], the share of agricultural exports to overall exports to Bhutan was approximately 19 percent in the first timeframe, which was 2003–2004. Subsequently, the share showed a downward tendency until 2008–09, at which point it began to climb once more. This trend increased until COVID-19. After that, it started to slow down again, although by 2022–2023, it was about 20% of overall commerce.

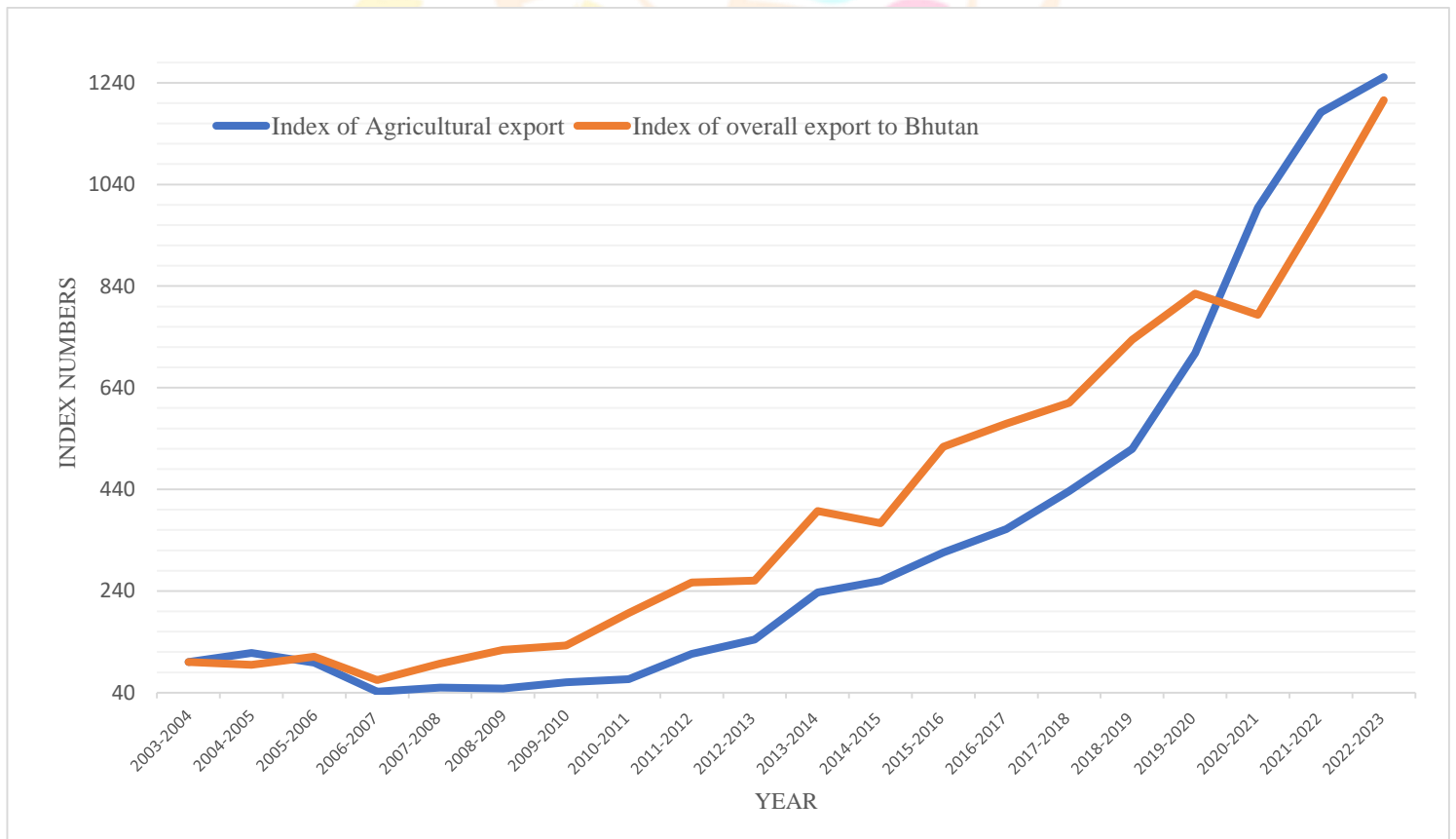


Fig.1: Growth trends of India's total and agricultural trade with Bhutan (2003-04=100)
 Source: Export Import Data Bank, Ministry of Commerce and Industry, Government of India

5.2. Trends and Composition of India’s agricultural exports to Bhutan

Table 1 provides a detailed analysis of agricultural exports from India to Bhutan from the Triennium (TE) 2005/06 to the TE 2022/23. This analysis reveals that there have been significant changes in the quantity and type of commodities exported over time. In the Triennium (TE) 2005-06, cereals, beverages, spirits, and vinegar, dairy products, sugar and confectionary, animal or vegetable fats and oils, pre-edible fats, animal or vegetable wax products, and preparations of cereals, flour, starch, or milk; pastry cooks products together made-up majority of agricultural exports from India to Bhutan, accounting for approximately 30% of the total agricultural exports during that time.

