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Challenges and strategic measures to enhance the international trade of selected agricultural commodities

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Abstract

This study examines changes in the tariff and bound duty structures of major agricultural commodities in India from 2007 to 2021. The analysis highlights significant shifts in customs duty rates, reflecting evolving government priorities in domestic protection, revenue generation, and trade liberalization. Commodities such as cereals, pulses, plantation crops, horticultural products, and edible oils exhibited notable changes in Basic Customs Duty (BCD) and bound duty rates. Despite tariff adjustments, agricultural exports continue to face challenges related to quality, productivity, infrastructure, and market intelligence. High duties protected domestic producers, while reduced rates facilitated imports to meet domestic demand. The findings indicate that non-tariff barriers remain the major impediments to export competitiveness. A balanced approach that integrates tariff policy with structural reforms is essential to enhance trade performance. Key measures suggested include strengthening infrastructure, adopting modern production technologies, and improving market intelligence systems. Overall, the study underscores that tariff policies alone are insufficient without addressing underlying structural and operational constraints.

Keywords: Tariff structure, bound duty, basic customs duty, agricultural exports, India, trade policy, productivity, market intelligence, export competitiveness

1. Introduction

Agriculture has historically been the backbone of India's economy, providing livelihoods to nearly 50 per cent of the population and contributing substantially to national GDP. Beyond domestic consumption, agricultural commodities constitute a significant portion of India's export basket, generating foreign exchange and strengthening the country's position in global trade. With increasing globalization, the competitiveness of agricultural exports has become a critical factor in sustaining economic growth, ensuring food security, and promoting rural development. The period between 2007 and 2021 witnessed notable shifts in India's tariff structure and bound duty rates across major agricultural commodities, including cereals, pulses, plantation crops, horticultural products, and edible oils. Analysing these changes provides insights into the evolving priorities of the government regarding domestic protection, revenue generation, and trade liberalization. Moreover, understanding the interplay between tariff policies and non-tariff constraints is essential for designing strategies that can enhance India's agricultural export performance. This study aims to examine the tariff and bound duty structures of major agricultural commodities over the 2007-2021 period, identify the challenges faced by agricultural exports, and suggest actionable measures to boost international trade. By linking tariff policies with sectoral challenges, this research

provides a holistic perspective on the factors influencing India's agricultural competitiveness in the global market.

Objective

To identify the problems and suggests suitable measures to boost the international trade of selected agricultural commodities.

2. Data and Methodology

The analysis is based on secondary data sourced from *IndiaStat*, *Agri at Glance* for the years 2007 and 2021, focusing on Basic Customs Duty (BCD), Bound Duty (BD) and Agriculture Infrastructure and Development Cess (AIDC). Comparative analysis was conducted to understand structural changes, protection levels, and their implications for domestic producers and international trade performance.

3. Results and Discussion

3.1 Tariff and Bound Duty Structure (2007)

As shown in table 1 that in 2007, India's agricultural tariff structure was characterized by relatively high protection for domestic producers. Pulses and wheat had zero (free) BCD and 100 per cent bound duty rates, signifying strong protectionist intent to support domestic production and reduce import dependency. Cereals such as maize and jowar carried 70 per cent BCD, while rice and sorghum were

protected at 80 per cent. Plantation crops, including tea and coffee, had 100 per cent BCD, with tea having a 150 per cent bound duty. Edible oils, particularly palm and groundnut oils, faced some of the highest duty rates (up to 300 per cent bound duty), reflecting the government's dual objectives of revenue generation and import regulation.

Horticultural commodities, including fruits like apples (50 per cent) and grapefruit (25 per cent), had moderate tariff rates to balance domestic production and consumer demand. Overall, the 2007 tariff structure revealed a complex interplay between domestic protectionism, fiscal interests, and international obligations.

