



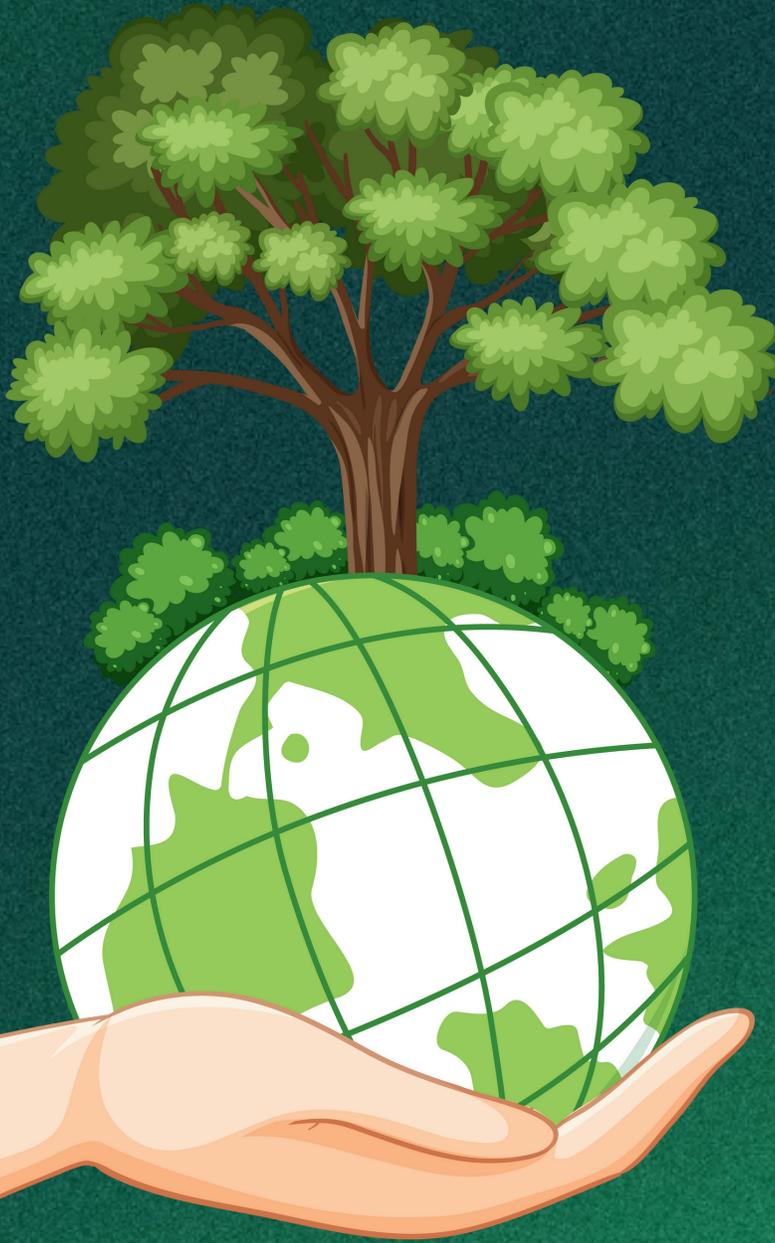
PURNABRAHMA



NEW AGE FARMING FOR HEALTHY PLANET

Oct - Dec 2025 | Year 5 | Volume- 4

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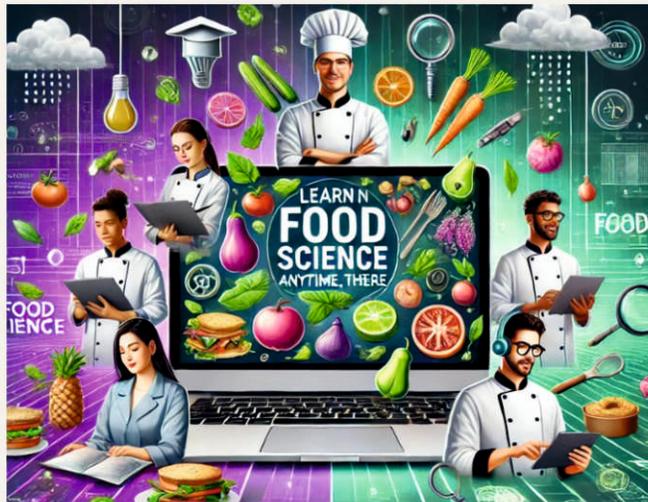
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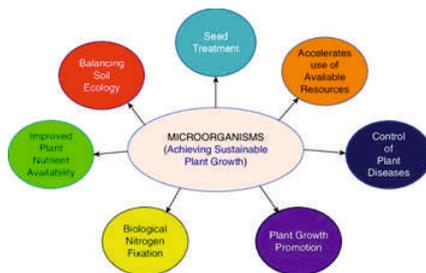
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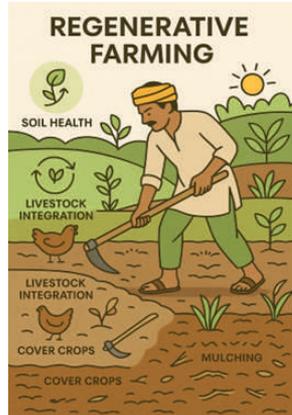
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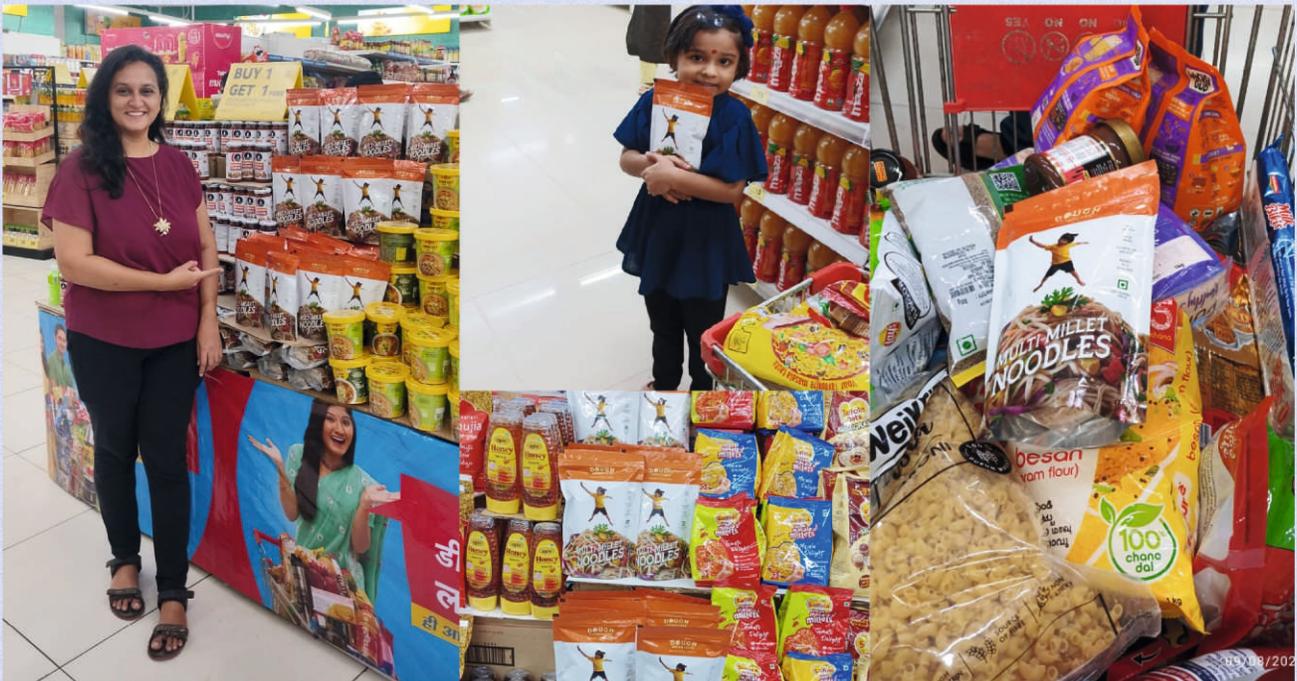
Nidhi Godbole Deshpande
Editor Purnabrahma
Senior Food Consultant
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CASMB MEMBER'S ACHIEVEMENT



Launched Healthy High Protein Jowar Puffs. Nihkan launches New product - Healthy Protein crackers made with Sprouted lentils & Millets, Gluten free, Vegan, No Palm oil, No Preservatives.



