INTERNATIONAL YEAR OF MILLETS: INDIA LEADING THE WAY

Significant rise in MSP over last five years helps raise production of Millets; boost farmers’ income in the country

(Ministry of Agriculture and Farmer’s Welfare)

December 26, 2022

“India is at the forefront of popularising Millets, whose consumption furthers nutrition, food security and welfare of farmers.”

- Prime Minister Narendra Modi

Millets in India: Background

In India, millets were traditionally consumed, but due to the push given to food security through Green Revolution in the 1960s, millets were rendered as ‘orphan crops’ – less consumed and almost forgotten. Before the Green Revolution, millets made up around 40% of all cultivated grains, which has dropped to around 20% over the years.

Not only has the consumption of millets declined, but the area under production has been replaced with commercial crops, oilseeds, pulses and maize. These commercial crops are profitable, and their production is supported by several policies through subsidised inputs, incentivised procurement and inclusion in the Public Distribution System. This has resulted in changes in dietary patterns with preferential consumption towards fine calorie-rich cereals.

Against this backdrop, the Government of India realized the importance of millets in building nutritional security in the country and made several efforts such as gazetting millets as Nutri-Cereals, the celebration of the National Year of Millets in 2018, several small-scale policies on millets and proposing the International Year of Millets to UNGA.

International Year of Millets: Introduction

Millets (Bajra, Jowar, Ragi etc) are one of the oldest foods known to humans. Millets were among the first crops to be domesticated in India with several pieces of evidence pointing to their consumption during the Indus valley civilization.

Recognizing the importance of millets, and creating a domestic and global demand along with providing nutritious food to the people, the Government of India, guided by the vision of Prime Minister Narendra Modi, spearheaded the United Nations General Assembly (UNGA) resolution for declaring the year 2023 as International Year of Millets.²

The proposal of India was supported by 72 countries, and UNGA declared 2023 as the International Year of Millets in March 2021.³

So, what are Millets?

Millet is a common term to categorize small-seeded grasses that are often termed Nutri-cereals or Dryland-cereals and includes Sorghum (Jowar), Pearl Millet (Bajra), Finger Millet (Ragi), Little Millet (Kutki), Foxtail Millet (Kakun), Proso Millet (Cheena), Barnyard Millet (Sawa), Kodo Millet (Kodon) and other millets.

Millets are the stapled crops adapted to dry land agro-ecologies of the arid and semi-arid tropics. In India, millets are produced in most of the states characterized by low to moderate precipitation (200–800 mm rainfall).

An important staple cereal crop for millions of smallholder dryland farmers across Sub-Saharan Africa and Asia, millets offer nutrition, resilience, income and livelihood for farmers. They have multiple untapped uses such as food, feed, fodder, biofuels and brewing. Therefore, millets are Smart Food as they are Good for Consumers, Good for the Farmer and Good for the Planet.⁴
Millets as Smart-Foods: Significance and Benefits

- **Nutritionally Rich:** Millets are nutritionally superior to wheat and rice owing to their higher levels of protein with a more balanced amino acid profile. Similarly, the dietary fibre content of millet is also higher compared to some of the staple cereals. Millets also contain various phytochemicals which exert therapeutic properties owing to their anti-inflammatory and anti-oxidative properties.

- **Climate Resilient:** Millets are the backbone for dry land agriculture. They are hardy, resilient crops that have a low carbon and water footprint, can withstand high temperatures, grow on poor soils with little or no external inputs and are thus termed as the 'miracle grains' or ‘crops of the future’. In times of climate change, they are the most secure crops to small farmers as they are the hardiest, most resilient and climate-adaptable crops in harsh, hot (up to 50 degrees Celsius) and drought environments.

- **Health Benefits:** Millet grains are rich sources of nutrients like carbohydrates, protein, dietary fibre, and good-quality fat and have substantially higher amounts of minerals like calcium, potassium, magnesium, iron, manganese, zinc and B complex vitamins, making them a preferable choice over the cereal grains. Millets can also help tackle health challenges such as obesity, diabetes and lifestyle problems as they are gluten-free, have a low glycemic index and are high in dietary fibre and antioxidants.

- **Ecologically Sustainable:** Millet production is not dependent on the use of chemical fertilizers. These crops do not attract pests, and a majority of the millets are not affected by storage pests. Thus, the use of pesticides is also not mandated.

