

14– 08 – 2024

News: Cotton

- The data recently released by the Ministry of Textiles shows that cotton consumption by the textile industry from October 2023 to September 2024 is one of the highest seen in this decade.

Cotton

- Cotton is a tropical crop grown in the Kharif season in semi-arid areas of the country.
- Cotton is a drought – resistant crop ideal for arid climates and requires an average annual rainfall of 50- 100 cm.
- It requires at least 210 frost free days in a year.
- Cotton can be successfully grown in a range of soil types, including well-drained deep alluvial soils in northern regions, variable-depth black clayey soils in the central region, and mixed black and red soils in the southern zone.
- While cotton exhibits some tolerance to salinity, it is highly sensitive to waterlogging, emphasising the importance of well-drained soils in cotton farming.

- It occupies just 2.1 % of the world's arable land, yet it meets 27% of the world's textiles need. In addition to its fibre used in textiles and apparel, food products are also derived from cotton like edible oil and animal feed from the seed.
- India ranks first in the world in the production of cotton followed by China and United States.
- Cotton occupies about 4.7 percent of the total cropped area in the country. In India, around 67% of India's cotton is grown in rain-fed areas and 33% in irrigated areas.
- Due to its economic importance in India, it is also termed as "White-Gold".
- Cotton is a "pure" raw material that does not lose weight in the manufacturing process.
- So other factors, like, the power to drive the looms, labor, capital, or market may determine the location of the industry.
- At present, the trend is to locate the industry at or close to markets, as it is the market that decides what kind of cloth is to be produced. Also, the market for the finished products is extremely variable, therefore, it becomes important to locate the mills close to the market.
- The cotton textile industry is one of the traditional industries of India. In the ancient and medieval times, it used to be only a cottage industry.

- India was famous worldwide for the production of muslin, a very fine variety of cotton cloth, calicos, chintz, and other different varieties of fine cotton cloth.
- The development of this industry in India was due to several factors. One, it is a tropical country and cotton is the most comfortable fabric for a hot and humid climate. Second, a large quantity of cotton was grown in India.
- Abundant skilled labor required for this industry was available in this country.
- In fact, in some areas, the people were producing cotton textiles for generations and transferred the skill from one generation to the other and in the process perfected their skills.
- There are **three cotton-growing areas, i.e. parts of Punjab, Haryana and northern Rajasthan in the northwest, Gujarat and Maharashtra in the west and plateaus of Andhra Pradesh, Karnataka and Tamil Nadu in the south.**
- India is the **only country in which all four varieties of cotton are grown:** G. Arboreum, G. Herbaceum (varieties of Asian cotton), G. Barbadense (Egyptian cotton) and G. Hirsutum (American upland cotton).
- **Leading producers of this crop are Gujarat, Maharashtra and Telangana per hectare output of cotton is high under irrigated conditions** in the north-western region of the country. Its yield is very low in Maharashtra where it is grown under rainfed conditions.

- Tamil Nadu has the largest number of mills and most of them produce yarn rather than cloth. Coimbatore has emerged as the most important center with nearly half the mills located there.
- While Tamil Nadu accounts for less than 2% of country's total raw cotton production, it has almost half of cotton spinning capacity of the country.
- Initially, the British did not encourage the development of the indigenous cotton textile industry. They exported raw cotton to their mills in Manchester and Liverpool and brought back the finished products to be sold in India. This cloth was cheaper because it was produced at mass scale in factories in the U.K. as compared to the cottage based industries of India. In 1854, the first modern cotton mill was established in Mumbai.
- Between 2011 and 2018, India implemented a Cotton Technical Assistance Programme (Cotton TAP-I) for seven African countries namely Benin, Burkina Faso, Mali and Chad and also Uganda, Malawi and Nigeria. The technical assistance focused on improving the competitiveness of the cotton and cotton-based textiles and apparel industry in these countries through a series of interventions which had significant outcomes leading to a demand for a follow on project.
- Cotton cultivation in India is regulated by the Cotton Corporation of India, which is a statutory body.

Cotton Corporation of India (CCI)

- Cotton Corporation of India (CCI) is incorporated under **Companies Act 1956**, under the aegis of **Ministry of Textiles**.
- CCI is a **public sector agency** responsible for equitable distribution of cotton among the different constituents of the industry and aid imports of cotton.
- It is also responsible to **undertake price support operations**, whenever the market prices of cotton fall below the minimum support prices (MSP).
- The **government of India** announces Minimum Support Price (MSP) for both **medium and long-staple cotton**.
- CCI is having pan India presence through **headquarters at Navi Mumbai** (Maharashtra) to **safeguard the economic interest of cotton farmers** in all the cotton growing regions and to ensure smooth supply of good quality cotton to the textile industry in India.

News: International Sugar Organization (ISO)

- Recently India hosted the 64th International Sugar Organization (ISO) Council Meeting 2024 in New Delhi.

International Sugar Organization (ISO)

- The International Sugar Organization serves as a vital intergovernmental body of 85 member countries dedicated to enhancing the global sugar market.
- It represents around 87% of world sugar production and 64% of world sugar consumption.
- With a membership of around 88 nations, India being among them, the organization encompasses a diverse range of countries.
- International Sugar Organization is headquartered in London, United Kingdom.
- The ISO administers the International Sugar Agreement (ISA), 1992 aiming to foster international cooperation in sugar related matters, facilitate intergovernmental discussions to improve the global sugar economy, collect and disseminate market information, and encourage expanded sugar use, especially in non-traditional applications.
- India is the chairperson of organization in 2024.