Placement of Products with Reliance Retail, Smart Bazaar, Mumbai.
-Mansi Kulkarni



CASMB ACTIVITIES



Nileshe Lele, President CASMB, skillfully moderated one of the key sessions, bringing sharp insights to the table, Anuga Select India.



A proud highlight from the CASMB Pavilion at ANUGA Select India – we launched Purnabrahma, our latest step towards redefining waste management in the F&B sector.



Big milestone achieved! CASMB Guru Nanak Khalsa College – Nutraceutical Department, with Foodtech Pathshala as the Training Partner, have officially signed an MoU



KFC India's Sahyog Program: Empowering Food Safety in Chennai The Chamber for Advancement of Small and Medium Businesses (CASMB) and AFSTI Chennai Chapter successfully hosted KFC India's Sahyog Program at Queen Mary's College, Chennai.



CASMB at World Food India 2025! We were proud to be part of the Global Food Regulators Summit (GFRS), representing the voice of MSMEs and showcasing the power of collaboration between industry and government.



Empowering Through Knowledge! CASMB successfully organized a RAMP Training Program focused on Risk Assessment and Management Practices. The session helped participants enhance their skills, improve workplace safety, and strengthen industry standards through expert-led insights and practical learning.

Dr. Prabodh Halde

Chairman
Chamber for Advancement of
Small and Medium Businesses,
CASMB



I am delighted to share my thoughts in this new issue of *Purnabrahma Magazine*. The chosen theme, “**New Age Farming for a Healthy Planet,**” is both relevant and timely. Agriculture is the foundation of India's economy, and how we shape its future will decide the health of our people and our planet.

India has nearly 65 percent of its population dependent on agriculture. Yet, many farmers still rely on conventional methods with limited technology and unpredictable returns. To secure the next generation, we must move beyond traditional cultivation toward **value addition and value creation**. Farmers should become producers of ideas, innovators, and entrepreneurs.

During one of my visits to Brazil, I saw a remarkable transformation in agricultural practices. Farmers there use **drones for pesticide spraying**. The drones precisely target crops and reduce wastage, ensuring safety for both the environment and the workers. This experience showed me how **high-tech and precision farming** can make agriculture efficient, sustainable, and profitable.

In India, we must invest in such technologies and train our farmers to use them effectively. Digital farming, artificial intelligence, soil sensors, and satellite mapping are no longer future concepts—they are the present. We can use them to monitor soil health, control irrigation, and apply fertilizers or pesticides in accurate doses.

We also need to **rethink crop choices**. Instead of focusing only on staple crops, farmers should explore **herbal, aromatic, and nutraceutical plants**. The Central Institute of Medicinal and Aromatic Plants (CIMAP) have made great progress in this area. Post-COVID, the demand for herbal extracts, essential oils, and plant-based nutraceuticals has increased sharply. This is an opportunity for India to lead.

Farmers growing lemongrass, tulsi, ashwagandha, and aloe vera are already seeing better returns. Such crops

need less water, fewer chemicals, and have ready export markets. With proper support and awareness, we can build a strong value chain around them—from cultivation to processing and packaging.

Another striking lesson from Brazil was their **rain-fed sugarcane** cultivation. Entire regions grow sugarcane without any irrigation, using only rainwater. They have developed varieties that are drought-tolerant and pest-resistant. India can benefit from such innovation. Research institutions should focus on developing **resilient and high-yield varieties** that require fewer resources.

There is also scope to study **genetically modified (GM)** crops where necessary, within scientific and regulatory boundaries. The goal is not to replace natural farming but to strengthen it through innovation and research.

We must also remember that sustainable agriculture is not only about technology. It is about **balance**—using resources wisely, reducing dependence on chemicals, and protecting soil health. Every drop of water and every inch of land must be treated as valuable. If we integrate modern science with traditional wisdom, India can become a model for sustainable agriculture.

At CASMB, we believe that empowering farmers and small businesses is the key to rural transformation. We work to connect farmers, technologists, and entrepreneurs to create value-added products that benefit both producers and consumers. The goal is simple: better income for farmers and better nutrition for society.

This new age of farming calls for collaboration between academia, industry, and policymakers. It is time to make agriculture aspirational for the youth. When young people see farming as a science-driven profession, we will see a true revolution.

I thank *Purnabrahma Magazine* for selecting such a meaningful topic and for giving a voice to ideas that can shape the future of Indian agriculture. Together, let us build a model of farming that is smart, sustainable, and healthy—for both people and the planet.

With gratitude and best wishes,

Dr. Prabodh S. Halde
Chairman, CASMB



CHAMBER FOR ADVANCEMENT
OF SMALL & MEDIUM BUSINESSES

Nilesh Lele

**President,
Chamber for Advancement
of Small & Medium
Business (CASMB)**



Dear Members,

Agriculture has always been more than an occupation - it is the foundation of human civilization, a sacred relationship between humankind and nature. Today, as the world faces the urgent challenge of climate change, depleting soil fertility, and food insecurity, we stand at a crucial crossroad. The choices we make now will determine not only our food systems but also the health of our planet for generations to come.

The concept of *New Age Farming* brings together the best of both worlds - ancient wisdom and modern innovation. It emphasizes harmony rather than exploitation, regeneration rather than extraction, and collective well-being rather than mere profit. Our farmers are no longer just cultivators; they are innovators, environmental stewards, and guardians of the Earth's natural wealth.

Across India, we see remarkable examples of transformation. Farmers are adopting organic and regenerative practices that restore soil health, minimize chemical use, and enhance biodiversity. Technological tools such as sensors, drones, and data analytics are enabling precise irrigation, smart pest management, and efficient use of natural resources. These innovations are reshaping the agricultural landscape and empowering farmers to produce more with less - less water, less energy, and fewer ecological costs.

At *Purnabrahma*, we deeply believe that every effort toward sustainable agriculture is a step toward global health and harmony. The soil beneath our feet is a living system, and its vitality directly reflects the health of our communities. Supporting farmers in this transition - through training, policy advocacy, and research - is essential for a truly self-reliant and sustainable India.

This issue of *Purnabrahma Magazine* celebrates the change makers in agriculture - the thinkers, doers, and dreamers who are redefining farming as a path to both prosperity and planetary wellness.

Warm regards,

Nilesh Lele

**President,
Chamber for Advancement of Small &
Medium Business (CASMB)**



PURNABRAHMA

**Nidhi Godbole
Deshpande**

**Editor Purnabrahma
Senior Food Consultant
Farm to Fork Solutions**



Modern agriculture is no longer just about productivity; it's about responsibility. We are witnessing a powerful shift - from treating soil as a medium for yield to recognizing it as a living ecosystem. This change in perception is the foundation of *new age farming*, where every innovation seeks to regenerate rather than exploit.

Across the world and within India, this evolution is already taking root. In Sikkim, India's first fully organic state, farmers have demonstrated how chemical-free cultivation can sustain livelihoods and preserve biodiversity. In Punjab and Haryana, *no-burn residue management* has begun reducing stubble burning and air pollution - turning agricultural waste into soil wealth. These are not isolated examples - they represent a global awakening. New Age Farming integrates the precision of science with the conscience of sustainability. Tools and technologies are empowering farmers to

make smarter decisions, conserve resources, and improve yields. At the same time, a return to indigenous practices like mixed cropping, composting, and natural pest management ensures that the Earth's fertility is preserved for future generations.

The necessity of this transformation cannot be overstated. Agriculture is both a victim and a contributor to climate change - responsible for nearly a third of greenhouse gas emissions, yet also the sector most vulnerable to its impacts. By shifting toward climate-smart and regenerative methods, we can reverse this cycle - turning farms into carbon sinks, restoring degraded soils, and ensuring food security for all.

