



## Role of Millets in Sustainable Agriculture and Health

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Lifestyle-related diseases are pushing people toward healthier eating, which is why millets are once again being seen as “superfoods of the future.” For over 4,000 years, millets like bajra, jowar, ragi, kangni, and kodo were a major part of the Indian diet. After the Green Revolution, millets became less popular because rice and wheat were produced in larger quantities and received government support. Today, millets are valued for their high fiber, protein, calcium, and iron, as well as their low glycemic index. The Indian government is helping people eat more millets by adding them to programs like school lunches, child nutrition schemes, and food support plans.

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### Introduction

These "lifestyle disorders" are making people more health-conscious and are prompting them to change their eating habits to prevent or manage these conditions. New diets that are dominated by white rice and milled wheat flour might please the tummy but lack nutritional value. This is the time when millets are once again coming into the spotlight. Bajra and other millets have been part of our food traditions for centuries. Our ancestors used to grow and eat them long ago, before they went out of fashion. These small-grained cereals—bajra (pearl millet), jowar (sorghum), ragi (finger millet), foxtail millet, and kodo millet—were food of huge sections of India. For many years, people stopped eating millets, especially after the Green Revolution when rice and wheat became more common. But now things are changing. As health issues grow and people want farming that's better for the environment, millets are now being called the 'superfood of the future'.

### Traditional Significance of Millets in India

The history of millets in India goes back more than 4000 years. These grains are mentioned in Vedic texts, old Ayurvedic books, and even Indian village folk stories. Bajra roti, ragi laddoos, and jowar bhakri were part of daily meals for centuries. They didn't just fill the stomach—they were also very nutritious and full of energy. But in the 1960s, after the Green Revolution, government plans focused more on rice and wheat because they gave higher yields and more calories. Rice and wheat were subsidized, supported by minimum support prices, and massive procurement at the cost of millets, gradually. "For many years, millets were called 'poor man's food' and were ignored in urban diets and farming policies. Today, with growing health and environmental problems, this forgotten grain is making a strong comeback. From being food for rural poor in the past to "nutri and cereals" today for health-aware city consumers, millets are the new superfoods.

### Nutritional Value of Millets

The largest reason for the increasing demand for millets is that they have improved nutritional value. In contrast to the empty calories of white rice, millets are a storehouse of essential nutrients.

**High in Fiber:** Millets have 6–12% dietary fiber, which aids in digestion, avoids constipation, and regulates blood sugar.

**Mineral-rich:** Ragi is highly rich in calcium, so it's ideal for bones. Bajra is rich in iron and zinc, which combat anemia.

**Protein Content:** Millets have 7–12% protein, which is utilized for muscle repair and development as a whole

**Low Glycemic Level:** In contrast to rice, millets digest at a slower rate in blood and hence are suitable for diabetics. Research has established that regular intake of millets lowers the rate of cardiovascular diseases, obesity, and type-2 diabetes. They also assist in weight loss because the fiber does not make you feel hungry for quite a long time.

**An easy comparison justifies their robustness:** 100 grams of ragi has thrice the calcium content of milk, and bajra has nearly twice the iron content of rice. It's clear that millets are not simply a meal; they're nature's medicine.

### Millets and Environmental Benefits

Millets are not only wholesome for human health but also for planetary health. Conventional agriculture based on rice and wheat uses huge quantities of water and chemical fertilizers. It takes, for instance, about 4000–5000 liters of water to produce 1 kilogram of rice. Millets, however, are able to grow with only one-third of this water. They are naturally drought-tolerant and perform well in poor soil conditions when other crops would not. They can endure extreme temperatures, abnormal rainfalls, and even subpar soil. That's why they are the perfect crop for a climate-unstable world. Furthermore, millet farming calls for fewer chemical inputs, thus having lower carbon emissions and lower degradation of the health of the soil. In short, millets are climate-smart crops—they conserve natural resources with continuous bountiful nutrition.

### Government Initiatives in India

Seeing their potential, various efforts have been taken by the Indian government to encourage millets. 2023 was marked across the world as the International Year of Millets, a suggestion suggested by India and adopted by the United Nations.

#### Key efforts are:

**Inclusion into Nutrition Schemes:** Millets have been added into Mid-Day Meal Schemes and Integrated Child Development Services (ICDS) for child nutrition promotion.

**National Food Security Mission on Nutri-Cereals:** Millets are being promoted under this scheme with subsidies, research assistance, and promotion.

At all these stages, the government not only supports the farmers but also provides healthier food to the masses.

### Global Perspective and Market Potential

The upsurge of millets is not exclusive to India. In the entire world as well, health-oriented consumers in nations such as the United States, Japan, and European countries are also developing greater interest towards millets. Gluten-free products and superfoods are trendy, and millets fit very well into these trendsetters. As the world's largest producer of millets, India has a golden chance to capture foreign markets. Already, millet flour, millet noodles, millet breakfast cereals, cookies, and energy bars are gaining from international markets. With improved branding and packaging, India can become the world hub for millets. Overseas market is opening quickly, and with a proper policy, millets can become India's next big agri-success story, like Basmati rice.

### Issues in Millet Promotion

Despite all the benefits, several challenges exist in making millets a mass food to popularize.

1. **Consumer Awareness:** People in the urban regions still view millets as traditional.
2. **Processing Facilities:** Rice and wheat are easier to process because of their small unit of size. Inadequately equipped modern processing facilities restrict their marketability.

3. **Government Support Bias:** Rice and wheat continue to hold sway over procurement policy and subsidies. Farmers will not change unless millets receive equivalent support.
4. **Taste Habits:** Most people are not used to cooking millets or have no idea about their taste compared to ordinary rice or wheat. Simple millet recipes must be kept free of frills. All these hurdles have to be overcome before millets can find their proper place back in our plates.

### The Way Forward

If millets must really go mainstream, there must be a multi-pronged approach.

**Awareness Campaigns:** Celebrity endorsement, public health campaigns, and school nutrition programs will generate awareness about the advantages of millets.

**Value Addition:** Preparation of millet-based new foods such as breakfast cereals, pasta, bakery items, and packed snacks will attract the youth generations.

**Farmer Training:** Millet processing, marketing, and storage will require training for the farmers.

**Policy Reforms:** Subsidies and MSP (Minimum Support Price) must be made available to millets more intensively in order to promote large-scale cultivation.

**International Branding:** India should export millets overseas as "superfoods of India" to raise exports.

### Conclusion

Millets are not just old grains. They are still useful today. They help with three big things:

- Keeping people healthy, saving nature, and helping farmers earn more money.
- When we eat millets, we stay healthy. Farmers get better income. The Earth also stays safe.
- Millets are not only food from the past—they are good for the future too. If India uses more millets, it can help the whole world get better food and health.

### References

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