



MAINSTREAMING MILLETS

POLICY BRIEF NO. 1

A Case for Inclusion of Millets in Social Safety Nets

What is the Issue?

Introduction of the Green Revolution in 1960 resulted in high production of wheat and rice. On the other hand, it led to a dramatic decrease in cultivated area under millet - 80% for small millets, 46% for finger millet, 59% for sorghum and 23% for pearl millet from 1961 to 2009¹. Cereal grains like rice and wheat, became part of India's biggest social welfare scheme - Public Distribution System (PDS), contributing to a steep fall in overall millet consumption. Recently, recognizing the climate resilience of millets and its potential to address India's food and nutrition security, governments have taken many national and state-level initiatives that helped millets return to the farms and fields but are slow in being revived on food plates². Among the major limiting factors to millet consumption is people's perception of millets as coarse grains and "poor man's food" despite its high nutritional benefits. Inclusion of millets in social welfare schemes like Targeted Public Distribution System (TPDS), Integrated Child Development Services (ICDS), and Mid-Day Meal (MDM) can help introduce millets in people's plates and become a part of their daily diet.

Overview

Millets should be included in social welfare schemes to increase their availability and therefore per household consumption. To maintain the regular supply of millets under any of the schemes, the quality and quantity of raw millets should be monitored continuously.

Increased awareness of communities, especially urban populations and inclusion in social safety-nets will provide boost to overall millet demand and supply.

¹ Revalorizing Small Millets in Rainfed Regions of South Asia (RESMISA). Supporting Millets in India, Policy Review & Suggestions for Action. Dhan Foundation. 2012

² Millets are returning to our fields and plates. Down to Earth. August 2018

Key Challenges?

1. **Variance in supply and demand of millets:** Despite India having more than 34% of semi-arid lands suitable for harvesting millets, it contributes only to 10% of the country's food grain basket³. Only a few States are involved in millet production leading to imbalance in its demand and supply. However, to increase the demand of millets, it is important to increase the processing and supply of good quality of millets simultaneously. For example, under Odisha Millet Mission (OMM), ragi ladoo has been included under ICDS for children in two districts. However, the data shows that as the demand of these ladoos increased in the districts, there was a need to source millets from nearby districts.
2. **Low Aspirational Value:** Millets are known as next generation crops due to their climate resilient nature⁴. Further they are nutritionally beneficial. However, they continue to have low aspirational value, leading to them disappearing from diets over the years.
3. **Limited knowledge on recipes and cooking:** Although millets are nutritionally rich and available in 9 different varieties, people are not aware about its different types of recipes and cooking styles/methods, often leading to loss of nutrients. Additionally, lack of processing environment makes it difficult to cook unprocessed millets.
4. **Quality of raw millets:** The lack of investment in procurement and processing facilities throttles the quality of millets, with no encouragement (through advance credit/ guaranteed buyers) from intermediaries or consumers. Evidence from inclusion of finger millets in PDS under OMM shows that consumption of millets increases if good quality of millets is distributed.

Why is this Important?

Inclusion of millets in social safety welfare schemes can increase its adoption among consumers, hence reviving them in the farms and in plates. This will improve nutritional outcomes among people as they are non-acid forming, non-allergic, and easy to digest in addition to high in protein, dietary fiber, magnesium, iron and calcium⁵. Hence, millets like pearl millet, Ragi, Jowar can help in improving haemoglobin level, and in reducing iron deficiency anaemia particularly among women and girls⁶. Millets are also known as resilient crops

³Bandyopadhyay Tirthankar, Muthamilarasan Mehanathan, Prasad Manoj. 2017. Millets for Next Generation Climate-Smart Agriculture. *Frontiers in Plant Science*

⁴Goron TL, Raizada MN. 2015. Genetic diversity and genomic resources available for the small millet crops to accelerate a New Green Revolution. *Front Plant Sci*.

