G20
भारत 2023 INDIA

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Millet Mantra

The Culinary Centrepiece of India's G20 Presidency

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Millet Mantra: The Culinary Centerpiece of India's G20 Presidency by the Council on Energy, Environment and Water (CEEW) and the Taj Hotels is a proud collaboration that showcases lives and livelihoods around millets. From sustainable farming of millets to crafting gourmet beers from them, champions from different parts of India are creating a sustainable food system around the climate-resilient and nutritious grains. This book will take you on a journey from the millet farms of rural Odisha in India to the kitchens of world-renowned chefs cooking with these healthy cereals. Interspersed with these stories are exclusive recipes of millet dishes curated by Taj Hotels and served at the events held in India during its G20 presidency.

Authors: Saahil Parekh, Karan Shinghal, Nandini Agarwal, and Shuva Raha.

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Front cover: Features Himanshu Kapoor (see Soul Kitchen chapter), a millet-champion, styling a foxtail millet and vanilla mousse in her kitchen in New Delhi, as part of her 'cooking with millets' sessions. The feature celebrates how women, from farm to fork, are at the centre of reviving millets. Image: Emotive Lens/CEEW.

Back cover: Features aubergine and proso millet croquettes prepared by Chef Mokgadi Itsweng (see Chefs without Borders chapter). Image: Chef Mokgadi Itsweng.

Millet Mantra

The Culinary Centrepiece of India's G20 Presidency

Saahil Parekh, Karan Shinghal, Nandini Agarwal, and Shuva Raha

December 2023



Foreword

Amitabh Kant, G20 Sherpa

India's enduring relationship with millets spans millennia, and is at the heart of this book. The traditional importance of millets in India's food history – and their reemergence in the modern diet – presents the perfect timing to share India's *Millet Mantra*.

India celebrated its first National Year of Millets in 2018, and accorded long due significance to these nutri-cereals, introducing them into the nationwide *Poshan Abhiyaan* (Nutrition Mission). The *Odisha Millets Mission*, started in 2017, today includes 26,374 villages and over 200,000 farmers. It is an excellent example of a policy intervention to promote the cultivation and consumption of millets in tribal areas, and this model is being replicated by many other Indian states, with village and block level campaigns to create greater demand.

India's proposal to the United Nations to declare 2023 as the International Year of Millets was supported by 72 countries. Today, India is leading the world towards a millets revolution, which will boost global nutritional outcomes, promote sustainable eating habits, and address food security concerns.

Millets are ecologically sustainable, and an extremely resilient agricultural ammunition to combat climate change. Millets require 25-30 per cent less rainfall than rice and sugarcane, and can be grown on arid soil and hilly terrain, which makes them well-suited to India's diverse agro-climatic conditions.

Millets are also a nutritional powerhouse and excellent sources of carbohydrates, proteins, and vitamins. For instance, finger millets (ragi) contain ten times more calcium than wheat, and pearl millets (bajra) have six times more iron than rice, and almost twice as much as wheat. Millets boost immunity, and are essential weapons in the fights against malnutrition, diabetes, cardiovascular diseases, and even cancer. Supplementing the diets of women of reproductive age and children with millets can substantially augment efforts to address the serious public health concerns of iron deficiency and anaemia. With increasing global preference of fitness-savvy customers for nutrient-rich diets, gluten-free and fibre-rich millets are garnering higher relevance and market shares worldwide.



Mr Amitabh Kant viewing a millets exhibition at a G20 event.

A similar consumption preference is also emerging in urban India. The once-declining yield of millets is now reversing, with many agri-tech firms and start-ups procuring it and selling their innovative products nationwide. Major consumer packaged goods brands, such as Millé, Manna, Tata Soulfull, Slurrp Farm, True Elements, and 24 Mantra, are introducing millet-based products to meet the growing demand. MyGov India has been conducting many activities to engage citizens, from millet recipe contests to the Millet Startup Innovation Challenge. The image of millets is transforming from a poor man's crop to a new-age superfood.

The first International Year of Millets and India's G20 Presidency in 2023 have steered global attention towards the multifaceted potential of millets. The G20 meeting of agricultural chief scientists (MACS 2023) saw the launch of a first-of-its-kind R&D initiative called MAHARISHI – *Millets and Other Ancient Grains International Research Initiative*. International attendees have also enjoyed multi-cuisine millet-based menus at G20 meetings across India.

India is the world's largest producer and a global champion of millets, with a projected market value of USD 15 billion by 2025. India is carving a path for the significant growth of millets as a mission to enhance food security, reinstate environmentally sustainable farming habits, support farmers' welfare, and restore nutritional balance to diets across the world. The time is ripe to tap domestic and international markets, ensure quality storage and transportation, and ultimately, boost the global production and consumption of millets.

I compliment the Council on Energy, Environment and Water, and Taj Hotels, for championing India's *Millet Mantra* through this meticulously researched G20 collectible book.

I welcome you to this millennia-spanning journey of millets, and its foray into the future.



From the CEO's desk, CEEW

Arunabha Ghosh

A sustainable food system should provide nutrition security for all while nurturing the environment. Millets are hardy crops, resilient to harsh climates, and offer more nutrition than rice or wheat. They are especially well-suited to the dryland regions of the world, which occupy 41 per cent of the land surface, produce 44 per cent of the crops, and provide livelihood to over 2 billion people[1]. Mainstreaming millets once more is, therefore, a critical pathway towards improving food and nutrition security, the livelihoods of smallholder farmers, and ensuring environmental sustainability.

The resurgence of millets on the Indian *thali* (plate), spearheaded by the Indian government and businesses with both traditional and modernised recipes and preparation processes, is also being welcomed by people seeking more nourishing yet affordable meals. Twelve Indian states have policies promoting the cultivation, distribution and consumption of millets. Some, like Odisha, have taken a holistic farm-to-fork approach, which creates a virtuous value chain between smallholder farmers, including communities led by women, who are integral to the country's food security, and the public distribution system that serves 800 million people. Urban India is also experiencing this transformation as entrepreneurs and big businesses strive to invent and introduce novel ways to incorporate millets into our diets.

This book is an ode to the spirited agents of change driving the modern millet mantra in India. It is our endeavour to bring you a handful of stories of smallholder farmers, chefs, entrepreneurs and officials who are inventing the future of this ancient, humble grain. I thank Mr Amitabh Kant, India's G20 Sherpa, for emphatically supporting this effort since the germination of the idea. I also thank Mr Puneet Chhatwal and the Taj team for sharing our vision, and bringing us a selection of the special millet-based menu they served the G20 delegations and Heads of State and governments. India has led by example at the grassroots and on the world stage through its G20 presidency and the International Year of Millets. I compliment my colleagues at CEEW for curating this deeply-researched and timely collectors' book that celebrates this global leadership towards more sustainable food systems and healthier diets.

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From the CEO's desk, IHCL

Puneet Chhatwal

I am delighted to introduce Millet Mantra: The Culinary Centerpiece of India's G20 Presidency, a memorable milestone in the journey of the Indian Hotels Company (IHCL) to transcend borders and cultures. A harmonious fusion of gastronomy and diplomacy, this book is a testament to the vibrant tapestry of India's culinary heritage and global outreach.

Intrinsically bound with the country's history, IHCL's iconic brand Taj has long been heralded as the custodian of Indian heritage. Diversity, respect, and equity are the cornerstones of our culinary endeavours. As a testament to this commitment, Taj has not only maintained but also elevated standards of food and cuisines, enriching the lives of our patrons and the communities we serve.

As a pioneering force in the hospitality sector, Taj has embraced the vision of mainstreaming millets in India's gastronomic landscape. Curating the G20 recipes featured in *Millet Mantra* was a meticulous effort to showcase the significance of the grain, a voyage from the fertile fields to the grand stages of the G20. The process was not merely about preparing exceptional dishes but also weaving stories of farmers and chefs into the narrative.

With *Millet Mantra*, we are celebrating the convergence of India's leadership with the strength of complementary partnerships, innovation, and culinary artistry. This book reflects the synergy between the G20 Presidency, Taj, CEEW, and the visionaries who are integrating millets into the world's sustainable food systems.

With deep pride and anticipation, I invite you to savour the rich narrative of millets, the spirit of sustainable cuisines, and the shared aspirations of a brighter, nourished future.