Table 1: Tariffs and Bound Rates on Major Agricultural Commodities/ Groups (2007)

Sr. No	Item description	Basic Customs duty (per cent)	Bound duty (per cent)
		(As on 01.08.2007)	(As on 01.08.2007)
	I. Cereals and Pulses		
1	Pulses other than peas (Pisum sativam)	Free	100
2	Wheat	Free	100
3	Maize	70	70
4	Rice	80	80
5	Jowar	70	70
6	Sorghum	80	80
	II Plantation Crops		
1	Tea	100	150
2	Coffee	100	100
3	Copra	70	100
4	Cassia and cinnamon	30	100
5	Cloves	35	100
5	Other Spices	30/70	150/100
	III. Horticulture		
1	Apples	50	50
2	Grapefruit	25	25
3	Pears and quinces	30	35
4	Oranges; lemons and limes; fresh grapes	30	40/100
	IV. Edible Oils (Crude)		
1	Soyabean Oil	40	45
2	Palm Oil	45	300
3	Groundnut Oil	85	300
4	Sunflower/ Safflower	40	300
	V. Edible Oils (Refined)		
1	Soyabean Oil	40	45
2	Palm Oil	52.5	300
3	Groundnut Oil	85	300
4	Sunflower/ Safflower	50	300

Source-India Stat

3.2 Tariff and Bound Duty Structure (2021)

It is revealed from table 2 that the notable shifts were observed by 2021. Duty rates on certain essential commodities were rationalized to ensure affordability and control inflation. Pulses, which previously enjoyed free BCD, were subject to differentiated rates—10 per cent for chickpeas, Bengal gram, and Kabuli chana, and nil for lentils and others. AIDC rates were introduced, ranging

from 10 to 50 per cent, signifying the government's fiscal focus through agricultural cesses. For cereals, wheat's BCD rose sharply to 40 per cent, indicating heightened protection for domestic farmers, while maize, jowar, and bajra witnessed a decline from 70 per cent to 50 per cent. Plantation crops such as tea and coffee retained high duty levels, reflecting continued support to traditional export industries.

Table 2: Tariffs and Bound Rates on Major Agricultural Commodities/ Groups (2021)

Sr. No	Item description	Prevailing Basic Customs Duty (BCD) in per cent (as on 28.10.2021)	Agriculture Infrastructure and Development Cess (AIDC) in per cent (as on 28.10.2021)	Bound duty (per cent)
I. Cereals and Pulses				
1	Pulses	Chickpeas-10, Bengal Gram-10, Kabuli Chana-10, Tur-10, Yellow Peas-10, Lentils-Nil, Rest-Nil	Chickpeas-50, Bengal Gram- 50, Kabuli Chana-30, Yellow. Peas-40, Lentils-10, Rest Nil	Peas: 50, Rest: 100
2	Wheat	40	Nil	100
3	Maize	50	Nil	70
4	Rice	80	Nil	80
5	Jowar	50	Nil	70
6	Bajra	50	Nil	70
II. Plantation Crops				
1	Tea	100	Nil	150
2	Coffee	100	Nil	100 for non-

				decaffeinated and 150 for decaffeinated
3	Cassia and cinnamon	30	Nil	100
4	cloves	35	Nil	100
5	Other spices	30	Nil	150
III. Horticulture				
1	Apples	15	35 per cent	50
2	Grapefruit	30	Nil	40
3	Banana	30	Nil	100
4	Oranges; lemons and limes	30	Nil	40
IV. Edible oil (Crude)				
1	Soybean oil	Nil	5 per cent	45
2	Palm oil	Nil	7.50 per cent	300
3	Groundnut oil	35	Nil	300
4	Sunflower oil	Nil	5 per cent	300
5	Safflower oil	35	Nil	-
6	Coconut oil	35	Nil	300
V. Edible oil (Refined)				
1	Soybean oil	17.5	Nil	45
2	Palm oil	17.5	Nil	300
3	Groundnut oil	45	Nil	300
4	Sunflower oil	17.5	Nil	300
5	Safflower oil	45	Nil	300

Source-India Stat

In horticulture, the BCD for apples was reduced from 50 per cent in 2007 to 15 per cent in 2021, accompanied by a 35 per cent AIDC, suggesting increased openness to imports. The edible oil sector saw the most significant liberalization, with crude palm and soybean oils at nil BCD but subject to 5-7.5 per cent AIDC, while refined oils were taxed at 17.5 per cent BCD.

3.3 Policy Interpretation

The shift from high protectionism in 2007 to a more balanced tariff regime in 2021 demonstrates India's evolving trade strategy—balancing self-sufficiency, consumer welfare, and global competitiveness. High duties on plantation crops and edible oils continued to safeguard domestic producers, while reduced tariffs on certain horticultural and cereal products aimed to manage food inflation and ensure supply stability.

