

Journey of Small Millets from Orphan Crops to Nutricereals

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SUMMARY

Small millets are the crops cultivated since ancient times having its origin in Africa and India. With the advent of green revolution the small millet cultivation has been declined and renowned as crops grown in hilly tracts. Nutritional importance of small millets has impacted and begun for its revival.

INTRODUCTION

The journey of small millets from being considered as "orphan crops" to being recognized as "nutri-cereals" has been a transformational one, marked by increasing awareness of their nutritional and ecological value. Here's an overview of their journey. Since ancient times small millets are cultivated and contributed to the food basket of India to a major extent. Small millets have been mentioned in various ancient texts viz., Vrikshayurveda, Charaka Samhita Sushruta Samhita Kautilya's Arthashastra Greek, Roman texts and Chinese agricultural texts. With the advent of green revolution the small millets cultivation has been faded off and cultivation restricted to drylands tracts and slowly are forgotten and has been as orphan crops for decades. Small millets, including crops like finger millet (ragi), foxtail millet, proso millet, kodo millet, browntop millet, barnyard millet, and little millet, were often considered "orphan crops" due to their limited commercial importance and lack of attention from mainstream agricultural research and development. At present small millets are gaining importance because of its nutritional importance. These crops were found to be rich in dietary fiber, essential amino acids, vitamins (especially B-complex), minerals (iron, calcium), and antioxidants, making them well-suited to combat malnutrition and diet-related health issues. Their potential as gluten-free and diabetic-friendly grains further expands their market demand. Now the entire world is moving ahead towards the nutritional security from food security in addition to nutritionally being rich these crops have importance from ecological point of view known for their low water and input requirements, ability to grow in diverse agro-climatic zones, and positive impact on soil health. Small millets have a promising scope as contingent crops due to their resilience in challenging environments, short growth cycles, and nutritional benefits. They are well-suited for regions with unpredictable weather patterns, as they can tolerate drought, poor soil conditions. Small millets generally exhibit higher water use efficiency compared to many other major cereal crops like rice, wheat, and maize. Flexible planting time making it suitable for year long sowing, small millets can thrive in poor soils and even improve soil health due to their root systems. Small millets have low fertilizer requirement compared to other crops. Dumping of fertilizers can be mitigated by cultivation of small millets. Small However, successful adoption depends on awareness, research, policy support, and creating value chains to ensure sustainable production and market access. Nutritional and ecologically importance of small millets made them an iconic dragging the consumer preferability and making them ecologically sustainable. Small millets cultivation has been increased in the recent past the productivity of small millets has been boosted with the recent advances of technologies. By looking into these advantages these small millets have been introduced in public distribution system making Indian future generation nutritionally secure. The year 2023 has been declared as International year of millets and strategies has been chalked out by the world to make millet as crop competent to other crops.

Steps to be taken for millet revival

Promotion and Research:

With growing awareness about the nutritional and ecological benefits of small millets, various organizations, NGOs, and governments started promoting their cultivation. Research efforts intensified to improve their productivity, pest resistance, and post-harvest handling.

Government Initiatives:

Many governments introduced policies to support the cultivation and consumption of small millets. These initiatives aimed to improve food security, promote sustainable agriculture, and empower rural communities.

Marketing and Value Addition:

The shift from "orphan crops" to "nutri-cereals" involved efforts to rebrand these crops and position them as premium health foods. Innovative value-added products, such as millet-based snacks, flours, and ready-to-eat foods, gained popularity.

Consumer Awareness:

Increased health consciousness and interest in traditional diets led to greater consumer demand for nutritious foods. As people became more aware of the health benefits of small millets, their consumption started to rise.

International Recognition:

Small millets gained recognition beyond their native regions, with organizations like the United Nations and international agricultural bodies acknowledging their role in addressing malnutrition, food security, and sustainable agriculture.

Culinary Revival:

Chefs and culinary experts began experimenting with small millets in a variety of dishes, contributing to their culinary revival. This helped in breaking the perception of these crops as "poor man's food."

Mainstream Acceptance:

Over time, small millets transitioned from being relatively unknown or ignored to being integrated into mainstream diets and cuisines, both locally and globally.

REFERENCES

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