IHCL

Preface

The Indian G20 presidency celebrated the International Year of Millets and showcased the resurgence of the resilient grain by presenting a delightful array of traditional and modern millet dishes to delegates. This inspired us to write *Millet Mantra*, a tribute to the people who are at the forefront of mainstreaming millets.

The book features stories both local and global — from the villages of Odisha in eastern India to an international manifesto rallying chefs around the world to bring sustainability into culinary science. It is a compendium of the tour de force of individuals who are collectively creating a sustainable food system through millets.

So, what makes our food system sustainable? The answers to this question typically emphasise the need that a food system has minimal environmental impact, is remunerative for producers and brings nutrition security to consumers. They also highlight the complex, interconnected nature of the food system.

But do we dare say that there is also deceptively simpler answer? Our choices make the food system sustainable. What crop does the farmer choose to grow, what products are stocked on the supermarket shelves, what kind of produce does a chef work with – these and many more such choices decide the fate of our food systems.

Arguably, the most important choice is the one that we, as consumers, make. What we buy, how we cook and what we eat have profound implications for the food system and its impact on the planet. The recipes in this book have soul, and they are steeped in the traditions and cultures of different parts of India. But they are also modern and quirky. We hope that they will encourage you to add millets in your own diets and appreciate the power, and the profound responsibility, of making sustainable food choices.

What constitutes a sustainable food choice? We asked this question to food systems and climate change experts* around the world to define the fundamental principles that can guide humanity to find the destination — a shared vision of a sustainable food system — and shape the journey towards it.

These fundamental principles are **respect** for nature that gives so abundantly and for the people engaged in growing food and bringing it to our tables, preservation of the **diversity** in our agricultural, ecological, cultural and culinary heritages, and steadfast support for **equity** across gender, incomes and geographies in food production, distribution and consumption.

Keeping these principles in our mind and making small, conscious choices when we shop next at the market, or when we eat at a restaurant or order food, can bring incremental changes to our food system.

*17 people from the field of public policy in food, agriculture, and climate change were surveyed to identify the fundamental principles of a sustainable food system. Their responses have been summarised in the adjacent illustration. These principles are not exhaustive. Through this list, we hope to provide the readers a few important principles that can guide them to make better food choices.

Principles of a Sustainable Food System

Equity

Supporting equity across genders, incomes and geographies in food production, distribution and consumption



- Support food sovereignty
- Support fair wages and fair trade pratices
- Support nutrition security for all

Diversity

Preserving diversity in our agricultural, ecological, cultural and culinary heritages



- Eat diverse foods
- Appreciate different cultures and culinary traditions
- Choose indigenous produce

Respect

Respecting the ecology and the people that support the food system



- Support regenerative agriculture
- Choose local and seasonal produce
- Reduce food waste













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Millets Around the World

Millets hold an important place in various cultures and cuisines around the world. These grains, which have been with us for millennia, are integral to festivities and revered both as a gift from the heavens as well as a sacred offering to the gods. This map offers a glimpse into their rich and diverse history.



1 Mexico

Amaranth, a pseudo-millet is used to make candies called *Alegría* on the Day of the Dead. It is also considered a sacred offering to Aztec deities.[2]

2 Europe

From buckwheat millet crepes eaten during Candlemas in France to the *Pan de maj* made of proso millet in Italy, millets have had a place in the culture of many countries[3].

3 Mali

Tô, a porridge made from fonio or sorghum millets, is a popular street food flavoured with sugar or honey and served with soup.[4]



4 Korea

Locals cherish their *Omegisul*, a traditional alcoholic beverage made from proso millet, during the Chuseok harvest festival.[5]

5 Japan

The Ogoku rite is believed to be a prayer for a bountiful harvest of five grains: wheat, rice, foxtail (awa) millet, proso (kibi) millet, and beans, collectively called *'Gokoku'*.[6]

6 Ethiopia

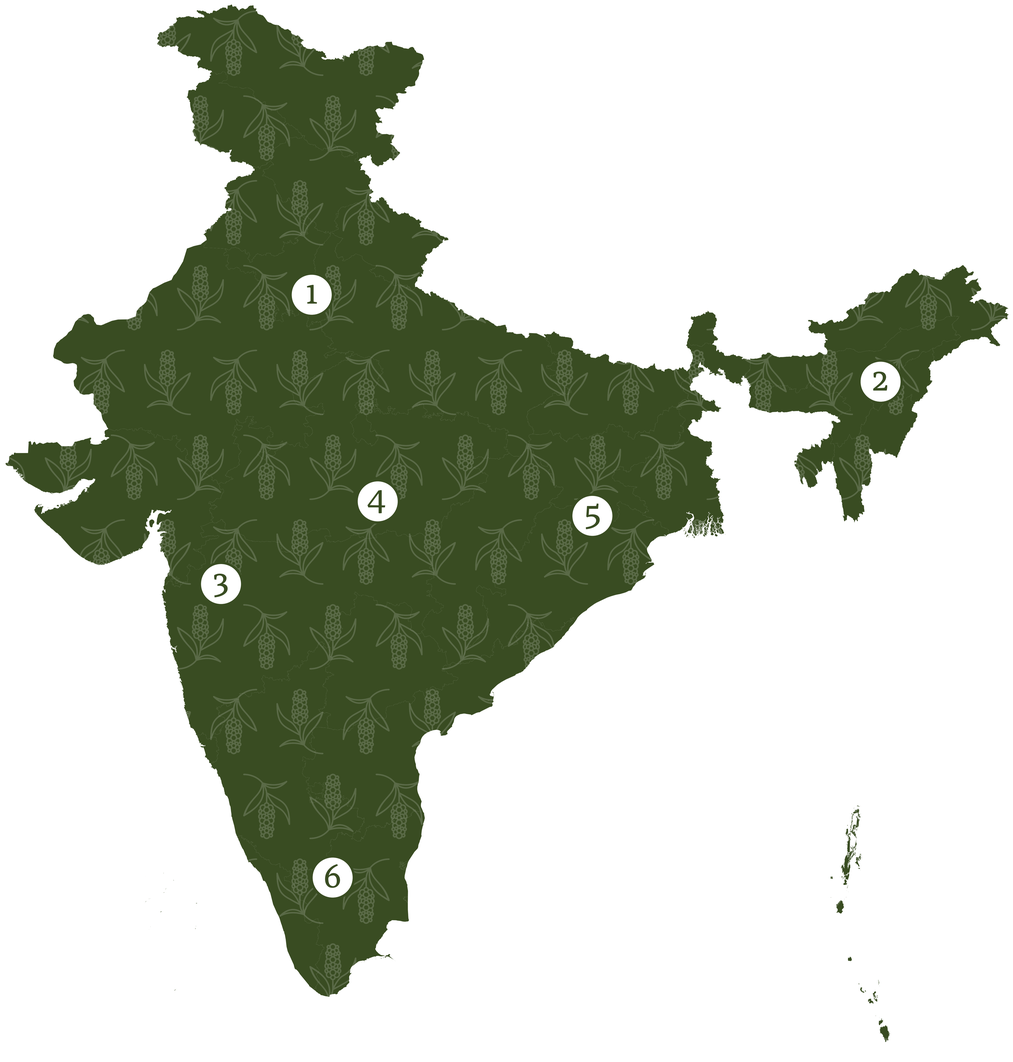
Injera, a sourdough flatbread made of teff millet, is an integral part of most meals in the country.[7]

7 Australia

Panicum, the native millet of the Aboriginal communities is a staple food.[8]

The world map is not to scale and is for illustrative purposes only.

Millets in India



For over 5,000 years, millets have been a part of the Indian subcontinent's cultural and culinary identity. Every corner of India has a unique relationship with this hardy grain. This map is a snapshot of that relationship.

