

SUGARCANE: A SWEET SOURCE OF INCOME AND EMPLOYMENT IN INDIA WITH ETHANOL MAKING CONTRIBUTIONS

Randhir Yadav¹ and Aditya Bhooshan Srivastava²

Introduction

Sugarcane, a major cash crop in India, has been a vital contributor to the country's economy for centuries. India is the world's second-largest producer of sugarcane, and the industry surrounding this versatile crop plays a significant role in generating income and employment opportunities for millions of people. In recent years, the utilization of sugarcane by-products, such as ethanol, has further strengthened its economic impact. This article explores how sugarcane helps generate income and employment in India, with a particular focus on the contributions of ethanol and relevant economic data.



A crucial part of the rural economy Sugarcane farming is an important way for people in rural India to make money. According to the Ministry of Agriculture and Farmers Welfare, about 5.12 million hectares of land were used to grow sugarcane during the 2020-2021 crop year, and about 383 million metric tonnes were made. Sugarcane sales bring in a lot of money that helps small and poor farmers make a living. This makes sugarcane sales an important part of the country economy.

Sugar Mills:

Employment Hubs India boasts a vast network of sugar mills, which serve as employment hubs in rural areas. Throughout the year, these mills provide work to a sizable number of people, with employment peaking during the sugarcane crushing season. Millions of people have access to direct and indirect employment opportunities in the sugar sector, from skilled workers to administrative employees, which helps to reduce unemployment and spur economic growth.

Randhir Yadav¹ and Aditya Bhooshan Srivastava²

¹Assistant Professor, Department of Agricultural Economics, Chandra Shekhar Azad Mahavidyalaya Parnapur, Gonda

²Research Scholar, Department of Agricultural Economics, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya

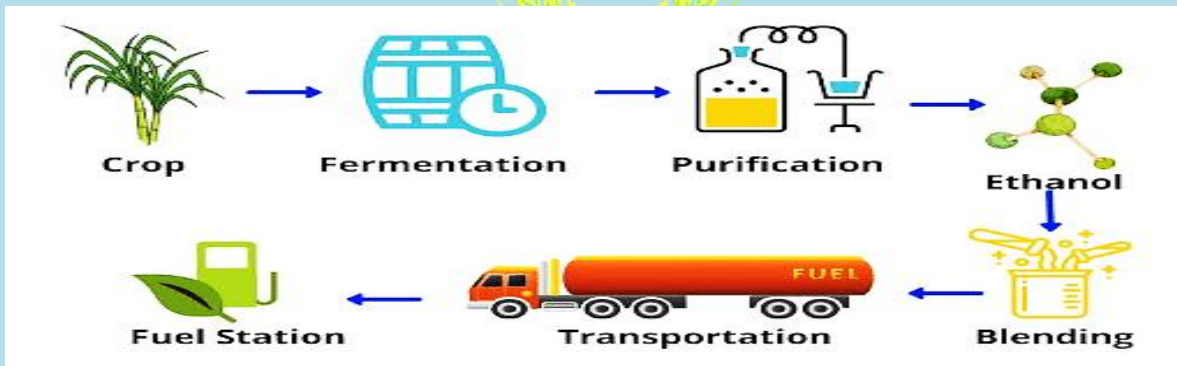
Ethanol Production:

Expanding Revenue Streams Ethanol, a by-product of sugarcane, has emerged as a game-changer in India's quest for energy security and environmental sustainability. The Ethanol Blended Petrol (EBP) programme, which aims to encourage the blending of ethanol with gasoline to lessen dependence on fossil fuels and reduce greenhouse gas emissions, was launched by the Indian government in 2020. The government has ambitious goals to raise this percentage even further. According to data from the Ministry of Petroleum and Natural Gas, the blend of ethanol in fuel reached 8.5% for the fiscal year 2020–2021.

sugar inventory, thereby stabilizing sugar prices.



Additionally, the manufacture of ethanol helps the nation save money by replacing imported goods. India's capacity to produce ethanol has greatly expanded recently, with a projected output of more than 4.2 billion litres in 2020–2021, and it is anticipated to continue to grow in the



Economic Impact of Ethanol Production

The production of ethanol from sugarcane not only helps in achieving energy security and environmental goals but also provides additional revenue streams for the sugar industry. Ethanol production creates a market for surplus sugarcane, ensuring better prices for farmers and reducing the surplus

upcoming years, according to the Indian Sugar Mills Association (ISMA).

What is the present status of ethanol blending in India?

As of March 2022, India had reached a level of ethanol blending of 9.45 percentage points, as reported by the Ministry of Petroleum and Natural Gas. According to the

projections made by the Centre, this number will get up to 10% by the conclusion of the fiscal year 2022 Ethanol Blending Programme. The Union Cabinet gave its approval to a number of revisions to the National Policy on Biofuels, 2018, in June of 2022. The goal of the amendment was to bring forward from the year 2030 to the year 2025 the deadline by which gasoline firms are required to increase the blending proportion of ethanol in petrol to 20%.

What are the challenges to raise the ethanol blending to 20%?

A mixture of 10% does not require any significant engine changes; however, a mixture of 20% may require some modifications and may potentially cause an increase in vehicle prices. More blending could result in more agricultural land being reallocated to produce water-intensive crops like sugarcane, which the government already subsidises financially. By the year 2025, there will be a demand for 10.16 billion litres of ethanol, which will call for an annual consumption of six million metric tonnes of sugar and 16.5 million metric tonnes of cereals. The larger land allocation also raises questions about whether or not the combination of ethanol and petrol is genuinely effective in reducing emissions.

Government Initiatives: Boosting the Ethanol Sector

The Indian government has been proactive in promoting the ethanol sector. Various policy measures and financial incentives have been introduced to encourage sugar mills to invest in ethanol production. These initiatives include offering soft loans and subsidies for setting up ethanol plants, permitting the production of ethanol from various feedstocks, and fixing attractive prices for ethanol supplied to oil marketing companies.

Conclusion

Sugarcane is a vital economic resource in India, generating income and employment opportunities for millions of people. Its cultivation provides a stable source of income for farmers, while sugar mills serve as significant employment hubs in rural areas. The utilization of sugarcane by-products, particularly ethanol, has added a new dimension to its economic impact. The production of ethanol not only helps in achieving energy security and reducing carbon emissions but also creates additional revenue streams for the sugar industry. With the Indian government's proactive support and various initiatives to boost the ethanol sector, the economic significance of sugarcane and its by-products is expected to grow further, benefiting the nation's economy and contributing to a greener and more sustainable future.