



India's Millet Revolution

This editorial is based on [“Tasks for India's millet revolution”](#) which was published in The Hindu on 31/01/2023. It discusses the barriers in millet consumption in India.

For Prelims: Millets and its Significance, UNEP FAO, Food Security

For Mains: International Year of Millets 2023 and its Significance, Agricultural Resources, Food Security

The [Food and Agriculture Organization of the United Nations \(FAO\)](#) has declared 2023 as the [International Year of Millets](#). **Millets have special nutritive properties** (they are high in protein, dietary fibre, micronutrients and antioxidants) and special agronomic characteristics (drought-resistant and suitable for semi-arid regions).

Two groups of millets are grown in India. Major millets include sorghum, pearl millet and finger millet, while minor millets include foxtail, little millet, kodo, proso, and barnyard millet.

India's Millet Revolution is **driven by growing awareness of the health and environmental benefits of millets**, as well as efforts to revive traditional agricultural practices and support small-scale farmers. It is seen as a solution to the country's dual challenges of improving public health and promoting sustainable agriculture.

Why are Millets Considered Important 'Nutri-Cereals'?

- **Climate Resilient Staple Food Crops:**
 - Millets are **drought-resistant, require less water and can grow in poor soil conditions**. This makes them a suitable food crop for areas with unpredictable weather patterns and water scarcity.
- **Rich in nutrients:**
 - Millets are a good source of fiber, protein, vitamins, and minerals.
- **Gluten-free:**
 - Millets are naturally gluten-free, making them suitable for people with celiac disease or gluten intolerance.
- **Adaptable:**
 - Millets can be grown in a variety of soils and climates, making them a versatile crop option for farmers.
- **Sustainable:**
 - Millets are **often grown using traditional farming methods**, which are more sustainable and environmentally friendly than modern, industrial farming practices.

What is Millet?

▪ **About:**

- It is a **collective term referring to a number of small-seeded annual grasses** that are cultivated as grain crops, primarily on marginal lands in dry areas in temperate, [subtropical and tropical regions](#).
- Some of the **common millets available in India** are Ragi (Finger millet), Jowar (Sorghum), Sama (Little millet), Bajra (Pearl millet), and Variga (Proso millet).
 - The earliest evidence for these grains has been found in [Indus civilization](#) and was one of the first plants domesticated for food.
- It is **grown in about 131 countries and is the traditional food** for around 60 crore people in Asia & Africa.
- India is the largest producer of millet in the world.
 - It **accounts for 20% of global production and 80% of Asia's production**.

▪ **Global Distribution:**

- **India, Nigeria and China are the largest producers of millets** in the world, accounting for more than 55% of the global production.
- For many years, **India was a major producer of millets**. However, in recent years, millet production has increased dramatically in Africa.

What are the Constraints to Increased Millet Cultivation and Consumption?

▪ **Decline in the Area Under Millet Cultivation:**

- **Millets were earlier cultivated in an area of 35 million hectares of land**. But it is now being grown in only 15 million hectares.
- The reasons for a shift in **land use include low yields, time-consuming and laborious tasks in the processing of millets** which are undertaken by women.
 - Additionally, very little was marketed, and a tiny share of grain was processed into value-added products.
 - In 2019-20, the total offtake of cereals through the [Public Distribution System \(PDS\)](#) and the [Integrated Child Development Scheme \(ICDS\)](#) and also school meals was around 54 million tonnes.
 - If about 20% of rice and wheat were to be replaced by millet, the state would have to procure 10.8 million tonnes of millet.

▪ **Low Productivity of Millets:**

- Over the last decade, the production of sorghum (jowar) has fallen, the production of pearl millet (bajra) has stagnated, and the production of other millets, including finger millet (ragi), has stagnated or declined.

▪ **Lack of Awareness:**

- Many people in India are **not aware of the health benefits of millets**, leading to low demand.

▪ **High Cost:**

- Millets are **often priced higher than traditional cereals**, making them less accessible to low-income consumers.

▪ **Limited Availability:**

- Millets are **not widely available in traditional and modern (e-commerce) retail markets**, making it difficult for consumers to purchase them.

▪ **Perceived Taste:**

- Some people believe that **millets have a bland or unpleasant taste**, which discourages them from consuming them.

▪ **Agricultural Challenges:**

- The cultivation of millets is often associated with low yields and low profitability, which can discourage farmers from growing them.

▪ **Competition from Rice and Wheat:**

- Rice and wheat are staple foods in India and are widely available, making it difficult for millets to compete in the market.

▪ **Lack of Government Support:**

- India has **not provided enough support to promote the cultivation and consumption**

of millets, which has limited their growth.