1 Northern India

Parts of the northern region still follow a traditional mixed-cropping system called *'Barahnaja'*, which involves cultivating 12 types of crops. It mainly includes planting different types of millet and pulses.[9]

2 Northeastern India

Some areas of the northeast are the largest consumers of small millets like kodo millet and raishan millet which they use as an alternative to rice, while some use the latter to make biscuits, beer and soap.[10,11]

3 Western India

In some regions of western India, the pearl millet is used as a sacred offering during festivals to bring prosperity and blessings[12]. In Goan villages, the Udhalashe women perform a dance called *'katyo'* to thank the stars for protecting their millet crop.[13]

4 Central India

In parts of central India, kodo and kutki millets have been a staple of India's second-largest tribal community, the Gonds. Popular dishes are *kutki-kodu bhat* (porridge), *kheer* and *laddu* (sweet dishes) and *khichdi* (a rice preparation with pulses).[14]

5 Eastern India

Some states in the eastern belt of India enjoy millets in their fermented form. The Gadaba tribe of Odisha prepares nutritious beverages from finger millets, called *landa* and *pej*, uusually savoured after dinner.[15] People of the Pahadi Korwa tribe of Chhattisgarh hang millet stalks in their courtyards to ensure a bountiful harvest.[16]

6 Southern India

In some states of south India, festivals use millets as well as honour them. *Unniyappam*, a sorghum fritter, is used as a sacred offering during the Onam festival. The Attapaddy tribe has recently revived the centuries-old Kambalam custom in Kerala to bring back millet cultivation in the area.[17]

Seeds of Change

Millet farming builds resilience of smallholder farmers

Image: Emotive Lens/ CEEW



“The fallow, empty land is now beaming with life, food and a future.”

Sanjulata Mahanta

Millet farmer in Keonjhar district of Odisha, planting finger millet saplings. She grows finger millets, foxtail millets and sorghum across 6 acres of land.

Image: Emotive Lens/ CEEW

The Resilient Millet

Smallholder farmer Sanjulata Mahanta’s journey from cultivating paddy to pioneering the resurgence of the finger millet in Kaunari Kala, a quaint village in the heart of Odisha’s Keonjhar district, is a tale of resilience, sustainability, and the profound impact one farmer can have on her entire community.

“Everyone in my village grew paddy because the government would buy it. But millets use less water, require fewer inputs, and when demand exists, earn us more profit.”

Mahanta's transition to millet cultivation is no longer an anomaly. It is now an anecdote of success in a movement spreading across India’s rainfed regions occupying over half of the country’s area under cultivation[18]. With growing demand, rainfall-dependent Indian farmers are embracing millets because these ancient, hardy crops can grow with as little as 350 mm of rain. By comparison, paddy needs about 875 mm of rainfall annually[19].

Millet farmers are also gaining from the crop’s ability to withstand the stresses of increasingly unpredictable weather patterns. Mahanta beams with pride while showing us a YouTube video featuring her finger millet crop, locally known as *mandya*.

The Progressive Farmer

As Sanjulata Mahanta's crop flourished, so did her agency, and the community's respect for her. Through similar women-led initiatives, Keonjhar district has witnessed an exponential growth in millet cultivation from a mere 100 hectares in 2019 to 3,000 hectares in 2022.[19] Across India, several such women-led initiatives are steering the recovery of local crop varieties known as landraces, preserving indigenous knowledge, and empowering other farmers by reducing their dependence on single-use hybrid seeds.

Mahanta's advocacy for millets extends beyond the crop. Embracing the principles of natural farming, a regenerative agriculture system picking pace in India, she has reduced her reliance on fertilisers and pesticides and nurtured a harmonious relationship with the soil. She also grows vegetables and pulses alongside the millets on her field.

Her story is a reflection of a larger movement across India. Thousands of smallholder farmers are growing millets alongside other crops, many of which serve their own family's nutritional requirements, while also adopting traditional practices of integrating locally available bio-resources and weaning off harmful chemicals.

As the sun set on the tranquil village of Kaunari Kala, Mahanta and the millet movement of India were bringing in a new dawn.





Source: Agricultural Statistics Division, Department of Agriculture & Farmers Welfare, Government of India

Image: Emotive Lens/ CEEW

The Leading States

Twelve Indian states have launched their millet missions or other similar initiatives since 2017. India's total millets production has increased by 10 per cent from 17.87 million tonnes in 2016-17 to 19.67 million tonnes in 2020-21.[21]

> *Odisha Millets Mission* is a first-of-its-kind fork-to-farm initiative that aims to revive millets in farms and on plates. Guided by the tenets of equity and justice to vulnerable rain-fed farmers, in the last six years, we have expanded the coverage to more than 200 thousand farmers across all the districts."

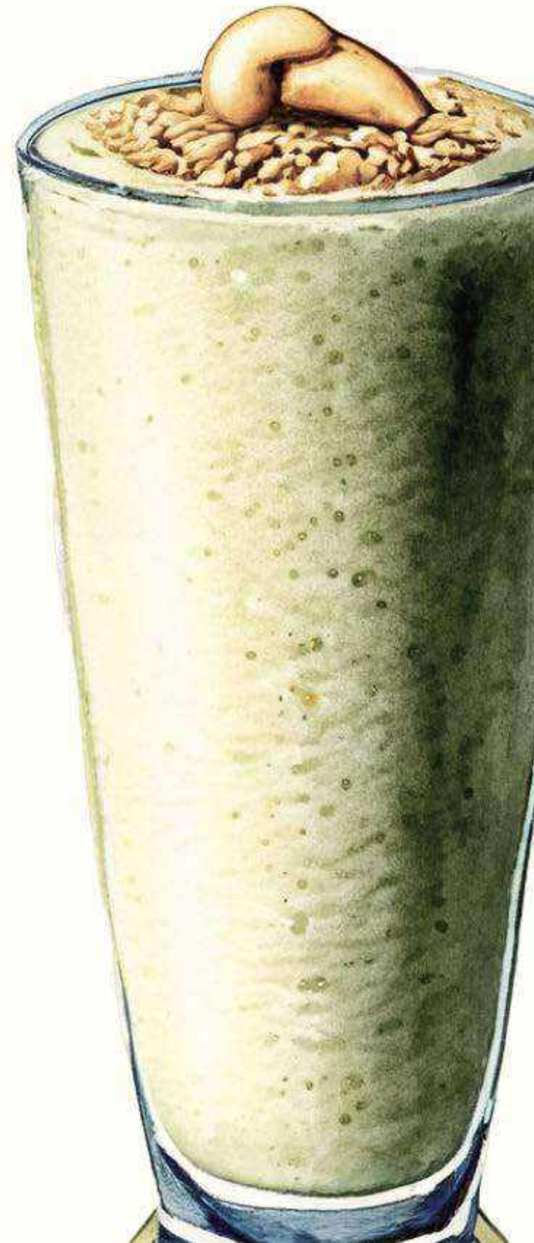
Arabinda K. Padhee

Principal Secretary, Department of Agriculture & Farmers' Empowerment, Government of Odisha

Foxtail Millet Juice



Falhari Rajgira Smoothie

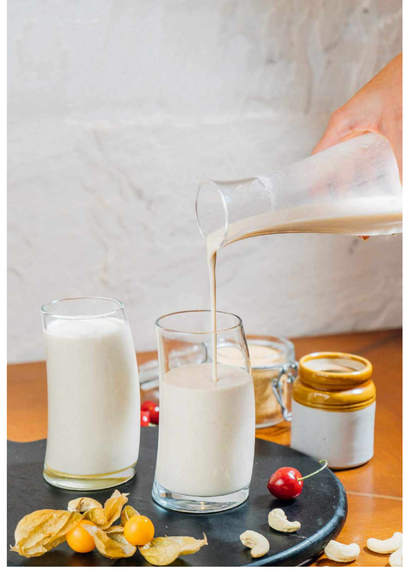


Recipes

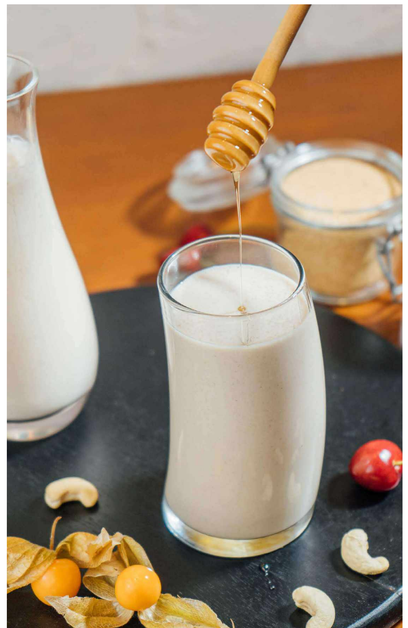
Beverages



Images : Ankur Kewat/CEEW







Falhari Rajgira Smoothie

Gluten Free Meat Free Egg Free



“This fruity amaranth drink is a unique high-protein smoothie that makes for a perfect millet morning. Quick to make and so healthy!”

