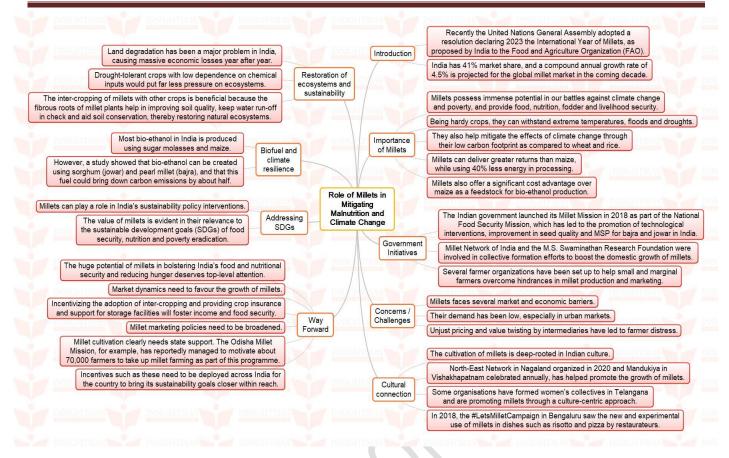


# **Insights Mindmap**



General Studies-3; Topic: Major crops cropping patterns in various parts of the country

# Role of Millets in Mitigating Malnutrition and Climate Change

### Introduction

- Recently the United Nations General Assembly adopted a resolution declaring 2023 the
   International Year of Millets, as proposed by India to the Food and Agriculture Organization (FAO).
- India has 41% market share, and a compound annual growth rate of 4.5% is projected for the global millet market in the coming decade.

### **Importance of Millets**

- Millets possess immense potential in our battles against climate change and poverty, and provide food, nutrition, fodder and livelihood security.
- Being hardy crops, they can withstand extreme temperatures, floods and droughts.
- They also help mitigate the effects of climate change through their low carbon footprint as compared to wheat and rice.
- Millets can deliver greater returns than maize, while using 40% less energy in processing.
- Millets also offer a significant cost advantage over maize as a feedstock for bio-ethanol production.

#### **Government Initiatives**

- The Indian government launched its Millet Mission in 2018 as part of the National Food Security
  Mission, which has led to the promotion of technological interventions, improvement in seed quality
  and MSP for bajra and jowar in India.
- Millet Network of India and the M.S. Swaminathan Research Foundation were involved in collective formation efforts to boost the domestic growth of millets.

# **Insights Mindmap**

• Several **farmer organizations** have been set up to help small and marginal farmers overcome hindrances in millet production and marketing.

#### **Concerns / Challenges**

- Millets faces several market and economic barriers.
- Their demand has been low, especially in urban markets.
- Unjust pricing and value twisting by intermediaries have led to farmer distress.

#### **Cultural connection**

- The cultivation of millets is deep-rooted in Indian culture.
- North-East Network in Nagaland organized in 2020 and Mandukiya in Vishakhapatnam celebrated annually, has helped promote the growth of millets.
- Some organisations have formed women's collectives in Telangana and are promoting millets through a culture-centric approach.
- In 2018, the **#LetsMilletCampaign** in Bengaluru saw the new and experimental use of millets in dishes such as risotto and pizza by restaurateurs.

### Restoration of ecosystems and sustainability

- Land degradation has been a major problem in India, causing massive economic losses year after year.
- Drought-tolerant crops with low dependence on chemical inputs would put far less pressure on ecosystems.
- The **inter-cropping of millets with other crops** is beneficial because the fibrous roots of millet plants help in improving soil quality, keep water run-off in check and aid soil conservation, thereby restoring natural ecosystems.

## Biofuel and climate resilience

- Most bio-ethanol in India is produced using sugar molasses and maize.
- However, a study showed that bio-ethanol can be created using sorghum (jowar) and pearl millet (bajra), and that this fuel could bring down carbon emissions by about half.

## **Addressing SDGs**

- Millets can play a role in India's sustainability policy interventions.
- The value of millets is evident in their relevance to the sustainable development goals (SDGs) of food security, nutrition and poverty eradication.

#### **Way Forward**

- The huge potential of millets in bolstering India's food and nutritional security and reducing hunger deserves top-level attention.
- Market dynamics need to favour the growth of millets.
- Incentivizing the adoption of inter-cropping and providing crop insurance and support for storage facilities will foster income and food security.
- Millet marketing policies need to be broadened.
- Millet cultivation clearly needs state support. The Odisha Millet Mission, for example, has
  reportedly managed to motivate about 70,000 farmers to take up millet farming as part of this
  programme.
- Incentives such as these need to be deployed across India for the country to bring its sustainability goals closer within reach.