With an export value of 7.01 million US dollars, or 25% of the nation's total agricultural exports in TE 2013–14, the products made from preparing cereals, flour, starch, or milk; for the past eight years, agricultural export commodities have made up the majority of export volume. From the largest exports earlier, cereal goods fell to third place among agricultural exports. Rubber and its byproducts had a sharp increase in value from 0.34 million US dollars in TE 2005–06 to 4.78 million US dollars in TE 2013–14. Additionally, throughout the same years, the export of dairy products doubled.

In addition, compared to TE 2013–2014, the volume of agricultural exports increased almost 7 times ten years later, in TE 2022–2023. Cereals accounted for nearly 17% and dairy products for approximately 11% of Bhutan's total agricultural exports in TE 2022–2023 (US\$

193.88 million). However, in terms of India's exports, pre-edible fats, vegetables or animal wax, and fats and oils generated from these sources witnessed a significant increase compared to the previous quarter, ranking second. During TE 2013–14, there was a significant growth in the export of meat products, sugar and confectionery, spices, roots and tuber crops, and edible vegetables.

table 2: trends and composition of India's agricultural exports to Bhutan (in US\$ million)

HS Code	Commodity	TE 2005-06	TE 2013-14	TE 2022-23
15	Animal or vegetable fats and oils and their cleavage products; pre. Edible fats; animal or vegetable wax.	1.29	0.02	25.17
10	Cereals.	5.7	3.08	33.88
04	Dairy produce; birds' eggs; natural honey; edible prod. Of animal origin, not elsewhere spec. Or included.	1.25	2.61	21.87
07	Edible vegetables and certain roots and tubers.	0.32	0.04	9.3
03	Fish and crustaceans, molluscs and other aquatic invertebrates.	0.21	0.11	5.79
02	Meat and edible meat offal.	0	1.3	12.98
21	Miscellaneous edible preparations.	0.74	1.05	10.23
19	Preparations of cereals, flour, starch or milk; pastrycooks products.	1.41	7.01	11.91
11	Products of the milling industry; malt; starches; inulin; wheat gluten.	0.4	0.24	5.75
23	Residues and waste from the food industries; prepared animal fodder.	0.08	0.07	9.88
40	Rubber and articles thereof.	0.34	4.78	11.99
17	Sugars and sugar confectionery.	1.42	1.9	6.54
24	Tobacco and manufactured tobacco substitutes.	0	0	10.04

Source: Export Import Data Bank, Ministry of Commerce and Industry, Government of India

The top agricultural and allied export goods from India in 2020–2021 to 2021–22 and their corresponding growth rates are shown in Table No. 3. Rice (Other than Basmati), dairy products and vegetable oils recorded a India's highest export among agriculture during the said periods. In comparison to 2020–21, tobacco, fresh vegetables, basmati rice, and various goods that are processed all saw substantial spikes in exports.

In contrast, the agricultural export crop growth rate analysis revealed that tobacco had the strongest growth rate of any crop, increasing to 264.92 percent. Fresh vegetables subsequently followed the second highest growth rate, while rice and dairy products showed negative growth rates compared to 2020–21. Compared to 2020–21, the total export of agricultural crops increased by 18.15%, reflecting an excellent growth rate.

table 3: India's leading agricultural export to Bhutan during 2020-21 to 2021-22 (in million US\$)

S.No	Commodity	2020-21	2021-22	Growth (%)
1	Vegetables Oils	18.98	25.08	32.13
2	Rice(Other than Basmati)	25.34	20.55	-18.87
3	Dairy Products	23.02	20.55	-10.74
4	Misc Processed Items	11.64	14.72	26.53
5	Cereal Preparations	13.29	10.5	-21.00
6	Tobacco Manufactured	2.67	9.73	264.92
7	Fresh Vegetables	2.79	6.77	142.93
8	Oil Meals	4.75	6.74	42.04
9	Rice -Basmati	4.25	6.56	54.34
10	Other Cereals	4.53	6.33	39.70
India's Agricultural and allied export to Bhutan		150.35	177.64	18.15