Chef Kaushik Misra | Executive Chef
Taj West End, Bengaluru

Ingredients

Puffed amaranth (rajgira)	2 cups
Raisins	1/2 cup
Cashews	1/2 cup
Deseeded dates	6 nos
Honey	2 tbsp
Milk	4 cups
Water	1 cup

10 min

Serves 4

98 Kcal

Method

Soak the cashews and dates for 30 minutes. Blend the cashews, dates, raisins, and amaranth with 1 cup of water into a smooth paste. Add milk and honey slowly, and keep blending till it reaches a silky consistency. Garnish with amaranth, raisins and cashews.



Images : Ankur Kewat/CEEW





Foxtail Millet Juice

Gluten Free | Meat Free | Egg Free | Dairy Free



> A hearty drink, commonly consumed in rural India."

Chef Kaushik Misra | Executive Chef
Taj West End, Bengaluru

Ingredients

Foxtail millet	3 cups
Grated coconut	1/2 cup
Sugar	to taste
Ginger powder	1 tbsp
Clove powder	1 tbsp
Deseeded dates	10 nos
Water	1 ltr

30 min

Serves 4

102 Kcal

Method

Wash and soak the millet for 2 hours. Soak the dates for 30 minutes. Add the millets, ginger, cloves, and dates into a blender with 100 ml of water and blend till it becomes a smooth paste. Add 500 ml of water to the paste, sieve it and keep aside. Now, blend the coconut while slowly adding 400 ml of water. Mix everything together, add sugar to taste and serve cold or at room temperature, according to preference.

Flour Power

Women-led millet value chains improve local nutrition

Image: Emotive Lens/ CEEW



Image: Emotive Lens/ CEEW

The Virtuous Value Chain

The 500-square-foot premises of the Krishna Self-Help Group (SHG) is bustling with activity in the morning hours. Ten uniformed employees, all women, are busy at work turning their stock of finger millet seeds into flour.

Ganga Singh, the founder-president, directs the operations of the processing facility and beams with pride as she tells us about the motivation behind their work: “Our SHG supports the noble vision of the *Odisha Millets Mission*. The flour processed by us is converted into finger millet (ragi) *laddus* (a type of sweet dumpling) that is distributed to children at the *anganwadis* (childcare centres) in Keonjhar.”

The millet value chain in Keonjhar, Odisha, of which Singh is an integral part, has fostered financial independence and social empowerment for the community. Singh and her fellow members are no longer anonymous; they are revered as the resilient women of the Krishna SHG.

Odisha’s story symbolises and inspires a broader trend unfolding across the country. Under the *Pradhan Mantri Poshan Shakti Nirman* (PM-POSHAN) scheme of the Government of India, millet-based foods and snacks are now being served as part of midday meals in schools in Andhra Pradesh[22], Chhattisgarh[23], Jharkhand[24], Karnataka[25], Odisha[26], Uttar Pradesh[27], and Telangana[28] which is transforming the lives of thousands of children. Inspired by the many success stories of SHGs like Krishna, the government recently allocated INR 25 core (USD 3 million) as seed money for 7,500 SHGs[29] to start their own enterprises.



1



2



3

1 Krishna SHG, a group of 10 women, all from small and marginal farming households, dehusk and process 6,000 quintals of finger millet grain every quarter to make it fit for consumption.

2 Finger millet (ragi) laddus being served to school children as part of the *Integrated Child Development Scheme* of the government to improve nutrition. These laddus have been made using the millets grown in nearby farms of Keonjhar, Odisha and processed by members of SHGs.

3 Krishna SHG runs the Millet Shakti Cafe on the premises of the district government's administrative offices in Keonjhar, Odisha. A wide variety of millet-based dishes are available throughout the day.

The Tenacious Entrepreneur

"It looks great now, but things weren't always easy," says Ganga Singh as she narrates the story of her SHG. "We started the SHG as a collective of women with a contribution of just INR 25 (USD 0.3) from each member and the aim to uplift our lives."

> "Today, we each earn INR 20,000 (USD 240) every month."

From its modest beginnings, Krishna SHG has grown into a formidable local enterprise clocking a monthly turnover of INR 2 lakh (USD 2,400) . It not only has a millet processing facility but also a café in the local district collector's office that serves mouth-watering millet-based dishes throughout the day.

Ganga Singh's SHG is one of 1,500 SHGs[30] in the state driving the *Odisha Millet Mission*. India has 1.2 crore SHGs, spanning agriculture, allied industries and service sectors. These groups—88 per cent of which are all-women-member organisations—are juggernauts of empowerment and impact, creating local economies and contributing to their communities' overall development and well-being.

Stories like Ganga Singh's are a testament to the resourcefulness of India's women entrepreneurs. Their contribution to the national economy and social fabric embodies the qualities of the humble grain they turn into hearty, nourishing flour.



Image: Emotive Lens/ CEEW

Members of Krishna SHG outside their Millet Shakti Cafe in the premises of the district government's administrative offices in Keonjhar, Odisha.



Jowar Matar Shorba

Sajje Tabbouleh Cups



Recipes

Appetisers









Jowar Matar Shorba

Gluten Free | Meat Free | Egg Free



> A rich, creamy soup of sorghum and green peas enhanced with the flavour of asafoetida and roasted cumin that strengthens the immune system."

Chef Nitin Mathur | Executive Chef
Taj Bengal, Kolkata

Ingredients

Sorghum (jowar) flour	50 gms
Boiled green pea (matar) puree	80 gms
Yoghurt	300 ml
Clarified butter (ghee)	20 gms
Garlic paste	1 tbsp
Roasted cumin powder	1 tsp
Red chilli powder	1 tsp
Salt	to taste
Chopped green coriander	for garnish
Water	as needed
Asafoetida	1/2 tsp

30 min

Serves 4

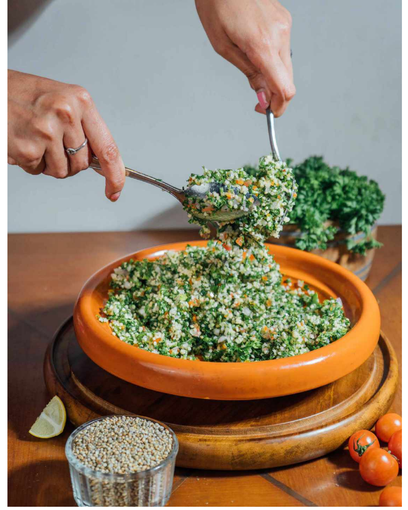
322 Kcal

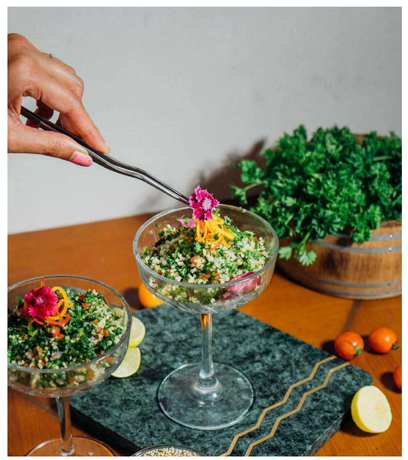
Method

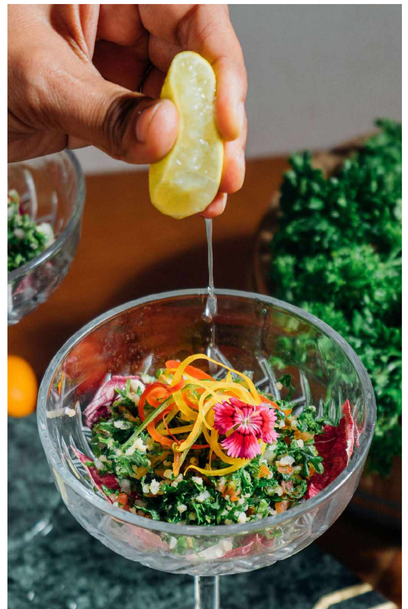
Mix sorghum flour and yoghurt with water. Whisk it to form a smooth emulsion without lumps. Mix the boiled green pea puree with it. The mixture should be thin and runny. Put the mixture in a small pan and start heating. Once it starts boiling, cook it for 5-7 minutes on a slow flame. Strain this mixture through a soup strainer and keep it aside. In a separate pan, heat the clarified butter. Temper with asafoetida. Add cumin powder, garlic paste and red chilli powder. Add all the prepared sorghum mixture to the pan. Add in the salt and cook for another 3 to 4 minutes. Adjust consistency with water if needed and serve hot. Garnish it with chopped coriander.



