

# मुख्य सचिवों का द्वितीय राष्ट्रीय सम्मेलन SECOND NATIONAL CONFERENCE OF CHIEF SECRETARIES

VIKASIT BHARAT-REACHING THE LAST MILE

02

THEMATIC  
MEAL



INTERNATIONAL YEAR OF  
MILLETS 2023

5-7 जनवरी 2023 | नई दिल्ली  
5-7 January 2023 | New Delhi





## Second National Conference of Chief Secretaries

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## 1. Brief Introduction

Millets are ancient nutritional grains and important food staples, particularly, in poor, semi-arid tropics of Asia and Africa. They are mostly cultivated in a variety of agro-ecological situations like plains, coasts, hills, and even in diverse soils, with varying rainfall.

Millets are primarily categorized as major and minor/small. Major millet crops produced in India include jowar or sorghum, bajra or pearl millet, mandua/ragi or finger millet and small millets, comprising kangani or foxtail millet, *kutki* or *sama* or little millet kodo millet, *jhangora* or *sawan* or barnyard millet, *cheena* or proso millet and *korale* or brown top millet.

Due to the nutritional superiority of millets compared to regular staples like wheat and rice, they have been notified as nutri-cereals by the Government of India. In India, millets are produced in most States characterized by low to moderate precipitation (300-800 mm rainfall).

### Benefits

Millets are considered to be super foods as they are gluten free, non- allergenic and good sources of proteins, carbohydrates, dietary fibre and essential amino acids. Most millets are non-acid forming, non-glutinous, highly nutritious, and easily digestible foods. Due to the low glycaemic index (GI) and being gluten-free, they help in a slower release of glucose over a longer period of time, thus reducing the risk of diabetes mellitus.

Millets are rich sources of minerals like calcium, iron, zinc, phosphorus, magnesium, and potassium. They also contain appreciable amounts of dietary fibre and vitamins such as folic acid, vitamin B6,  $\beta$ - Carotene, and niacin. The availability of high amounts of lecithin is useful for strengthening the nervous system. Therefore, regular consumption of millets can help in overcoming malnutrition.

Millets are often the only group of crops that can grow in arid regions, requiring only 300-400 mm of water compared to 1400-1500 mm for rice cultivation. They have zero carbon footprint by virtue of carbon absorption from the environment equivalent to their carbon emissions. Millets are important in view of the requirement of a shorter growing season, ability to adapt to a wide range of temperatures, moisture-regimes and input conditions, besides their ability to convert more carbon dioxide into oxygen. Also, the immense potential of the millets to provide food and feed for smallholder farmers of drylands and domestic animals makes them a popular choice for ensuring food and nutritional security.

## 2. Current Scenario

### Millet Production in World

India is the topmost producer of millets, followed by Nigeria. Globally, India dominates the global area at 20% and production at 18%. About 78% of the area under millets is rainfed.

### Millet Production in India

In India, millets are currently being cultivated across 23 States, with a total production of 15.92 million metric tonnes across the area of 12.14 million hectares during the year 2021-22 (fourth advance estimates). The top five millet producing States are Rajasthan, Maharashtra, Uttar Pradesh, Karnataka, and Madhya Pradesh. Rajasthan has the highest area under millets (36%) followed by Maharashtra (19%), Karnataka (14%), Uttar Pradesh (9%), and Madhya Pradesh (5%).



## About International Year of Millets

The United Nations General Assembly (UNGA) declared 2023 as the International Year of Millets (IYOM) on 5 March 2021. The proposal submitted by the Government of India was supported by 72 countries. Through this declaration, the UNGA aims to elevate awareness of nutri-cereals (millets) for food security and nutrition, enhance investment in R&D and extension, and inspire stakeholders towards improving production productivity and quality of millets. Additionally, the Government of India has decided to celebrate IYOM 2023 to make it a people's movement for the country, inspiring markets, farmers and consumers, so that the Indian millets, recipes, and value-added products come to be accepted globally.

