



Millets

The Future Crop of India

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Introduction

Millets, a group of small-seeded grasses, have been cultivated in India for thousands of years. They are often referred to as "coarse grains" and have played a significant role in the country's agricultural history. However, with the advent of modern agriculture and the focus on high-yielding crops like rice and wheat, millets were pushed to the sidelines. Nevertheless, recent years have witnessed a resurgence in

the popularity of millets due to their numerous health benefits, environmental sustainability, and adaptability to changing climatic conditions. This article explores why millets are considered the future crop of India, emphasizing their nutritional value, climate resilience, agricultural benefits, and their potential to address the challenges of food security and sustainability in the country.

Nutritional Value of Millets

Millets have long been recognized for their exceptional nutritional value. They are rich in dietary fiber, protein, vitamins, and minerals, making them a valuable addition to a healthy diet. Millets are gluten-free, making them an excellent alternative for individuals with gluten intolerance or celiac disease. Additionally, they have a low glycemic index, which means they release glucose slowly into the bloodstream, making them suitable for individuals with diabetes or those aiming to manage their blood sugar levels.

Each variety of millet offers unique nutritional benefits. For instance, finger millet (ragi) is an excellent source of calcium and iron, which is particularly beneficial for addressing malnutrition and combating anemia, prevalent in certain sections of the Indian population. Foxtail millet (kangni) is rich in antioxidants, while pearl millet (bajra) provides a good amount of protein. By incorporating millets into the Indian diet, there can be a significant improvement in public health and nutrition outcomes.



Foxtail millet



Bajra



Kodo Millet



Climate Resilience and Adaptability

One of the key reasons why millets are considered the future crop of India is their remarkable resilience and adaptability to diverse agro-climatic conditions. Millets have a natural ability to thrive in harsh environments with minimal water

requirements, making them ideal for regions facing water scarcity and unpredictable rainfall patterns. They have deep roots that enable them to access groundwater effectively. Moreover, millets are relatively resistant to pests and diseases,

reducing the need for chemical pesticides and fertilizers.

As climate change poses a growing threat to traditional crops, such as rice and wheat, millets offer a sustainable alternative. They require fewer inputs, have a shorter

Agricultural Benefits

Millets offer numerous agricultural benefits that contribute to sustainable farming practices. Firstly, these crops are known for their high yield potential, even in marginal or rain-fed areas. They require minimal investment and have lower production costs compared to other crops, making them economically viable for small and marginal farmers. Additionally, millets are known to improve soil fertility due to their ability to fix atmospheric nitrogen. This reduces the need for synthetic fertilizers and promotes sustainable soil management practices.

growing season, and can withstand extreme temperatures, making them well-suited to adapt to the changing climate. By promoting the cultivation of millets, India can enhance its food security and reduce its dependence on water-intensive crops.

Furthermore, millets exhibit excellent intercropping and rotation capabilities. They can be grown alongside other crops, such as pulses, legumes, or oilseeds, to create a more diversified and resilient farming system. This enhances biodiversity, reduces the risk of crop failure, and provides additional income streams for farmers. Millets also require less water compared to conventional crops, which can help conserve water resources and alleviate the pressure on irrigation systems.



Addressing Food Security and Sustainability Challenges

India faces significant challenges in achieving food security and sustainable agriculture. A rapidly growing population, shrinking arable land, water scarcity, and climate change necessitate innovative solutions. Millets offer a promising response to these challenges. Firstly, millets can contribute to enhanced food security by diversifying the Indian diet and reducing

reliance on a few staple crops. By incorporating millets into the Public Distribution System (PDS) and mid-day meal schemes, the government can ensure wider availability and accessibility of nutritious food options, thereby improving public health outcomes. Moreover, the cultivation and consumption of millets can help combat hidden hunger and

micronutrient deficiencies prevalent in certain sections of the population.

Secondly, promoting millet cultivation can enhance the sustainability of Indian agriculture. By reducing the reliance on chemical inputs, millets help reduce the environmental impact associated with conventional farming practices. They

contribute to soil conservation, reduce greenhouse gas emissions, and conserve water resources. Additionally, promoting millets can empower small and marginal farmers, who often face challenges in adopting modern agricultural practices due to their limited resources.

Government Initiatives and Consumer Awareness

Recognizing the potential of millets, the Government of India has undertaken various initiatives to promote their cultivation. The Millets Mission under the National Food Security Mission aims to increase millet production and promote their value addition. Several states have included millets in their agricultural

policies, providing incentives and subsidies to farmers. Additionally, efforts are being made to create awareness among consumers about the health benefits and versatility of millets through campaigns, food festivals, and public outreach programs.

Conclusion

Millets are poised to become the future crop of India due to their exceptional nutritional value, climate resilience, agricultural benefits, and their potential to address food security and sustainability challenges. By incorporating millets into the Indian diet and promoting their cultivation, the country

can improve public health outcomes, enhance agricultural sustainability, and reduce its vulnerability to climate change. Efforts from the government, farmers, and consumers are essential to unlock the full potential of millets and secure a sustainable future for Indian agriculture.