



# Analyze the Impact of Agricultural Trade on Food Security and Farmer Incomes

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## Abstract

Agricultural trade plays a pivotal role in shaping the livelihoods of farmers and ensuring food security in India. This research examines the dynamics of India's agricultural trade, focusing on the developments during 2017–2022, and especially the policy shifts in 2022 triggered by the Russia-Ukraine war, rising global inflation, and supply chain disruptions. Using secondary data from FAO, WTO, World Bank, RBI, and Indian government reports, the paper evaluates how export restrictions, import dependencies, and rising input costs affected both farmer incomes and national food security. The findings reveal a dual impact: while trade policies protected domestic consumers, they constrained farmers from reaping higher export gains. Policy recommendations stress diversification, predictable trade frameworks, and strengthening farmer producer organizations (FPOs).

*Keywords: Agricultural trade, food security, farmer incomes, India, exports, imports, WTO, Ukraine war, inflation*

## Introduction – Context of Indian Agriculture and Trade

Agriculture forms the backbone of India's economy, contributing 18.6% to the Gross Value Added (GVA) in 2022 and employing nearly 58% of the population (Economic Survey of India, 2022). India is the largest producer of milk, pulses, and spices, and the second-largest producer of rice, wheat, cotton, sugarcane, and fruits and vegetables. Given this scale, agricultural trade—both exports and imports—has become a central pillar of India's economic growth strategy.

In 2021–22, India's agricultural exports touched an all-time high of USD 50.2 billion, led by rice, wheat, marine products, and spices (Government of India, 2022). Yet, trade policy must constantly balance between two often competing objectives: ensuring food security for 1.4 billion people and enhancing farmer incomes. This duality was starkly visible in 2022, when India restricted wheat and rice exports even as international prices surged due to the Russia-Ukraine conflict.



## Literature Review – Global and Indian Perspectives

Scholars argue that trade liberalization enhances efficiency and provides farmers with access to international markets (FAO, 2022). However, critics highlight that global price volatility can destabilize domestic markets and disproportionately harm smallholders (Sen & Himanshu, 2018). In the Indian context, Gulati & Juneja (2021) note that frequent export bans reflect a consumer-first approach, prioritizing food security over farmer profitability. Pingali (2019) underscores that while the Public Distribution System (PDS) protects consumers, it discourages diversification.

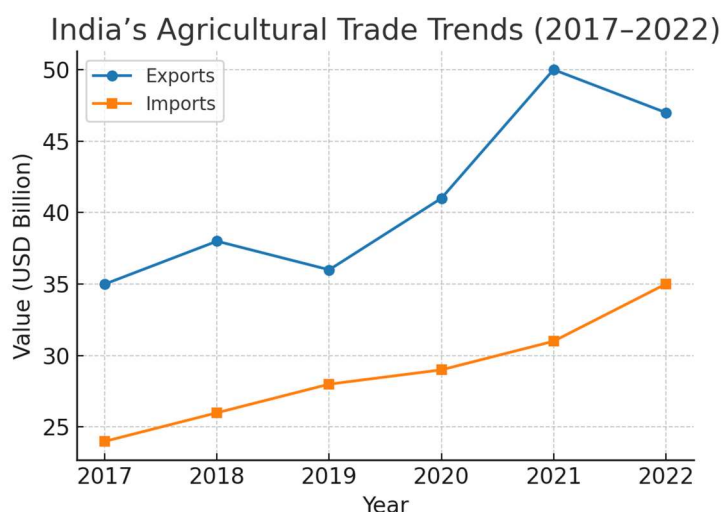
## Methodology – Data Sources and Analytical Framework

This study adopts a mixed-methods approach, combining quantitative analysis of trade and income data with qualitative review of policies. Secondary data was obtained from FAOSTAT, WTO, World Bank, RBI, and the Ministry of Agriculture. Export-import volumes, farmer household incomes, fertilizer costs, and food inflation indices were analyzed. A case study approach was applied to wheat export bans, rice restrictions, and fertilizer import dependency.

## Agricultural Trade Trends in India (2017–2022)

Table 1: India's Agricultural Trade (2017–2022)

Year	Exports (USD Billion)	Imports (USD Billion)
2017	35	24
2018	38	26
2019	36	28
2020	41	29
2021	50	31
2022	47	35





