



Re-awareness towards Millets in food habits

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Abstract

During last five decades the country has witnessed about its production reduced day by day due to avoidance of this finger millet crop. Now a day the value of this crop is very important due to awareness of people. The International Year of Millets (IYM 2023) was designated by the United Nations General Assembly at its 75th session in March 2021. In cooperation with other pertinent stakeholders, FAO is the primary organization for the Year's celebration. Millets are tolerant of climatic fluctuations and can be grown on arid lands with few inputs. As a result, they are the perfect way for nations to boost national independence and lessen their dependency on imported cereal grains. IYM 2023 will provide an opportunity to increase public awareness of millets' health and nutritional advantages as well as their potential for cultivation in challenging and changing climatic circumstances. Additionally, millets' potential to open up new, sustainable market prospects for producers will be highlighted, as will the Year's efforts to promote their sustainable production.

A number of important Sustainable Development Goals (SDGs) of the United Nations, particularly SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), SDG 12 (Sustainable Consumption and Production), and SDG 13 (Climate Action), have been intimately associated with the achievement of millets.

Introduction

The consumer awareness about millets is relatively high with 87.3 per cent of those surveyed having heard about them, a survey conducted by Wholesome Foods that owns millet-based food brands such as Slurp Farm and Mille, said. The survey, conducted among 550 consumers across the country to understand their awareness and willingness to include millet in their everyday life, saw the highest participation by millennials (58.9 per cent), while 54.5 per cent of overall respondents were females.



Millets are one of the oldest cereals consumed by humans and may have been the first cereal grain used in residential settings. Millets are referred to as "yesterday's coarse grains and today's nutri-cereals". Millets are regarded as "future crops" since they are resistant to the majority of pests and illnesses and can thrive in the arid and semi-arid climates of Asia and Africa. Millets are small-seeded grains, of which sorghum, pearl millet, finger millet, teff, proso millet, foxtail millet, little millet, and fonio are the most popular and significant foods. Millets require less water, fertilizer, and herbicides to flourish in poor soil conditions. They are the ideal choice for "climate-smart cereals" due to their ability to resist greater temperatures. A healthier, more sustainable future is strongly tied to the millet revolution, and India, which produces 20% of the world's millet, can quickly spread this underappreciated superfood to address the pressing issues of climate change

Nutritional value

- Millets are a crop that is very nutrient-dense and rich in vitamins and minerals. They are a good source of phytochemical, dietary fiber, and protein. Numerous health advantages of high dietary fiber include bettering gastrointestinal health, blood lipid profiles, and blood glucose clearance.
- Similar to rice and wheat, millets are abundant in fatty acids and several minerals.
- When compared to staple cereals, millets have a higher percentage of dietary fiber and non-starchy polysaccharides and contain 65–75% carbs.
- Millets' rich nutritional content has many advantages, including a decrease in gastrointestinal disorders, migraines, and cancer.

A proverb from Kannada states *that a person who eats rice is weightless like a bird; a person who eats jowar is powerful like a wolf, and a person who eats ragi remains.*

Benefits of millets

Millets are gluten-free, have a low glycemic index, rich in dietary fiber and antioxidants, and can aid in addressing health issues like obesity, diabetes, and lifestyle issues. It is well known that millets, which are nutri-cereals, have a high nutrient content, including protein, essential fatty acids, dietary fibre, B-Vitamins, and minerals like calcium, iron, zinc, potassium, and magnesium. In particular for children and women, it can offer nutritional stability and safeguard against nutritional deficiencies. Additionally, it will be crucial for dryland climate change mitigation efforts as well as significant for smallholder and marginal farmers.

Introduction to IYOM 2023

The Indian government had asked the UN to declare 2023 the International Year of Millets (IYOM). 72 nations agreed with India's request, and on March 5, 2021, the United Nations General



Assembly (UNGA) proclaimed 2023 the International Year of Millets. In order for Indian millets, recipes, and value-added goods to be recognized globally, the Indian government has now decided to celebrate IYOM 2023.

Steps taken for promoting millets

- Since 2018, the National Food Security Mission has included a "Sub Mission on Millets".
- Several State missions were launched on Millets.
- Millets are included in the Ministry of Women & Child Development's POSHAN MISSION Abhiyan.
- Millets are encouraged through the spread of technology, the provision of high-quality seeds through millet seed hubs, the creation of awareness, the establishment of a minimum support price, and inclusion in PDS.
- In Karnataka and Telangana, initiatives are currently being made to incorporate the nutrient-rich smaller millets into the mid-day meal program in government and government-aided schools.
- The Millet Mission of the Centre will concentrate on enhancing farm-gate processing, empowering farmers through collectives, and aggregating the produce while focusing on value addition.
- 200 startups were helped: (Through IIMR, Hyderabad, a turnover of more than Rs. 320(cr).
- Technology support for 400+ business owners with annual sales of more than Rs 900 crore.
- At centers of excellence, 67 value-added technologies were developed.
- Release of 13 High Yielding Millet Varieties, 4 are Bio-Fortified, as Part of the Intensive Millet Promotion (INSIMP) Initiative for Nutritional Security.
- The government raised the minimum support price (MSP) for millets, which provided farmers with a significant financial incentive.
- Millets have also been incorporated into the public distribution system by the government in order to guarantee a consistent market for the produce.
- Support for Inputs: The government has implemented the distribution of seed kits and inputs to farmers, the development of value chains through Farmer Producer Organizations, and the promotion of millets marketability.