This issue of *Purnabrahma Magazine* brings together stories of innovation, resilience, and revival - from farmers, scientists, policymakers, and entrepreneurs who are sowing the seeds of a healthier planet. Their collective journey reminds us that the future of farming is not just about growing crops - it is about growing balance, hope, and harmony between people and nature.

Nidhi Godbole Deshpande

**Editor Purnabrahma
Senior Food Consultant**



PURNABRAHMA

Dr. Umesh Kamble

Secretary
Chamber for Advancement of
Small & Medium Businesses
(CASMB)



In the 21st century, farming is no longer confined to ploughs and monsoons — it is powered by innovation, sustainability, and purpose. The new generation of Indian farmers is redefining agriculture as an enterprise that not only feeds the nation but also fuels economic growth and heals the planet. *New Age Farming* is ushering in a silent revolution across our rural landscape, where technology meets tradition and prosperity aligns with planetary health.

Across India, inspiring examples are proving that sustainable practices can be both profitable and planet-friendly. In Maharashtra, farmers practicing zero-budget natural farming have reduced input costs by over 50% while improving soil fertility and crop resilience. In Telangana, drone-assisted precision farming is helping smallholders apply fertilizers and pesticides efficiently, saving resources and protecting water bodies from chemical runoff. Similarly, solar-powered irrigation systems in Gujarat and Rajasthan have cut energy costs and enabled year-round cultivation, improving incomes and reducing carbon emissions.

These examples reflect a broader economic transformation. As farmers adopt digital

platforms and agri-tech solutions, they gain direct access to markets and transparent pricing. The rise of Farmer Producer Organizations (FPOs) and community-based models has further strengthened bargaining power and enabled collective branding of eco-friendly produce. Sustainable farming is thus emerging not just as an environmental necessity, but as a viable business model—one that builds rural wealth while conserving natural resources.

New Age Farming is also contributing significantly to India's green economy. Organic exports, eco-certified produce, and climate-resilient crops are creating new avenues for trade and employment. Government initiatives promoting natural farming, drip irrigation, and renewable energy integration are reinforcing this movement, aligning economic policy with environmental stewardship.

At Purnabrahma, we view this transformation as a beacon of hope - a sign that economic progress and ecological balance can move hand in hand. A healthy planet is the foundation of a healthy economy. When the soil thrives, when water is valued, and when biodiversity flourishes, our farmers prosper - and so does the nation.

Warm regards,

Dr. Umesh Kamble

Secretary
Chamber for Advancement of
Small & Medium Business (CASMB)

Dr. Prakash Kondekar

**BSc(Hons) MD(Homeo)
ND Ayurved Ratna
LLB Fellow of Royal Society
of Health (London)
BTER(UK)**



Saving the Planet thro' NEW AGE FARMING.

Leveraging technological advancements and data-driven insights to optimize every aspect of agricultural production leaving back the traditional methods of farming. This approach acknowledges the complexities of modern farming challenges, with innovative solutions to address them effectively. Some of the factors can be as below.

1. Considering New Age Farming, precision agriculture, a methodology that employs a suite of technologies such as GPS, sensors and drones to gather precise data on soil conditions, weather patterns, and crop health. By harnessing this information, farmers can make informed decisions regarding irrigation, fertilization, and pest management, maximizing yields while minimizing resource inputs.
2. Slowly arable land is becoming scarce hence solution can be vertical farming offers a sustainable solution. By vertically stacking crops in controlled indoor environments, farmers can maximize space utilization and optimize growing conditions. This method not only increases crop yields but also reduces water usage and transportation costs, making fresh produce more accessible to urban populations.
3. Soilless farming techniques such as aquaponics and hydroponics represent another facet of New Age Farming. These methods involve cultivating plants in nutrient-rich water solutions, bypassing the need for traditional soil utilization. By integrating aquaculture with plant cultivation, aquaponics systems create symbiotic relationships between fish and plants, resulting in efficient nutrient cycling and enhanced

productivity. Hydroponic systems can provide precise control over nutrient delivery, allowing for accelerated plant growth and higher yields which is need of the hour.

4. Automation and data-driven decision-making are essential factors, in New Age Farming. Autonomous machinery, IoT devices and advanced analytics platforms empower farmers to streamline operations, optimize resource utilization and improve overall efficiency. By harnessing the power of real-time data and predictive analytics, farmers can easily manage their farms, mitigating risks and maximizing yields.

IoT devices can detect pests early, preventing widespread crop damage. Automated pest control systems act on real-time data to protect crops. Smart agriculture practices reduce the need for chemical pesticides. IoT solutions are cost-effective over time by reducing losses and input costs. Adopting IoT in pest control contributes to sustainable farming practices.

In short, New Age Farming is about more than just maximizing productivity, it's about cultivating a sustainable future for generations to come. By embracing practices that conserve resources, zero waste on the basis of principle waste to wealth and protect biodiversity, New Age Farmers are stewards of the land, nurturing ecosystems that nourish both people and the planet....



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“New Age Farming with Microbiological Intervention”

Nikita Kansara

Microbiologist & Nutritionist (Mumbai)



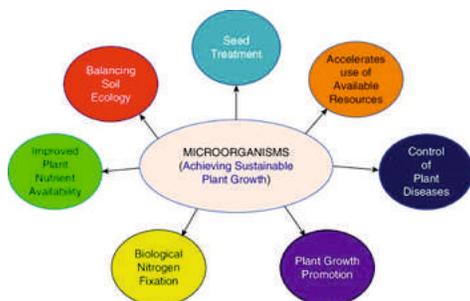
India's agriculture is at a crossroads. Traditional methods have fed the nation for generations, but challenges - soil degradation, chemical overuse, water scarcity and climate variability - demand smarter, sustainable solutions. New - age farming powered by microbiological interventions offers a promising pathway: using beneficial microbes to improve soil health, increase soil yields, reduce chemical inputs and build climate resilience.

What is microbiological intervention?

Microbiological intervention refers to the deliberate use of microorganisms - bacteria, fungi, algae, actinomycetes, and protozoa - to enhance agricultural productivity and ecosystem functioning. These microbes can be applied as biofertilizers, biopesticides, bio-stimulants or as inoculants to rehabilitate degraded soils and promote plant health. They work by fixing atmospheric nitrogen, solubilizing phosphorus, producing plant hormones, decomposing organic matter and suppressing pathogens.

Why it fits well in India?

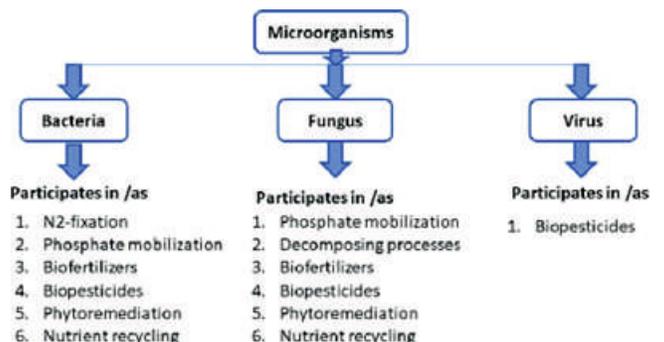
With Indian agriculture largely dependent on small holders and spanning multiple agro-climatic regions, the microbial



interventions must remain cost - effective, scalable and eco - friendly. It reduces dependency on costly synthetic fertilizers and pesticides. It improves the quality of the marginal soil, locally produced and tailored to specific crops and soil.

Key microbial tools and their roles

1. Rhizobium and other Nitrogen fixers -Symbiotic bacteria that forms the nodules on legumes and fix atmospheric nitrogen, reducing the need for synthetic N - fertilizers.
2. Phosphate - solubilizing bacteria (PSB) -Convert insoluble phosphorus into forms plants can absorb, improving P - use efficiency.
3. Mycorrhizal fungi -Forms network with plant roots, enhancing water and nutrient uptake, and increasing drought tolerance.
4. Plant growth - promoting rhizobacteria (PGPR) - Produces hormones, increase plant growth and induce systemic resistance against diseases.
5. Biocontrol agents (e.g. Bacillus Trichoderma) - suppress soil borne pathogens and reduces pesticides usage.
6. Composting and waste degrading microbes - Speed up organic matter recycling, producing, producing high quality compost and improving soil structure.
7. Algal biofertilizers - Cyanobacterial and micro algae improve soil organic content, fix nitrogen and can be grown on marginal lands or in farm ponds.
8. Bio-remedial microbes: - Can break down pollutants and heavy metals in polluted soil, helping to clean and restore land for crop production.



