

Processing and Value Addition in Sugarcane

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Food Processing: A food undergone any changes to its natural state and involves one or a combination of various processes including washing, chopping, pasteurising, freezing, fermenting, packaging, cooking and many more.

Agro-processing: Subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector.

Value-Addition: Economic Enhancement of a product's value usually through the manufacturing process before selling it to consumers.

Output: Value added products

Importance of Food Processing involves Preservation, Convenience, Edible, More Variety, Reduce Waste, and Enhances Nutrition and ensures Greater Food Safety.

Food processing industry prospects in Indian Scenario

- Natural supply advantage.
- Need for growing population (1.3 billion people).
- Indian Food Industry supported by large raw material production base.
- Largest producer: Milk, Bananas, Mangoes, Guavas, Papaya, Ginger, Okra.
- Second Largest producer: Wheat, Rice, Fruits and Vegetables, Tea, Sugarcane and Cashewnut.
- Third Largest producer: Cereals, coconut, lettuce, chicory, nutmeg, cardamom and pepper.

(Processed Food Industry, June, 2021)

India has a unique geographical advantage with convenient connectivity leading to significant business growth opportunities. India is also having a large consumption base. Estimates evidence the vast market opportunities offered by Indian food processing, food retail, transport, logistics and related infrastructure sectors to players in food processing value chain. Food processing is the “Fastest Growing Industry.”

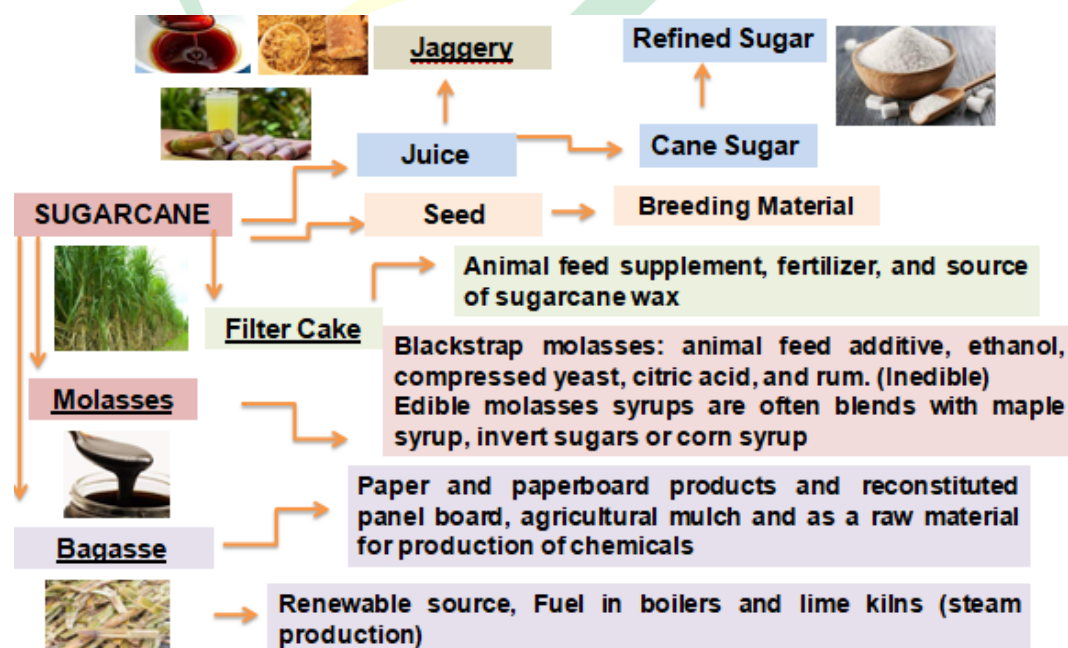
Present status of food processing industry in India and a way forward

India's food processing sector is one of the largest in the world and its output is expected to reach USD 535 billion by 2025-26, 32 per cent of the country's total food market and is ranked fifth in terms of production, consumption, export, and expected growth. The food processing sector contributes 12.8 per cent to the Indian GDP and provides, directly and indirectly, huge employment. The Indian food and grocery market is the world's sixth-largest, with retail contributing 70 per cent of the sales. Under PMKSY (Pradhan Mantri Kisan Sampada Yojna), 42 Mega Food Parks, 353 Cold Chain projects, 63 Agro-Processing Clusters, 292 Food Processing Units, 62 Creation of Backward & Forward Linkages Projects and 6 Operation Green projects across the country have been approved. Increasing the level of processing in India from the current 10 per cent will boost farmers' income.

Why Sugarcane?

When commercial production of sugar first began, the crop produced FOOD for people, the FUEL needed for processing and FEED for animals used to transport the cane to the mill. It is a major CASH CROP. Sugarcane processing remains a UNIQUE INDUSTRY in not requiring exogenous sources of fuel, irrespective of whether the technology employed is industrial (crystalline sugar) or artisanal (“panela” or “gur”). There are multiple ECONOMICAL and HEALTH BENEFITS of this crop.