Sugarcane

- Sugarcane is a **low-land tropical, plantation, and cash crop** which are grown in the regions having **high temperature and heavy rainfall**.
- This crop is usually grown in **regions that have monsoonal type of climate**. Some major producers include India, Java, Formosa, Cuba, Jamaica, Trinidad, and Barbados.
- **India is the top country with sugar cane production** in the world beating Brazil in 2022. However, **Brazil is the largest exporter** of Sugar in the world. **India is also the largest consumer** of sugar in the world.
- India accounts for about **19 percent of the world's production of sugarcane**. But it occupies only 2.4 percent of the total cropped area in the country.
- This industry provides employment for more than 4 lakh persons directly and many farmers indirectly.
- The **sugar industry is a seasonal industry** because of the seasonality of raw materials.
- The development of the industry on modern lines dates to 1903 when a sugar mill was started in Bihar. Subsequently, sugar mills were started in other parts of Bihar and Uttar Pradesh.

- In 1950-51, 139 factories were in operation. The number of sugar factories rose to 662 in 2010-11.
- Sugarcane is a **weight-losing crop**. The ratio of sugar to sugarcane varies between 9 to 12 percent depending on its variety.
- Its **sucrose content begins to dry during haulage** after it has been harvested from the field.
- **Better recovery of sugar is dependent upon its being crushed within 24 hours of its harvesting.**
- **Sugar factories hence are located within the cane producing regions.**
- **Maharashtra has emerged as a leading sugar producer** in the country and produces more than one-third of the total production of the sugar in the country.
- **Uttar Pradesh is the second-largest producer** of sugar. The sugar factories are concentrated in two belts – the Ganga-Yamuna doab and the Tarai region.
- The major sugar-producing centers in the Ganga -Yamuna doab are Saharanpur, Muzaffarnagar, Meerut, Ghaziabad, Baghpat, and Bulandshahr districts; while Kheri Lakhimpur, Basti, Gonda, Gorakhpur, Bahraich are important sugar-producing districts in the Tarai region.
- The **crop yield is low in Northern India than in Southern India**. Uttar Pradesh's yield is low, but in Maharashtra, Karnataka, and Tamil Nadu the yield is high.

- Area under sugarcane is expected to be almost 54.55 lakh hectare in 2021-2022 sugar season (October to September) or 3% higher than the current season's area, according to the Indian Sugar Mills' Association (ISMA).

Advantages of increasing Sugarcane production

- Sugar production generates several by-products, such as molasses, bagasse, and press mud, which can be used to produce other products such as ethanol, paper, and Bio-Fertilizers.
- Sugar mills can divert excess sugarcane to ethanol, which is blended with petrol, which not only serves as a green fuel but also saves foreign exchange on account of crude oil import.
- The government of India has fixed a target of 10% blending of fuel grade ethanol with petrol by 2022 & 20% blending by 2025.
- India achieved its target of an average of 10% blending across the country five months ahead of the targeted timelines of November 2022.
- Cultivating sugarcane provides farmers with an opportunity to diversify their agricultural activities and increase their income.
- Sugarcane cultivation can be integrated with other crops such as vegetables, fruits, and spices to promote crop diversification. This can lead to better soil health, reduced pest and disease pressure, and improved crop yields.

Challenges Associated with Growing Sugarcane

Longer Duration to Harvest

- Sugarcane takes a long time to grow and be ready for harvest (around 10 to 12 months). Growing sugarcane is not an easy task as it requires the farmer to plant and harvest two more crops before they can finally harvest sugarcane.
- This means that growing sugarcane demands a lot of hard work over a period of about three years.

Higher Investment

- Growing sugarcane requires farmers to invest more money because they have to prepare the fields properly before planting. This involves tilling the soil to a greater depth, followed by harrowing, and leveling it to make it suitable for sugarcane.
- Moreover, buying sugarcane seedlings is expensive, and before planting, farmers need to add manure and fertilizers to the soil, which also comes at a high cost.

High Labor Cost

- The labour for cutting sugarcane costs huge and if the cutting season is dry without rain, it gravely affects the total weight of the cane and if it rains, there

will be slush on the path resulting in lorries/trucks not being able to come near the field.

- Farmers must spend a lot to transport the sugarcane from their fields to the main road by employing labour.

Unviability Sugar Exports

- India is finding it difficult to export sugar as the cost of producing it is higher compared to the international market price, mainly due to the high cost of sugarcane.
- To help bridge this gap, the government has been providing export subsidies, but other countries have raised objections with the World Trade Organization (WTO).
- Although India is currently allowed to continue with these subsidies until December 2023, there is uncertainty about what will happen after that.

Problem with India's Ethanol Programme

- Blending ethanol with petrol to use as auto fuel was first announced in 2003, but this initiative has not been very successful due to several challenges. One of the key challenges is the poor pricing of ethanol supplied for blending.

- Since the price of ethanol is often higher than the price of petrol, blending ethanol with petrol becomes less economically viable. This can discourage ethanol producers from supplying ethanol for blending.

Price Determination of Sugarcane in India

- The Prices of Sugarcane are determined by the Central Government and the State Governments.

Central Government: Fair and Remunerative Price (FRP)

- The Central Government announces FRP which are determined on the recommendation of the Commission for Agricultural Costs and Prices (CACP) and announced by the Cabinet Committee on Economic Affairs (CCEA).
- CCEA is chaired by the Prime Minister of India.
- The FRP is based on the Rangarajan Committee report on reorganising the sugarcane industry.

State Government: State Advised Prices (SAP)

- The SAP is announced by the Governments of key sugarcane producing states.
- SAP is generally higher than FRP.

- The price is calculated by the experts, who calculate the entire economics of the crop by taking input cost and then suggest to the government, which may agree or not.