Benefits

- Improved soil health: - Rebuild soil structure, increases decomposition of organic matter and nutrient recycling.
- Higher nutrient use efficiency: - Crops extract more nutrients from the same or reduced fertilizer inputs.
- Improves plant growth and immunity power: - Boost the overall growth of crops and increases the resistance power against diseases.
- Lower input cost and environmental protection: - Reduced chemical fertilizer and pesticides use cuts farmer expenses and pollution.
- Improves resilience to stress: - Mycorrhizae and PGPR help crops withstand drought, salinity and some diseases.

Real world application in India.

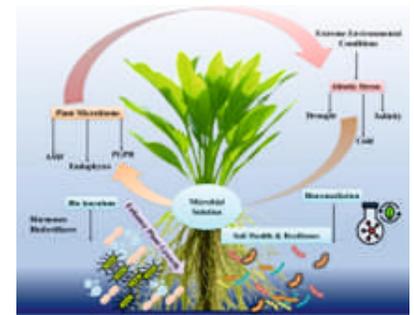
- IISR, Kerala: Developed microbial bio-capsules, created Bactolime, Bactogypsum, Trichogypsum to improve soil health.
- Uttar Pradesh (ICAR - IIPR, Kanpur):- Designed microbial consortia for pulses under drought.
- Delhi (ICAR -IARI):- Introduced Push Decomposer for faster straw breakdown. Widely used in Punjab, Haryana, UP, Delhi.
- ICAR- NBAIM (U.P): Runs India's Soil Microbiome Project. Maintain microbial culture collection.
- State labs and SAUs: Produce biopesticides like Trichoderma and Pseudomonas
- In many parts of India, legumes inoculants (Rhizobium) are widely used to boost pulses.
- Azolla and Cyanobacteria biofertilizers are used in rice paddies to cut nitrogen costs.
- Trico derma - based formulations control root diseases in horticulture and plantation crops.

Environmental and biological challenges

- Quality control: Many commercial bio- inputs vary in potency and shelf - life., poor quality products undermine trust.
- Limited range of action: The high specificity of some microbial products can require the use of multiple inoculants to target different diseases or various functions.
- Context specificity: Microbial effectiveness depends on soil type, crop and climate - one solution doesn't fit all.
- Awareness and training: Farmer needs to be trained on storage, application timings, etc. since one solution does not fit all.
- Short -term yield expectations: Farmers under economic pressure expect immediate yield gain; biologicals sometimes take longer to show benefits.

Conclusion

Microbial intervention represents a practical, science-backed route to make Indian agriculture more productive, sustainable and resilient. While challenges around quality control, farmer awareness, and local adaptation exist coordinated investment in research, extension, and policy can unlock widespread benefits. For India - with its urgent need produce more food on fragile landscapes and within tighter environmental limits - microbes offer a powerfully in the next agricultural revolution. □



Dr. Kondekar With Ms Shivani Ariyaratne, Consul, Minister (Commercial), Consulate General of the Democratic Socialist Republic of Sri Lanka, in World Trade Centre Mumbai, 28th Nov 2025.



Mr. Umesh Kamble at Innovation Mahakumbh 2025, SNTD Women's University, Mumbai

New Age Farming in India for a Healthy Planet

Chef Sumit Ghadiyali

*Brand Consultant and Executive Chef, (Pune)
Co-Owner @Gujarati Thecha*



On a hot afternoon in Andhra Pradesh, farmer Lakshmi bends over her field, not to spread chemical fertilizer, but to sprinkle a homemade brew of cow dung, jaggery, and local microbes. A few years ago, she was spending half her earnings on pesticides. Today, her soil is alive again, her costs are down, and she's part of a quiet revolution sweeping across India: new age farming.

This isn't just about growing food. It's about healing land, conserving water, cutting carbon, and proving that farming can work with nature instead of against it. And as the climate crisis tightens its grip, India's choices in the field matter not just for its 1.4 billion people, but for the health of the entire planet.

Why Farming Must Change

For decades, Indian agriculture was shaped by the Green Revolution – high yield seeds, chemical fertilizers, and endless groundwater pumping. It saved the country from famine, but the ecological costs were brutal: falling water tables, poisoned rivers, pesticide laced vegetables, and soils that have lost their vitality.

Add climate chaos - droughts in one season, floods in the next and farmers are feeling the squeeze. With agriculture guzzling 90% of India's freshwater and spewing nearly a fifth of its greenhouse gases, the system is straining.

The old model can't hold. The new one has to do better - for farmers, for consumers, and for the planet.



What New Age Farming Looks Like

So what does “new age” farming mean in India today? Think of it as a mix of old wisdom and cutting edge tools, guided by one principle:

farming must nourish the earth as much as it feeds people.

1. **Organic & Natural** – No chemicals, just compost, biofertilizers, and indigenous methods. Sikkim has already gone 100% organic, proving it can be done at scale.
2. **Regenerative** – Farming that actively restores ecosystems: cover crops, mulching, crop rotation, and integrating livestock to bring life back to soils.
3. **Climate Smart** – Growing millets that thrive in drylands, planting trees alongside crops, and adopting precision irrigation that saves every drop.
4. **Tech Enabled** – Farmers checking weather updates on WhatsApp, drones spraying micronutrients, AI apps warning of pest attacks before they strike.
5. **Farmer Centric** – Shifting from “maximum yield at all costs” to farmer wellbeing and long term resilience.

It's a layered approach, grounded in India's unique context but carrying lessons for the world.

The Organic Turn

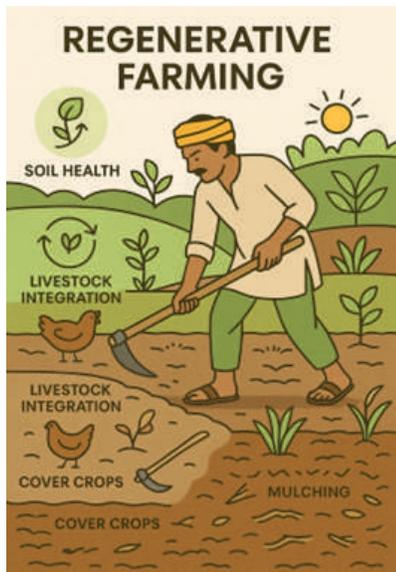
Sikkim's organic success is often the headline, but the story is spreading wider. Andhra Pradesh's Zero Budget Natural Farming (ZBNF) movement has mobilized millions of farmers to ditch chemicals. The “budget zero” part is key, inputs are made from what's available on the farm, keeping costs down and independence up.

The early years can be tough. Yields may dip. But the long game pays off: soils bounce back, water retention improves, and crops become more resilient. Plus, organic farmers often fetch higher prices in both domestic and export markets.

It's farming as both an economic and ecological strategy.

Regeneration: Beyond Organic

If organic farming is about removing chemicals, regenerative farming is about adding life. Cover crops keep the soil blanket intact, agroforestry brings shade and biodiversity, and rotational grazing cycles nutrients back into the earth.



Pilot projects in Madhya Pradesh and Maharashtra show that regenerative farms use less water and inputs, while steadily boosting soil carbon. In a world desperate to cut CO₂, Indian farms could literally become carbon sinks.

That's farming as climate action.

Tech Meets Tradition

India's young farmers are embracing gadgets as eagerly as they are reviving age-old practices.



- o Drones zip across paddy fields, spraying nutrients with surgical precision.

- o Start-ups like DeHaat and

Ninjacart connect farmers directly to buyers, cutting out exploitative middlemen.

- o Soil sensors and satellite imagery warn farmers before pests hit or when irrigation is needed.
- o Blockchain systems track organic produce from field to fork, giving consumers trust in what they buy.

What was once limited to large corporate farms is now accessible to smallholders thanks to cheap smartphones and expanding internet coverage. It's farming in 4G and soon, 5G.