Outcome of steps taken since 2018

- From 164 lakh tonnes in 2017–18 to 176 lakh tonnes in 2020–21, production has increased.
- From 1163 kg/ha in 2017–18 to 1239 kg/ha in 2020–21, productivity increased.



- From 21.98 million US dollars in 2017 to 24.73 million US dollars in 2020, millets were exported.
- 154 disease-resistant, high-yielding cultivars, including 10 Nutri Cereal crops and 9 bio-fortified types, have been released.
- Increases in the supply of high-quality seed from novel, high-yielding types and hybrids; in 2020–21, 5780 qtls were produced.

State initiative in millets production

ODISHA- Ragi is included under PDS for 2018–19 in 7 districts. Odisha Millet Mission (OMM): 2018's slogan is "farm to plate," regenerating millets in 15 districts.

KARNATAKA - Millets are being promoted as "The Food of the Future" through initiatives such as the "Savayava Bhagya Yojana" and farmers are being given incentives of Rs. 10,000 per hectare to cultivate millets. National and international trade fairs that were organized.

MAHARASHTRA - Project on Climate Resilient Agriculture is promoting millets.

TELANGANA - Raithu Bandhu Samithi, exclusive FPOs for millets.

CHHATTISGARH- The "Millet Mission" was formally introduced by the Chhattisgarh state government on September 10, 2021, with the goal of making the state a millet centre. The Indian Institute of Millet Research (IIMR), Hyderabad, inked MoUs with 14 state districts as part of this goal.

BIHAR- The state is known for the production of Jowar, Bajra, Ragi and Small Millets. During the year 2021-22, Bihar has exported 21,187.60 MT Millets worth 5.92 Million US Dollars and Bhojpur is the hub of sourcing of Sorghum and Small Millet.

Concerns and challenges

Prior to the Green Revolution, more rice and millets were produced than that of wheat, barley, and maize put together. Millets were originally produced in large quantities, but following the Green Revolution "the crops that were once consumed in every household became a fodder crop in just a few decades".

Reasons of low production are -Lack of knowledge, Lack of adequate milling equipment, There are no ready-to-use products available for purchase, Eating habits, Properties of organoleptics. Semolina and flour have a low shelf life due to high levels of oxidative and hydrolytic rancidity. The lack of players developing millet products with added value in India due to the low level of knowledge of the benefits of millets. Low pay, a lack of input subsidies and pricing incentives, the subsidized supply of fine cereals through the public distribution system (PDS), a shift in customer tastes, and decreasing demand are the key causes of the fall. Reduced demand also results



in a constrained supply and increased costs. Millet consumption is confined to rural haats, bazaars, tourist destinations, and festivals in the absence of adequate market links for agricultural and forestry products.

Around 54 million tonnes of cereal were consumed in 2019–20 through PDS, ICDS, and school meals. States would need to purchase 10.8 million tonnes of millets if millets replace 20% of rice and wheat. Millets are only accessible in the States, and the Central Pool's stock is sparse, consisting of only 33 million tonnes of rice, 31 million tonnes of wheat, and 4 million tonnes of nutritional grain.

Future aspects

Millions more people are now living in extreme poverty, hunger, and malnutrition as a result of the COVID-19 pandemic and its aftereffects, the Russia-Ukraine conflict, the looming climate disaster, and other worldwide challenges. The crisis has left the entire world in a condition of uncertainty, putting millions of people's lives, food security, and health at risk. Particularly, food shocks are being felt in many parts of the world. As a result, there is an urgent need to introduce a food system that is climate resilient and offers cheap and wholesome options. Here, millets as climate change-resistant crops make about perfect option. Millets have enormous potential to help solve a variety of 21st-century food issues, making them a good future food option.

With its G20 Presidency and its effort to promote millets as a crop of the future, India is currently engaged in a dual leadership role. The millets mission was started by the GOI and state governments, particularly those of Odisha and Karnataka. These policies are appreciated, but if we ignore the economics of millets farming, we will lose the war to more profitable alternatives. Millet production may become economical, assure supplies for PDS, and ultimately help a large portion of the population in terms of nutrition with enough governmental assistance. Changes in consumption and nutrition are the hardest outcomes to determine. According to a quick sample research, people of all ages consumed millets nine days a month in 2021.

In conclusion, boosting cultivation and production of millets are possible yet challenging. Numerous interventions are needed, including contributions from the scientific community, institutional mechanisms, financial incentives, and in-kind assistance.

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