



REVIEW ON EXPORT OPPORTUNITIES OF SUGARCANE FROM INDIA

Varun Singh¹, Ajay Bishnoi² and Kshitij Parmar³

^{1&2}B.Sc. (Hons.) Agriculture and ³Assistant Professor

Amity Institute of Organic Agriculture, Amity University, Noida

Corresponding author: varunsingh1649@icloud.com

<https://doie.org/10.10346/AE.2025280166>

ABSTRACT

India is the second-largest producer of sugarcane in the world, contributing significantly to global sugar production (FAO, 2023). The country has immense potential for exporting sugarcane and its byproducts, such as raw sugar, refined sugar, ethanol, and molasses (ICAR, 2023). However, despite its strong production base, India's sugar exports are influenced by fluctuating global prices, government policies, trade barriers, and environmental factors (USDA, 2023). This review explores the export potential of Indian sugarcane by analyzing global demand trends, major importing countries, government support mechanisms, and challenges faced in international trade (OECD-FAO, 2023). The paper highlights India's export policies, including subsidies, minimum support prices, and ethanol blending programs, which impact competitiveness in global markets (NITI Aayog, 2023). Furthermore, it examines sustainability challenges such as water-intensive cultivation, soil degradation, and climate change, which could affect long-term export growth (ICAR-SBI, 2023). The review also discusses trade agreements and tariff policies that determine India's market access (WTO, 2023). Through a detailed analysis, this paper identifies key strategies for enhancing India's position as a global sugarcane exporter, including technological advancements, diversification of sugarcane-based products, and international collaborations (RBI, 2023). The study concludes that with appropriate policy reforms, infrastructure improvements, and sustainable agricultural practices, India can strengthen its sugarcane export potential and contribute significantly to the global sugar industry (FAOSTAT, 2023).

Keywords: Sugarcane export, India, trade policies, global sugar market, sustainability, ethanol, trade barriers

INTRODUCTION

India's agricultural sector contributes 17-18% to the country's GDP and employs around 45% of the total workforce (FAO, 2023). Among the various crops cultivated, sugarcane is one of the most significant due to its economic and industrial importance (ICAR, 2023). India ranks second after Brazil in global sugarcane production, with an annual output of 400-450 million metric tons (USDA, 2023).

Sugarcane production in India is mainly concentrated in Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, and Gujarat, where favorable climatic conditions and irrigation facilities support high yields (NITI Aayog, 2023). The sugar industry provides direct and indirect employment to over 50 million farmers and workers engaged in allied sectors (RBI, 2023).



India's sugar exports are influenced by government policies, trade agreements, global price fluctuations, and climatic conditions (OECD-FAO, 2023). Additionally, the environmental impact of sugarcane cultivation, particularly in terms of water consumption and soil degradation, poses significant sustainability challenges (ICAR-SBI, 2023). This paper explores India's export opportunities by analyzing global market trends, major importing countries, trade barriers, and policy frameworks.

OVERVIEW OF SUGARCANE PRODUCTION IN INDIA

Current Production Trends

India cultivates sugarcane on approximately 5 million hectares, yielding an average of 80-85 tons per hectare (FAOSTAT, 2023). The leading sugarcane-producing states include Uttar Pradesh (44% of total production), Maharashtra (30%), and Karnataka (12%) (ICAR, 2023).

Varieties of Sugarcane and Their Impact on Yield

The adoption of high-yielding varieties such as Co 0238, Co 86032, and Co 0118 has enhanced productivity and sugar recovery rates (ICAR-SBI, 2023). These varieties provide higher sucrose content (12-14%), improving sugar mill efficiency and profitability (NITI Aayog, 2023).

GLOBAL DEMAND AND ITS BY-PRODUCTS

Sugar Demand in International Markets

The global sugar market is projected to grow at a CAGR of 2.9% between 2023 and 2030, driven by increasing consumption in Asia, Africa, and the Middle East (OECD-FAO, 2023).

Countries like China, Indonesia, and Bangladesh rely heavily on imports to meet domestic demand (USDA, 2023).