## Steps taken for promoting millets since 2018

- » The Government of India took several initiatives in promoting and mainstreaming millets. In April 2018, millets were notified as nutri-cereals. The same year was declared and celebrated as “National year of nutri cereals (millets)”
- » A sub mission on nutri-cereals/millets is being implemented under the National Food Security Mission (NFSM) **since** 2018 in identified 212 districts of 14 States
- » State missions have been launched in Karnataka, Odisha, Tamil Nadu, Chhattisgarh and Assam
- » Millets have been included under POSHAN Abhiyan

## Initiatives by the Government of India towards IYOM 2023

The Government of India has taken a multi stakeholder engagement approach (engaging all Ministries, States/UTs, farmers, start-ups, exporters, retail businesses, hotel chains, Indian embassies etc.) to promote millets in India and the international market.

## The Seven Sutras as the guiding principles for the IYOM 2023

- » Enhancement of production/productivity
- » Nutrition and health benefits
- » Value-addition, processing and recipe development
- » Entrepreneurship/start-up/collective development
- » Awareness creation: branding, labelling and promotion
- » International outreach
- » Policy interventions for mainstreaming

Additionally, six task force committees have been constituted to tackle various issues and challenges across the millet value chain.

## 3. Challenges in Millet Ecosystem in India

### A. Supply-side Factors

- ♦ Less remunerative cultivation backed by lower yields.
- ♦ The productivity of millets as compared to staple crops such as wheat and rice, is comparatively low, which can be attributed to their cultivation in marginal





lands in rainfed farming, use of traditional seeds and cultivation method with low technology usage.

- ♦ Lower profitability and lack of commercialization.
- ♦ The government's policy favouring irrigated crops with input subsidies such as irrigation, fertilizers etc.

#### **B. Demand-side Factors**

- ♦ *Limited recipe options:* The absence of gluten content in millets makes the preparation very difficult and needs skill.
- ♦ *Changing consumer tastes and preferences:* Over the decades, consumer preferences have shifted to tastier and convenient foods either through the demonstration effect of western culture or due to a "misconception that millets are poor man's foods".
- ♦ *Availability of other fine cereals at incentivized prices:* Fine cereals such as rice and wheat have been made available at incentivized prices through PDS, MDM, WCD and other public- funded feeding programmes.
- ♦ Lack of processing machinery and diversification of processing technologies.
- ♦ *Lack of awareness about the nutritional merits of millets:* The awareness about the high nutritive values of millets is very low among both the producers and consumers.

#### **C. Policy Interventions**

- ♦ *Lack of adequate policy support:* Post the Green revolution, the country's focus was to increase food production by encouraging high-yielding crops to achieve food security. In that process, it was witnessed that all the policy support was in terms of incentivizing cultivation, procurement security, MSP and inclusion in PDS, MDM, etc.
- ♦ *Inadequate support to research efforts for improving the millets cultivation:* While aligning more resources for the improvement of fine cereals, millets were not given adequate importance in research and development on improved varieties, productivity, diversification of processing technologies and marketing.

### **4. Possible Solutions**

#### **A. Value Chain Development for Millets**

- ♦ *Area Expansion:* Expansion of the cultivation of millets across the country including fallow lands, wastelands and non-traditional areas, and enhancing their yield levels with clear cut goals by leveraging ICAR network of millets coordinating centres and ICRISAT. This would happen when farmers get a higher share in the consumer rupee in the value addition process.
- ♦ *Seed hubs and breeder seed production:* There is a huge need for identifying various product-specific cultivars and establishing the seed hubs for breeding and producing such seeds so as to establish demand-driven production. The



development of seed hubs that can deliver quality seed at high production levels is an important intervention.

- ♦ *Development of Millet Value chain:* Scaling up the value chain on millets by addressing backward integration related to supply chain, retrofitting processing machinery, diversification of processing technologies for increasing convenience and shelf-life, nutritional evaluation, awareness creation, commercialization for proving consumer acceptability, entrepreneurship development, involvement of private sector through niche markets, etc., for transforming the traditional crops grown for farmers' domestic consumption to an emerging role as commercial crop.
- ♦ *Strengthening Research and Development* to improve the primary processing machinery, enhancing shelf-life from current levels, studying secondary processing techniques for the impact on nutrition, and diversification into emerging food trends to compete with other fine cereals. The clinical studies on health benefits, and establishing the role of millets in prebiotic, immunity builders, gut microbiome, etc. with national and international medical institutes, etc. will strengthen the cause of defining the USP around nutrition and health benefits.
- ♦ *Multi Stakeholder Approach:* Involving various stakeholders such as R&D institutes, farmers, FPOs, private food processors, State and Central government departments, which would aid in effectively capturing and aligning the efforts with the consumer preferences.
- ♦ *Training and Capacity Building:* Training and capacity building needs to take place at different levels across the value chain such as farming, farm-gate processing, value addition, commercialization, etc.