Source: Department of Agriculture and Farmers Welfare, Govt. of India, can be access here

<https://agriwelfare.gov.in/sites/default/files/India%20Bhutan.pdf>

An examination of Bhutan's agricultural exports to India during the 2020-21 and 2021-22 fiscal years reveals some interesting trends, likely based on the data presented in table 4, This table 4 presumably details the composition of India's agricultural imports from Bhutan categorized by specific crops. It appears that for the given period, miscellaneous processed items and spices emerged as the dominant categories within India's agricultural imports from Bhutan, securing the top two spots. This suggests a strong market for these types of Bhutanese agricultural products in India. Furthermore, the data indicate a positive development in Bhutan's agricultural exports. The total volume of these exports to India reportedly climbed to US\$15.70 million in 2021-22. Notably, spices and miscellaneous processed items continued to hold a significant position, contributing 84% of Bhutan's total agricultural exports to India during the same year. This highlights the importance of these categories in Bhutan's agricultural trade with India. While fresh vegetables exhibited the highest growth rate in Bhutan's agricultural exports to India year-over-year, the overall trade volume for this category remained negligible. This analysis suggests a significant difference in the volume of agricultural exports between Bhutan and India during the study period. Bhutan's exports appear considerably lower than those of India.

table 4: India's leading agricultural imports from Bhutan during 2020-21 to 2021-22 (in million US\$)

S.No	Commodity	2020-21	2021-22	Growth (%)
1	Spices	3.08	7.57	145.54
2	Misc Processed Items	4.56	5.63	23.50
3	Fresh Vegetables	0.03	0.86	2549.13
4	Processed fruits and juices	0.45	0.68	49.10
5	Alcoholic beverages	1.42	0.45	-68.31
6	Cereal preparations	0.09	0.32	256.01
India's Agri and allied imports from Bhutan		9.73	15.7	61.35

Source: Department of Agriculture and Farmers Welfare, Govt. of India, can be access here

<https://agriwelfare.gov.in/sites/default/files/India%20Bhutan.pdf>

5.3. Agricultural Products that India has potential to export to Bhutan

To identify prospective goods in the present agricultural items, the share of India's exports to Bhutan and the global share of India's exports of agricultural commodities have been studied. Table 5 lists India's agricultural exports to Bhutan, imports of Indian agricultural products, and global agricultural exports for the years 2022 and 2023. To analyze India's potential for agricultural exports, only a few of the most popular commodities were selected for easy comprehension and analysis. This section examines commodities with only six digits. The results of the analysis indicate that, as this table [Refer Table 5] illustrates, India has been the country of primary imports for Bhutan in terms of all goods imported from around the world. The data indicate that despite India's complete dominance in agricultural exports, the country has a greater potential to grow both the size of its export market and the number of agricultural exports to Bhutan. The table 5 illustrates that although India is the leading exporter of agricultural products to Bhutan, the country's overall exports to Bhutan in 2022 and 2023 are in comparison to India's total exports to the global market. During 2022, exports in Bhutan were just 0.24% of India's overall exports in the same year, about 1% of which was exported to Bhutan in 2023 in the form of maize products. Following the same pattern, only 7.41 percent of India's vegetable exports reached Bhutan in 2023; similarly, only 0.8 percent of India's potato exports reached Bhutan in 2023. Therefore, despite India leading the world in agricultural exports to Bhutan, this research indicates that there is ample opportunity for India to expand its export base to that nation. In comparison to other European and Middle Eastern nations, Bhutan offers traders and farmers the opportunity to earn a respectable amount of exportable income at a lower cost of export procedures due to its proximity to India and the lack of restrictions on the export of these crops.

table 5: India's potential agricultural items to acquire more Bhutan market

HS code	Product label	Value of India's exports to Bhutan		Value of world exports to Bhutan		Value of world import from India	
		2022	2023	2022	2023	2022	2023
100630	Semi-milled or wholly milled rice, whether or not polished or glazed	24168	20231	24168	20250	9400160	9921633
100590	Maize (excl. seed for sowing)	6367	6694	6367	6694	1067214	646159
230400	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...	3711	3426	3711	3426	574288	1115152
230690	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...	2522	2140	2522	2140	211064	158445
230400	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...	3711	3426	3711	3426	574288	1115152
140490	Vegetable products n.e.s	3490	2100	3490	2100	33201	28318
071340	Dried, shelled lentils, whether or not skinned or split	1851	1518	1851	1518	68845	137668
070310	Fresh or chilled onions and shallots	1854	1303	1854	1303	524591	642074
702000	Articles of glass, n.e.s.	14	16	15	46	152363	136867
100640	Broken rice	824	64	824	64	1203857	329643
070190	Fresh or chilled potatoes (excl. seed)	711	815	711	815	94857	101769