Images : Ankur Kewat/CEEW







Sajje Tabbouleh Cups

Gluten Free · Meat Free · Egg Free · Dairy Free



“Pearl millets add a light and healthy twist to the traditional tabbouleh (salad). The parsley, garlic, and olive oil help enhance digestion.”

Chef Kaushik Misra | Executive Chef
Taj West End, Bengaluru

Ingredients

Pearl millet (sajje)	1.25 cups
Chopped cucumber	2 tsp
Chopped tomato	2 tsp
Salt	8 tsp
Chopped parsley	8 tsp
Chopped fresh mint	4 tsp
Chopped green onion	4 tsp
Olive oil	4 tsp
Lemon juice	4 tsp
Garlic	4 tsp
Carrot shavings (optional)	3 tsp

2hrs prep + 45min

Serves 4

76 Kcal

Method

Soak the millets for 2 hours. Cook in hot water till soft, strain, and leave to cool. Salt the cut tomato and cucumber, and drain off the excess water. Finely chop the parsley, mint and green onions and add them to the mix of tomato, cucumber and millet. Season sufficiently with lemon juice, salt and some olive oil. Put the tabbouleh in a tall glass cup, add thin carrot shavings as garnishing and serve as shown in the image.

Soul Kitchen

Change begins at home

Image: Emotive Lens/ CEEW



Image: Emotive Lens/ CEEW

A repast from starters to desserts made by Himanshu Kapoor using different millets.

A Delicious Discovery

Amid the delicious scents wafting through Himanshu Kapoor's kitchen, the versatile millet shines through in the diverse spread the home chef-turned-advocate of slow food has prepared for us. As we help her bring the food from the kitchen to the table, she shares her journey of cooking with millets.

"In 2005, a friend reached out with an earnest request. Her daughter, Rhea, was gluten intolerant and couldn't eat cakes. That year, I discovered millets through my search for gluten-free grains to bake Rhea's cake."

Compared to rice, wheat and other cereal grains, millet are a better source of dietary fibre. They are also richer in some essential vitamins and minerals.[31] With their low glycemic index, they are a boon for diabetics.

Even though people know about the health benefits of eating millets, they often dislike them for being too dry and mealy. But Kapoor and her recipes disagree. She has created a delectable assortment of puddings, pancakes and *namkeen* (savoury snacks), all made from millet varieties.

While the versatility of the grain captivated Kapoor in the kitchen, what converted her into a passionate advocate for it was its ability to be "healthy for the people and the planet." Every dish she prepared tells a story of its connection to the land and the people who nurtured it.

A Conscious Citizen

Millets were a part of the traditional diet in many Asian and African countries, but their presence in most food baskets has been declining since the 1960s[32].

In India, the per capita consumption of millet fell from 32.9 kg in 1962 to just 4.2 kg in 2010, while that of wheat almost doubled from 27 kg to 52 kg during the same period.[33]

“The traditional food cooked by our grandmothers, which respects the changing seasons and the cycles of harvesting and sowing, has slowly disappeared. To bring this back...

“I set up C.Green, a social enterprise spreading knowledge about local food and slow cooking.”

Kapoor’s journey with slow cooking[34] and the alternative food has taken her around the world. In the last 25 years, she has conducted 600 workshops[35] on a variety of topics from cooking with millets to developing large-scale nutrition programmes.

As we listened to Kapoor’s experiences, we nourished our body with the nutritious food and our minds with the soulful conversations on the revival of millets.



Images : Himanshu Kapoor’s archives



Kapoor trains young chefs to cook a millet-based lunch for eminent guests of the Indian Embassy in the Kingdom of Bhutan to celebrate the International Year of Millets.



Haraka Masala Uttapam
with Peanut Chutney

Kodo Millet Khichdi



Recipes

Mains



Image : Ankur Kewat/CEEW

Haraka Masala Uttapam with Peanut Chutney

Gluten Free | Meat Free | Egg Free



“Kodo millets add a twist to the south Indian *uttapam*, a savoury pancake made of fermented rice batter and lentil flour.”

Chef Kaushik Misra | Executive Chef
Taj West End, Bengaluru

Ingredients

Overnight prep + 30 min | Serves 1 | 110 Kcal

For Peanut Chutney

Peanut	1 cup
Chickpeas	1/2 tsp
Salt	1 tsp
Green chilli split	1 tsp
Red chilli powder	1 tsp
Onion slices	2 nos
Coriander seeds	1 tsp
Garlic	1 tsp
Chopped ginger	1 tsp
Oil	1 tsp
Curry leaves	3-4 nos
Water	1 tbsp
Black gram	1 tsp
Mustard	1 tsp

For Uttapam

Kodo millet (haraka)	1/2 cup
Idli rice (shortgrain rice)	1 cup
Split urad dal (white lentils)	2 tsp
Salt	1 tsp
Water	2 tsp
Fenugreek	1 tsp
Chickpeas	2 tsp
Clarified butter (ghee)	3 tsp

For Tempering the Chutney

Curry leaves	2 tsp
Mustard seeds	1 tsp
Oil	2 tbsp
Yellow lentils	1 tsp

Method

For the Peanut Chutney: Roast the peanuts and chickpeas, and then remove the skin of the peanuts. Blend the roasted chickpeas, peanuts, chilli, chopped ginger, salt and water. Then temper it by, adding oil to a small saucepan on medium-high heat, add the curry leaves, mustard seeds, and yellow lentils. Once the ingredients start crackling for a few seconds, take this oil mixture and add it to the blended chutney made earlier. Your chutney is ready.

For the Uttapam: To create the batter, rinse the millets, idli rice, urad dal (white lentils) and chickpeas in water 2 to 3 times. Soak them together for 4-6 hours. Grind the mixture by slowly pouring in small quantities of water till you get a coarse paste. Then keep it covered outside for 6 hours to ferment. Add salt after fermentation.

When the fermented batter is ready, heat a flat pan and add 2 teaspoons of clarified butter, then add 2-3 tablespoons of the batter, cook it like a pancake on either side on medium-high heat for 3-6 minutes till golden brown.

Serve hot with the peanut chutney and a teaspoon or two of clarified butter on top of the uttapam.

Optional: You can also add vegetables such as chopped onions and tomatoes on the uttapam right after putting the fermented batter on the pan.







Images : Ankur Kewat/CEEW



Kodo Millet Khichdi

Gluten Free · Meat Free · Egg Free · Dairy Free



“This healthier version of the ubiquitous khichdi (rice and lentil porridge) is made with kodo millets. This simple and comfort food is loaded with nutrients that not only keep you full, but can also aid weight loss.”

Chef Nitin Mathur | Executive Chef
Taj Bengal, Kolkata

Ingredients

Kodo millet	200 gms
Green gram	200 gms
Salt	1 tsp
Water	1.2 ltr
Clarified butter (ghee)	100 ml
Cumin seeds	1/2 tsp
Onion	120 gms
Tomatoes	100 gms
Bay leaf	2 nos
Ginger	20 gms
Green chillies	2 nos
Turmeric powder	3/4 tsp
Sugar	1/2 cup
Salt	2 tsp
Green peas	80 gms
Diced carrots	60 gms
Garam masala powder/roasted cumin powder	1.5 tsp

2hrs prep + 60 min

Serves 4

329 Kcal

Method

Wash, rinse and soak the kodo millet and the green gram separately for 2 hours. Add clarified butter in a saucepan on medium-high heat. Once the clarified butter has melted, add cumin seeds, chopped onions, chopped ginger and cook till the onions are translucent. Then add in the chopped green chillies and chopped tomatoes.

Drain the millet and lentils and add to the pan, sauté them for 1 to 2 minutes. Then add the turmeric, the bay leaves and the cut vegetables. Add 1.2 litres of hot water and salt, and bring it to a boil. Cover and cook on medium heat for 15-20 minutes till the millet and lentils are soft. Finish by adding cumin or garam masala powder, and garnishing with a few teaspoons of clarified butter and a sprig of coriander. Serve hot.







Images : Ankur Kewat/CEEW

Into the Brew





Entrepreneurs and big businesses brew a transformation at scale









A Cultural Catalysis

A young audience has gathered at a rooftop bar in Mumbai on a Saturday afternoon to listen to Thomas Zacharias, chef and founder of The Locavore, a platform committed to “doing good through food”.