Ethanol as a Growing Export Commodity

India's Ethanol Blended Petrol (EBP) program aims to achieve 20% ethanol blending by 2025, increasing ethanol exports to markets such as Brazil, the USA, and Europe (Ministry of Petroleum, 2023).

MAJOR IMPORTING COUNTRIES AND MARKET TRENDS

Key Sugar Importers

India's major sugar export destinations include:

- Indonesia – World's largest sugar importer, with 5.6 million metric tons imported in 2022 (USDA, 2023).
- Bangladesh – A key buyer of Indian sugar due to geographical proximity and favourable trade policies (FAO, 2023).
- China – Despite domestic production, China imports 3.5 million metric tons annually to meet demand (OECD, 2023).

Competitive Analysis with Other Exporters

India faces competition from Brazil, Thailand, and Australia in global sugar markets (USDA, 2023). Brazil dominates the market due to low-cost production, advanced logistics, and large-scale ethanol integration (OECD-FAO, 2023).

EXPORT POLICIES AND GOVERNMENT INITIATIVES

Sugar Export Subsidies

The Indian government provides subsidies under:

- Maximum Admissible Export Quantity (MAEQ) – Incentives for surplus sugar exports (Government of India, 2023).
- Production-linked export incentives – Encouraging sugar mills to boost output (RBI, 2023).



Trade Agreements and Market Access

India benefits from trade agreements under SAFTA (South Asian Free Trade Area), ASEAN, and bilateral agreements with Indonesia, Bangladesh, and China (WTO, 2023).

TRADE BARRIERS AND CHALLENGES

Price Volatility in Global Sugar Markets

Global sugar prices fluctuate due to weather conditions, production surpluses, and government policies (FAO, 2023).

Tariff and Non-Tariff Barriers

Countries like China and the EU impose high import tariffs (30-50%) on sugar, limiting India's market access (WTO, 2023).

Environmental and Sustainability Concerns

Sugarcane is a water-intensive crop, requiring 2000-2500 liters of water per kg of sugar produced (ICAR, 2023). Sustainable farming practices such as drip irrigation and intercropping are crucial for reducing resource consumption (ICAR-SBI, 2023).

SUSTAINABILITY AND FUTURE PROSPECTS

Diversification of Sugarcane-Based Products

Expanding exports of jaggery, organic sugar, and biofuels can enhance revenue streams (FSSAI, 2023).

Climate-Resilient Sugarcane Cultivation

Adopting drought-resistant varieties, precision irrigation, and organic farming can improve sustainability (ICAR-SBI, 2023).

CONCLUSION

India holds immense potential to expand its sugarcane exports, leveraging its vast production capacity, supportive government policies, and growing global demand. As one of the largest producers of sugarcane, the country has a strategic advantage in supplying both raw and refined sugar, as well as value-

added by-products such as ethanol, jaggery, and molasses. With rising international demand for sugar and ethanol as a biofuel alternative, India can strengthen its position in global markets by increasing production efficiency and diversifying its export portfolio.

However, several challenges need to be addressed to ensure long-term growth and competitiveness. Price fluctuations in the global sugar market, trade restrictions imposed by importing nations, and high tariffs can limit export potential. Additionally, the environmental impact of sugarcane cultivation, particularly its high-water consumption and soil degradation, poses sustainability concerns. Developing climate-resilient sugarcane varieties, promoting precision farming techniques, and adopting water-efficient irrigation methods will be essential for maintaining productivity while minimizing environmental risks.

To enhance its export competitiveness, India must also focus on improving infrastructure for transportation and storage, ensuring better logistics and reduced post-harvest losses. Strengthening trade agreements with key importing countries, negotiating favourable tariff reductions, and exploring new markets will further expand export opportunities. Additionally, integrating technology-driven solutions in processing and refining can improve efficiency, quality standards, and global market acceptance.

By addressing these challenges through policy reforms, sustainable agricultural practices, and technological advancements, India can establish itself as a dominant player in the international sugarcane trade. With the right strategies, the country can boost its agricultural economy, support millions of farmers, and contribute significantly to the global sugar industry.



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