

# MILLET CULTIVATION IN INDIA - ADVANTAGES AND OPPORTUNITIES

Article

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*Millets are dry-composition, small grain cereals which are being cultivated in India since centuries. Resilient to harsh weather and infestations, millets are well-suited for cultivation in India's rainfed agricultural areas. They are ideal to meet the nutritional requirements of urban populations with sedentary lifestyles and a preference for locally grown, healthy food. With the declaration of 2023 as Year of the Millets by the FAO, there is a need for ecosystem-level initiatives to promote millets as staple food grains.*

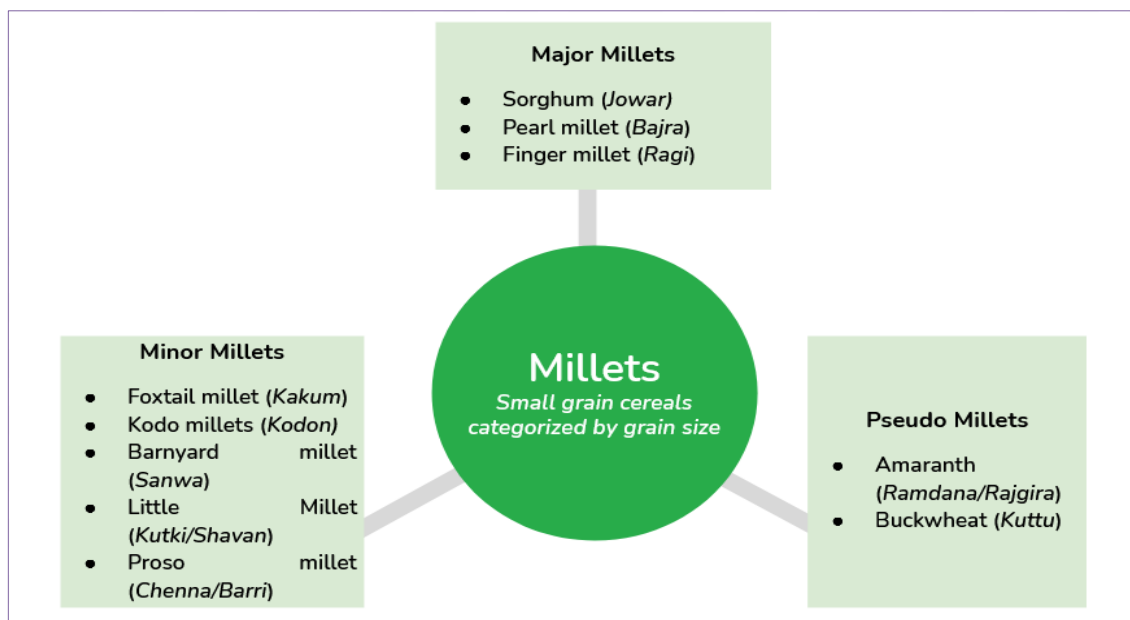
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The discussion around millets has been gaining momentum of late. Millets are being hailed as 'super crops' globally, and deserve a revival in the context of the Indian economy, where the production and consumption of millets dates back centuries. It is only recently that the Food and Agriculture Organization (FAO) has announced 2023 to be the 'Year of the Millets' under India's recommendation.<sup>1</sup> This gives India a strategic advantage over the discourse of millets even in the global context. In an economic sense, millets require fewer intensive

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<sup>1</sup> [United Nations Digital Library, 2021](#)

inputs, and make unit production-level economics more efficient. Awareness of wastage of resources has strengthened the concept of sustainability among millennials. The following sections try to understand the potential of millets as a viable answer to India's evolving dietary needs and agricultural realities.




Millets offer multiple nutritional benefits that substantiate their claim to become the next superfood.

- **Rich nutritional profile:** Millets pose significant health benefits, containing significant amounts of carbohydrates, dietary fiber, protein and fat with scientifically approved claims for improved digestibility. They also contain a good amount of minerals like phosphorus, zinc, iron and magnesium as well. Depending on the type of millet, some are comparable to wheat and rice in terms of their composition profile. <sup>2</sup>
- **Ideal for people with lifestyle-related disorders:** Millets are said to be functionally suitable for individuals with diabetes, cardiovascular and bowel issues due to their water absorbing capacity and helpful management of carbohydrates and toxins in the body. Their gluten-free nature also makes them the go-to cereals for people who seek to avoid gluten. Millets are therefore suited for an increasingly sedentary lifestyle predominant among urban populations.
- **Adaptable to alternative diets:** Experiments with value addition in millets show that these can be used as alternatives for individuals who adopt vegan and other selective diets. Sorghum, for instance, has been used to create non-dairy products.