The Millet Tap Takeover event has patrons weaving through an array of captivating activities, including the whimsical “Which Millet Will You Swipe Right On?” where the ‘dating profiles’ of various millets entice attendees. Amidst sips of locally brewed pearl millet beers and ales, lively discussions merge the playful with the insightful.

“Experiencing flavours and sharing stories can be a powerful catalyst for change since we are all driven by our experiences and emotions,” Zacharias proclaims. Within a span of 18 months, The Locavore has nurtured a community of 18 food producers and brands, orchestrated 23 events, curated 92 recipes, and amassed 165,000 website visits.

The Rainmatter Foundation, a non-profit dedicated to climate action in India, succinctly expresses its support for The Locavore's Millet Revival Project: “They're at the forefront of preserving local culinary traditions against the tide of globalised standardisation of our diets. With their continued efforts, we envision millets becoming the staple grain in both homes and restaurants.” We need to revive our bond with nature and ignite a cultural renaissance that bridges contemporary tastes with ancestral knowledge.

The Locavore’s Millet Revival Project promotes the consumption of millets and local foods through events.

A Wholesome Disruption

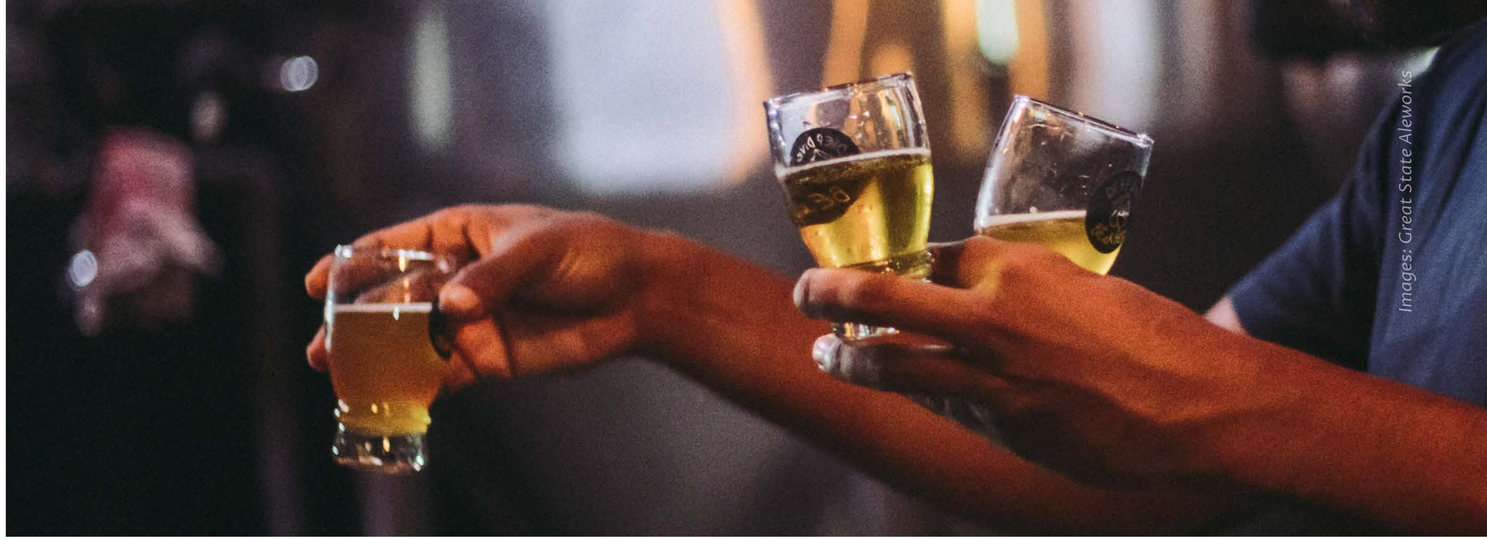
About 150 km south-east of Mumbai, in Pune, Nakul Bhonsle explains the intricacies of brewing beers from millets in his brewery, The Great State Aleworks. “We were one of the first breweries in India to introduce a range of millet beers which contained 30 per cent millets, and recognised a knowledge gap in brewing with millets, so we published a first-of-its-kind handbook so anyone can learn how to brew millet beers.”

Bhonsle has gone beyond product innovation, from sourcing millets through local producers via The Locavore's producer network, to creating a millet brewing handbook, and using creative labels that promote sustainable food values.

Innovation and cultural shifts are crucial for the longevity of our food systems. Zacharias captures this essence through the mission of his organisation: “The Locavore is more than a platform—it's a movement aimed at fostering connections and synergies among farmers, brewers, restaurateurs, and consumers, all united by a passion for a sustainable food future for everyone.”

Bhonsle and Zacharias are not alone in this burgeoning movement of food innovation using millet. Even big brands have joined the movement by introducing millets into their products like mueslis and noodles and are brewing a transformation to scale.

The Great State Aleworks brews beers entirely made from locally sourced millets. It was able to achieve this feat after four years of constant pursuit.



Images: Great State Aleworks



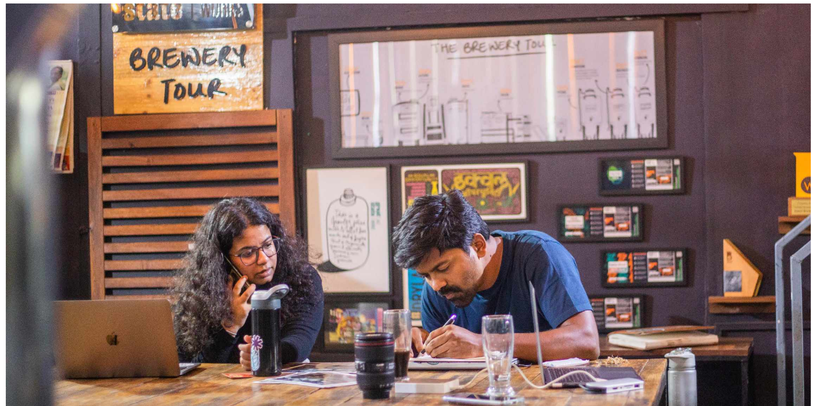






Image: Akshaya Patra

Akshary Patra runs large-scale kitchens across a few states in India, where meals for public schoolchildren are cooked and distributed as part of the ***Midday Meal Scheme.*** They produce 2 million meals a day which won them the Global Food Champion Award by BBC World Service in 2019.



Image: Akshaya Patra

Millet ***Bisi Bele Bhath,*** (originally made with rice) being served to schoolchildren in Vadodara by Akshaya Patra.



Image: Wholsum foods

A variety of millet-based foods are now available in supermarkets in urban India.