Millets, the Comeback Kids

Millets like bajra, ragi, jowar once staples across India, were side lined by rice and wheat during the Green Revolution. Now they're staging a comeback.

Why? They need less water, thrive in poor soils, withstand drought, and are packed with nutrition. India pushed hard for the UN to declare 2023 the International Year of Millets, and suddenly these "coarse grains" are showing up in urban supermarkets as superfoods.

For farmers, millets mean resilience. For consumers, they mean health. For the planet, they mean less strain on resources. A win all around.

Communities at the Core

In rural Odisha, women's self-help groups run thriving organic clusters. In Gujarat, tribal communities are reviving traditional seed varieties. Across Maharashtra, Farmer Producer Organizations (FPOs) are giving small farmers the muscle to negotiate better prices.

These stories matter because farming change isn't just top-down, it's grassroots. It's farmers sharing seeds, women leading kitchen gardens, youth experimenting with rooftop hydroponics. It's communities realizing that sustainable farming is about dignity as much as it is about food.

What's at Stake

The shift to new age farming delivers more than better crops.

- **Cleaner food:** Fewer pesticides in your plate.
- **Water security:** Smarter irrigation means rivers last longer.



- Carbon capture: Healthy soils act as climate buffers.
- Biodiversity: Birds, bees, and beneficial insects return.
- Rural revival: Lower debts, better incomes, fewer farmer suicides.

In other words, it's farming that nourishes people and planet in one sweep.

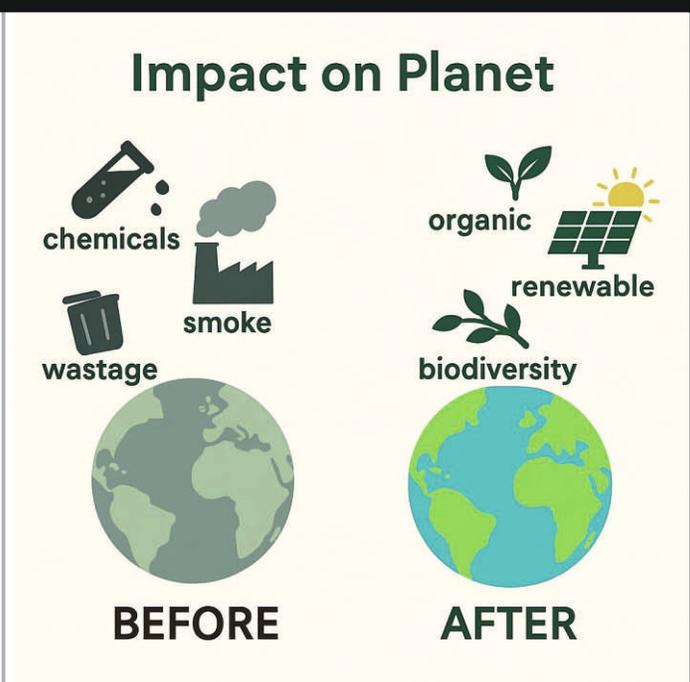
The Roadblocks

Of course, the road ahead isn't smooth. Farmers often struggle with the transition period. Premium markets for organic produce aren't always accessible. Awareness and training gaps remain huge. And policies still tilt toward water hungry, chemical heavy crops like wheat and sugarcane.

Bridging these gaps will take more than slogans. It requires government investment in infrastructure, consumer willingness to pay fair prices, and research to refine sustainable methods.

Growing a Planet Friendly Future

India stands at a crossroads. With its sheer scale of farming and rich agro-ecological traditions, it could be the country that shows the world how to grow food without wrecking the planet.



New age farming isn't just a trend; it's a necessity. It's about turning fields into carbon sinks, reviving forgotten crops, and putting farmers at the centre of climate solutions. It's about rewriting the story of Indian agriculture, from one of crisis to one of hope.

The seeds are already in the soil. The question is whether India, and the world, will nurture them fast enough. ❑



In the city of Allen Tx USA, Dr. Prakash Kondekar was one of the participant amongst 6000 Indians, recited all 18 chapters of Srimad Bhagwat Gita, in three hours continuously, on 12th July 2025. A note has been taken in the Guinness book of World record.

New Age Farming for Healthy Planet

Ms. Srirupa Guha

**Senior PMT-
Nutraceutical,
Siddhayu Lifescience
Senior Nutritionist**



New age farming is quietly transforming the way we grow food, prioritizing sustainability to heal the planet while feeding the ever-growing population. As the world grapples with climate change, soil degradation and biodiversity loss, innovative agricultural methods focused on environmental restoration are gaining traction, proving that farming can be both productive and kind to the earth.

At the heart of this transformation is regenerative agriculture. Unlike conventional farming that often depletes soil and relies heavily on chemicals, regenerative practices rebuild the land. They focus on increasing soil organic matter, enhancing biodiversity and capturing carbon dioxide to combat climate change.

Sustainable farming initiatives in India are driven by a mix of large companies, startups, NGOs. Several pioneering farms have embraced these methods with inspiring results. They've turned overworked fields into vibrant ecosystems, witnessing healthier soils and stronger crop yields. These farms demonstrate that sustainability and profitability don't have to be at odds - in fact, working with nature often improves long-term financial outcomes and that is how they train masses regarding its outcome.

Some of the farming organization or institution in India are UPL, AgroStar, DeHaat, BASAI India and the Centre for Sustainable Agriculture (CSA). By making their farms regenerative, they've improved water retention, prevented erosion and boosted soil health. These changes not only increase productivity but also cater to consumers increasingly demanding sustainably produced food. The result? Farms that are more resilient, profitable and environmentally responsible.

AgroStar provides scientific advisory & lab-tested inputs aimed at increasing yields and cutting input costs. It has introduced biological/biocontrol products, to improve crop resilience under climate stress. Its ESG report shows reductions in water usage, restoration of carbon in soils, and lowering food wastage.

DeHaat enables small farmers to access sustainable biological input formulations (biopesticides, etc.) via partnerships (e.g. with Global BioAg Innovations). It provides advisory, market access, and input supply services in many villages, helping farmers adapt practices to changing climate.

BASAI focuses on promoting biological agri-inputs (biofertilisers, biopesticides, bio stimulants), raising awareness, advocating for regulation of bio-products, and supporting industry collaboration. These reduce dependency on chemical inputs and help make farming systems more climate-friendly.

Centre for Sustainable Agriculture (CSA) works with farmers, FPOs, NGOs and government to scale agro-ecological methods, promote organic farming, develop climate change adaptation/mitigation models, strengthen livelihoods, and improve public policy.

Even big agribusinesses are getting on board. By investing in research and innovation, these organization aims to make sustainable farming a mainstream practice, proving that corporate commitment can drive real environmental progress in agriculture.

The benefits of sustainable farming go well beyond individual farms. Healthy soils act as massive carbon sinks, helping reduce greenhouse gases in the atmosphere. Improved water retention means less irrigation and better drought resilience. Biodiverse farms support pollinators and reduce pest outbreaks, decreasing the need for harmful pesticides. Together, these benefits enhance ecosystem health and make food systems more secure against climate shocks.

New age farming is more than a trend: it's a vital shift toward a future where agriculture restores rather than exploits the earth. It will make crops and its produce more nutritionally rich. As farmers and companies worldwide adopt these practices, the planet stands to gain cleaner air, richer soils, and resilient ecosystems. This means the biodiversity will also flourish and will bring more positive food security. It's a win for farmers, consumers and most importantly, the planet-ensuring that future generations inherit a thriving, healthy world. □

New-Age Farming for a Healthy Planet, Harnessing Technology to Cultivate Sustainability”

Prof. Rupa Rawal
(MITCOM.MIT Adt University, Pune)

Mr. Yash Ashok Gujar - Sanika Ambadas Dhole



Students - MBA(AFBM)
(MITCOM.MIT Adt University, Pune)

Agriculture has always been the foundation of human civilization. Yet today, it faces unprecedented challenges such as a growing global population, climate change, depleting natural resources, and the urgent need for sustainable food systems. To feed nearly 10 billion people by 2050, global food production must increase by an estimated 60–100%. This calls for a complete transformation in how we grow, manage, and distribute food. The answer lies in new age or smart farming, where technology and ecology work hand in hand to ensure a healthier planet.