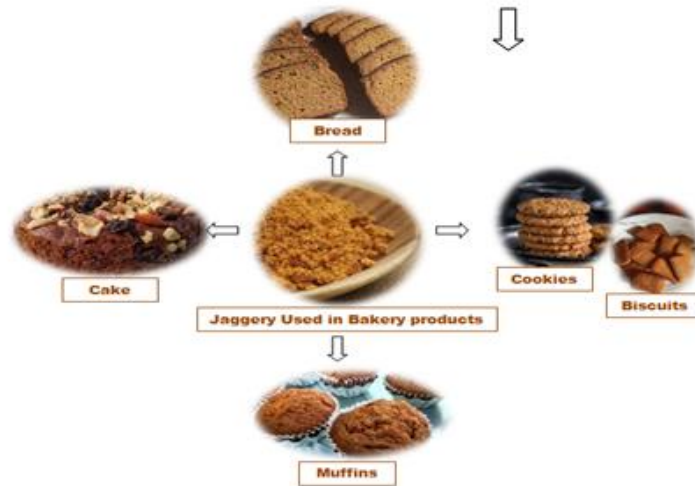
Sugarcane Processing



SUGARCANE JAGGERY



JAGGERY AS SUGAR REPLACER



SUGARCANE BAGASSE



BAGASSE PELLETS AS FUEL IN BRAZIL

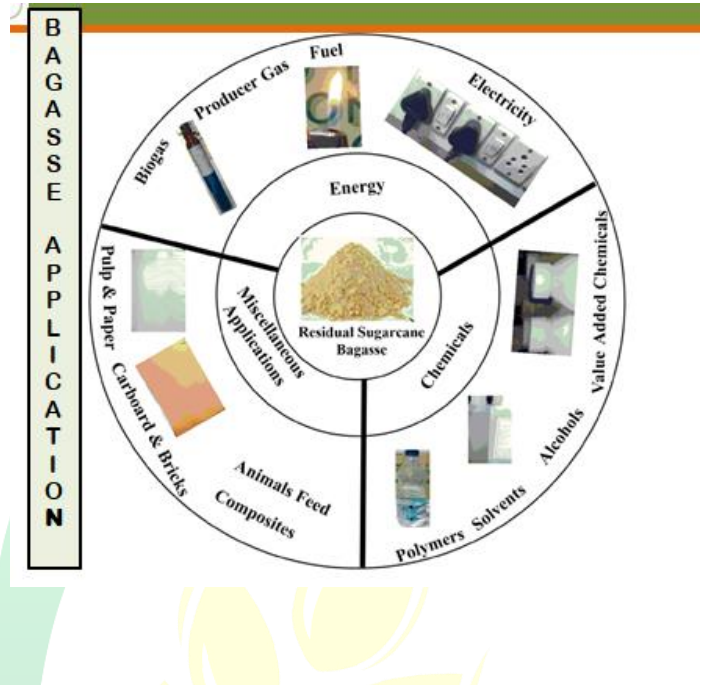


Sugarcane bagasse amendment improves the quality of green waste vermicompost and the growth of *Eisenia fetida*

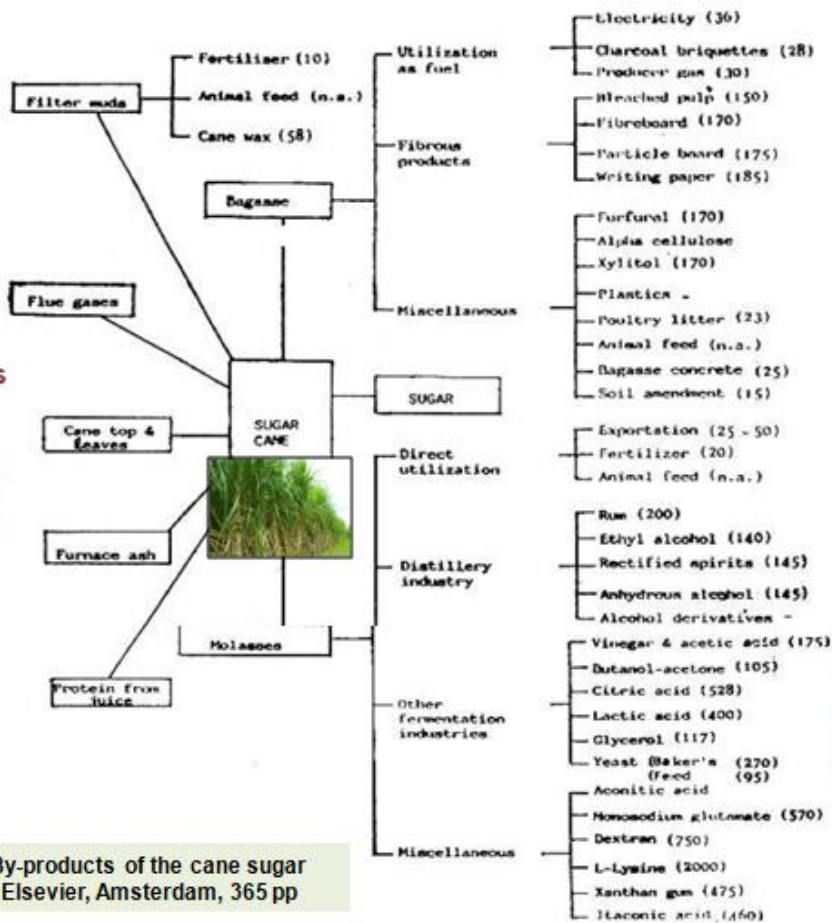


SUGARCANE BAGASSE IN SOIL AMENDMENT

Cia. et al., 2020



Alternative uses of sugarcane and its by-products in Agroindustry



Paturau, J.M. 1982. By-products of the cane sugar industry. 2nd edition, Elsevier, Amsterdam, 365 pp