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Millets

About

- Small-grained cereals also known as **coarse grains**
- Often referred to as **'Superfood'**
- Among the **first crops to be domesticated** - evidence of millet consumption dates back to the **Indus Valley Civilisation (3,000 BC)**

Climatic Conditions

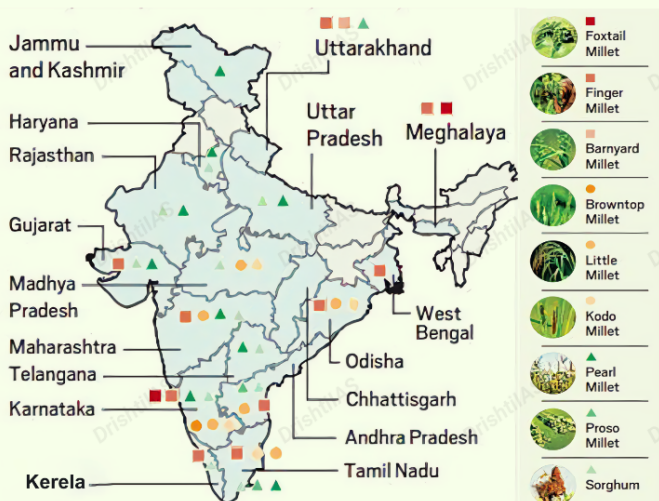
- **Mainly a Kharif crop in India**
- **Temperature:** 27°C - 32°C
- **Rainfall:** Around 50-100 cm
- **Soil Type:** Inferior alluvial or loamy soil

India and Millets

- **Global Largest Millet Producer:**
 - 20% of global production, 80% of Asia's production
- **Common Millets:**
 - **Ragi** (Finger millet), **Jowar** (Sorghum), **Sama** (Little millet), **Bajra** (Pearl millet), and **Variga** (Proso millet)
 - **Indigenous varieties** (small millets) - **Kodo, Kutki, Chenna and Sanwa**
- **Top Millets Producing States:**
 - Rajasthan (largest), Karnataka, Maharashtra, Madhya Pradesh and Uttar Pradesh
- **Govt. Initiatives:**
 - Initiative for Nutritional Security through Intensive Millet Promotion (INSIMP)
 - **'India's Wealth, Millets for Health'**
 - Millet Startup Innovation Challenge
 - **Hiked MSP** for Millets
 - Agriculture Ministry declared millets as **"Nutri Cereals"** in 2018

Significance

- Less expensive, **nutritionally superior**
- High protein, fibre, minerals, iron, calcium and a **low glycemic index**
- Help **tackle lifestyle problems and health** (obesity, diabetes etc.)
- Photo-insensitive, **resilient to climate change & water efficient**



International Year of Millets - Year 2023

Proposed by India, declared by UNGA



What are the Related Initiatives taken by the Government?

- **National Millets Mission (NMM):** [NMM](#) was launched in 2007 to promote the production and consumption of millets.
- **Price Support Scheme (PSS):** Provides financial assistance to farmers for the cultivation of millets.
- **Development of Value-Added Products:** Encourages the production of value-added millet-based products to increase the demand and consumption of millets.
- **Promoting Millets in PDS:** The government has introduced millets in the Public Distribution System to make it accessible and affordable to the masses.
- **Promotion of Organic Farming:** The government is **promoting [organic farming](#) of millets** to increase the production and consumption of organic millets.

What should be the Way Forward?

- **Adequate Public Support:**
 - Small farmers in hilly regions and dryland plains who are among the poorest households in rural India will cultivate millets only if it gives them good returns.
 - Adequate public support can make millet cultivation profitable, ensure supply for the PDS, and, ultimately, provide nutritional benefits to a wide section of the population.
- **Awareness and Education:**
 - Lack of awareness about millets and their health benefits can be **addressed through education and promotion.**
- **Availability and Accessibility:**
 - **Improving the availability of millets in markets and making them more accessible** to consumers can encourage consumption.
- **Affordability:**
 - Millets are often more expensive than other staple grains, making them less accessible to low-income consumers. **Addressing affordability through government subsidies or market interventions** can increase consumption.
- **Changing Perception:**
 - The perception of millets as a poor man's food needs to be changed through marketing and promotion.
- **Processing and Value-added Products:**
 - **Improving processing techniques and increasing the availability of value-added millet-based products** can make them more appealing to consumers.
- **Collaboration:**
 - Collaboration between farmers, processors, and marketers can help increase the supply and demand of millets.

Drishti Mains Question

What are the challenges in India's efforts to revive the cultivation and consumption of millets?

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. With reference to 'Initiative for Nutritional Security through Intensive Millets Promotion', which of the following statements is/are correct? (2016)

1. This initiative aims to demonstrate the improved production and post-harvest technologies, and to demonstrate value addition techniques, in an integrated manner, with a cluster approach.
2. Poor, small, marginal and tribal farmers have a larger stake in this scheme.
3. An important objective of the scheme is to encourage farmers of commercial crops to shift to millet cultivation by offering them free kits of critical inputs of nutrients and micro irrigation equipment.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

Ans: (c)

Exp:

- 'Initiative for Nutritional Security through Intensive Millets Promotion' Scheme aims to demonstrate the improved production and post-harvest technologies in an integrated manner with visible impact to catalyse increased production of millets in the country. Besides increasing production of millets, the Scheme, through processing and value addition techniques, is expected to generate consumer demand for millet-based food products. **Hence, statement 1 is correct.**
- Technology demonstrations in compact blocks would be organized in selected districts for four categories of millets – sorghum, pearl millet, finger millet and small millets. Poor, small, marginal and tribal farmers have a larger stake in this scheme. **Hence, statement 2 is correct.**
- There is no such provision to encourage farmers of commercial crops to shift to millet cultivation. **Hence, statement 3 is not correct.**
- **Therefore, option (c) is the correct answer.**