The Rise of Smart Farming

New-age farming, often termed Smart Agriculture or Agriculture 4.0, integrates digital innovations such as Artificial Intelligence (AI), the Internet of Things (IoT), drones, robotics, satellite imaging, and data analytics into traditional farming systems. These technologies enable farmers to make data-driven decisions, improving both efficiency and sustainability. Smart farming is not just about automation it is about precision.

Drones monitor crop health from above, sensors

measure soil moisture and nutrient levels, and AI-powered systems analyze data to suggest optimal irrigation and fertilizer use. This precision agriculture reduces waste, maximizes yield, and minimizes environmental impact. As studies have shown, farms adopting digital technologies report higher productivity reduced input costs, and better resilience against unpredictable weather patterns.



<https://bsmaenterprises.com/>

Sustainability through Innovation

Sustainability is at the heart of new-age farming. With the integration of sensors and automated systems, farmers can ensure that every litre of water and every gram of fertilizer is used judiciously. This approach reduces leaching, soil degradation, and water pollution — all while improving soil health and biodiversity.

Smart farming systems are also essential in combating climate change. By monitoring crop and soil conditions in real time, farmers can adopt practices that lower greenhouse gas emissions and reduce energy use. The global agricultural sector, responsible for a significant portion of CO₂ and methane emissions, can greatly benefit from precision agriculture's sustainable practices.

For instance, IoT-based irrigation systems can detect soil dryness and automatically release the right amount of water at the right time, conserving water resources. Similarly, AI tools can predict pest attacks or disease outbreaks before they occur, helping farmers apply minimal, targeted treatments instead of broad-spectrum chemical sprays.

Digital Tools: The New Farming Allies

1. **Artificial Intelligence (AI):** AI algorithms process huge datasets from drones, sensors, and satellites to offer predictive insights. They help forecast weather conditions, detect crop

diseases, and estimate yield, allowing farmers to make proactive decisions.

2. **Internet of Things (IoT):** IoT-enabled sensors continuously monitor soil moisture, temperature, and nutrient levels. These smart devices send real-time alerts to farmers' smartphones, helping them manage resources efficiently.
3. **Drones and Satellite Imaging:** Aerial imaging gives farmers an overview of field health, crop stress, and water distribution. This technology minimizes manual field inspections and ensures that no area is overlooked.
4. **Big Data and Cloud Analytics:** Data from various sources sensors, weather stations, and machinery are stored and analyzed in the cloud. Such integration supports better farm planning, inventory management, and logistics coordination.
5. **Nanotechnology:** Emerging Nano-agriculture methods enhance nutrient delivery and pest control with high precision and minimal ecological footprint, making farming more sustainable and cost-effective.

Voices from the Field: The Human Side of Digital Agriculture

A recent study involving farmers, agricultural professionals, and students revealed overwhelmingly positive perceptions of smart farming technologies. All respondents agreed that innovations such as AI, drones, and sensors improve operational efficiency and productivity. They also believed these tools help preserve the environment by minimizing waste and pollution.

However, the same study highlighted a key concern: accessibility. Small and medium-scale farmers often struggle to afford these technologies. High costs, lack of technical knowledge, and inadequate infrastructure remain significant obstacles. Yet, the willingness to learn and adopt is strong 85% of respondents expressed readiness to use digital tools if proper training and institutional support were available.

This demonstrates that the success of digital agriculture doesn't depend solely on technology, it

depends on people. Empowering farmers through education, training, and awareness is essential. When farmers understand how to operate and interpret digital tools, they become active agents of change rather than passive beneficiaries of technology.

Economic and Environmental Payoffs

Smart agriculture is not only good for the planet but also profitable. By reducing resource wastage and optimizing input use, farmers can increase profitability while maintaining ecological balance. The data suggests that farmers using smart tools experience higher yields and better returns on investment. For example, AI-driven systems that predict weather variations and soil conditions help farmers plan better and avoid crop losses.

Environmentally, these technologies promote a closed-loop farming system one that recycles organic waste, utilizes renewable energy, and enhances soil fertility. Reduced pesticide and fertilizer use means cleaner waterways and safer food for consumers. In the long run, smart farming practices can help rebuild ecosystems that traditional methods have depleted.

Challenges and the Way Forward

While digital farming promises a greener future, certain challenges must be addressed for widespread adoption. The first is cost advanced technologies like drones and IoT sensors can be expensive for smallholders. Secondly, digital literacy among farmers remains limited, particularly in developing countries. Many farmers lack the training to interpret data or maintain digital equipment.

Moreover, data privacy and ownership concerns have surfaced. As farms become data-rich environments, ensuring secure and ethical data handling is crucial. Governments and private enterprises must collaborate to create frameworks that protect farmers' information while promoting innovation.

To overcome these challenges, policymakers should focus on three critical areas:

- ❖ **Infrastructure Development:** Investments in rural connectivity, broadband access, and renewable energy sources are vital for enabling digital agriculture.
- ❖ **Capacity Building:** Training programs,

workshops, and farmer field schools should be implemented to improve technical skills and confidence in using new technologies.

- ❖ **Policy and Financial Support:** Governments must introduce subsidies, low-interest loans, and tax incentives for adopting smart farming equipment. Public-private partnerships can also play a major role in making technology accessible and affordable.

Toward a Sustainable Future

Digital transformation in agriculture is more than a technological shift it represents a philosophical change in how humanity interacts with nature. Instead of exploiting resources, the new model emphasizes precision, preservation, and partnership with the environment. With AI, IoT, and data analytics, farmers are becoming eco-stewards, ensuring that their land thrives for generations to come.

The future of farming is not confined to vast fields but extends to screens, sensors, and satellites. Yet, the ultimate goal remains the same to feed people while nurturing the planet. By combining human wisdom with digital intelligence, agriculture can evolve into a force for both prosperity and planetary health.



Conclusion

The transition to smart and sustainable agriculture is no longer optional, it is imperative. As the study concludes, technologies such as AI, drones, and IoT are revolutionizing farming systems by improving productivity, reducing waste, and protecting natural resources. However, for these innovations to truly make an impact, inclusivity must be ensured. Governments, agribusinesses, and academic institutions must work together to empower farmers with affordable tools, infrastructure, and knowledge.

New-age farming is more than a revolution; it is a

responsibility. By sowing the seeds of innovation today, we can harvest a future where technology and nature coexist harmoniously ensuring a healthy planet for all.



“Protecting Earth is not a choice but a responsibility we all share.”

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A few ways to save our Planet

**Dr Prakash
Kondekar**

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Growing tendency of converting agricultural land into non-agricultural one, is in turn affecting the Planet. An Aquaponics and hydroponics have to work together since it will be good for environment.

Sylvia Bernstein has dedicated herself in connecting people and plants through indoor, soil-less gardening products. Aquaponics is a revolutionary system for growing plants by fertilizing them with the waste water from fish in a sustainable closed system. A combination of the best of aquaculture and hydroponics, aquaponic gardening is an amazingly productive way to grow organic vegetables, greens, herbs and fruits while providing the added benefits of fresh fish as a safe, healthy source of protein. On a larger scale, it is a key solution to mitigating food insecurity, climate change, groundwater pollution and the impacts of overfishing on our oceans.

Aquaponic Gardening is the definitive do-it-yourself home manual, focused on giving you all the tools you need to create your own aquaponic system and enjoy healthy, safe, fresh and delicious food all year round.

Hydroponics is a method of growing plants without soil, using water-based mineral nutrient solutions in an artificial environment. This technique allows for efficient space utilization and water conservation, making it popular among home gardeners and commercial growers. Earliest published work on growing terrestrial plants without soil was the 1627 book *Sylva Sylvarum* or 'A Natural History' by Francis

Bacon, printed a year after his death. As a result of his work, water culture became a popular research technique. In 1699, John Woodward published his water culture experiments with spearmint. He found that plants in less-pure water sources grew better than plants in distilled water. There are various systems such as nutrient film technique (NFT), deep water culture (DWC) and aeroponics, each with its own advantages. Hydroponics can yield more produce in less space, reduce water usage, and allow for year round cultivation. A wide variety of plants can be grown hydroponically, including vegetables like lettuce, tomatoes and strawberries.