In addition to nutritional benefits, millets are also more suited to the agricultural setup of

<sup>2</sup> [Nutritional and Health Benefits of Millets, 2017](#)



India, owing to these reasons -

- India has been the major producer of millets since ancient times, which gives the landscape of India a perennial and **locational advantage** for growing millets.
- Being hard grains, millets can **grow with less water** and are highly resistant to drought and extreme weather conditions. It has been found that growing a kilogram of millets requires 2.5 times less water as compared to that required for a kilogram of rice. Hence, these are ideal for cultivation in rainfed areas that account for over half of the net sown area in the country.
- These crops are also **less prone to pests** and do not require chemical fertilizers. These attributes make millets resilient to climate change and adverse conditions.
- Owing to their dry composition, millets are **well-suited to long-term storage**. They can easily be stored for 2-3 years.


There have been several initiatives to promote millets as a staple foodgrain. India celebrated 2018 as the National Year for Millets, paving the way for the inclusion of millets as part of the Public Distribution Scheme (PDS). States like Odisha, Telangana and Andhra Pradesh, Karnataka, and Maharashtra have ongoing programmes to promote millet cultivation and consumption.

Karnataka, for instance, has a host of programmes in place, including the distribution of millets through the PDS, wherein grains are sourced and distributed locally. As millets call for fewer chemical inputs, their production and distribution qualify for certified organic cultivation. The state has ensured increased acreage under organic cultivation through a series of promotional events that focus on awareness, promotions and establishment of linkages. Bengaluru, widely known as the organic and millet hub of India, has been at the forefront of the market action with over 330 exclusive organic and millet outlets, and more than 400 corporate retail outlets.

The Odisha Government had initiated a similar Odisha Millet Mission (OMM) for promoting finger millets (ragi) as a staple crop in the farming system in 2017. Under the mission, a strategy was devised to increase household consumption of millets, improving their productivity and inclusion in Mid-Day Meal, Integrated Child Development Service and Public Distribution System. Since inception of this mission, a 215% increase in gross value of millet produce has been reported per farmer household - from ₹3,957 to ₹12,486 - in Odisha<sup>3</sup>. Similar initiatives have been replicated across states, with support from UN-IFAD and UN-FAO.

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<sup>3</sup> [Health and Nutrition - Practice Insights, NITI Aayog.](#)



Even though India has close to 14 million hectares of land under millet cultivation and almost 14 states across the country are running initiatives to promote cultivation of millets, the momentum created to bring millets to the spotlight and make it more remunerative to farmers could soon lose its focus if, at an ecosystem level, we do not move faster with proactive approaches.

- **Targeted approach to increase the land under cultivation across geographies:** The land under cultivation for millets has not increased substantially to build a case for a change which would drive the market forces to respond accordingly. Location-specific practices on millet cultivation need to be studied in greater detail. There is also a pressing need to build awareness among the farming community of benefits on intercropping for different varieties of millets.
- **Remunerative structures:** Taking into consideration the opportunity cost of growing millets over other crops, prices for these grains have to be considerably higher, to make millet cultivation more viable for farmers.
- **Strategic planning to reduce risk of monocropping:** Data across various states indicate a disproportionate share of some millet varieties. Among millets, jowar (great millet), bajra (pearl millet), and ragi (finger millet) dominate the market, as they have much higher yields. The government has already created a plan to increase MSP for specific millets, however, it needs to incorporate more varieties.
- **Participatory projects co-funded by governments and other development institutions:** Reversals in agricultural trends are not possible without the continuous support of all ecosystem players. The conceptualization of Odisha Millet Mission, for example, can be attributed in part to efforts in Revitalizing Rainfed Area Network (RRAN) in the Malkangiri district of Odisha over several years. Some prominent agents working in this direction are Action for Social Advancement (ASA) and the MS Swaminathan Research Foundation, who have identified around 30-40 villages for millet promotion through the procurement of appropriate processing units. Similarly, the North East Network (NEN) is making conscious efforts to involve more women in the entire value chain by creating awareness around seed varieties, nutritional benefits, and training on value-added products.

The return of millets to the everyday diet of Indians requires a gradual attitudinal shift, complemented with ecosystem-level initiatives to make millet cultivation a lucrative agricultural activity. A concerted effort to repackage and promote millets as a sustainable, healthy cereal group is therefore the need of the hour.