A Transformation to Scale

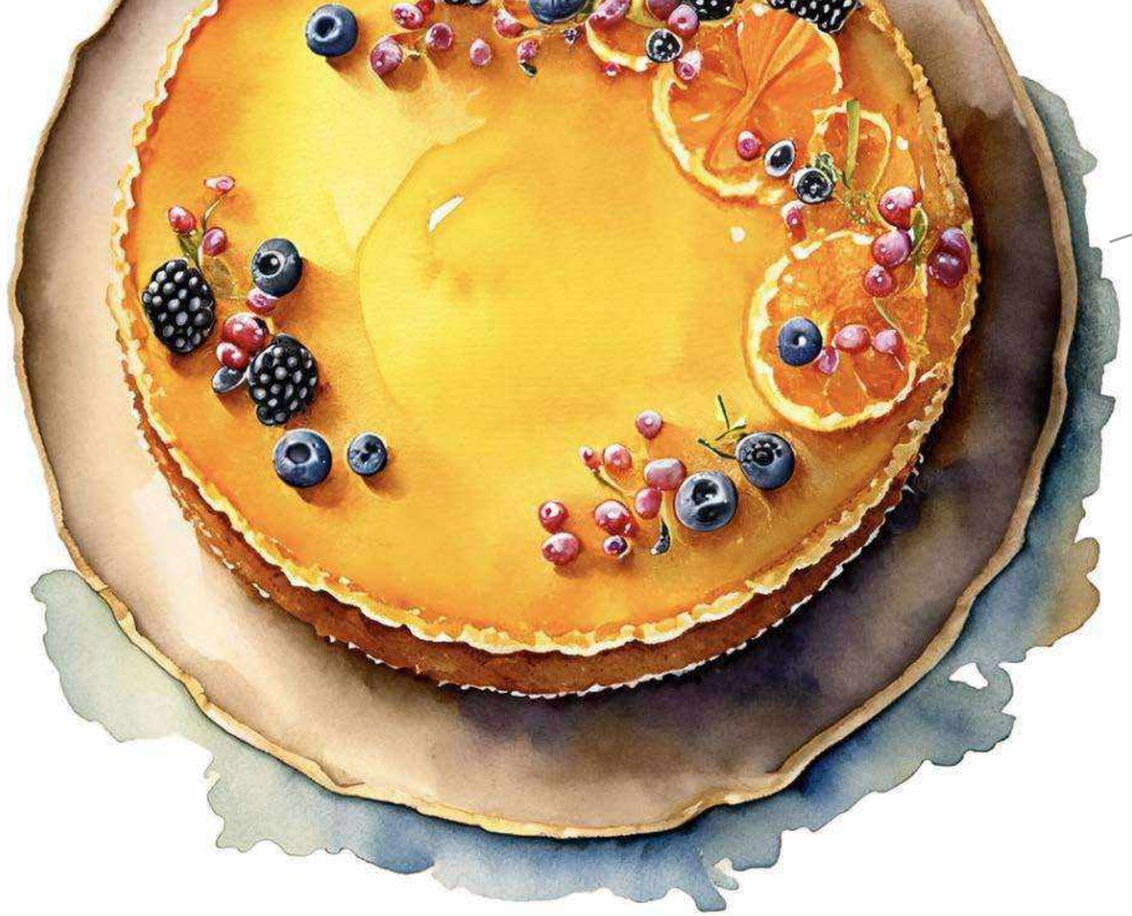
Beyond the niche pockets of innovation such as Nakul Bhonsle's brewery in Pune, the millet transformation is becoming mainstream too.

The global market for millets is poised to grow annually at 4.5 per cent from 2021 to 2026.[36] Through a comprehensive promotion strategy by the Government of India, the nation's contribution to millet export has grown from USD 62.75 million in 2021-22 to USD 75.46 million in 2022-23. [37,38]

India's domestic market is also flourishing. Hand in hand with the policy push[39] to increase millet consumption, the food processing industry has increased healthier millet-based alternatives in breads, biscuits, drink powders, muesli and cereals in the market.[40] Alongside the major FMCG companies, India boasts of a thriving ecosystem of over 500 startups[41] engaged in the millets value chain. Together, these are creating the infrastructure and innovation needed for a steady farm-to-fork supply of millets.

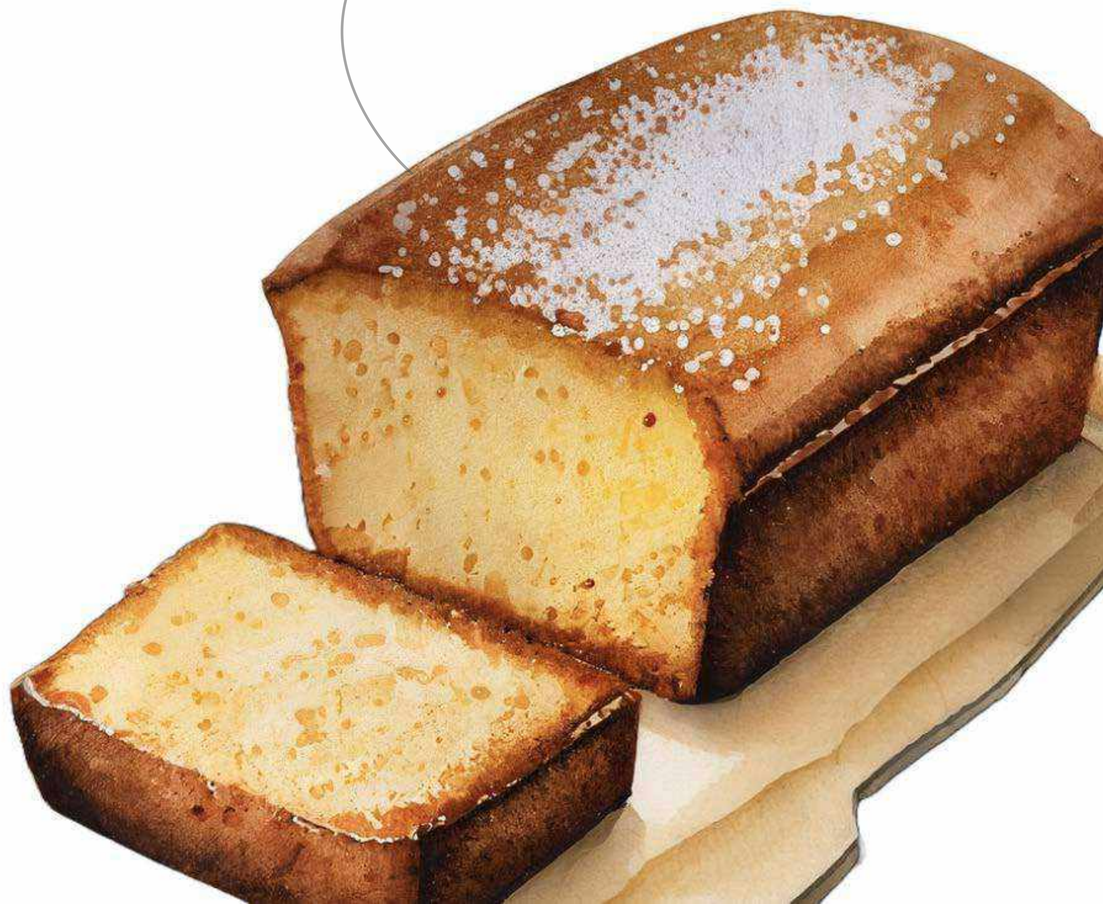
Beyond the private sector, government and non-profits and cater to the nutritional needs of 800 million people through the public distribution system. The PM-POSHAN provides millets as take-home ration and in cooked meals at childcare centres. The Akshaya Patra Foundation, a prominent NGO, procures millets from local communities to prepare nutritious recipes that they serve to 2 million schoolchildren everyday.[42]

With these developments, millets are beginning to reclaim their place in India's food system.



Bolo Gosto

Toucinho Do Céu



Recipes

Desserts



Image : Ankur Kewat/CEEW







Bolo Gosto

Gluten Free Meat Free



> Bolo Gosto loosely translates to 'cake-as-per-my-liking' in Portuguese and is a versatile cake. It can be paired with anything from coffee to honey to ice cream."

Chef Dibyendu Roy | Executive Chef
Taj Fort Aguada Resort & Spa, Goa

Ingredients

Proso millets	250 gms
Coconut	250 gms
Sugar	100 gms
Whole eggs	5 nos
Egg yolks	3 nos
Nutmeg powder	3/4 tbsp
Unsalted butter	113 gm
Baking powder	1/2 tsp
Coconut water	100 ml

65 min

Serves 220gms

315 Kcal

Method

Dry roast the proso millet over a low flame till it starts changing colour. Remove from the fire and set aside to cool. Once it reaches room temperature, grind the millet into a fine powder and set aside. Grind the freshly grated coconut with 100 ml of coconut water and set aside.
In a mixing bowl, add 5 whole eggs and 3 yolks, while slowly adding the sugar whisk to a smooth paste-like consistency and set aside. Melt the unsalted butter and add it to the coconut mix. Add nutmeg powder. Add the roasted millet powder and mix it well ensuring there are no lumps. Add baking powder and let it rest for 45 minutes. Pour the mixture into a baking mould and bake at 180°C for 45 minutes. Your cake is ready.



Images : Ankur Kewat/CEEW







Toucinho Do Céu

Gluten Free Meat Free



“It’s a versatile Portuguese almond cake and one of my personal favourites. It can either be served warm or with your choice of ice cream.”

Chef Dibyendu Roy | Executive Chef
Taj Fort Aguada Resort & Spa, Goa

Ingredients

Pearl millet flour	200 gms
Sugar	300 gms
Water	250 ml
Fig jam	25 gms
Almond flour	50 gms
Egg yolks	5 nos
Whole eggs	3 nos
Vanilla extract	1 tsp
Ice cream (optional)	1 scoop

45 min

Serves 400gms

261 Kcal

Method

Boil water, sugar, and salt in a saucepan. Once the water starts boiling, add in pearl millet flour and almond flour little by little so that no lumps are formed. Stir gently but constantly over medium-to low-heat for approximately 10 minutes until the mixture starts to thicken and then take it off the heat.