## **B. Popularization and Strategic Awareness Creation**

- ♦ Leveraging the International Year Millets for global awareness creation and popularization by organizing various kinds of events during the entire year of 2023.
- ♦ Building USP around individual millets and also positioning 2-3 selected millets as champion millets by tying with a unique proposition such as milk for calcium, egg for protein, etc. for effective marketing in both domestic and export markets.
- ♦ Taking millets closer to people through advertising in print, electronic and social media, anganwadis.
- ♦ Hosting international and national conferences, food festivals, trade fairs, etc., for creating a dialogue on various policy, scientific, promotional and consumption aspects while acting as a platform for developing linkages would expand the reach of millets.
- ♦ Developing the technologies for continental and export market-specific recipes for pushing the demand in the global market.
- ♦ Diversification into emerging trends such as plant protein, nutraceuticals, etc., for positioning millets on a par with rice and wheat.



- ♦ Development of a comprehensive database on the effect of various processing technologies on the nutritional characteristics of millets and a framework of the best processing technologies for enhancing the availability of nutrients and decreasing the anti-nutritional contents.

### C. Policy-Specific Interventions

- ♦ A paradigm shift in government policy from food security to nutritional security will have a greater bearing on the future of millets. Sub-missions for promoting and piloting millets by some State governments would serve as scalable models.
- ♦ Convergence of various departments such as NITI Aayog, APEDA, MHRD, MOFPI, MSME, etc., with DA&FW and ICAR, can enlarge the mandate of millets' promotion in the country, while connecting with other public and premier institutions, the private sector, NGOs, farmers' groups, chefs, dieticians, doctors, nutritionists, and start-ups.

### D. Building the Private Processing Industry

- ♦ Accelerating the incubation of millet start-ups is an essential forward linkage for catering to various dynamic segments in the domestic and global markets. Increasing millets-specific incubation centres, in collaboration with State governments, should be done with support from ICAR-IIMR, CFTRI, IIFPT, etc.
- ♦ Incentivizing the processing and export of millet products for encouraging big private companies such as ITC, Britannia, Marico, Kelloggs, MTR, etc., to adopt millets into their product portfolio.
- ♦ Strengthening of small and medium enterprises would play a pivotal role in pushing millet products in local markets.

## 5. Way Forward: Role of States & UTs

- ▶▶ Launching State millet missions by drawing inspiration from those of Odisha, Karnataka, Tamil Nadu, Assam, and Chhattisgarh.
- ▶▶ Mapping of fallow, wastelands and the non-traditional areas and supporting the cultivation of millets across such lands.
- ▶▶ Supporting start-ups and enterprises in establishing the processing and value addition infrastructure across production clusters.
- ▶▶ Promote consumption by including millets in ICDS, MDMS and PDS, where they have not yet been integrated.
- ▶▶ Convergence with existing schemes for the holistic development of the millet value chain.
- ▶▶ Each state to prepare an action plan and calendar of events towards the celebration of IYOM 2023, along with a list of activities for a dedicated month in the year 2023.
- ▶▶ Organize a public campaign and events at the state-, district-, municipality-, and village-level on a monthly basis.





- » Engaging all State's departments in making millets and IYOM a people's movement.
- » Creating awareness and promoting millets through schools, restaurants and hotels with the involvement of different state departments such as health, culture, tourism, education etc.
- » States to also conduct activities for promotion of millets and IYOM 2023 alongside events under India's G20 presidency.
- » Promoting millets in regional cultural festivals.









सत्यमेव जयते

Government Of India