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**Global Scenario of Millets**

Millets Area and Production Region-wise (2019):

6 https://agricoop.nic.in/sites/default/files/Crops.pdf#page=41&zoom=100,0,720
<table>
<thead>
<tr>
<th>Regions</th>
<th>Area (lakh hectare)</th>
<th>Production (lakh tonne)</th>
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<tbody>
<tr>
<td>Africa</td>
<td>489 (68%)</td>
<td>423 (49%)</td>
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<tr>
<td>Americas</td>
<td>53 (7%)</td>
<td>193 (23%)</td>
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<tr>
<td>Asia</td>
<td>162 (23%)</td>
<td>215 (25%)</td>
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<tr>
<td>Europe</td>
<td>8 (1%)</td>
<td>20 (~2%)</td>
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<tr>
<td>Australia &amp; New Zealand</td>
<td>6 (~1%)</td>
<td>12 (~1%)</td>
</tr>
<tr>
<td>India</td>
<td>138 (20%)</td>
<td>173 (20%)</td>
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<tr>
<td>World</td>
<td>718</td>
<td>863</td>
</tr>
</tbody>
</table>

(Source: FAO Stat 2021)

- India produces more than 170 lakh tonnes of millet, which is **80 per cent of Asia’s and 20 per cent of global production**.
- While the Global average yield of Millet is 1229 kg/ha, the **yield in India is 1239 kg/ha**.

**India: Production of Millets during the last 10 years**

(In Lakh Tonnes)

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<tr>
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<tbody>
<tr>
<td>Jowar</td>
<td>59.8</td>
<td>52.8</td>
<td>55.4</td>
<td>54.5</td>
<td>42.4</td>
<td>45.7</td>
<td>48.0</td>
<td>34.8</td>
<td>47.7</td>
<td>47.8</td>
</tr>
<tr>
<td>Bajra</td>
<td>102.8</td>
<td>87.4</td>
<td>92.5</td>
<td>91.8</td>
<td>80.7</td>
<td>97.3</td>
<td>92.1</td>
<td>86.6</td>
<td>103.6</td>
<td>108.6</td>
</tr>
<tr>
<td>Ragi</td>
<td>19.3</td>
<td>15.7</td>
<td>19.8</td>
<td>20.6</td>
<td>18.2</td>
<td>13.9</td>
<td>19.9</td>
<td>12.4</td>
<td>17.6</td>
<td>19.6</td>
</tr>
<tr>
<td>Small Millets</td>
<td>4.5</td>
<td>4.4</td>
<td>4.3</td>
<td>3.9</td>
<td>3.9</td>
<td>4.4</td>
<td>4.4</td>
<td>3.3</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Total Nutri Cereals</td>
<td>186.4</td>
<td>160.3</td>
<td>172.0</td>
<td>170.8</td>
<td>145.2</td>
<td>161.2</td>
<td>164.4</td>
<td>137.1</td>
<td>172.6</td>
<td>179.6</td>
</tr>
</tbody>
</table>

**Millets in India: Facts and Figures**

- India produces all the nine commonly known millets and is the largest producer and fifth-largest exporter of millets in the world. Most of the states in India grow one or more millet crop species.
- **India recorded 27 per cent growth in millet production in 2021-22** as compared to millet production in the previous year was 15.92 MMT.

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7 ibid
• Pearl millet (60%) followed by Sorghum (27%), Finger millet (11%) and Small millets (2%) are the major millets produced in India (as per the 4th Advance estimate 2021-22).\(^9\)

![Pie chart showing the percentage of major millets produced in India](image)

• The major millets producing states in India are Rajasthan, Uttar Pradesh, Haryana, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh and Telangana.\(^10\)

• Under National Food Security Mission (NFMS) programme, the NFSM-Nutri Cereals is being implemented in 212 districts of 14 states.

• India has more than 500 Start-ups working in the millet value-added chain, while Indian Institute of Millets Research has incubated 250 Start-ups under Rashtriya Krishi Vikas Yojana - Raftar.

• India exported millets products worth of **USD 34.32 million during 2021-22. In 2020-21, India exported millets worth USD 26.97 million** against USD 28.5 million in 2019-20.

• According to 2020 data, India’s millets exports have continuously increased at around 3 per cent CAGR in the last five years ending with 2020.

• India’s **major millet exporting countries** are U.A.E, Nepal, Saudi Arabia, Libya, Oman, Egypt, Tunisia, Yemen, U.K and U.S.A. The varieties of millets exported by India include Bajra, Ragi, Canary, Jawar, and Buckwheat.

• Asia and Africa are the major production and consumption centres of millet crops. India, Niger, Sudan and Nigeria are the major producer of millet.

• Jowar and Proso Millets (Common Millet) are the most cultivated millets in the 112 and 35 countries respectively. Sorghum and Pearl millets cover more than 90% area and production. The remaining production comes from Ragi (Finger Millets), Cheena (Proso Millets), Foxtail Millets (Kangni) and other non-segregated millets.

• The major millet-importing countries in the world are Indonesia, Belgium, Japan, Germany, Mexico, Italy, the U.S.A, United Kingdom, Brazil and Netherlands.

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\(^9\)[https://apeda.gov.in/milletportal/Production.html#:~:text=The%20major%20millets%20producing%20states%20in%20Millets%20production%20in%20India.](https://apeda.gov.in/milletportal/Production.html#:~:text=The%20major%20millets%20producing%20states%20in%20Millets%20production%20in%20India.)

