

## Sustainability in export of agricultural commodities

### Why in news?

Increasing exports of key commodities like tea, sugar, and millets poses multiple challenges to the sustainability of production, processing, and distribution systems.

### What is the recent trend of agricultural exports in India?

- **Indian agriculture** - India has a vast domestic consumption base that supports a variety of agricultural sectors, including tea, sugar, and millets.
- **Agri export growth** - India's agricultural export value surged from 8.7 billion dollars in 2004-2005 to **53.1 billion dollars** in 2022-2023, reflecting the expanding demand for Indian agricultural products globally.

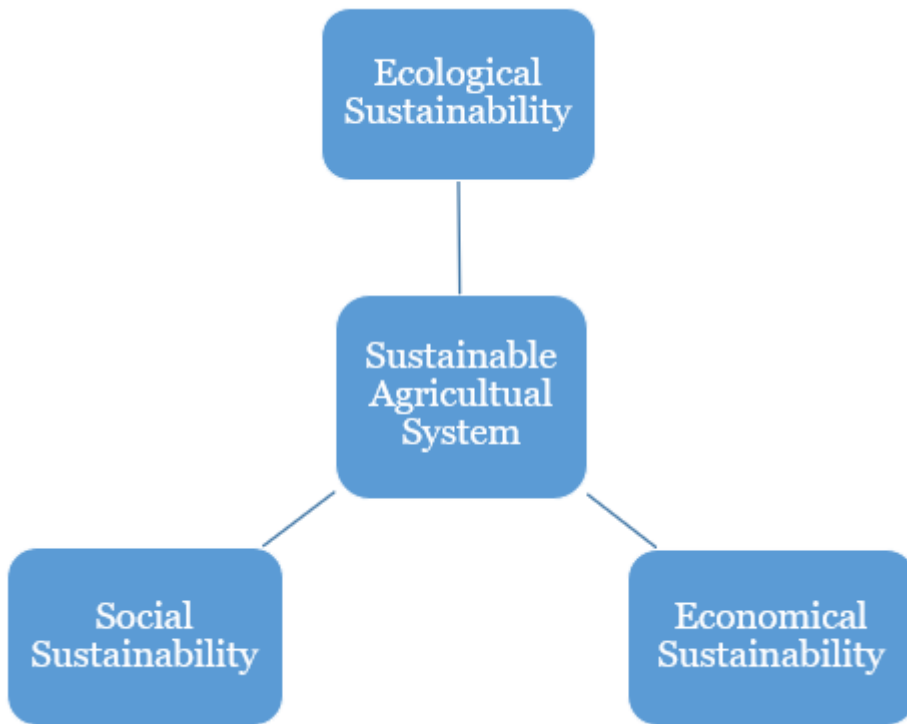
*India is in 8<sup>th</sup> position in global agriculture exports in 2023 as per WTO report.*

- **Surge in sugar exports** - India is the world's 2<sup>nd</sup> -largest sugar producer, with 34 million metric tonnes of production, about a fifth of the global production.
  - Sugar exports values at 4,600 million dollars in FY 2021-2022 which by 291% from 2013.

*About 50 million farmers depend on sugarcane cultivation in India.*

- **Increased tea exports** - India is the 2<sup>nd</sup> largest tea producer and 4<sup>th</sup> -largest tea exporter.
  - In 2022-2023, tea exports reached 793.78 million dollars.
  - The top export destinations of Indian tea are the United Arab Emirates, Russia, Iran, the U.S. and the U.K.
- **Millets export growth** - Millets are gaining importance to reduce malnutrition and balance diet.
  - In 2022-2023, millet exports were valued at 75.45 million dollars.

### What are the sustainability issues in Indian agricultural system?



- **Ecological factors**

- **Biodiversity loss** - The expansion of monoculture crops like sugarcane and tea replaces diverse ecosystems, leading to significant biodiversity loss.
- **Human-wildlife interactions** - 70% of tea plantations are situated at the periphery of forests and migratory routes of elephants which results in frequent interactions with humans and human property.
- **Synthetic pesticides usage** - Synthetic pesticides constitute up to 85% of total pesticide use in tea plantations and increase in the incidence of DDT, Endosulfan 35 EC, Dicofol 18.5 EC, and Cypermethrin 10 EC in tea.
- **Pressure on water resources** - Intensive water use for crops like sugarcane depletes groundwater levels, creating stress on water resources and limiting availability for other crops and communities.

*On average, 1 kg of sugar requires between 1,500 and 2,000 kg of water and Sugarcane and paddy occupy around 25% of the gross cropped area in India and consume 60% of the country's total irrigation water.*

- **Economic aspects**

- **Vicious debt cycles** - Many farmers remain trapped in debt cycles due to low income and high production costs.
- This restricts their ability to invest in sustainable practices or adopt new technologies that could improve crop resilience and productivity.
- **Supply chain issues**- With a complex supply chain, farmers and small-scale producers become vulnerable to market fluctuations.
- Any disruption in the supply chain can have significant impacts on their livelihoods and the consistency of export.

- **Social aspects**

- **Labor rights** - Laborers in the tea and sugar industries often lack access to fair wages, health benefits, and safe working conditions.

- **Hazardous working conditions** - Workers in these industries are exposed to pesticides without protective gears.

### What are the potential solutions to ensure sustainability?

- **Sustainable farming practices** - Promote long-term ecological and socio-economic sustainability.
- **Enhance social equity** - Address wage gaps and labor concerns such as hazardous working conditions and skilling labors.
- **Millets a sustainable option** - Promote millet cultivation can help reduce the environmental footprint of agricultural exports.

*Millets require minimal water and are resilient to harsh conditions, making them an ideal sustainable crop for both domestic use and export.*

- **Better management practices** - Implement efficient management practices in tea and sugar plantations can improve resource use, reduce chemical dependency, and mitigate environmental impact.
- **Monitoring pesticides usage** - Monitor maximum residue limits for pesticides to improve the quality and safety of agricultural exports.
- **Enforcement of existing labor regulations** - Strengthen and enforce labor regulations is critical to protect workers' rights and ensure safer working conditions.
- **Ensuring sustainability** - Encompass sustainability at pre-sowing, on-farm production, and post-harvest stages.
- **Efficiency in water use** - Implement drip irrigation in water intensive crops could lower water consumption by 40-50%.
- **Alternate cropping patterns** - Reduce stress on land degradation and Improve soil management.

### Reference

[The Hindu |Agriculture Exports Raise Sustainability Concern](#)