Source: trademap.org

5.4. Revealed Comparative Advantage

For the preceding eight years, the revealed comparative advantage (RCA) of India and Bhutan trends has been studied in order to comprehend its temporal movement. A disclosed comparative advantage in that product is indicated by an RCA index value greater than 1. The RCA for leading India's agricultural products traded with Bhutan have shown in Table 6. Rubber's comparative advantage (RCA) showed a noteworthy and consistent increase over time, remaining close to 100 for the duration of the study period. RCA for sugar and confectionery has demonstrated a notable comparative advantage during the research period, with some fluctuations in the value but a constant value of more than five, with the exception of 2018. Vegetable RCA showed notable enhancement, especially in the later stages of the study. However, as of 2019, the RCA value of vegetables remained less than 1, indicating that they were at a comparative disadvantage prior to that year. Only in 2015 and 2016, RCA of various edible preparation values reach unity; beyond that, it registered a value below 1, indicating a comparative disadvantage. Notably, this makes it the only top agricultural export commodity to receive a score below one.

Conversely, every product, aside from the miscellaneous edible preparation, showed a value greater than one, indicating that they all had a comparative advantage.

table 6: RCA for selected exported agricultural commodities from India to Bhutan

HS Code	Name of Products	2015	2016	2017	2018	2019	2020	2021	2022
02	Meat and edible meat offal	0.40	0.49	0.79	1.08	1.21	1.52	2.32	2.17
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere	2.44	7.21	8.34	6.47	6.70	7.47	4.44	4.45
07	Edible vegetables and certain roots and tubers	0.23	0.22	0.089	0.08	0.30	1.12	2.58	3.06
10	Cereals	1.44	0.86	0.73	0.35	2.02	6.80	5.13	4.58
15	Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats	1.15	2.66	3.27	3.48	3.96	5.68	5.14	3.73
17	Sugars and sugar confectionery	16.7	9.87	6.96	4.70	6.30	7.26	5.04	5.06
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	1.79	0.44	1.50	1.52	1.54	2.13	2.23	3.13
21	Miscellaneous edible preparations	1.45	1.42	0.72	0.80	0.90	0.73	0.80	0.94
22	Beverages, spirits and vinegar	0.07	0.01	0.32	0.97	1.01	1.47	1.68	1.67
23	Residues and waste from the food industries; prepared animal fodder	0.93	0.88	1.21	1.58	1.55	1.66	1.59	1.43
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	2.00	2.76	1.88	2.80	3.23	2.43	1.83	1.42
40	Rubber and articles thereof	97.9	98.4	97.8	94.5	100.4	100.8	99.2	97.8

Source: Author own computations

Table 7 analyzed Bhutan's competitive advantage for the leading agricultural commodities exported to India. In the areas of drinks, spirits, and vinegar, Bhutan enjoys a natural and persistent comparative advantage; in 2022, the value of RCA for beverages rose to 5.94. Vegetable RCA sustained a comparative advantage throughout the inquiry periods, and its value remained constant across the study periods, with an average RCA value of more than 4. Fruit RCA also revealed comparative advantages. Coffee, tea, mate, and spices have RCA values that indicate strong positions of comparative advantage. In 2021, these values are 12.298, which is noteworthy.

India is well ahead of Bhutan in terms of agricultural exports, as evidenced by the comparison of the RCA values of the two nations, which is larger than 1 for practically all the selected items over the study period.