However, despite tariff rationalization, agricultural exports have not achieved sustained competitiveness. The persistence of non-tariff barriers such as inadequate infrastructure, limited value addition, insufficient quality certification mechanisms, and weak market intelligence has hindered export expansion. Based on the foregoing analysis, the null hypothesis stating that agricultural exports do not encounter challenges pertaining to quality, productivity, infrastructural development, and market intelligence is rejected. The alternative hypothesis is accepted, indicating that India's agricultural exports remain significantly constrained by these challenges despite tariff adjustments and trade liberalization.

4. Problems Identified

- 1. Quality and Standardization:** Limited adherence to international quality standards and inadequate testing infrastructure reduce export acceptability.
- 2. Low Productivity:** Productivity in key crops remains

below global averages due to fragmented landholdings and limited mechanization.

- 3. Infrastructural Gaps:** Deficient storage, cold-chain, and transportation infrastructure increase post-harvest losses and reduce competitiveness.
- 4. Market Intelligence Deficit:** Inadequate data on global demand, pricing trends, and buyer preferences hinders strategic market penetration.
- 5. Policy and Regulatory Complexity:** Frequent tariff revisions, cess impositions, and procedural delays discourage export-oriented agribusinesses.

5. Suggested Measures to Boost Agricultural Trade

- 1. Enhance Quality and Certification Systems:** Establish internationally accredited testing laboratories and promote Good Agricultural Practices (GAP) to meet export standards.
- 2. Promote Productivity through Technological Interventions:** Invest in research, high-yield varieties, and precision agriculture to improve output efficiency.
- 3. Strengthen Infrastructure:** Expand cold storage, integrated logistics parks, and port connectivity for perishable exports.
- 4. Develop Market Intelligence Platforms:** Create a centralized digital portal providing real-time data on international market trends, trade policies, and buyer networks.
- 5. Rationalize Tariff and Non-Tariff Barriers:** Streamline export procedures, ensure policy consistency, and reduce bureaucratic delays.
- 6. Encourage Value Addition and Diversification:** Promote agro-processing industries and branding initiatives to enhance global competitiveness.

Policy Implication

Customs duties on wheat and rice should be rationalized to

enhance their export potential. At the same time, greater emphasis should be placed on promoting rice and mango exports by addressing quality standards, branding and market access challenges.

6. Conclusion

The comparative analysis of tariff structures between 2007 and 2021 highlights a gradual transition in India's agricultural trade policy—from rigid protectionism towards a balanced framework accommodating domestic and international priorities. While tariffs play a vital role in protecting domestic producers and ensuring revenue, persistent structural challenges particularly in quality assurance, productivity, infrastructure, and market access continue to constrain export growth. To achieve sustainable growth in agricultural trade, India must adopt a holistic strategy combining tariff reforms with infrastructural modernization, quality enhancement, and data-driven market intelligence systems.

References

1. Anonymous Indiatat Website. 2023. <https://www.indiatat.com/>
2. Baliyan K, Kumar S. Constraints in mango export from India. *Indian J Ecol.* 2022;49(2):473-80.
3. Baliyan K, Kumar S, Chandra M. Constraints in mango export from India. *Indian J Ecol.* 2022;49(2):483-90.
4. Das K. The impact of sanitary and phytosanitary measures on India's exports and the challenges/opportunities of the SPS Agreement. In: *The WTO and India: Issues and Negotiating Strategies.* 2013. p. 333-57.
5. Dhar B, Panagariya A. *India's Agricultural Exports and the WTO: Addressing Tariff and Non-Tariff Barriers.* Centre for Policy Research; 2022.
6. Gautam P, Kishore A, Khanna A, Chandra K, Jaggi. Strategic defect management for a sustainable green supply chain. *J Cleaner Prod.* 2019;233:226-41.
7. Mehta R, George J. Processed food products exports from India: An exploration with SPS regime. In: *Food Safety and Environmental Concerns in India.* Academic Foundation; 2003. p. 263-80.
8. Mukherjee A, Goyal T, Kapoor A. *SPS Barriers to India's Agriculture Export: Learning from the EU Experiences in SPS and Food Safety Standards.* Indian Council for Research on International Economic Relations (ICRIER); 2019.
9. Narayan R, Bhattacharya S. Barriers and Opportunities in India's Agricultural Exports: A Sectoral Analysis. *Asian J Agric Dev.* 2023;20(1):45-60.
10. Persaud S. Impacts on India's Farmers and Processors of Reducing Soybean Import Barriers. ERS-USDA Report, OCS-19J-02. Economic Research Service, United States Department of Agriculture; 2019. p. 1-33. www.ers.usda.gov.