In the face of a rapidly changing climate, diminishing agricultural land and a growing global population, the quest for sustainable food alternatives has never been more urgent. Traditional farming and meat production are among the most resource-intensive industries on Earth, contributing significantly to greenhouse gas emissions and biodiversity loss. **Solein**, a trailblazing nutrition powder developed by Finnish company **Solar Foods**. Unlike anything currently on supermarket shelves, Solein is created without plants or animals. Instead, it's produced using carbon dioxide from the air, water and renewable electricity. This novel approach has the potential to redefine how we think about food, making nutrition not only cleaner and greener but also potentially limitless. Looking ahead, Solar Foods envisions Solein being used not just on Earth but also in **space exploration**. Its ability to be produced in closed-loop systems using minimal inputs makes it ideal for off-world colonization efforts like Mars missions.

Critically, the production of Solein doesn't depend on soil, weather or climate, which means Solein can be produced anywhere in the world, even in deserts or the Arctic. emits **no methane**, requires **100x less land** than plant-based proteins, and uses **virtually no freshwater**, marking it as one of the most sustainable food technologies developed to date.

One of the most exciting aspects of Solein is its versatility. It isn't just a niche health food product, it has the potential to enhance or even replace ingredients

across multiple food categories:

- **Plant-Based Dairy:** Solein can improve the protein profile of dairy alternatives like oat or almond milk which typically lack sufficient protein.
- **Meat Alternatives:** It can be used as a binding and nutritional enhancer in plant-based meats, improving texture and boosting amino acid content.
- **Protein Powders & Shakes:** As a standalone product, Solein offers a lactose-free, vegan, and allergen-friendly alternative to whey or soy protein.
- **Functional Snacks:** It's ideal for protein bars, baked goods, and savory snacks needing added nutritional value without chemical additives.
- **Meal Replacements:** Its complete nutrient

profile makes it an excellent base for meal replacement drinks and clinical nutrition

On Earth, the plan is to scale production rapidly through partnerships with major food manufacturers. New factories are being planned to support production that could feed **millions of people per year** without harming the planet.

The broader vision is a food system where protein is no longer extracted from nature but **engineered sustainably**, reliably, safely and locally, anywhere in the world.

Solein represents a bold step forward in the evolution of food. It challenges the status quo by offering a protein source that doesn't compromise the planet's ecosystems or natural resources. As consumer awareness of climate and health grows, innovative products like Solein are not only welcome but essential. ▣



DECLARATION



- The contents of this issue is referred and compiled from various sources and Purnabrahma doesn't claim it's authenticity.
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Blessings from Dr Mashelkar

In Sept 2025, I had an occasion to meet, MS Dhanashree Aole (Masc., B.E), in Pune, who stepped into the field of Health and wellness Foods after 10 years of being a Metallurgical Engineer. The founder of Kultured Vitality Foods LLP (2021), she earned a title of “Detoxification Specialist” (Dt. Sp. ®) from Academy of Natural Health Science in New Jersey, USA. As a slow food enthusiast, she is obsessed with exploring slow-foods and detoxification therapies for wholesome living and longevity. For more than two decades ago, Dhanashree was introduced to Kombucha by her father. However, at that age she was more interested in the taste than phenomenon of Kombucha. It was until 2014, when she got fascinated by the phenomenon of fermentation and decided to brew Kombucha herself. Keeping in mind her father's healing story, she was consistent in demystifying the process of kombucha making and create her first perfect brew. Dhanashree came to know about the magnitude of Kombucha's health benefits, until her long-seated health issue got resolved within a month of consuming Kombucha. Using her extensive experience, she started to share this wonder drink with family and friends and delivered this new knowledge in clear, tasteful and healthful way. Soon kombucha started spreading with positive word of mouth. Moving forward, she became more cognizant about client's health needs and explored distinct recipes with kombucha culture....

Dr Prakash Kondekar

Dr. PRK.... How did your journey begin?

Ms DA.... I was born into a Maharashtrian Family in Nagpur, where my parents always emphasized on Sattvic lifestyle, a dietary ideology and practice which I swears by. My father was a science expert and got home a kombucha culture in early 1990's. He succeeded in harvesting perfect Kombucha in his first attempt and Kombucha became a routine for our family. As a kid, I loved drinking kombucha daily and as my father explained the culture and how it grows

and ferments, I became more curious about the mysterious drink (Kombucha).

I was sincere in my studies. My parent's high value for education and motivation resulted for me to be the University topper in bachelor's and I grabbed my first offer from Tata Motors Ltd., Pune. After two years of working with Tata motors, I moved to Canada for Master's in Mechanical Engineering. In my free time, I started interacting with many holistic health practitioners and fermentation enthusiasts. My

inclination toward holistic living increased during this period. During this phase, I was exposed to ancient food preserving techniques of different cultures and their practice of mindful eating. My curiosity in fermented foods and more specifically on Kombucha was growing. As a hobby, I started reading books and research papers on Kombucha. I came to know that the health benefits of Kombucha have been touted for centuries by scientists, doctors, and holistic practitioners. Meanwhile, I returned from Canada and joined TCS innovation Center (TRDDC) in Pune. By the end of 2014, I again worked with Engineering Research Center, Tata Motors as a Corrosion and Coating Expert. But my passion for brewing Kombucha was budding at the same time. InDPink Beverages birth in 2016 was result of my intense passion for sharing kombucha with the world. As the distinct flavor and texture of kombucha pleased everyone, I was motivated to spread it intensely. Hence, I quit my job to focus honestly and deeply into the business in December 2016. Since the product was very new for Indian market, I faced challenges before its launch. Further to promote Kombucha and its health benefits in right way, I decided to earn knowledge on probiotics, prebiotics and postbiotics for vibrant health.

Dr. PRK.... When was the birth of Kultured Vitality Foods LLP?

Ms DA.... I got married in early 2017 and moved to USA. There I studied probiotics & digestive health, nutritional and herbal detox therapies for two years and obtained Diploma in Detoxification in 2020 from Academy of Natural Health Science, New Jersey. In Jan 2021, while I was looking for branding support and raising funds to build the business, one of my old friends showed interest to become a part of this mission and Kultured Vitality Foods originated in June 2021.

Motivation behind it

Dr. PRK.... What is a genesis of your product?

Ms DA.... For the past few years, consumers are increasingly turning towards food and beverage for functional benefits, to combat the negative stressors which are the greatest obstacle to their vibrant well-being. The idea of making Kombucha commercially available in India was based on the belief that it could improve people's quality of life and help them restore

the body's natural healing ability through infinite nutritional excellence. Dhanashree is determined to awaken people's consciousness of simple yet powerful laws of health by offering well-curated recipes of Kombucha which have perfect blend of taste and health.

Dr. PRK.... Can you tell us about your product?

Ms DA.... Kultured Kombucha is a restoring drink that is home-brewed, unpasteurized and handcrafted in small batches. Our brew cycles are optimized to make sure that the final drink is low in sugar and rich in gut-friendly microbes & bioavailable nutrients (vitamins, antioxidants, essential acids etc.). As a crucial step towards revival of fermentation tradition in India, Kultured is offering Kombucha in both original and herb-infused form.

Dr. PRK.... What are the major challenges you faced in Kombucha production?

Ms DA.... Kombucha is not a modern age soda with exotic flavours but the most powerful traditional fermented beverage with plethora of health benefits. Lack of awareness and improper understanding about the significant benefits of Kombucha are the major challenges. Our nation is struggling with lifestyle diseases, moreover, COVID-19 pandemic is an eye opener that we need to learn to strengthen our innate or inherent immunity that has existed from the earliest stages of evolution and operate continually to keep us disease-free. Now as detoxification specialists and an ardent Kombucha brewer, we are determined to explore and evangelize the health benefits of Kombucha.

Dr. PRK..... What are your future plans?