\(^10\) Ibid
Rise in Millet production and their MSP

Through the efforts made by the Government, the production of millets has increased significantly in recent years. Several efforts have been made over the last few years to realign the Minimum Support Price (MSP) to encourage farmers to shift to larger areas and adopt the best technologies and farm practices, to correct the demand-supply imbalance. There has been a significant rise in the MSP of Millets which can be seen from the graphs below:

![Graph of MSP of Jowar](https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf)

![Graph of MSP of Bajra](https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf)

![Graph of MSP of Ragi](https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf)

11 [https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf](https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf)
12 ibid
13 [https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf](https://eands.dacnet.nic.in/PDF/English%20MSP%202021.pdf)
Major Initiatives by the Government to Promote Millets

- In view of the nutritional value of the millets, the Government has notified **millets as Nutri-cereals** in April 2018.\(^\text{14}\)

- The Government, under the Sub Mission on **National Food Security Mission (NFSM) -Nutri-cereals**, is creating awareness among farmers for Nutri Cereals (Millets) such as ragi, sorghum, bajra and small millets through demonstration and training.\(^\text{15}\)

- The Government is popularizing Nutri-cereals through Research & Development support. Support is also given to start-ups and entrepreneurs for developing recipes & value-added products that promote the consumption of millet. Eight bio-fortified varieties/hybrids of Bajra have been released for cultivation from 2018 to February 2022.\(^\text{16}\)

- To promote the shipment of Nutri-cereals, the Ministry of Commerce and Industry through its apex agricultural export promotion body, the Agricultural and Processed Food Products Export Development Authority (APEDA) has prepared a comprehensive strategy to promote Indian millets exports across the globe commencing December 2022.\(^\text{17}\)

- For the promotion of Indian Millets and its value-added products, the **Centre has developed 30 e-Catalogues on each of the targeted countries** comprising information on various Indian Millets and the range of their value-added products available for export, list of active exporters, start-ups, FPOs and importer/retail chain/hyper markets, etc that to be circulated to the Indian Embassy abroad, importers, exporters, Start-ups and stakeholders.

- **NITI Aayog signed a Statement of Intent (SoI) with United Nations World Food Program (WFP) on December 20, 2021.** The partnership focuses on mainstreaming millets and supporting India in taking lead globally in knowledge exchange using the opportunity of 2023 as an International Year of Millets.\(^\text{18}\)

- Union Budget 2022-23 highlighted that support would be provided for post-harvest value addition, enhancing domestic consumption, and for branding millet products nationally and internationally.\(^\text{19}\)

- In a webinar, held on February 24, 2022, dealing with the positive impact of Union Budget 2022-23 on the agriculture sector, Prime Minister Narendra Modi **called upon the corporate world to come forward in branding and promoting Indian millets.**\(^\text{20}\)

- During the launch ceremony of the International Year of Nutri-cereals organized by the Food and Agriculture Organization of the United Nations (FAO) in Rome (Italy), Prime Minister Narendra Modi **emphasized on making millets a food choice for the future.** He also touched upon **how climate change is affecting food availability.** The Prime Minister remarked, “**Millets are good for the consumer, cultivator and climate.**”

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\(^{19}\) https://www.indiabudget.gov.in/doc/budget_speech.pdf
A major initiative was taken by the Union Ministry of Agriculture and Farmers Welfare to promote millets in the country and the world by organizing a 'Special Millets Lunch' for MPs in the Parliament Courtyard on December 20, 2022. The luncheon served an elaborate curated millet buffet to highlight the diversity of Indian millet and the variety of millet cuisines.

In order to promote the consumption of millets and in view of their health benefits, all offices of the Department of Food and Public Distribution (DFPD) have recently directed to introduce and promote millets in their canteens and in meetings.21

In order to enhance nutrition among children, the Central Government has requested State Governments/Union Territory Administrations to explore the possibility of introducing millets under the PM POSHAN Scheme, preferably in the districts where eating millets is a culturally accepted food habit.22

By declaring 2023 as 'The International Year of Millets,' the UN General Assembly has set the tone for increasing the area of cultivation of millet across the world. India, which is the world's largest producer of millet, is taking wide-ranging steps to implement the benefits of this opportunity.

To read about the Millets Recipes, Click Here

To read about the Millets International Recipes, Click Here

References:


Further reading:

- https://www.nutricereals.dac.gov.in/IYoM2023/Data/M%20Mec%202.jpg
- https://www.nutricereals.dac.gov.in/IYoM2023/Data/M%20USP%20Millets.jpg
- https://www.nutricereals.dac.gov.in/IYoM2023/Data/M%20Health%20benefits.jpg
- https://www.nutricereals.dac.gov.in/IYoM2023/Data/Millet%20Recipes%202021%20English.pdf
- https://apeda.gov.in/apedawebsite/SubHead_Products/Indian_Millets.htm

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