⁵Vinoth A, Ravindhran R. 2017. Biofortification in Millets: A Sustainable Approach for Nutritional Security. *Frontiers in Plant Science*

⁶Millets can have a major impact on improving iron status, haemoglobin level, and reducing Iron deficiency anaemia- A systematic review and meta-analysis, *Frontiers in nutrition*.2021

with tolerance against extreme climatic stress including drought and flood and can be considered ideal crops of the 21st century, where we face depleting natural resources as a result of climate change and increasing population stress. Due to low production cost and nutrient input requirement, millets can provide economic security and high profit to small and marginal farmers, particularly women farmers, who traditionally have an important role in millet farming.

How policy can support?

- 1. Introduction of millets in social welfare schemes:** Central as well as several state governments have initiated various policies to increase the supply as well as demand of millets across the country. The National Food Security Act(2013) provides opportunity to increase consumption of millets as it mentions distribution of nutria-cereals through social welfare schemes such as TPDS, MDM and ICDS. Integration of millets in these safety-nets will have two primary advantages, first, improving the food security and nutrition of the poor people and second, economic security- increasing the income of small and marginal farmers, especially women farmers, as production of millets requires low cost inputs. Ministries can also start with small proportion of millet supply by introducing it for fixed number of days to increase its adaptability and acceptance and gradually optimize the distribution along with other commodities.
- 2. Balancing the Supply and Demand of Millets:** Minor millets are a rich source of nutrients and minerals and are also resistant to drought and stress in rainfed farming. However, production of minor millets had declined between 1966 and 2006. About 44% of millet cultivation areas were occupied by other crops leading to losses in India's food and farming systems⁷. To boost the consumption of millets in India, it is also important to increase its production simultaneously. There is need to ensure an adequate supply of millets to meet its demand and maintain its continuous inclusion in social safety net programs.
- 3. Promoting millets as Aspirational food:** Millet should be promoted as healthy alternatives to wheat/rice instead of poor man's food and as part of dietary diversification. During the COVID19 pandemic, the importance of a healthy and nutritious diet became even more stark, making this a favorable time to push millets to the mainstream. Encouraging millets to market, can also increase its production and processing, hence reducing the market price.
- 4. Increased awareness for increased demand:** To create awareness around millet consumption and to increase the knowledge on different recipes and cooking styles, Social and Behavior Change Communication (SBCC) activities should be used. They should focus on changing the behavior of consumers to uptake millet as a healthy alternative to their other staple foods and as part of dietary diversification.

⁷Production and consumption of minor millets in India- A structural break analysis. Indian Agriculture Research Institute. September 2018

5. **Quality of Millets:** Although the nutritional benefits of millets are high as compared to rice/wheat, but to revive them into the diets of consumers, the good quality of raw/ processed millets needs to be a priority. Findings from OMM show that the consumption of millets increases under PDS as the quality of raw millets improves.
6. **Millet procurement system** – Introduction and strengthening of millet procurement system is a pre-requisite to the inclusion of millets in social safety nets. Awareness of the required quality, technological innovations for end-to-end registration of farmers, and making equipment available for sorting and grading need to be introduced to make an effective millet procurement system at the state level. The Millet Procurement System (M-PAS) used by Odisha is one good example.

Summing up

Millets are traditionally a staple food in semi-arid tropics and drought-prone regions in India. They are of high nutritional benefits providing food security and can be considered ideal crops of the 21st Century where we face depleting natural resources and an era of climate change. Other than production, the government shall also focus on increasing the per household consumption of millets, to restore the staple diet into the plates of the poor people in the country.

Millets should be included in social welfare schemes to increase their availability and therefore per household consumption. To maintain the regular supply of millets under any of the schemes, the quality and quantity of raw millets should be monitored continuously. Simultaneously, they need to promote millets as aspirational food among urban people. This will lead to balanced millet demand and help rationalize millet prices in the market. Processing environment needs to be set up in panchayats/clusters to convert the raw millets into healthy and tasty products.

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