Ms DA.... Glad to share with all that I am doing a YouTube series on nourishing fermented foods with Celebrity Chef Harpal Singh Sokhi. The purpose of this series is to revive the ancient wisdom of cooking and share slow-food recipes, for better living.

Dr. PRK.... Any suggestions for Kombucha users ?

Ms DA.... We are failing to thrive in this microbial world is because our lifestyle and approach to health care has become divorced from nature. We sincerely need to understand how our innate immune system works and nurture it well. Embrace kombucha into your

routine, as nutrition is all about healthy substitutions. Remember that kombucha is not cure-all drink but a living beverage that strengthens the Gut flora and nourishes whole body, so that the immune and other

physiological systems function more efficiently. Fermented Foods like Kombucha are for a vibrantly healthy life. Drink Wise, Think Wise! ❑



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Importance of Metro and Coastal Road Projects for Mumbaikars



**Mrs. Ashwini Bhide, IAS, Addl Chief Secretary, GOM & MD, MMRCL, BKC Mumbai....
Dr Prakash Kondekar**

On 27th November 2025, I had a privilege to talk to Mrs Ashwini Bhide, IAS, Additional Chief Secretary, GOM & MD, MMRCL, BKC Mumbai. She spoke about the remarkable journey of Mumbai's major infrastructure projects, particularly the Metro and the Coastal Road and the vital role they play in strengthening the city's transport network.....Dr Prakash Kondekar, Fellow of Royal Society of Health (London), Advisor(CASMB).....

Dr PK... Mam, public transport is a main problem of the Mumbaikars. Can you tell us about the measures taken by the Government for the improvement of the system?

Mrs AB... As we all know, Mumbai is not just a city; it is the financial heartbeat of India. Every year, thousands of people come here seeking opportunities and as a result, our population continues to grow. Yet, we are a city built on a narrow peninsula with natural geographical limitations. This puts enormous pressure on our roads, transport systems, and overall infrastructure. To address this growing challenge, it became essential to adopt modern, long-term, and inclusive solutions. This is where transformative projects like the underground Metro and the Coastal Road gained significance.

Dr PK... What difficulties you had to face?

Mrs AB... These projects were not without difficulties. In the beginning, we faced land-related issues, legal and environmental clearances and genuine concerns raised by citizens. But through meticulous planning,

transparent communication, coordination among multiple government departments and the active involvement of the public, we were able to overcome these hurdles.

Dr PK.. Can you tell us about the India's first fully underground metro line?

Mrs AB.. Metro Line 3—connecting Colaba to SEEPZ—is India's first fully underground metro line. This project stands as a powerful example of how engineering and social engagement can go hand in hand. For more than five years, construction activities continued across crowded neighborhoods and critical stretches of the city. Yet, because we consistently engaged with citizens, addressed their concerns openly and maintained complete transparency through digital platforms, we were able to retain their trust.

Dr PK.. What were the precautions taken for implementation of this project?

Mrs AB... We ensured top-class safety, high-quality execution and strict accountability for every team member working on the project. It is a matter of pride that not a single untoward incident occurred during this massive undertaking. Several factors contributed to the timely progress of the Metro and Coastal Road projects. These include detailed pre-planning, strong and committed leadership, quick and informed decision-making, continuous on-site monitoring, excellent teamwork and the use of advanced technology. Just as importantly, we maintained open communication with citizens and nurtured a mindset geared towards solving problems rather than avoiding

them. Above all, political will and continuous guidance from the Chief Minister's War Room gave these projects the momentum they needed.

Dr PK... Any particular organizations or institutes you had to coordinate with?

Mrs AB... Yes. I must acknowledge the extraordinary cooperation from various agencies, Mumbai Police, Mumbai Municipal Corporation, Port Trusts, Railways, Defense authorities and the Airport Authority. Their seamless coordination played a decisive role in moving these projects forward.

Dr PK... What are the other important projects from the point of view of Mumbai public?

Mrs AB.. Today, Mumbai is witnessing an unprecedented phase of infrastructure development. Major projects like the Atal Setu, the Marine Drive to Bandra–Worli Coastal Road stretch and the Navi Mumbai International Airport have reached significant milestones. Many others, including the **Bandra–Versova Sea Link**, Versova–Dahisar–Bhayandar Coastal Road, Borivali–Thane Tunnel, Goregaon–Mulund Link Road and the Orange Gate to Marine Drive Tunnel—are progressing steadily.

Dr PK... Would you like to mention about the projects in the nearby vicinity of Mumbai ?

Mrs AB... Yes. Future initiatives such as the Virar–Alibaug Multi-purpose Corridor and the Vadhavan Port will further accelerate the city's growth. In conclusion, these projects represent more than concrete, steel and technology. They symbolize a vision of a modern, efficient and inclusive Mumbai, a city prepared not just for today's demands but for the opportunities of tomorrow. With continued collaboration, transparency and commitment, we can ensure that Mumbai remains a dynamic, world-class metropolis for generations to come.

Dr PK.... A last question about, how much care for environment through these projects?

Mrs AB.... Good question. Wherever and whatever plantation has been disturbed we saw that ten times more plantations have been given to those places so as to have ecofriendly projects.

Dr PK... Many thanks for your time, Mam.

Mrs AB... Appreciate.

Glimpses of gigantic work





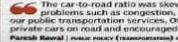
MUMBAI'S VEHICLE COUNT HITS 53 LAKH DENSITY 2,648 A KM, 2-WHEELERS DOMINATE

The number of vehicles in Mumbai has reached 53 lakh this month, with a density of 2,648 vehicles per km of road. Transport department officials say that nearly 2 lakh vehicles have been added in just the last six months. Of the total vehicle count, which includes all categories, two-wheelers alone account for 31 lakh, making up 60% of the city's vehicular traffic. **Santosh Sen** reports.

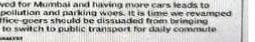
VEHICLES REGISTERED BY CITY



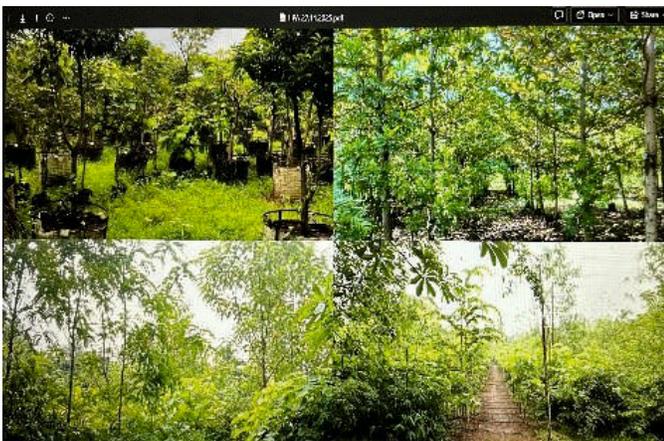
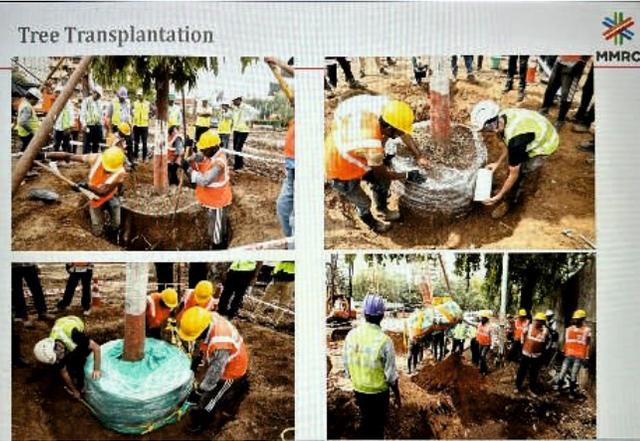
RISE IN NUMBERS



COMPARISON WITH OTHER METROS



The car-to-road ratio was skewed for Mumbai and having more cars leads to problems such as congestion, pollution and parking woes. It is time we ramped up our public transportation services. Office-goers should be dissuaded from bringing private cars on road and encouraged to switch to public transport for daily commute. **Puneesh Rawal** | [@puneeshrawal](#) (Twitter) | [@puneeshrawal](#) (LinkedIn)



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