In a separate bowl, lightly whisk the yolks and whole eggs into a thick creamy texture for 4 minutes over a double boiler. Fold the almond mixture into the egg mixture. Add the vanilla extract and fig jam. Pour the batter into a baking pan, and bake at 180°C for 28-30 minutes until the cake is firm in the centre and lightly golden brown on the top. Remove from the pan and serve it with a scoop of ice cream if you like.

Chefs without Borders





A global network of chefs unite for sustainable culinary innovation







Chef Mokgadi in Tanzania cooking nutritious meals in schools with and for the students.

The Unconventional Chefs

"My grandmother's kitchen garden was the beginning of my journey with the millet," says South African Chef Mokgadi Itsweng. As maize colonised the fields of South Africa, sorghum almost disappeared from local plates. Driven by childhood inspiration, she is reviving sorghum and other millets in South African cuisine. Her innovations include a sorghum and bambara nut stew that she likens to "a big giant hug".

Thousands of miles away in New York, world-renowned Chef Pierre Thiam, of Senegalese origin, echoes similar words.

> "Africa is a net importer of food, and I never understood it. We grow stuff we don't know, and we don't grow the stuff we know."

Chef Thiam started Yolélé, a company focused on promoting fonio (millet), a traditional and endemic millet of the Sahel region of west Africa, to address the branding and accessibility issues that millets often face. Sourced only from smallholder farmers and micro-processors from the region while respecting the diversity of the land, all fonio snacks are rooted in the values of a sustainable food system.

In London, Chef Justin Horne, founder of London's zero-waste restaurant, Tiny Leaf, and co-founder of the Chefs' Manifesto, pays tribute to the International Year of Millets with his innovative millet caviar and the harissa roast carrot.

Uniting Chefs Itsweng, Thiam, Horne, and 1,250 others is one mission: the Chefs' Manifesto.



1



2



3



4

1 Paul Newnham, Executive Director of the Chefs' Manifesto, holds a sorghum stalk and advocates for a future that has millets in global diets.

2 Chef Mokgadi Itsweng's *Ting Ya Mabele* is a traditional fermented sorghum porridge of the Tswana community of Botswana. 'Ting' means a fermented porridge, while 'mabele' refers to sorghum meal.

3 Chef Pierre Thiam sources fonio millets from smallholder farmers in Senegal for his brand, Yolele, which produces nutritious millet-based snacks in the US.

4 Chef Justin Horne, co-founder of the Chefs' Manifesto, adds finishing touches to his zero-waste harissa millet and carrot roast.

An Actionable Manifesto

Launched in 2018, the Chefs' Manifesto is now a global network of more than 1,250 chefs in 93 countries, facilitated by the SDG2 (Zero Hunger) Advocacy Hub. The Chefs' Manifesto unites chefs under a global mission to help deliver progress through actions that create a more sustainable food system. It unites the chefs under one mission: to end world hunger and create a sustainable food system. Chefs can catalyse change across the food system. "They influence what we grow, what we eat and how we perceive our food. They motivate people to make changes in their kitchens and communities and promise a better food future for all," explains the executive director of the Manifesto, Paul Newnham.

Through Action Hubs that bring together chefs, and other stakeholders, through events and workshops, collaborations with 120+ organisations, and curating sustainable dining experiences for global leaders, the Manifesto is advancing the transition to sustainable food systems. Paul Newnham summarises the role of millets in this mission: "By 2050, there will be 10 billion mouths to feed, and in the face of climate change, we must lean on 'climate-friendly foods'. Millets are climate-resilient, nutritious, affordable, and promote diversified diets.

> "These ancient grains hold unlimited potential and are delicious!"

Chef Asma Khan and Chef Tom Hunt take masterclasses on cooking with millets at their London Action Hub.







Garlic Rajgira Pickle in
Peri Peri Sauce

Ragi Choux Shells
with Coconut Halwa



Recipes

Innovations



Image : Ankur Kewat/CEEW

Garlic Rajgira Pickle in Peri Peri Sauce

Meat Free Egg Free



> A pickle inspired by a local peri peri sauce that lasts for six months when refrigerated or kept at 15°C.”

Chef Dibyendu Roy | Executive Chef
Taj Fort Aguada Resort & Spa, Goa

Ingredients

Puffed amaranth (rajgira seeds)	120 gms
Sesame oil	300ml
Turmeric powder	10 gms
Peri peri chilli powder	50 gms
Tamarind pulp	200 gms
Garlic cloves	350 gms
Jaggery	100 gms
Rock salt	to taste

20 min

10-15 servings

For Tempering

Fenugreek seeds	2 tsp
Mustard seeds	1 tsp
Cumin seeds	1 tsp
Dry red whole chillies	4-5 nos
Asafoetida	pinch

Method

Peel the garlic, wash it with warm water and set aside. Roast the puffed amaranth on a very low flame till it starts changing colour. Remove from the flame and keep it aside to cool. In a saucepan, lightly shallow fry the garlic in sesame oil. Add the whole red chilies and cook for a minute. Strain it and keep aside to cool.

In a separate pan, heat oil for tempering. Once the oil is hot, add turmeric powder, peri peri chili powder, fenugreek seeds, mustard, cumin seeds, and pinch of asafoetida. Add the fried garlic to it and cook over low flame for one minute. Remove the spices from the heat and add the roasted amaranth while stirring. Take another pan and heat the tamarind pulp and jaggery, and season with rock salt. Now add the garlic mixture with the amaranth and tamarind mixture. Mix it well and set it aside for 30 minutes or till it reaches room temperature. Check for seasoning and adjust if required. Store it in a glass jar and this pickle is good to go for six months.







Images : Ankur Kewat/CEEW



Ragi Choux Shells with Coconut Halwa

Meat Free



“A delish mélange of protein and potassium that makes for a hearty dessert. It is a yummy sweet treat and also great for weight watchers.”

Chef Nitin Mathur | Executive Chef
Taj Bengal, Kolkata

Ingredients

For the choux shell

Finger millet (ragi) flour	100 gms
Water	500 ml
Butter	200 gms
Salt	5 gms
Flour	200 gms
Eggs	10 nos

For the Halwa

Finger millet (ragi) flour	50 gms
Clarified butter (ghee)	50 ml
Water	400 ml
Jaggery powder	50 gms
Coconut milk	100 ml
Almonds	35 gms
Sunflower seeds	35 gms

60 min

Serves 12

1285 Kcal

Method

In a pan, combine water, butter and salt. Cook for 2 minutes on a high-flame until the liquid comes to a rolling boil and the butter has melted. Remove from the heat and add the flour at once. Using a silicone spatula, thoroughly mix in the flour till it is free of lumps. Put the saucepan back with the flour on medium-high heat and cook for about 2 minutes, while stirring continuously.

For the Choux: Transfer the dough to a round-bottomed utensil/pan. Leave it for 4 to 5 minutes, till the temperature reduces. Add one egg and start beating it into the dough in a clockwise direction, repeat this process adding one egg at a time, till all eggs have been incorporated and the mixture is fluffy. This is the choux and you can use it right away but it is recommended that you leave it aside for 2 hours before using it. Put this choux (mixture) into a piping bag.

On a greased baking tray, put small- to medium-sized lumps of the mixture, which will create 12-15 pieces. Preheat the oven to 180°C and then bake the choux for approximately 25 minutes. After 25 minutes, reduce the temperature of the oven to 120°C and keep it in for another 3 to 4 minutes to dry.

For the Halwa (sweet mixture): In a non-stick pan, heat clarified butter, add in the finger millet flour and stir on a medium flame for 2 to 3 minutes. Add water, jaggery, and coconut milk and stir to make a uniform mixture. Make sure you mix well for 2 to 3 minutes. Remove from the flame and mix in the almond and sunflower seeds. Lastly, let the halwa cool for some time before adding it in the choux shells.

To assemble the dessert, take the baked choux shells and cut them into two horizontal halves. Pipe in the halwa on to the bottom half of the choux shell. Close the shell with the top half, garnish with sugar dust and a berry of your choice, and serve.







Images : Ankur Kewat/CEEW

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Flour Power

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