## Analysis and Discussion

### Agricultural Export Growth

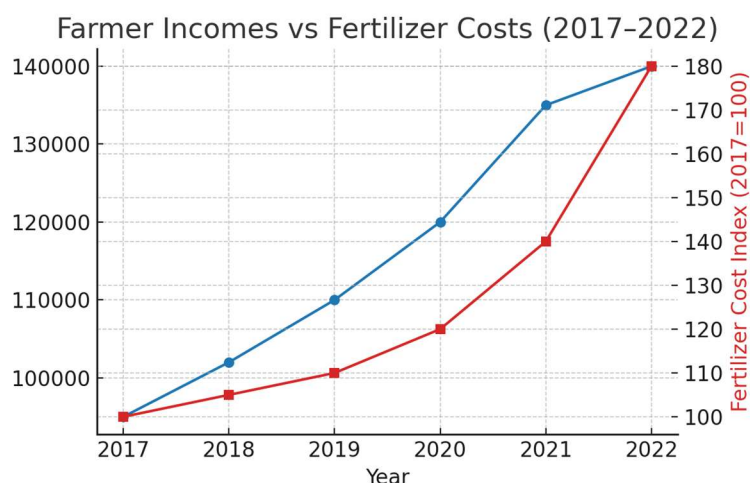
India's exports peaked in 2021–22 due to record shipments of rice and wheat. However, restrictions imposed in 2022 reduced growth momentum. Farmers in surplus states such as Punjab and Haryana faced reduced opportunities, while global buyers turned to alternatives.

### Food Security Implications

Export bans stabilized domestic cereal prices and enabled the PDS and PMGKAY schemes to distribute grains affordably. Yet, nutritional security worsened as prices of pulses and edible oils—dependent on imports—remained high.

### Farmer Income Dynamics

Average annual farmer household income rose from INR 95,000 in 2017 to INR 1.4 lakh in 2022 (NITI Aayog, 2021). However, rising fertilizer costs eroded gains. The following chart illustrates this trend:



## Case Studies

### Wheat Export Ban (2022)

India banned wheat exports in May 2022 after heatwaves reduced yields. This ensured domestic supply but limited farmer profits.

### Rice Export Restrictions (2022)

India restricted broken rice exports in September 2022. While it stabilized prices domestically, global markets were disrupted.

### Fertilizer Import Dependence

India's 90% import dependency on phosphates and 100% on potash created vulnerabilities. Prices surged by 70–80% in 2022.



### Challenges and Issues

1. Export restrictions benefitted consumers but reduced farmer incentives.
2. Rising input costs cut into farmer incomes.
3. Small farmers lacked access to export markets.
4. WTO criticisms highlighted India's role in tightening global supply.
5. Climate shocks increased volatility.

### Policy Recommendations

1. Implement predictable export policies.
2. Strengthen Farmer Producer Organizations (FPOs).
3. Diversify cropping towards oilseeds, pulses, and millets.
4. Increase investment in cold chains and logistics.
5. Link trade strategy with SDG-2 goals.

### Conclusion

Agricultural trade has a dual impact on India—creating opportunities for farmer income growth but also posing risks to food security. The events of 2022 highlight that while domestic stability was ensured, farmers lost export advantages. A balanced trade policy is essential to safeguard both farmer welfare and consumer needs in the long term.

### References

1. Dev, S. M. (2020). Agricultural trade and farmer welfare in India. *Economic and Political Weekly*, 55(12), 45–53.
2. FAO. (2022). *The State of Food Security and Nutrition in the World*. Food and Agriculture Organization.
3. Gulati, A., & Juneja, R. (2021). Indian agricultural trade policies: Balancing food security and farmer welfare. ICRIER Policy Paper.
4. World Bank. (2022). *Commodity Markets Outlook*. Washington, DC.
5. WTO. (2022). *Trade Policy Review: India*. World Trade Organization.
6. Government of India. (2022). *Agricultural Statistics at a Glance*. Ministry of Agriculture & Farmers' Welfare.
7. NITI Aayog. (2021). *Doubling Farmers' Income Strategy Report*. New Delhi.
8. Chand, R. (2017). Doubling farmers' income: Rationale, strategy, prospects and action plan. NITI Aayog Discussion Paper.
9. OECD–FAO. (2021). *Agricultural Outlook 2021–2030*. Paris: OECD Publishing.
10. RBI. (2022). *Handbook of Statistics on Indian Economy*. Reserve Bank of India.
11. Pingali, P. (2019). Agricultural policy and nutrition outcomes in India. *World Development*, 123, 104589.
12. Birthal, P. S., Negi, D. S., & Kumar, S. (2020). *Transforming Indian agriculture: Markets, policies and institutions*. Springer.



13. Joshi, P. K., & Hanchate, A. (2022). India's food security in the wake of global disruptions. *Food Policy Journal*, 107, 102205.
14. Economic Survey of India. (2022). Chapter on Agriculture & Food Management. Ministry of Finance, Government of India.
15. The Hindu. (2022, May 15). Government bans wheat exports to ensure food security.
16. Business Standard. (2022, September 9). India restricts rice exports amid global shortage fears.
17. FAOSTAT. (2022). India Trade Data – Agricultural Products. Retrieved from <http://www.fao.org/faostat>
18. United Nations. (2022). Sustainable Development Goals Report. United Nations Publications.
19. Sen, A., & Himanshu. (2018). Farm incomes and food security in India. *Journal of Agrarian Change*, 18(4), 720–737.
20. Ramesh, M., & Prasad, A. (2021). Agricultural subsidies and trade competitiveness in India. *Journal of Development Studies*, 57(9), 1452–1470.