table 7: RCA for major exported commodities from Bhutan to India

HS Code	Name of Products	2015	2016	2017	2019	2020	2021	2022
1	Live animals	0.01	0.000	0.01	0.01	0.01	0.01	0.40
4	Dairy produce; birds' eggs; natural honey; edible products	0.06	0.127	0.17	0.01	0.07	0.17	0.14
7	Edible vegetables and certain roots and tubers.	4.87	6.293	5.02	4.96	6.90	4.45	3.94
8	Edible fruit and nuts: peel of citrus fruit or melons.	1.02	1.214	0.96	0.87	1.014	1.19	1.43
9	Coffee, tea, mate and spices.	6.56	10.42	11.40	9.00	7.18	12.3	5.54
11	Products of the milling industry; malt; starches; inulin; wheat gluten.	3.22	1.068	0.388	1.06	0.24	0.00	0.00
12	Oil seed and oleaginous fruits; miscellaneous grains, seeds	0.01	0.012	0.048	0.02	0.02	0.01	0.04
13	Lac; gums, resins and other vegetable sap and extracts.	0.21	0.006	0.011	0.00	0.030	0.00	0.00
15	Animal and vegetable fats or oils and their cleavage	0.07	0.079	0.07	1.02	0.004	0.00	0.00
21	Miscellaneous edible preparations.	0.91	0.491	0.40	0.27	0.13	0.05	0.05
22	Beverages, spirits and vinegar.	3.45	4.426	3.97	3.84	5.36	4.80	5.94
23	Residues and waste from the food industries; prepared	0.33	0.531	0.25	0.57	0.45	0.47	0.21

Source: Author own computations

5.5. Challenges in Exporting Agricultural Products

Particularly in a state with a majority of Buddhists, the Bhutanese people are renowned for their consideration of animal welfare and the consumption of animal products. These movements are subject to severe limitations. Bhutan is distinct from other nations in that it publishes a happiness index highlighting the country's awareness of food consumption. In order to protect public health and safety, maintain quality standards, and promote international trade in agricultural products, a variety of sanitary and phytosanitary (SPS) regulations as well as technological trade barriers (TBT) apply to agricultural products. (Francois et al., 2009). SPS and TBT limitations have been applied multiple times to Indian agricultural products. Because ethylene oxide is used in food products, which is absolutely forbidden in India owing to its carcinogenic qualities, Hong Kong and Singapore recently ceased acquiring spices from India. Ethylene oxide was classified as a Group 1 carcinogen by the International Agency for Research on Cancer (IARC), suggesting that it may cause cancer in people. (The New Indian Express, 2024). Spices are an essential part of India's agricultural exports, which bring about \$4 billion annually; consequently, the government has taken the charges made against the corporations that produce them seriously and ordered a probe. (Pant, 2024). For a very long time, Bhutanese traditional cuisines required the use of chillies from the town of Faklakata in West Bengal. However, because of the presence of pesticide residues over the limits set by the Codex Alimentarius Commission, the Bhutanese government banned their import in July 2016. In the wake of this tragedy, Bhutan has tightened its range of Indian food goods in an effort to transition to a healthier food economy. (Acharya, 2017).

Prior to importation, food importers for commercial use in Bhutan must get an import authorization from the Ministry of Agriculture and Forests' Bhutan Agriculture and Food Regulatory Authority (BAFRA). (Anonymous, nd.). The imported edible products must meet all conditions specified in the import permit and adhere to the appropriate standards for that specific food. To confirm compliance, a food inspector may also perform an inspection.

To keep India's dominant position in exports, Indian farmers who export agricultural products must abide by the international minimal requirements for food production quality. The Indian government has carried out several measures to guarantee that food items meet requirements for health, and exporters from India need to exercise caution in regards to this. In the future, it will be vital that the government follows through on these directives.

6. Conclusion:

The Indo-Bhutan relationship is not only centred on trade but is also of geo-strategic importance for both nations, as they face common security threats from neighbouring China. As a landlocked Himalayan nation, Bhutan often uses Indian territory for trade with India and other neighbouring countries. In this context, bilateral trade is highly beneficial, particularly for cost-effective and high-quality agricultural commodities. Between 2005-06 and 2022-23, the total trade between the two countries recorded a significant increase. However, during this period, India outperformed Bhutan in agricultural exports, while Bhutan's growth remained sluggish, likely due to its continued reliance on hydropower and tourism for economic growth (Nayak, 2022).

Both countries have a comparative advantage in certain agricultural commodities. India excels in meats, dairy products, vegetables, cereals, sugar, confectionery, and rubber, while Bhutan has an advantage in coffee, tea, spices, beverages, fruits, and nuts. There is considerable potential to expand agricultural trade between India and Bhutan by improving product quality, promoting organic farming, and minimizing non-tariff barriers on both sides.

The study also notes that while India has significant potential to increase agricultural exports to Bhutan, it must carefully navigate food standards regulations like SPS and TBT to avoid obstacles. To enhance their competitiveness in the global market, Indian exporters should swiftly upgrade their export quality to meet international standards and the requirements of importing countries.

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